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Report to the Congress

Medicare Payment Policy

MEDPAC



The Medicare Payment Advisory Commission (MedPAC) is an independent congressional agency established by the Balanced Budget Act of 1997 (P.L. 105–33) to advise the U.S. Congress on issues affecting the Medicare program. In addition to advising the Congress on payments to health plans participating in the Medicare Advantage program and providers in Medicare’s traditional fee-for-service program, MedPAC is also tasked with analyzing access to care, quality of care, and other issues affecting Medicare.

The Commission’s 17 members bring diverse expertise in the financing and delivery of health care services. Commissioners are appointed to three-year terms (subject to renewal) by the Comptroller General and serve part time. Appointments are staggered; the terms of five or six Commissioners expire each year. The Commission is supported by an executive director and a staff of analysts, who typically have backgrounds in economics, health policy, and public health.

MedPAC meets publicly to discuss policy issues and formulate its recommendations to the Congress. In the course of these meetings, Commissioners consider the results of staff research, presentations by policy experts, and comments from interested parties. (Meeting transcripts are available at www.medpac.gov.) Commission members and staff also seek input on Medicare issues through frequent meetings with individuals interested in the program, including staff from congressional committees and the Centers for Medicare & Medicaid Services (CMS), health care researchers, health care providers, and beneficiary advocates.

Two reports—issued in March and June each year—are the primary outlets for Commission recommendations. In addition to annual reports and occasional reports on subjects requested by the Congress, MedPAC advises the Congress through other avenues, including comments on reports and proposed regulations issued by the Secretary of the Department of Health and Human Services, testimony, and briefings for congressional staff.

REPORT TO THE CONGRESS

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Advisory Commission*

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March 15, 2022

The Honorable Kamala D. Harris
President of the Senate
U.S. Capitol
Washington, DC 20510

The Honorable Nancy Pelosi
Speaker of the House
U.S. House of Representatives
U.S. Capitol
Room H-232
Washington, DC 20515

Dear Madam President and Madam Speaker:

I am pleased to submit the Medicare Payment Advisory Commission's March 2022 *Report to the Congress: Medicare Payment Policy*. This report fulfills the Commission's legislative mandate to evaluate Medicare payment issues and make recommendations to the Congress. This report also satisfies four additional legislative mandates to report on a payment adjustment for certain low-volume acute care hospitals; on recent changes to the home health payment system; on the performance of certain specialized Medicare Advantage plans; and on a value-based payment program for post-acute care services.

The report contains 14 chapters:

- a chapter that provides a broader context for the report, including the near-term consequences of the coronavirus pandemic and the longer-term effects of Medicare spending on the federal budget and the program's financial sustainability;
- a chapter that describes the Commission's analytic framework for assessing payment adequacy;
- nine chapters that describe the Commission's recommendations on Medicare fee-for-service (FFS) payment rate updates and related issues, including, as mandated by the Congress, a report on the Bipartisan Budget Act (BBA) of 2018 extension of a payment adjustment for certain low-volume acute care hospitals and an interim report assessing the impact of BBA of 2018-mandated changes to the home health payment system;
- a chapter that describes recent trends in enrollment, plan offerings, and payments in Medicare Advantage (MA) plans and discusses related issues, including risk adjustment and coding intensity in MA and a congressionally mandated report on the performance of specialized MA plans that serve beneficiaries who are dually eligible for Medicare and Medicaid;

- a chapter that updates readers about trends in enrollment and plan offerings for plans that provide prescription drug coverage under Part D; and
- a mandated report on a prototype value-based payment program under a unified prospective payment system for post-acute care services and the potential impacts of such a program.

Tragically, over the course of 2020 and 2021, more than 800,000 people in the United States died of COVID-19. Medicare beneficiaries—particularly those who reside in nursing homes, have end-stage renal disease, are dually eligible for Medicaid, or are members of racial or ethnic minority groups—have been disproportionately affected. Two years into the coronavirus pandemic, health care workers continue to experience heavy workloads. As vaccines have become available, mortality rates from COVID-19 have dropped substantially. Still, the coronavirus continues to circulate and mutate, posing risks to beneficiaries and extending the burden on health care workers. In this report, we discuss some of the effects of the pandemic, including on beneficiaries' access to care and on providers' revenues and costs. A fuller discussion of the pandemic's effects on beneficiaries and providers, including the state of the nation's health care workforce and broader lessons learned, will require analysis of data that are still being collected and is beyond the scope of this report.

While the Commission is acutely aware of the past and ongoing effects of the coronavirus pandemic, our statutory charge is to evaluate available data to assess whether Medicare payments, in aggregate, are sufficient to support the efficient delivery of care and ensure access to care for Medicare's beneficiaries. In this report, we continue to make recommendations aimed at finding ways to provide high-quality care for Medicare beneficiaries while giving providers incentives to constrain their cost growth and thus help control program spending.

In light of our payment adequacy analyses, we recommend positive payment updates in 2023 for three FFS payment systems (hospital, long-term care hospital, and outpatient dialysis); no update for three systems (physician, ambulatory surgical center, and hospice); and negative updates for three systems (skilled nursing facility, home health, and inpatient rehabilitation facility). For two of these sectors, we include additional recommendations to improve payment accuracy by requiring ambulatory surgical centers to report cost data and by wage adjusting the hospice aggregate cap and reducing it by 20 percent.

In addition, we recommend that the Secretary require physicians and other health professionals, home health agencies, and hospices to provide more information on the telehealth services they provide, to help policymakers assess the impact of these services on access, quality, and costs.

I hope you find this report useful as the Congress continues to grapple with the difficult task of controlling the growth of Medicare spending while preserving beneficiaries' access to efficiently delivered, high-quality care and providing equitable payment for providers.

Sincerely,

A handwritten signature in black ink, appearing to read 'm. chernew', with a long horizontal line extending to the right.

Michael E. Chernew, Ph.D.
Chair

Enclosure

Acknowledgments

This report was prepared with the assistance of many people. Their support was key as the Commission considered policy issues and worked toward consensus on its recommendations.

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Executive summary

Executive summary

By law, the Medicare Payment Advisory Commission reports to the Congress each March on the Medicare fee-for-service (FFS) payment systems, the Medicare Advantage (MA) program, and the Medicare prescription drug program (Medicare Part D). In this year's report, we:

- consider the context of the Medicare program, including the near-term consequences of the coronavirus pandemic and the longer-term effects of program spending on the federal budget and the program's financial sustainability.
- evaluate payment adequacy and make recommendations concerning Medicare FFS payment policy in 2023 for acute care hospital, physician and other health professional, ambulatory surgical center, outpatient dialysis facility, skilled nursing facility, home health agency, inpatient rehabilitation facility, long-term care hospital, and hospice services.
- as mandated by the Congress, report on Bipartisan Budget Act (BBA) of 2018 changes to the low-volume hospital payment adjustment.
- as mandated by the Congress, report on the impact of changes to the home health payment system required by the BBA of 2018.
- review the status of the MA program (Medicare Part C), through which beneficiaries can join private plans in lieu of traditional FFS Medicare.
- as mandated by the Congress, report on the performance of specialized MA plans that serve beneficiaries who are dually eligible for Medicare and Medicaid.
- review the status of the Medicare program that provides prescription drug coverage (Medicare Part D).
- as mandated by the Congress in the Consolidated Appropriations Act, 2021, report on a prototype value-based payment program under a unified prospective payment system (PPS) for post-acute care (PAC) services and analyze the impacts of the prototype's design.

In this report, we recommend payment rate updates for nine FFS payment systems for 2023. Because of standard data lags, the most recent complete data we have for most payment adequacy indicators are from 2020. Starting in 2020, the ongoing coronavirus pandemic has had catastrophic consequences for many Medicare beneficiaries and affected health care delivery for all. In this report, we discuss some of the effects of the pandemic and pandemic-related policies on beneficiaries and providers, and we have considered the effects of the coronavirus PHE on our indicators in 2020 and beyond. To the extent that the effects of the PHE are temporary or vary significantly across providers in a sector, they are best addressed through targeted temporary funding policies rather than a permanent change to payment rates in 2023 and future years.

The goal of Medicare payment policy is to obtain good value for the program's expenditures, which means maintaining beneficiaries' access to high-quality services while encouraging efficient use of resources. Payment system incentives that promote the efficient delivery of care serve the interests of the taxpayers and beneficiaries who finance Medicare through their taxes and premiums.

The Commission recognizes that managing updates and relative payment rates alone will not solve what have historically been fundamental problems with Medicare FFS payment systems—that providers are paid more when they deliver more services, often without regard to the value of those additional services, and that these payment systems seldom include incentives for providers to coordinate care over time and across care settings. To address these problems directly, two approaches must be pursued. First, payment reforms need to be implemented more broadly, coordinated across settings, and pursued as expeditiously as possible. Second, delivery system reforms that have the potential to encourage high-quality care, better care transitions, and more efficient provision of care need to be enhanced and closely monitored, and successful models need to be adopted on a broad scale.

In the interim, it is imperative that the current FFS payment systems be managed carefully and continuously improved. Medicare is likely to continue using its current FFS payment systems for some years into the future. This fact alone makes unit prices—their overall level, the relative prices of different services within a sector, and the relative prices of the same service across sectors—of critical importance. Constraining unit price increases can induce providers to control their own costs and to be more receptive to new payment methods and delivery system reforms.

For each recommendation, the Commission presents its rationale, the implications for beneficiaries and providers, and how spending for each recommendation would compare with expected spending under current law. The spending implications are presented as ranges over one-year and five-year periods. Unlike official budget estimates used to assess the impact of legislation, these estimates do not consider the complete package of policy recommendations or the interactions among them. Although we include these budgetary implications, our recommendations are not driven by any single budget or financial performance target, but instead reflect our assessment of the payment rates needed to ensure adequate access to appropriate care while promoting the fiscal sustainability of the Medicare program.

In Appendix A, we list all recommendations and the Commissioners' votes.

Context for Medicare payment policy

This year, both the short-term and long-term context for the Medicare program is sobering. In the short term, the nation and the Medicare program are in the midst of the historic coronavirus pandemic. Medicare beneficiaries have been disproportionately impacted by COVID-19, with the elderly constituting 12 percent of COVID-19 cases but 76 percent of COVID-19 deaths by the end of 2021. Health care providers have faced extreme stress during the pandemic—risking their lives to treat patients. Providers have also faced major financial disruptions to their operations. In response, the Congress and CMS have extended federal grants to providers and temporarily altered certain Medicare payment policies. At least in part, those actions have offset the short-term financial effects of the coronavirus public health emergency (PHE) for many providers.

Considering the context, beneficiaries have maintained relatively good access to care during the pandemic. Although some nonurgent routine appointments were canceled in the early months of the pandemic, beneficiaries continued to obtain urgent and emergency care and used telehealth to access clinicians by interactive video and audio-only phone calls. Importantly, the share of Medicare beneficiaries completely forgoing a service that they thought they needed in the past year (as opposed to delaying it) has not increased during the pandemic relative to prior years, according to the Commission's annual telephone surveys.

Although the pandemic is not expected to have a long-term impact on Medicare, the program's finances nevertheless need urgent attention. Medicare's Trustees expect that the program's Hospital Insurance Trust Fund (which funds Medicare Part A services) will become insolvent by 2026, and the Congressional Budget Office (CBO) expects the fund to reach insolvency in 2027, due to the declining ratio of workers to Medicare beneficiaries (since payroll taxes are the primary source of funding for the trust fund). To extend the solvency of the trust fund for an additional 25 years, Medicare's Trustees have estimated that the Medicare payroll tax would need to be raised from 2.9 percent to 3.7 percent, or Medicare Part A spending would need to immediately be reduced by 18 percent (about \$70 billion in 2022); alternatively, a smaller tax rate increase could be combined with a smaller spending reduction to achieve a comparable effect.

Medicare's Trustees estimate that total Medicare spending will nearly double between 2020 and 2030—driven by growth in the volume and intensity of services provided to beneficiaries and by the number of beneficiaries in the program (which is projected to increase from 62 million to 77 million over this period).

Medicare spending has been consuming a growing share of the federal budget and strains beneficiaries' household budgets. In 2021, Medicare premiums and cost sharing were estimated to consume 23 percent of the average Social Security benefit, up from 14 percent 20 years earlier. The Medicare Trustees estimate that in another 20 years, these costs will consume 34 percent of the average Social Security benefit.

One of the most powerful ways Medicare can control spending growth is by setting prices. Over the last 10 years, spending per Medicare beneficiary has grown much more slowly than spending per privately insured enrollee. Increasing prices were the main cause of spending growth for the privately insured, which was in turn driven by high levels of provider market power. Hospitals and physician groups have increasingly consolidated, in part to gain leverage over private insurers in negotiating higher payment rates. From 2010 to 2020, that consolidation contributed to a 2.8 percent average annual per enrollee growth in spending on private health insurance. By comparison, over that same period, Medicare spending per enrollee increased an average of 1.9 percent per year—nearly the same as the general inflation rate of 1.8 percent over this period. This difference suggests that private plans’ greater ability to constrain volume has less of an effect on spending than the Medicare program’s greater ability to constrain prices under its administered pricing system.

The Commission makes recommendations about appropriate payment levels for various Medicare payment systems in our March report each year. These recommendations are based on our review of the latest available data and attempt to balance the need to pay high enough prices to ensure beneficiaries’ access to high-quality care with the need to be a responsible steward of fiscal resources.

Given Medicare’s financing challenges, many believe that restraining price growth will not be enough to ensure Medicare’s financial sustainability and that the quantity and/or mix of health care services must also be changed. Medicare has piloted several alternative payment models that give providers incentives to more closely manage and coordinate beneficiaries’ care to keep them healthy and reduce unnecessary utilization. One of the main goals of these payment models is to save Medicare money by financially rewarding providers for efficiently furnishing health care services while maintaining or improving the quality of care. Service utilization rates and payments to providers can also be influenced through other means. The Commission has made numerous recommendations that, if implemented, could address challenges with Medicare’s payment systems and improve payment accuracy and equity. Some key recommendations from prior years are summarized at the end of Chapter 1.

Medicare’s fiscal challenges must be met in a manner that improves quality and reduces inequities in access to care across the Medicare population. Although quality of care appears stable, there is room for improvement. The Commission is also dedicated to understanding and reducing disparities in access to care. As Medicare consumes growing shares of the federal budget and beneficiaries’ incomes, the Commission will continue to identify changes that could improve Medicare payment policy.

Assessing payment adequacy and updating payments in fee-for-service Medicare

As required by law, the Commission annually makes payment update recommendations for providers paid under Medicare’s traditional FFS payment systems. An update is the amount (usually expressed as a percentage change) by which the base payment for all providers in a payment system is changed relative to the prior year. As explained in Chapter 2, to determine an update, we first assess the adequacy of Medicare payments for providers in the current year (here, 2022) by considering beneficiaries’ access to care, the quality of care, providers’ access to capital, and how Medicare payments compare with providers’ costs. As part of that process, we examine whether payments will support the efficient delivery of services, consistent with our statutory mandate. Next, we assess how those providers’ costs are likely to change in the year the update will take effect (the policy year; here, 2023). Finally, we make a judgment about what, if any, update is needed for the policy year in question.

Providers’ financial status and the pattern of Medicare spending in 2020 varied substantially from historical patterns. In the spring of 2020, many health care sectors experienced large reductions in demand for services, resulting in temporary financial distress for some providers. In response, the Congress and CMS have extended federal grants to providers and temporarily altered certain Medicare payment policies. At least in part, those actions have offset the short-term financial effects of the coronavirus PHE for many providers. Some providers have returned funds to the federal government because their finances recovered faster than expected. The extension of federal funds, even if not precisely targeted, was a commensurate response to the immediate financial effects of the PHE.

To fulfill our congressional mandate to recommend updates to Medicare's payment systems, we must confine our focus to effects that we expect will impact payment adequacy in 2023. To the extent that the effects of the pandemic are temporary or vary significantly across individual providers, they are best addressed through targeted temporary funding policies. Because updates are cumulative—that is, they compound each year—they are not the preferred policy response to abrupt but temporary changes in demand for health care or resulting health care spending. Where we expect effects on providers' costs to persist into 2023, the policy year for our recommendations, those changes are noted in each sector's payment adequacy discussion and factor into our estimates of payment adequacy.

This year, we consider recommendations in nine FFS sectors: acute care hospitals, physicians and other health professional services, ambulatory surgical centers, outpatient dialysis facilities, skilled nursing facilities, home health agencies, inpatient rehabilitation facilities, long-term care hospitals, and hospice providers. The Commission looks at all available indicators of payment adequacy and reevaluates any assumptions from prior years, using the most recent data available to make sure its recommendations accurately reflect current conditions. We use the best available data and changes in payment policy to project margins for 2022 and make payment recommendations for 2023, accounting for anticipated changes in Medicare payments and providers' costs between 2022 and 2023. Because of standard data lags, the most recent complete data we have are generally from 2020. Where possible, we have bolstered our analyses with data from 2021, including interim claims data, information on facility closures, and beneficiary survey data.

In considering updates to payment rates, we may make recommendations that redistribute payments within a payment system to correct any biases that may make treating patients with certain conditions financially undesirable, make certain procedures unusually profitable, or otherwise result in inequity among providers. We may also recommend changes to improve program integrity. Our goal is to apply consistent criteria across settings, but because conditions at baseline and anticipated changes between baseline and the policy year may vary, the recommended updates may vary across sectors.

The Commission also examines payment rates for services that can be provided in multiple settings. Medicare often pays different amounts for similar services across settings. Basing the payment on the rate in the most efficient setting would in many cases save money for Medicare, reduce cost sharing for beneficiaries, and reduce the financial incentive to provide services in the higher-paid setting.

Our recommendations in this report, if adopted, could significantly change the revenues that providers receive from Medicare. Payment rates set to cover the costs of relatively efficient providers help induce all providers to control their costs. Furthermore, Medicare rates have broader implications for health care spending because they are used in setting payments for private health insurance and for other federal and state government programs. Thus, while setting prices intended to support efficient provision of care directly benefits the Medicare program, it can also help control health care spending across payers.

Hospital inpatient and outpatient services

Short-term acute care hospitals provide acute inpatient and outpatient services, such as treatments for acute medical conditions and injuries. Medicare generally sets FFS payment rates for hospital inpatient and outpatient services under the inpatient prospective payment systems (IPPS) and the outpatient prospective payment system (OPPS). In 2020, about 3,100 short-term acute care hospitals paid under the IPPS provided about 7.5 million inpatient stays to 4.8 million FFS Medicare beneficiaries. That same year, roughly 3,600 hospitals paid under the OPPS provided 78.1 million visits to 18.2 million FFS Medicare beneficiaries. The IPPS and OPPS payments for these services totaled \$172.6 billion, including \$8.3 billion in uncompensated care payments.

As described in Chapter 3, in 2020, some hospital payment adequacy indicators improved while others declined; however, indicators varied substantially across hospitals and largely reflect temporary changes during the PHE rather than changes in the overall adequacy of Medicare payments to hospitals.

Beneficiaries' access to care—At certain points during the PHE, FFS Medicare beneficiaries' access to hospital care was disrupted and inpatient capacity was stressed. However, short-term acute care hospitals continued

to have significant excess inpatient capacity in 2020, as indicated by an aggregate occupancy rate of 62 percent. In 2020 and 2021, the number of hospital closures declined substantially from the high in 2019. Inpatient stays and outpatient services per FFS beneficiary declined in 2020, driven by a decrease of over 40 percent in the use of hospital services in the spring of 2020, followed by partial rebounds by the end of the year. IPPS hospitals with excess capacity continued to have financial incentives to provide inpatient and outpatient services to Medicare beneficiaries, as indicated in 2020 by a positive Medicare marginal profit of about 5 percent.

Quality of care—Quality of care in 2020 is difficult to assess. While we report 2020 mortality, readmissions, and patient experience results, we have not used those results to inform our conclusions about trends in the quality of care provided to Medicare beneficiaries. In March 2019, the Commission recommended a redesign of the current hospital quality payment programs, including removing the current penalty-only quality programs and enacting a new hospital value incentive program that balances rewards and penalties and has the potential to drive further improvement in hospital quality.

Providers' access to capital—In 2020, IPPS hospitals' all-payer total margin remained strong but declined to 6.3 percent (a level similar to the average over the past 15 years). For rural hospitals, the all-payer total margin reached a near record high, reflecting targeted federal relief funds. In addition, certain large hospital systems reported that their 2021 all-payer operating margins exceeded 2019 levels, suggesting that hospitals' access to capital strengthened in 2021.

Medicare payments and providers' costs—In 2020, Medicare's payments to hospitals continued to be below hospitals' costs. IPPS payments per stay grew 8.7 percent, faster than in prior years; however, costs per stay grew even faster, rising 12.6 percent. Similarly, OPPS payments per service grew 13.5 percent, faster than in prior years, but costs per service grew even faster at 24.4 percent. For both IPPS stays and OPPS services, the faster growth in costs relative to payments is likely due to a combination of factors unique to the PHE, including spreading fixed costs over lower volume, increased wage rates, and pandemic-related protocols and supplies. Including the Medicare share

of federal PHE-related relief funds intended to help cover lost revenue and payroll costs, IPPS hospitals' Medicare margin was -8.5 percent, slightly above the 2019 margin, indicating that the federal relief funds did their intended job.

The coronavirus PHE made 2020 and 2021 anomalous years in many respects, and it is impossible to predict with certainty the extent to which these effects will continue into 2022 and beyond. Under these circumstances, we project that IPPS hospitals' Medicare margin in 2022 will be close to -10 percent prior to allocating relief funds. We project that IPPS hospitals' Medicare margin including relief funds will be around -9 percent, and the median Medicare margin for relatively efficient hospitals will remain at about 1 percent.

Recommendation—Our payment adequacy indicators are mixed but generally positive, and we anticipate changes caused by the PHE to be temporary (other than potentially increased wage rates, which should be accounted for under the current-law annual updates to the hospital market basket). Given these factors, the Commission recommends that the Congress maintain current-law IPPS and OPPS updates in 2023. The final update for 2023 will not be set until summer 2022, but CMS's third-quarter 2021 projections of the market basket and productivity (and the additional statutory increase to IPPS payments) would result in the IPPS base payment rate increasing by 2.5 percent and the OPPS base payment rate increasing by 2.0 percent. The Commission anticipates that this recommendation will be enough to maintain beneficiaries' access to hospital inpatient and outpatient care and keep IPPS and OPPS payment rates close to the cost of delivering high-quality care efficiently.

Mandated report: Changes to the low-volume hospital payment adjustment

In Chapter 3, we also report on the effects of the modifications to the low-volume hospital (LVH) payment adjustment for fiscal years 2019 through 2022, as mandated by the Bipartisan Budget Act (BBA) of 2018. The BBA of 2018 mandated that hospitals with fewer than 3,800 all-payer inpatient stays be eligible for the LVH adjustment (instead of hospitals with fewer than 1,600 Medicare stays, as mandated by the Affordable Care Act of 2010 (ACA)). However, the BBA of 2018

kept other aspects of the ACA changes to LVH policy, including specifying the exact adjustment (instead of having the Secretary of the Department of Health and Human Services determine an empirically justified adjustment) and the isolation requirement of fewer than 15 miles from the nearest IPPS hospital.

Our analysis found that in 2019, the BBA of 2018 policy change raised the number of LVHs by 5 percent but increased LVH payments by about 19 percent, due to increases in LVHs, the average number of FFS Medicare stays per LVH, and the average LVH adjustment. The BBA of 2018 requirement that LVH eligibility be based on all-payer volume (and not Medicare volume) is consistent with the Commission's prior recommendation, and LVH policy will become more consistent with our prior recommendation beginning in 2023 when CMS's authority to determine an empirically justified LVH adjustment is restored. Still, concerns remain that the policy is not well targeted to isolated hospitals and is duplicative for the majority of LVHs that receive cost-based payments through their designation as a sole-community or Medicare-dependent hospital.

Physician and other health professional services

Physicians, nurse practitioners, and other health professionals deliver a wide range of services in a variety of settings. In 2020, Medicare paid \$64.8 billion for these clinician services, accounting for just under 17 percent of traditional FFS Medicare spending. In the same year, almost 1.3 million clinicians billed the fee schedule.

In Chapter 4, we recommend a 2023 update to the conversion factor (a fixed dollar amount) used in Medicare's physician fee schedule based on our assessment of beneficiaries' access to care, the quality of their care, and providers' payments and costs.

Beneficiaries' access to care—Overall, beneficiary access to clinician services is comparable to that of privately insured people ages 50 to 64 and comparable to prior years, despite the ongoing PHE. Ninety-three percent of the Medicare beneficiaries ages 65 and over that we surveyed in mid-2021 were satisfied with the quality of the care they received in the past year. Only 10 percent reported forgoing care. Half of beneficiaries reported that during the past year they had accessed clinicians

through telehealth. Over 90 percent of beneficiaries in our survey had a primary care provider and did not need to find a new primary care provider in the past year. Consistent with prior years, among those looking for a new clinician, larger shares reported problems finding a new primary care provider than a new specialist. While the number of clinicians held steady in 2020, the ratio of clinicians to beneficiaries dipped slightly because of enrollment growth. The share of providers billing Medicare who are enrolled in Medicare's participating provider program—meaning they accept physician fee schedule amounts as payment in full—remains very high, and the share of beneficiaries who report encountering a clinician who does not accept Medicare is extremely low.

Quality of care—Quality of care is difficult to assess in 2020 due to the effects of the pandemic on beneficiaries and providers. While we report 2020 results for our quality measures (ambulatory care-sensitive hospitalizations and emergency department visits and patient experience), we have not used those results to inform our conclusions about whether overall quality has improved, worsened, or stayed the same. The 2020 results may reflect temporary changes in the delivery of care and data limitations unique to the PHE rather than trends in the quality of care provided to beneficiaries.

Medicare payments and providers' costs—After growing at an average annual rate of 2 percent from 2015 to 2019, FFS Medicare's allowed charges for clinician services per FFS beneficiary fell by 10.6 percent in 2020 due to care being postponed or forgone during the PHE. Medicare spending on clinician services in 2020 was \$8.7 billion lower than it was in 2019; it is too soon to tell whether clinicians experienced revenue declines in 2021. The Congress has provided clinicians with tens of billions of dollars to offset their pandemic-related revenue losses. This support accelerated the growth of national spending on clinician services, with spending on these services (by all sources, not just Medicare) growing by 5.4 percent in 2020 (up from 4.2 percent growth in 2019).

In 2020, private insurance payment rates for clinician services were 138 percent of Medicare's FFS rates, up from 136 percent in 2019. Despite reduced Medicare spending on clinician services due to the pandemic, median physician compensation from all payers

continued to grow in 2020, rising 1.0 percent. However, median compensation in 2020 remained much lower for primary care physicians than for many specialists—underscoring concerns about the mispricing of physician fee schedule services and its impact on the number of physicians who choose to practice primary care. In 2021, CMS substantially increased the payment rates for E&M office/outpatient visits, which could help reduce the large gap in compensation between primary care physicians and certain specialists.

Recommendations—The Medicare Access and CHIP Reauthorization Act of 2015 mandates no update for clinicians for 2023 (however, clinicians are eligible for annual performance-based payment adjustments through Medicare’s Merit-based Incentive Payment System, or they can receive an annual bonus worth 5 percent of their Medicare professional services payments if they participate in advanced alternative payment models). The Commission’s analyses suggest that Medicare’s aggregate payments for clinician services are adequate. Although clinicians have experienced declines in their Medicare service volume and revenue due to the pandemic, the Congress has provided tens of billions of dollars in relief funds to clinicians, and we expect volume and revenue to rebound to prepandemic levels (or higher) by 2023. Therefore, the Commission recommends that, for calendar year 2023, the Congress should update the 2022 Medicare base payment rate for physician and other health professional services by the amount determined under current law.

Before the coronavirus PHE, CMS paid for telehealth services under the physician fee schedule only if the services were provided using an interactive telecommunications system that included two-way audio and video communication technology. During the PHE, however, CMS has waived this requirement for certain services. But Medicare claims do not always indicate whether a telehealth service was delivered by an audio-only interaction or an audio-video interaction. Consequently, CMS and others are unable to use claims data to assess the impact of many audio-only telehealth services on access, quality, and cost. Therefore, the Commission recommends that CMS require clinicians to use a claims modifier to identify all audio-only telehealth services, like the agency has done for audio-only telehealth services for mental health conditions and substance use disorders. This

recommendation applies whether Medicare is covering these services temporarily or permanently.

Ambulatory surgical center services

Ambulatory surgical centers (ASCs) provide outpatient procedures to patients who do not require an overnight stay in a hospital. In 2020, the 5,930 ASCs that were certified by Medicare treated 3.0 million FFS Medicare beneficiaries. Medicare program and beneficiary spending on ASC services was about \$4.9 billion.

As described in Chapter 5, in 2020, some ASC payment adequacy indicators improved while others diminished. However, the decreasing measures very likely reflect the temporary effects of the PHE rather than the adequacy of Medicare payments to ASCs.

Beneficiaries’ access to care—Our analysis of facility supply and volume of services indicates that beneficiaries’ access to ASC services is adequate. From 2015 to 2019, the number of ASCs increased by an average annual rate of 2.1 percent. In 2020, the number of ASCs increased 2.0 percent. Most new ASCs in 2020 (95 percent) were for-profit facilities. From 2015 through 2019, the volume of services per Part B FFS beneficiary grew by an average annual rate of 1.5 percent. In 2020, volume per beneficiary declined by 13.6 percent, largely due to a substantial drop in the spring of 2020 caused by the PHE. ASC volume rebounded strongly, and volume in December 2020 was 97 percent of the volume in December 2019.

Quality of care—From 2013 through 2017, ASC-reported quality data showed improvement in performance; improvement plateaued from 2017 to 2019. For 2020, CMS collected data on five quality measures; these measures were generally unchanged from 2019 to 2020. However, CMS did not require ASCs to submit quality data for the first six months of 2020. We continue to be concerned about the delayed use of Consumer Assessment of Healthcare Providers and Systems® measures, the lack of a value-based purchasing program for the ASC sector, and the lack of claims-based outcome measures that apply to all ASCs.

Providers’ access to capital—Because the number of ASCs—especially for-profit ASCs—has continued to increase and consolidation in the ASC market has maintained a steady pace, access to capital appears to be adequate.

Medicare payments and providers' costs—From 2015 through 2019, Medicare payments for ASC services per FFS beneficiary grew by an average annual rate of 6.7 percent. However, in 2020, payments fell by 3.9 percent, reflecting the effects of the PHE. ASCs do not submit data on the cost of services they provide to Medicare beneficiaries. Therefore, we cannot calculate a Medicare margin as we do for other provider types to help assess payment adequacy.

Recommendations—Cost data would support more informed decisions about updating ASC payment rates and identifying an appropriate input price index for ASCs. Therefore, the Commission continues to recommend that the Secretary of Health and Human Services collect cost data from ASCs without further delay. Considering the available evidence of payment adequacy, the Commission recommends that, for calendar year 2023, the Congress eliminate the update to the 2022 Medicare conversion factor for ambulatory surgical centers.

Outpatient dialysis services

Outpatient dialysis services are used to treat the majority of individuals with end-stage renal disease (ESRD). In 2020, nearly 384,000 beneficiaries with ESRD on dialysis were covered under FFS Medicare and received dialysis from nearly 7,800 dialysis facilities. Since 2011, Medicare has paid for outpatient dialysis services based on a PPS bundle that includes certain dialysis drugs and ESRD-related clinical laboratory tests that were previously paid separately. In 2020, Medicare expenditures for outpatient dialysis services totaled \$12.3 billion. Six percent of the total consisted of payments for two calcimimetics paid under the ESRD PPS's transitional drug add-on payment adjustment (TDAPA), which pays providers according to the number of units of a drug and the drug's average sales price.

Tragically, patients with ESRD are at increased risk for COVID-19-associated morbidity and mortality. However, as described in Chapter 6, our payment adequacy indicators for dialysis services remain generally positive.

Beneficiaries' access to care—Measures of the capacity and supply of providers, beneficiaries' ability to obtain care, and changes in the volume of services suggest that payments are adequate. Between 2015 and 2019,

the number of in-center treatment stations grew faster than the number of FFS dialysis beneficiaries (but kept pace with demand from all dialysis patients across all types of health coverage). Between 2019 and 2020, capacity continued to grow but at a slower rate than between 2015 and 2019. Between 2019 and 2020, the number of FFS dialysis beneficiaries and the total number of treatments each declined by 3 percent, but these declines are attributable to the coronavirus pandemic, which resulted in slowing the initiation of dialysis by new patients and in excess mortality. Use of ESRD drugs in the payment bundle continued to decline, but at a slower rate than during the initial years of the ESRD PPS. In 2020, dialysis facilities' marginal profit was 20 percent, indicating that dialysis providers have a financial incentive to continue to serve Medicare beneficiaries.

Quality of care—The growing trend under the ESRD PPS toward home dialysis, which is associated with better patient satisfaction, continued in 2020. Between 2019 and 2020, all-cause hospitalizations, emergency department use, and kidney transplantation declined while mortality increased. Each of these changes are likely linked to the pandemic. By contrast, between 2018 and 2019, kidney transplantation increased while the other quality metrics held steady.

Providers' access to capital—Information from investment analysts suggests that access to capital for dialysis providers continues to be strong. The number of facilities, particularly for-profit facilities, continues to increase. Under the ESRD PPS, the two largest dialysis organizations have grown through acquisitions of and mergers with midsize dialysis organizations.

Medicare payments and providers' costs—In 2019, the aggregate Medicare margin for dialysis facilities jumped to 8.4 percent, due to the profitability of calcimimetics paid under the TDAPA policy. In 2020, cost per treatment rose by 4 percent, while Medicare payment per treatment declined by 2 percent, and the aggregate Medicare margin fell to 2.7 percent, similar to the 2018 margin of 2.1 percent. Including federal relief funds, the aggregate Medicare margin was 3.7 percent. While the PHE has made 2020 and 2021 anomalous years in many respects and it is impossible to predict with certainty the extent to which these effects will continue into 2022 and beyond, we project that the 2022 aggregate

Medicare margin will drop to 1.8 percent, in part due to cost changes that will exceed payment updates.

Recommendation—Under current law, the Medicare FFS base payment rate for dialysis services is projected to increase by 1.2 percent. Given that most of our indicators of payment adequacy are positive, for 2023, the Commission recommends that the Congress update the calendar year 2023 ESRD PPS base rate by the amount determined under current law.

Skilled nursing facility services

Skilled nursing facilities (SNFs) provide short-term skilled nursing and rehabilitation services to Medicare beneficiaries after a stay in an acute care hospital. In 2020, about 15,000 SNFs furnished 1.7 million Medicare-covered stays to 1.2 million FFS beneficiaries (3.3 percent of Medicare's FFS beneficiaries). In that year, Medicare FFS spending on SNF services was \$28.1 billion.

In Chapter 7, we examine the adequacy of Medicare's SNF payments. The effects of the coronavirus pandemic on beneficiaries and nursing home staff have been devastating. However, the combination of federal policies and the implementation of Medicare's new case-mix system resulted in considerably improved financial performance for SNFs in 2020. Some of the changes in our payment adequacy indicators in 2020 likely reflect the unusual circumstances of the pandemic rather than the adequacy of Medicare's payments.

Beneficiaries' access to care—The number of SNFs participating in the Medicare program has been fairly stable at about 15,000 for many years. In 2020, 88 percent of beneficiaries lived in a county with three or more SNFs or swing bed facilities. The median occupancy rate declined from 85 percent before the start of the pandemic to 74 percent in September 2021. This decline reflects the impact of the pandemic and is unrelated to the adequacy of Medicare's payments. Between 2019 and 2020, Medicare-covered admissions per 1,000 FFS beneficiaries dropped 7.9 percent, consistent with the lower number of admissions in the early days of the pandemic for hospital stays lasting at least 3 days, which is normally required for Medicare coverage. This requirement has been waived during the PHE. Covered days per 1,000 FFS beneficiaries also declined in 2020. The Medicare marginal profit

averaged 25 percent for freestanding facilities in 2020. This high level indicates that SNFs with available capacity have a strong incentive to admit Medicare beneficiaries.

Quality of care—Between 2019 and 2020, rates of successful discharge to the community fell and the rates of hospitalization rose. Given the effects of the pandemic, we cannot draw conclusions about whether the changes reflect the adequacy of Medicare's payments.

Providers' access to capital—Though lending activity stalled in 2020, transactions picked up in 2021, indicating investor interest in the nursing home sector. In 2020, the all-payer total margin—reflecting all payers and all lines of business—was 3 percent. This improvement is due to the general and targeted funding nursing homes received during the PHE, changes in Medicare payments, and the temporary increases in Medicaid rates made by many states.

Medicare payments and providers' costs—Despite the decline in volume, Medicare's aggregate FFS spending between 2019 and 2020 rose 2.7 percent to \$28.1 billion, reflecting the effects of the new case-mix system and PHE-related policies. On a per day basis, payments increased over 8 percent, while costs grew 2.1 percent. The aggregate Medicare margin for freestanding SNFs was 16.5 percent. If we allocate a portion of the reported federal relief funds to Medicare payments, we estimate that the aggregate Medicare margin was 19.2 percent. Margins varied greatly across facilities, reflecting differences in costs per day, economies of scale, and cost growth.

The level of Medicare's FFS payments remains well above the cost of Medicare-covered stays. Since 2000, the aggregate Medicare margin has been above 10 percent. The 2020 Medicare margin for efficient SNFs was very high (22.8 percent), though we are reluctant to place much weight on this indicator, given the impact of the pandemic on costs and quality measures. Medicare Advantage plans' payment rates, considered attractive by many SNFs, are much lower than the program's FFS payments, which is unlikely to be explained by the differences in patient characteristics.

As required by the Affordable Care Act of 2010, we also report on Medicaid use and spending and non-

Medicare (private-payer and Medicaid) margins. Medicaid finances the majority of long-term care services provided in nursing homes, and some state programs also cover the copayments on SNF care for dual-eligible beneficiaries who stay more than 20 days in a SNF. Between 2020 and 2021, the number of Medicaid-certified facilities declined less than 1 percent, to 14,720. Spending was \$39.8 billion in 2020, 3.8 percent less than in 2019. The average non-Medicare margin (which includes all payers and all lines of business except FFS Medicare SNF services) was -0.3 percent, an improvement from 2019.

Recommendation—Considering our payment adequacy indicators, the Commission recommends that, for fiscal year 2023, the Congress should reduce the 2022 Medicare base payment rates for skilled nursing facilities by 5 percent. While the effects of the pandemic on beneficiaries and nursing home staff have been devastating, the combination of federal policies and the implementation of the new case-mix system resulted in improved financial performance for SNFs under Medicare. The high level of Medicare's payments indicates that a reduction to payments is needed to more closely align aggregate payments to aggregate costs.

Home health care services

Home health agencies (HHAs) provide services to beneficiaries who are homebound and need skilled nursing care or therapy. In 2020, about 3.1 million Medicare FFS beneficiaries received care, and the program spent \$17.1 billion on home health care services. In that year, over 11,456 HHAs participated in Medicare. In January 2020, CMS implemented major changes to the payment system for home health care services, as mandated by the BBA of 2018. The changes included shortening the unit of payment from 60 days to 30 days, eliminating the number of in-person therapy visits provided in a home health episode as a factor in the payment system, and introducing a new case-mix system, the Patient-Driven Groupings Model (PDGM).

As described in Chapter 8, our payment adequacy indicators for home health care services are generally positive.

Beneficiaries' access to care—In 2020, over 99 percent of beneficiaries lived in a county served by at least one

HHA. Between 2019 and 2020 the number of HHAs fell by 1.0 percent, continuing a slow decline since 2013 but at a lower rate than in prior years. The slower decline in supply of HHAs suggests that neither the coronavirus PHE nor the implementation of the PDGM has had a significant impact on HHA supply. In 2020, the number of beneficiaries receiving home health care fell by 4.7 percent; that decline was concentrated in April and May. This monthly pattern, with the largest drop in volume coinciding with the onset of the PHE, indicates that the decline in services was not attributable to the implementation of the PDGM. The average number of in-person visits per 30-day period also declined (9.4 percent), but some of the decline may have been offset by greater use of virtual visits through telehealth, for which we lack detailed information. Freestanding HHAs' Medicare marginal profit was 22.9 percent in 2020, suggesting a significant financial incentive for HHAs to serve additional Medicare patients.

Quality of care—Quality of care was difficult to assess in 2020. The number of home health patients who were hospitalized during their spell of home health services fell slightly. However, the share of beneficiaries who were successfully discharged to the community (patients who did not experience an unplanned hospitalization within 30 days of the end of their home health care spell) also fell. Given the various disruptions to the health care delivery system in 2020, these results should be interpreted cautiously.

Providers' access to capital—Access to capital is a less important indicator of Medicare payment adequacy for home health care because this sector is less capital intensive than other health care sectors. The major publicly traded for-profit home health companies had sufficient access to capital markets for their credit needs.

Medicare payments and providers' costs—In 2020, Medicare spending for home health care declined by 4.7 percent to \$17.1 billion. Medicare aggregate margins for freestanding agencies averaged 20.2 percent, even as the cost per 30-day period increased by 3.1. Medicare's payments have always been in excess of cost under prospective payment, with the Medicare margin for HHAs averaging 16.2 percent from 2001 to 2019. The projected margin for 2022 is 17.0 percent.

Recommendations—Medicare beneficiaries often prefer to receive care at home instead of in institutional settings, and home health care can be provided at lower costs than institutional care. However, Medicare’s payments for home health services are too high, and these excess payments diminish the service’s value as a substitute for more costly services. Based on these findings, for 2023 the Commission recommends reducing the 2022 home health PPS base payment rate by 5 percent.

The lack of detailed information on the use of telehealth in 2020 impairs our ability to assess the impact of the PDGM and the PHE. As the use of telehealth in home health care grows, the lack of information about telehealth visits could also compromise CMS’s ability to accurately set payments under the home health PPS. The Commission therefore recommends that the Secretary require HHAs to report the provision of telehealth during home health care on Medicare claims, like they already report for in-person visits and other home health care services.

Mandated report: Assessing the impact of the PDGM on home health care in 2020

In Chapter 8, we also report on the effects of the changes to the home health PPS as mandated by the BBA of 2018. The mandated changes included shortening the unit of payment under the PPS from 60 days to 30 days and eliminating the number of in-person therapy visits provided in a home health episode as a factor in the payment system. CMS implemented these changes on January 1, 2020, under a new case-mix system, the PDGM. The Commission is required to assess the impact of the changes on costs, quality, and other behavioral responses by HHAs.

Assessing the initial impact of the PDGM on home health care in 2020 is confounded by the disruptions associated with the coronavirus PHE. The payment adequacy indicators for 2020 point to relative stability for Medicare home health care in the first year of the PDGM. Though the number of 30-day periods and the number of beneficiaries served in 2020 were lower than in 2019, the monthly pattern in home health care volume for 2020 signals that the declines were mostly attributable to the PHE and not the PDGM. In addition, the high payment levels under the PDGM in 2020 suggest that HHAs had adequate reimbursement to provide quality care.

Inpatient rehabilitation facility services

Inpatient rehabilitation facilities (IRFs) are hospitals and hospital units that provide intensive rehabilitation services to patients after illness, injury, or surgery. In 2020, Medicare spent \$8.0 billion on IRF care provided to FFS beneficiaries in about 1,110 IRFs nationwide. About 335,000 beneficiaries had 379,000 IRF stays. On average, the FFS Medicare program accounted for about 54 percent of IRF discharges.

As described in Chapter 9, in general, our payment adequacy indicators for IRFs are positive.

Beneficiaries’ access to care—After declining for several years, the number of IRFs increased in 2020. Over time, the number of hospital-based and nonprofit IRFs has fallen, while the number of freestanding and for-profit IRFs has increased. In 2020, the average IRF occupancy rate remained at 67 percent, indicating that capacity is more than adequate to meet demand for IRF services. The number of Medicare cases per 10,000 FFS beneficiaries fell by 5 percent in 2020, but this decline likely reflects the decrease in elective acute care hospital services requiring subsequent IRF care, not the adequacy of Medicare payments. The marginal profit was 19 percent for hospital-based IRFs and 38 percent for freestanding IRFs. This rate of marginal profit suggests that providers have a strong incentive to treat Medicare patients and is a positive indicator of patient access.

Quality of care—Quality of care is difficult to assess for 2020. We present average risk-adjusted rates of successful discharge to the community and all-condition hospitalizations during the IRF stay but do not draw conclusions about whether quality has improved, worsened, or stayed the same.

Providers’ access to capital—Despite variation among provider types, in general, the parent institutions of hospital-based IRFs continued to have strong access to capital. The major freestanding IRF chain, accounting for about 31 percent of Medicare IRF discharges in 2020, continued expanding during the PHE and returned all federal relief funds, suggesting good access to capital. In 2020, IRFs’ total margin remained at 10.2 percent for freestanding IRFs.

Medicare payments and providers' costs—The aggregate Medicare margin for IRFs has remained above 13 percent since 2010, reaching over 14 percent in 2018. From 2019 to 2020, IRF cost growth outpaced payment growth, lowering the Medicare margin in 2020 to 13.5 percent. However, after including an estimate of Medicare's share of federal relief funds, the aggregate Medicare margin in 2020 rose to 14.9 percent. While the coronavirus PHE has made 2020 and 2021 anomalous years in many respects and it is impossible to predict with certainty the extent to which the effects will continue, for 2022, we project an aggregate Medicare margin of 14 percent.

Recommendation—Given our positive payment adequacy indicators, the Commission recommends that for fiscal year 2023, the fiscal year 2022 IRF base payment rate be reduced by 5 percent. The Commission anticipates that this recommendation would provide IRFs with sufficient revenues to maintain beneficiaries' access to IRF care and bring IRF PPS payment rates closer to the cost of delivering high-quality care efficiently.

Long-term care hospital services

Long-term care hospitals (LTCHs) provide care to beneficiaries who need hospital-level care for relatively extended periods of time. To qualify as an LTCH, a facility must meet Medicare's conditions of participation for acute care hospitals and have an average length of stay of more than 25 days for certain Medicare patients. In 2020, Medicare spent \$3.4 billion on care provided in LTCHs; about 71,000 FFS Medicare beneficiaries had about 77,600 LTCH stays.

Medicare pays for care in LTCHs under the LTCH PPS for cases that meet the qualifying criteria specified in law. LTCH qualifying cases are those with an immediately preceding acute care hospital stay who spent 3 or more days in an intensive care unit or coronary care unit or who receive mechanical ventilation for at least 96 hours at the LTCH. Under the dual payment-rate system, cases that do not qualify for LTCH-level care may be treated in LTCHs but are paid a lower rate. After a four-year transition period from 2016 through 2019, during which they were paid a blended rate, LTCHs were slated to be paid lower site-neutral rates for cases that do not meet the qualifying criteria starting in 2020. However, site-neutral

payments have not yet been fully implemented because they were temporarily waived during the coronavirus PHE.

As described in Chapter 10, in general, our payment adequacy indicators for LTCHs reflect the transition to the dual payment-rate system and the effects of temporary PHE-related policies that waived certain LTCH payment policies.

Beneficiaries' access to care—Between 2019 and 2020, the decline in the supply of LTCHs slowed compared with the prior three years. Average LTCH occupancy in 2020 was 65 percent. From 2016 through 2019, after controlling for the number of FFS Medicare beneficiaries, total LTCH case volume fell about 10 percent annually, compared with a 12.4 percent decline in case volume in 2020. Medicare marginal profit averaged about 18 percent across LTCHs in 2020. For LTCHs with a high share of qualifying cases, Medicare marginal profit was 20 percent in 2020, an increase over 2019 that reflects temporary PHE-related policies that raised Medicare payments.

Quality of care—In 2020, the aggregate risk-adjusted rate of hospitalizations (6.1 percent) was higher than in prior years, as was the rate of successful discharge to the community (23 percent). Given the effects of the pandemic on these rates, we do not draw conclusions about whether the changes reflect the adequacy of Medicare's payments.

Providers' access to capital—In recent years, impending implementation of site-neutral rates for nonqualifying LTCH cases limited opportunities for growth and reduced the industry's need for capital to expand. In 2020, temporary payment policies to create additional inpatient capacity during the coronavirus PHE raised payments for nonqualifying cases, and LTCHs received relief funds. In 2020, the all-payer LTCH margin with relief funds included was 4 percent; all else equal, the margin was 2.7 percent excluding relief funds.

Medicare payments and providers' costs—Fueled by the suspension of the 2 percent sequestration reduction and temporary waivers of site-neutral payments and other LTCH payment criteria, Medicare aggregate margins in 2020 increased to 6.9 percent, up from 2.9 percent in 2019. We project that LTCHs' Medicare aggregate margin for facilities with a high share of qualifying cases will be 3 percent in 2022.

Recommendation—Based on payment adequacy indicators and in the context of ongoing changes to payment policy, the Commission recommends for fiscal year 2023 that the 2022 Medicare base payment rate for LTCHs be increased by the market basket minus the applicable productivity adjustment. We estimate, based on CMS’s third-quarter 2021 projections of the market basket productivity, that this recommendation would result in the LTCH base payment rate increasing by 2 percent in 2023, but that may change because the final update for 2023 will not be set until summer 2022. This update supports LTCHs in their provision of safe and effective care for Medicare beneficiaries meeting the LTCH PPS criteria for payment at the standard LTCH PPS rate.

Hospice services

The Medicare hospice benefit covers palliative and support services for beneficiaries who are terminally ill with a life expectancy of six months or less if the illness runs its normal course. In 2020, with the onset of the pandemic, deaths among Medicare beneficiaries increased by nearly 18 percent and more than 1.7 million Medicare beneficiaries (including almost half of decedents) received hospice services from 5,058 providers. Medicare hospice expenditures totaled \$22.4 billion.

As described in Chapter 11, our payment adequacy indicators for hospice services are positive.

Beneficiaries’ access to care—In 2020, the number of hospice providers increased by 4.5 percent, due to growth in the number of for-profit hospices, continuing a more than decade-long trend of substantial market entry by for-profit providers. The number of beneficiaries using hospice services at the end of life grew 9 percent in 2020, while the share of Medicare decedents using hospice declined between 2019 and 2020 because deaths increased more rapidly than hospice enrollments. Between 2019 and 2020, average lifetime length of stay among decedents grew from 92.5 days to 97.0, and the median length of stay was stable at 18 days. In 2019, Medicare payments to hospice providers exceeded marginal costs by roughly 17 percent. This rate of marginal profit suggests that providers have a strong incentive to treat Medicare patients and is a positive indicator of patient access.

Quality of care—Quality of care is difficult to assess for 2020. Due to the pandemic, CMS temporarily suspended collection of the hospice quality data submitted by providers (the Hospice Item Set and the Hospice Consumer Assessment of Healthcare Providers and Systems® (CAHPS®) survey); these data will become available again in 2022. Based on the most recent data reflecting performance through 2019, hospice quality, as measured by scores on the Hospice CAHPS, was stable. Performance on a measure of visits in the last three days of life improved slightly in 2019. Separate Commission analysis of nurse and social worker visits in the last days of life suggests some decline in in-person visits between 2019 and 2020, which is likely tied to the pandemic and is not necessarily a reflection of quality of care.

Providers’ access to capital—Hospices are not as capital intensive as other provider types because they do not require extensive physical infrastructure. However, continued growth in the number of for-profit providers and reports of strong investor interest in the sector suggest capital is available. Less is known about access to capital for nonprofit, freestanding providers, for which capital may be more limited. Hospital-based and home health-based hospices have access to capital through their parent providers.

Medicare payments and providers’ costs—Medicare payments are more than sufficient to cover providers’ costs. Between 2018 and 2020, hospice cost growth was generally modest. Average cost per day for routine home care, the level of care that accounts for more than 98 percent of hospice days, increased 0.5 percent between 2018 and 2019 and 1.2 percent between 2019 and 2020. The aggregate 2019 Medicare margin was 13.4 percent, up from 12.4 percent in 2018, and the projected 2022 margin is 13 percent.

In addition to indicators of hospice payment adequacy, Chapter 11 also discusses the hospice aggregate cap, which limits the total payments a hospice provider can receive in a year in aggregate. If a provider’s total payments exceed the number of patients treated multiplied by the cap amount, the provider must repay the excess to the Medicare program. The aggregate cap functions as a mechanism that reduces payments to hospices with long stays and high margins. In 2019, about 19 percent of hospices exceeded the cap; their

aggregate Medicare margin was about 22 percent before and 10 percent after application of the cap.

Recommendations—Based on these payment adequacy indicators and analysis of the hospice aggregate cap, the Commission recommends that hospice payment rates for 2023 be held at their 2022 levels and that the aggregate cap be wage adjusted and reduced by 20 percent.

In response to the PHE, CMS modified the hospice conditions of participation to permit hospice providers to furnish services using telecommunication systems during the PHE, under certain circumstances. However, hospices are unable to report on the use of telehealth services on Medicare claims (with the exception of social worker phone calls, which have historically been reported on claims). This lack of information has impaired our ability to understand the frequency and the role that telehealth has played during the PHE. For this reason, the Commission's recommendation is that CMS should require hospice providers to report telehealth visits on Medicare claims.

The Medicare Advantage program: Status report and mandated report on dual-eligible special needs plans

In Chapter 12, the Commission provides a status report on the Medicare Advantage (MA) program. In 2021, the MA program included 4,778 plan options offered by 186 organizations, enrolled nearly 27 million beneficiaries (46 percent of Medicare beneficiaries with both Part A and Part B coverage), and paid MA plans an estimated \$350 billion (not including Part D drug plan payments).

The MA program gives Medicare beneficiaries the option of receiving benefits from private plans rather than from the traditional FFS Medicare program. The Commission strongly supports the inclusion of private plans in the Medicare program; beneficiaries should be able to choose among Medicare coverage options, including the traditional FFS Medicare program and the alternative delivery systems that private plans provide. Because Medicare pays private plans a predetermined rate—risk adjusted per enrollee—rather than a per service rate, plans have greater incentives than FFS providers to innovate and use care management techniques to deliver more efficient care.

For the past two years, the coronavirus pandemic has had a significant and tragic impact on beneficiaries.

Policymakers have been concerned that the disruption in service utilization and plan administrative activities related to the coronavirus pandemic could impact payments in unexpected ways. However, because Medicare payments to MA plans are established before the start of each calendar year based on prior years' data, overall plan revenues in 2020 remained at prepandemic levels while service use declined, resulting in increased profitability for most MA plans. Although utilization remained below prepandemic levels and most publicly traded insurers reported profitability in 2021, some plans are concerned that lower utilization in 2020 limited their ability to document diagnoses, resulting in smaller risk adjustments and lower plan revenues in 2021. The effect of risk adjustments on 2021 revenues is not yet known and likely varies across the industry. In 2022, Medicare payments to MA plans are increased because of the expectation that deferred care will raise utilization above prepandemic levels. We do not anticipate that the pandemic will have a deleterious impact on overall plan revenues.

Many indicators point to an increasingly robust MA program, including growth in enrollment, increased plan offerings, and, for the sixth straight year, a historically high level of extra benefits. In 2022, the average Medicare beneficiary has a choice of 36 plans and the average MA plan enrollee has access to nearly \$2,000 in extra benefits annually that Medicare FFS enrollees cannot access without purchasing additional health insurance coverage. Medicare payments for MA extra benefits have increased by 53 percent since 2019. In this way, payments to MA plans have increasingly been used to provide an indirect subsidy to offer expanded benefits for MA enrollees. Medicare spending for these extra benefits (plus plan administrative fees and profit) accounts for 15 percent of payments to MA plans, yet we have no data about their use nor information about their value. In the three years from 2018 to 2021, the share of eligible Medicare beneficiaries enrolled in MA rose by 3 percentage points per year, from 37 percent to 46 percent. If the trend continues, a majority of eligible Medicare beneficiaries will be enrolled in MA by 2023.

MA plans continue to capitalize on their administrative flexibility and reduce their relative growth in health care costs year over year. For 2022, the average plan bid to provide Medicare Part A and Part B benefits was 15 percent less than FFS Medicare would spend for those

enrollees, and nearly all plan bids are below the cost of FFS Medicare.

However, these efficiencies are shared exclusively by the companies sponsoring MA plans and MA enrollees in the form of extra benefits. The taxpayers and Medicare beneficiaries who fund the MA program do not realize any savings from MA plan efficiencies. Instead, Medicare spends 4 percent more on MA than it would spend on FFS Medicare. The MA program has been expected to reduce Medicare spending since its inception: Under the original incorporation of private plans in Medicare in 1985, payments to private plans were set at 95 percent of FFS payments. However, private plans in the aggregate have never produced savings for Medicare, due to policies governing payment rates to MA plans that the Commission has found to be deeply flawed.

In particular, coding intensity inflates payments to MA plans and undermines plan incentives to improve quality and reduce costs; the quality bonus program boosts plan payments for nearly all enrollees but does not meaningfully reflect plan quality, from the perspective of the MA plan enrollee or the Medicare program; and plan benchmarks are set high enough that the government subsidizes substantial and ever higher levels of extra benefits for MA enrollees. Apart from payments, the Commission finds that the plan-submitted data about beneficiaries' health care encounters are incomplete, preventing policymakers from understanding plan efficiencies or implementing program oversight. These policy flaws diminish the integrity of the program and generate waste from beneficiary premiums and taxpayer funds. A major overhaul of MA policies is therefore urgently needed.

Over the past few years, the Commission has made recommendations to address coding intensity, improve the completeness of encounter data, replace the quality bonus program, and establish more equitable benchmarks. The Commission remains committed to including private plans in the Medicare program. Beneficiaries clearly find MA to be an attractive option through which to receive their Medicare benefits, as evidenced by robust trends in year-over-year enrollment growth. However, this does not mean that Medicare should continue to overpay MA plans; in fact, under current policies, as MA enrollment continues to grow, doing so will further worsen Medicare's fiscal sustainability. It is therefore imperative that the Congress and the Secretary make policy improvements.

To encourage efficiency and innovation, MA plans need to face appropriate financial pressure similar to what the Commission recommends for providers in the traditional FFS program.

Enrollment—For the third consecutive year, enrollment in MA plans grew by 10 percent. Between July 2020 and July 2021, MA enrollment grew by 2.5 million enrollees—to 26.9 million enrollees. In 2021, about 46 percent of MA-eligible beneficiaries were enrolled in MA plans, up from 43 percent in 2020.

Plan availability—In 2022, access to MA plans remains high, with 99 percent of Medicare beneficiaries having access to at least one plan. The average beneficiary has 36 available plans sponsored by 8 different parent organizations, both increases relative to 2021.

Plan rebates—In 2022, rebates that are used to provide additional benefits to enrollees are at a historic high of \$164 per enrollee per month. The average total rebates are 17 percent higher than in 2020 (\$24 higher per enrollee per month). Plans can devote the rebate to lower cost sharing, lower premiums, or supplemental benefits. In 2022, 43 percent of projected plan rebates was allocated for lower cost sharing, down from 46 percent in 2021.

Plan payments—In 2022, plan payments remain higher than FFS spending levels. Total Medicare payments to MA plans average an estimated 104 percent of FFS spending. The 2022 estimate incorporates about 3.6 percentage points of uncorrected coding intensity. Relative to FFS spending for Part A and Part B benefits, quality bonuses in MA account for 3 percentage points of MA payments. Using plan bid data for 2022 and ignoring the impact of coding intensity, we estimate that MA payments are 100 percent of FFS spending. In addition, MA benchmarks—the maximum amount Medicare will pay an MA plan to provide Part A and Part B benefits—continue to be well above FFS spending levels. In 2022, MA benchmarks averaged an estimated 108 percent of FFS spending (including quality bonuses), about the same level as in 2021. Bids fell to 85 percent of FFS, a record low.

Risk adjustment and coding intensity—Medicare payments to MA plans are enrollee specific, based on a plan's payment rate and an enrollee's risk score. Risk scores account for differences in expected medical expenditures and are based in part on diagnoses that

providers code. MA plans have a financial incentive to ensure that their providers record all possible diagnoses: Each diagnosis documented raises an enrollee's risk score, and higher enrollee risk scores result in higher payments to the plan.

A Commission analysis of 2020 data shows that higher diagnosis coding intensity resulted in MA risk scores that were about 9.5 percent higher than scores for similar FFS beneficiaries. By law, CMS makes an across-the-board reduction to MA risk scores to make them more consistent with FFS coding, and although CMS has the authority to impose a larger reduction than the minimum required by law, the agency has never done so. In 2020, the adjustment reduced MA risk scores by 5.9 percent, resulting in MA risk scores that were about 3.6 percent higher than they would have been if MA enrollees had been treated in FFS Medicare, translating to \$12 billion in excess payments to MA plans. We continue to find that coding intensity varies significantly across MA plans and that increasing diagnostic coding allows some plans to offer more extra benefits, thereby attracting more enrollees and undermining the goal of plan competition based on improved quality and reduced health care costs.

The Commission previously recommended changes to MA risk adjustment that exclude diagnoses collected from health risk assessments, use two years of diagnostic data, and apply an adjustment to eliminate any residual impact of coding intensity. These changes were intended to improve equity across plans and eliminate the impact of differences between MA and FFS coding intensity. Recent reports from the Office of Inspector General highlight the impact of MA plans' use of medical chart reviews (a coding practice that does not exist in FFS Medicare) and of health risk assessments to increase risk scores. We find that nearly two-thirds of MA coding intensity could be due to chart reviews and health risk assessments, and that these two mechanisms are a primary factor driving coding differences among MA plans.

Quality in MA—The current state of quality reporting in MA is such that the Commission can no longer provide an accurate description of the quality of care in MA. With 46 percent of eligible Medicare beneficiaries enrolled in MA plans, good information on the quality of care that MA enrollees receive and how that quality compares with quality in FFS Medicare is necessary

for beneficiaries and policymakers to have the ability to compare MA and FFS quality and to compare quality among MA plans. In its June 2020 report, the Commission recommended a new value incentive program for MA that would replace the current quality bonus program.

Mandated report: Comparing the performance of D-SNPs and other plans that serve dual-eligible beneficiaries

Dual-eligible special needs plans (D-SNPs) are specialized MA plans that limit their enrollment to beneficiaries who receive both Medicare and Medicaid. The BBA of 2018 permanently authorized D-SNPs and, starting in 2021, requires them to meet new standards for integrating the delivery of Medicare and Medicaid services. The Commission is mandated by the BBA of 2018 to periodically compare the performance of different types of D-SNPs and other plans that serve dual-eligible beneficiaries. Chapter 12 includes our first report under the mandate, which we are required to submit to the Congress by March 15, 2022. We find that the performance data that MA plans report as part of the Healthcare Effectiveness Data and Information Set (HEDIS®) provide limited insight on the relative performance of D-SNPs. This finding is consistent with previous Commission analyses that have examined the difficulties of assessing the quality and performance of MA plans.

The Medicare prescription drug program (Part D): Status report

In 2021, Part D paid for outpatient prescription drug coverage on behalf of more than 49 million Medicare beneficiaries. For Part D plan enrollees, Medicare subsidizes about three-quarters of the cost of basic benefits. Part D also includes a low-income subsidy (LIS) that provides assistance with premiums and cost sharing to about 13 million individuals with low income and assets. The 2020 and 2021 benefit years were extraordinary due to the coronavirus pandemic and its toll on Medicare beneficiaries and health care providers. However, Medicare beneficiaries experienced comparatively less disruption in access to medicines than in access to other types of health care services.

In 2020, Part D program expenditures totaled \$105.3 billion, accounting for about 11 percent of Medicare

spending. Of that amount, enrollees paid \$13.6 billion in plan premiums for basic benefits. Above and beyond program spending, Part D plan enrollees paid \$17.6 billion in cost sharing plus additional amounts in premiums for enhanced benefits.

Since its inception in 2006, Part D has changed in important ways. Enrollment has moved gradually toward MA-PDs that provide combined medical and drug coverage. In absolute numbers, enrollment in stand-alone prescription drug plans (PDPs) began to decline in 2019; in 2021, Part D enrollees were split evenly between PDPs and MA-PDs. Prescription drug use and spending have also changed dramatically. Part D enrollees have greatly expanded their use of generics, while a relatively small percentage of prescriptions for high-cost biological products and specialty medications accounts for a mounting share of spending. Medicare's payments to Part D plans have changed as well. Whereas fixed-dollar payments per enrollee used to make up most of Part D's subsidies, over time, a growing share has taken the form of cost-based reimbursements to plans through Medicare's reinsurance. The financial risk that plans bear, as well as their incentives to control costs, has declined markedly. In 2020, the Commission recommended major changes to the Part D benefit design and Medicare's subsidies to restore the role of risk-based, capitated payments that was present at the start of the program and provide some drag on drug price increases.

Nearly 300 organizations sponsor Part D plans, but most beneficiaries are enrolled in plans sponsored by a handful of large health insurers. Most large sponsors are vertically integrated with their own pharmacy benefit manager (PBM), and many also operate mail-order and specialty pharmacies. Formularies remain plan sponsors' most important tool for managing drug benefits. Generally, pharmaceutical manufacturers pay larger rebates when a sponsor positions a drug on its formulary in a way that increases the likelihood of winning market share over competing drugs. Plan sponsors also use provisions in network contracts with pharmacies that require postsale recoupments or payments for meeting performance metrics. Plan sponsors and PBMs have negotiated rebates and pharmacy fees that have grown as a share of Part D spending.

Enrollment in 2020 and benefit offerings for 2021—

In 2021, about 76 percent of Medicare beneficiaries were enrolled in Part D plans. An additional 2 percent obtained drug coverage through employer-sponsored plans that received Medicare's retiree drug subsidy. We estimate that the remaining 22 percent of beneficiaries were divided equally between those who had drug coverage from other sources and those with no coverage or coverage less generous than Part D.

Between 2020 and 2021, enrollment in PDPs declined from 25.5 million to 24.0 million, while enrollment in MA-PDs grew from 21.9 million to 24.3 million. As a result, in 2021, just over 50 percent of enrollees were in MA-PDs compared with 30 percent in 2007. The number of enrollees who receive the LIS has grown more slowly than the broader Part D population. In 2021, LIS enrollees made up 27 percent of total enrollment compared with 39 percent in 2007.

For 2022, beneficiaries continue to have a broad choice of plans, with growth in MA-PDs more than offsetting a contraction in the number of PDPs. Compared with 2021, sponsors are offering 7 percent more MA-PDs open to all beneficiaries and 19 percent more MA-PDs tailored to specific populations (special needs plans) but 23 percent fewer PDPs, due primarily to mergers among plan sponsors. In 2022, 2,159 plans are participating in the Center for Medicare and Medicaid Innovation's Part D Senior Savings Model that covers certain insulins at cost sharing of no more than \$35 per one-month supply. Most Part D plans use a five-tier formulary with differential cost sharing between preferred and nonpreferred drugs, as well as a specialty tier for high-cost drugs. For 2022, the base beneficiary premium rose by less than 1 percent over 2021 to \$33.37, reflecting the relatively small increase in the total average estimated cost for basic benefits after taking postsale rebates and discounts into account. However, individual plans' premiums vary substantially. In 2022, 198 premium-free PDPs are available to enrollees who receive the LIS, a 24 percent drop from 2021. All regions have at least four premium-free PDPs for LIS enrollees.

Part D program costs—Between 2007 and 2020, Part D program spending increased from \$46.2 billion to \$91.7 billion (average annual growth of 5.5 percent). Medicare's reinsurance (which covers 80 percent of spending in the catastrophic phase of the benefit after rebates) continues to be both the largest and

fastest-growing component of program spending, at an annual average rate of about 15 percent since 2007. As a result, between 2007 and 2020, the portion of the average basic benefits paid to plans through the capitated direct subsidy plummeted from 54.7 percent to 13.5 percent. In 2020, fewer enrollees reached the benefit's catastrophic phase, due in large part to a statutory increase in the out-of-pocket threshold. High-cost enrollees (those whose spending reaches the benefit's catastrophic phase) accounted for 62 percent of Part D spending, up from about 40 percent before 2011. In 2020, average prices continued to grow more slowly than in prior years, owing to the decline in prices of generic drugs. However, generics' share of prescriptions plateaued at about 90 percent in 2017, and further opportunities for generic substitution may be limited because a significant portion of brand products are protected from competition through longer periods of market exclusivity, extensive patent protection, or both. Inflation in prices for brand-name drugs and biologics will likely continue to drive spending upward. In 2020, over 443,000 enrollees filled a prescription for which a single claim was sufficient to meet the out-of-pocket threshold, up from just 33,000 in 2010.

Beneficiary access and quality in Part D—The quality of prescription drug care requires a balance between beneficiary access and medication management. Data from CMS audits and Part D appeals processes suggest that beneficiaries may be less likely to encounter access issues for most drugs than in previous years. However, among beneficiaries without the LIS, high cost sharing for expensive therapies may be a barrier to access. For 2022, average star ratings for Part D plans increased substantially, but much of that increase reflects changes CMS made in how it calculated the ratings to address the coronavirus pandemic. While average star ratings for MA-PDs continue to exceed those of PDPs, the trend among MA-PD sponsors of consolidating contracts leads us to question the validity of MA-PD ratings.

Mandated report: Designing a value incentive program for post-acute care

The Consolidated Appropriations Act, 2021, requires the Commission to report on a prototype value-based payment program under a unified PPS for PAC services and analyze the impacts of the prototype's design by

March 15, 2022. Building on the Commission's past work, in Chapter 14 we present key design elements for a PAC value incentive program (VIP). For each of the following elements, policymakers will need to make decisions to develop and implement a PAC VIP.

- **Small set of performance measures.** The PAC VIP would adjust payments based on provider performance on a small set of measures tied to clinical outcomes, patient experience, and resource use. Policymakers would need to decide whether all providers should be scored on the same set of measures and which measures should be scored.
- **Strategies to ensure reliable measure results.** The PAC VIP's measure results would reflect true differences in performance and not random variation. Policymakers would need to define the reliability standard for measure results and determine which strategies will ensure reliable results for as many providers as possible.
- **System to distribute rewards with minimal "cliff" effects.** The PAC VIP would use a simple scoring approach that awards points for every level of performance achieved. Policymakers would need to decide whether a provider should meet some minimum performance standard before it earns performance points that translate into a reward.
- **Approach to account for differences in patients' social risk factors using a peer-grouping mechanism, if necessary.** If higher social risk is tied to poorer outcomes, the PAC VIP would stratify providers into peer groups based on the social risk of their patient populations. Under this grouping mechanism, providers in peer groups with patient populations at high social risk would receive larger payment adjustments for attainments in quality compared with other providers. Policymakers would need to decide how to define and measure patient populations' social risk to establish the peer groups, as well as how many peer groups would be needed to meaningfully differentiate providers.
- **Method to distribute the entire provider-funded pool of dollars.** The PAC VIP would redistribute all withheld funds to providers based on their performance. Policymakers would need to determine the size of rewards and penalties needed to motivate providers to improve performance.

For illustrative purposes, we modeled a PAC VIP design that includes these elements and adjusts each provider's payments based on its performance. Approaches taken for four of the elements could be readily incorporated into a design—a starter set of performance measures, the reliability standard, a scoring methodology, and the distribution of incentive payments. However, questions remain about an approach to account for the social risk of a provider's patient population. Although there is a conceptual relationship between the share of fully dual-eligible beneficiaries (beneficiaries eligible for both Medicare and Medicaid, a proxy for low income) a provider treats and its outcomes, we did not find an empirical association in each of the four settings. More work is needed to define a measure of social risk that considers multiple dimensions before concluding whether adjusting performance results for social risk is always needed.

Implementing a PAC VIP would involve many steps and would be a multiyear endeavor. First, a PAC PPS would need to be implemented so that setting-specific practice patterns begin to converge. Concurrently, CMS would need to begin aligning regulatory requirements for PAC providers. Until this process is completed, providers' performance would likely be compared only within each setting because current practice patterns reflect current regulatory

requirements and the payment incentives embedded in the various PPSs. Setting-specific comparisons of performance would be phased out over time, leading up to comparisons of performance.

CMS would need to select a set of performance measures that captures differences across providers. There will be trade-offs between using common measures and using patient population-specific measures. In addition, the measure set should evolve to include accurate measures of the maintenance and improvement in patients' functional status and of patient experience. CMS would need to test a measure of social risk that has both a conceptual relationship and an empirical association with outcomes. CMS should explore the use of geographic area-level measures of social risk and whether they are accurate proxies for the social risk of individual patients.

Finally, CMS would need to design a methodology that scores providers' performance, ensures reliable measure results, distributes rewards with minimal cliff effects, accounts for differences in the social risks of a provider's patient population through peer grouping if necessary, and fully redistributes provider-financed incentive payments to providers. The Commission's PAC VIP model would be a good starting point for CMS's deliberations. ■

C H A P T E R

1

Context for Medicare payment policy

Context for Medicare payment policy

Chapter summary

This year, both the short-term and long-term context for the Medicare program is sobering. In the short term, the nation and the Medicare program are in the midst of a historic coronavirus pandemic. Medicare beneficiaries have been disproportionately impacted by COVID-19, with the elderly constituting 12 percent of COVID-19 cases but 76 percent of COVID-19 deaths by the end of 2021. Some beneficiary subpopulations have had higher rates of the disease, including Medicare beneficiaries with end-stage renal disease, beneficiaries dually eligible for Medicare and Medicaid, and beneficiaries ages 85 and older. Health care providers have faced extreme stress during the pandemic—risking their lives to treat patients while experiencing major financial disruptions to their operations.

Considering the context, beneficiaries have maintained relatively good access to care during the pandemic. Although some nonurgent routine appointments were canceled in the early months of the pandemic, beneficiaries continued to obtain urgent and emergency care and used telehealth to access clinicians by interactive video and audio-only phone calls. Importantly, the share of Medicare beneficiaries completely forgoing a service that they thought they needed in the past year (as opposed

In this chapter

- The impact of the coronavirus pandemic
- National health care spending
- Medicare's financing challenge
- The affordability of health care for Medicare beneficiaries
- Medicare spending trends
- Trends in Medicare beneficiaries' morbidity and mortality
- Disparities among Medicare beneficiaries
- Alternative payment models incentivize clinicians to deliver care more efficiently
- The Commission's recommendations for Medicare

to delaying it) has not increased during the pandemic relative to prior years, according to the Commission's annual telephone surveys.

Although the pandemic is not expected to have a long-term financial impact on Medicare, the program's finances nevertheless are in need of urgent attention. Medicare's Trustees expect that the program's Hospital Insurance Trust Fund (which funds Medicare Part A services) will become insolvent by 2026, and the Congressional Budget Office (CBO) expects insolvency to occur in 2027, due to the declining ratio of workers to Medicare beneficiaries (since payroll taxes are the primary source of funding for the trust fund). To extend the solvency of the trust fund for an additional 25 years, Medicare's Trustees have estimated that the Medicare payroll tax would need to be raised from 2.9 percent to 3.7 percent, or Medicare Part A spending would need to immediately be reduced by 18 percent (about \$70 billion in 2022); alternatively, a smaller tax rate increase could be combined with a smaller spending reduction to achieve a comparable effect.

Medicare's Trustees estimate that total Medicare spending will nearly double between 2020 and 2030—driven by growth in the volume and intensity of services provided to beneficiaries and growth in the number of beneficiaries in the program (projected to increase from 62 million to 77 million over this period).

Medicare spending has been consuming a growing share of the federal budget and also strains beneficiaries' household budgets. In 2021, Medicare premiums and cost sharing were estimated to consume 23 percent of the average Social Security benefit, up from 14 percent 20 years earlier. The Medicare Trustees estimate that in another 20 years, these costs will consume 34 percent of the average Social Security benefit.

One of the most powerful ways Medicare can control spending growth is by setting prices. Over the last 10 years, spending per Medicare beneficiary has grown much more slowly than spending per privately insured enrollee. Increasing prices were the main cause of spending growth for the privately insured, which was in turn driven by high levels of provider market power. Hospitals and physician groups have increasingly consolidated, in part to gain leverage over private insurers in negotiating higher payment rates. From 2010 to 2020, that consolidation contributed to average annual per enrollee growth in spending on private health insurance of 2.8 percent. By comparison, over that same period, Medicare spending per enrollee increased an average of 1.9 percent—nearly the same as the general inflation rate of 1.8 percent over this

period. This difference suggests that private plans' greater ability to constrain volume has less of an effect on spending than the Medicare program's greater ability to constrain prices under its administered pricing system.

The Commission makes recommendations about appropriate payment levels for various Medicare payment systems in our March report each year. These recommendations are based on our review of the latest available data and attempt to balance the need to pay high enough prices to ensure beneficiaries' access to high-quality care with the need to be a responsible steward of fiscal resources.

Given Medicare's financing challenges, many believe that restraining price growth will not be enough to ensure Medicare's financial sustainability, and that the quantity and/or mix of health care services must also be changed. Medicare has piloted a number of alternative payment models that give providers incentives to more closely manage and coordinate beneficiaries' care to keep them healthy and reduce unnecessary utilization. One of the main goals of these payment models is to save Medicare money by financially rewarding providers for efficiently furnishing health care services while maintaining or improving the quality of care.

Service utilization rates and payments to providers can also be influenced through other means. The Commission has made numerous recommendations that, if implemented, could address challenges with Medicare's payment systems and improve payment accuracy and equity. Some key recommendations from prior years are summarized at the end of this chapter.

Medicare's fiscal challenges must be met in a manner that improves quality and reduces inequities in access to care across the Medicare population. Although quality of care appears stable, there is room for improvement. The Commission is also dedicated to understanding and reducing disparities in access to care across vulnerable subgroups of beneficiaries. As Medicare consumes growing shares of the federal budget and beneficiaries' incomes, the Commission will continue to identify changes that could improve Medicare payment policy. ■

Introduction

Each March, the Commission reports to the Congress on traditional Medicare's various fee-for-service (FFS) payment systems, the Medicare Advantage program, and the Medicare prescription drug program. To place the information presented in those chapters in context, this chapter highlights key national trends in health care spending for the country as a whole and for the Medicare program in particular. We also review the factors that contribute to Medicare spending growth—including trends in demographics and the volume and intensity of services delivered per beneficiary. We find that sustaining Medicare fiscal solvency is a growing and pressing challenge. In particular, we note that Medicare's Hospital Insurance Trust Fund (which pays for hospital stays and other institutional services) is projected to be depleted by 2026 or 2027, according to Medicare's Trustees and the Congressional Budget Office (CBO), respectively.

Before considering the long-term financial context for the Medicare program, we first describe the short-term context: the coronavirus pandemic. COVID-19 has had a disproportionate impact on elderly Medicare beneficiaries, in terms of hospitalizations and mortality. Clinicians and medical staff have also been under stress—physically, psychologically, and financially. For many providers, the financial unpredictability of providing health care during the pandemic has been at least partly alleviated by federal financial assistance and rebounding service utilization levels. We discuss the pandemic's financial effects on a range of provider types in the various chapters of this report, but first we consider the pandemic's effects on beneficiary mortality and access to care.

The impact of the coronavirus pandemic

Over the course of 2020 and 2021, 837,000 people in the United States died of COVID-19 (Centers for Disease Control and Prevention 2022a). (In at least 90 percent of these deaths, COVID-19 was listed as the underlying cause of death; for the remaining deaths, COVID-19 was listed as a contributing cause of death.) Multiple “waves” of COVID-19 deaths have occurred, as social distancing practices have changed over time,

large shares of the population have become vaccinated, and new variants of the virus that causes COVID-19 have emerged (Figure 1-1, p. 8).

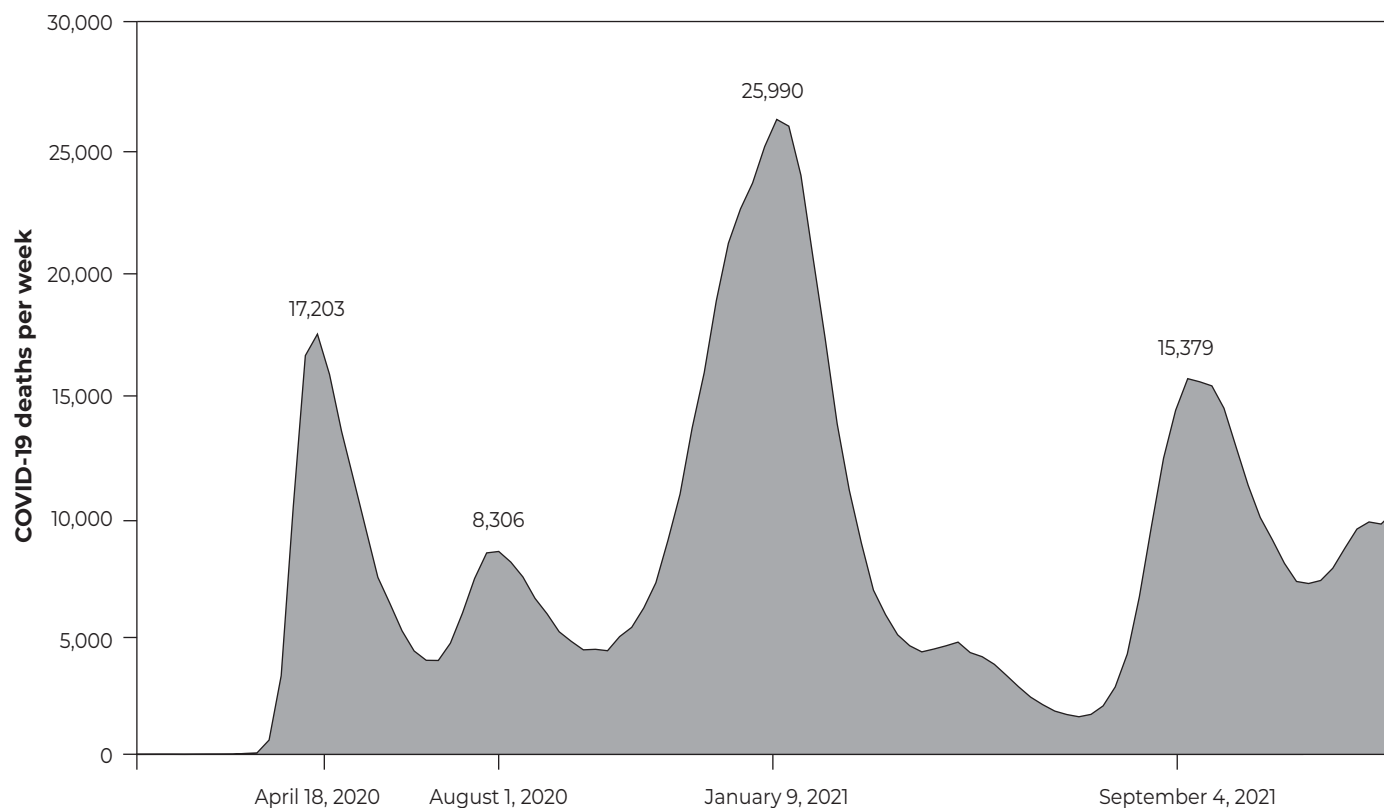
Beneficiaries have been hospitalized and died at high rates

People ages 65 and older have been more likely than younger populations to suffer severe cases of COVID-19 and die. By the end of 2021, data from the Centers for Disease Control and Prevention (CDC) indicated that individuals ages 65 and older had made up only 12 percent of reported COVID-19 cases, yet they represented 76 percent of COVID-19 deaths (Figure 1-2, p. 9).

By mid-August 2021, CMS analysis of claims and encounter data indicated that 8 percent of Medicare beneficiaries had had a diagnosis of COVID-19, and 2 percent had been hospitalized with a COVID-19 diagnosis. Among Medicare beneficiaries hospitalized for COVID-19, 17 percent died in the hospital and another 5 percent were discharged to hospice (Centers for Medicare & Medicaid Services 2021g).

Particular Medicare subpopulations have been disproportionately affected by the pandemic. By mid-August 2021, 24 percent of Medicare beneficiaries with end-stage renal disease had been diagnosed with COVID-19, and 13 percent had been hospitalized. Among beneficiaries dually eligible for Medicare and Medicaid, 14 percent had contracted COVID-19, and 4 percent had been hospitalized. Among beneficiaries ages 85 and older, 12 percent had contracted COVID-19, and 4 percent had been hospitalized. Black, Hispanic, and American Indian/Alaska Native Medicare beneficiaries have also been disproportionately impacted by the disease compared with White and Asian beneficiaries (Figure 1-3, p. 10) (Centers for Medicare & Medicaid Services 2021g).

Although disabled Medicare beneficiaries as a group do not appear to have had a higher risk of COVID-19, this may have varied by type of disability. One large study of 65 million patients at 547 health care organizations found that people with intellectual disabilities were two-and-a-half times more likely to be diagnosed with COVID-19 and six times more likely to die of COVID-19 than people without such disabilities. This made intellectual disabilities the single strongest predictor of a COVID-19 diagnosis and the second

**FIGURE
1-1****COVID-19 deaths in the U.S. per week, 2020–2021**

Note: Last date reflected in the graph is the week ending January 1, 2022, when there were 9,905 deaths.

Source: MedPAC analysis of National Center for Health Statistics' provisional COVID-19 death counts by week ending date and by state, last updated January 28, 2022. <https://data.cdc.gov/NCHS/Provisional-COVID-19-Death-Counts-by-Week-Ending-D/r8kw-7aab>.

strongest predictor of death due to COVID-19 (after old age) (Gleason et al. 2021). Possible explanations for these findings include the fact that individuals with intellectual disabilities often live in high-contact housing (such as group homes or long-term care facilities), have daily contact with home-care support staff, and use shared transportation; some may also have difficulty tolerating mask-wearing for long periods of time due to sensory issues (Gleason et al. 2021).

As vaccines have become available to most age groups, mortality rates from COVID-19 have dropped substantially. By the end of 2021, 88 percent of people ages 65 and older were fully vaccinated, and 60.5 percent had also received a booster shot (Centers

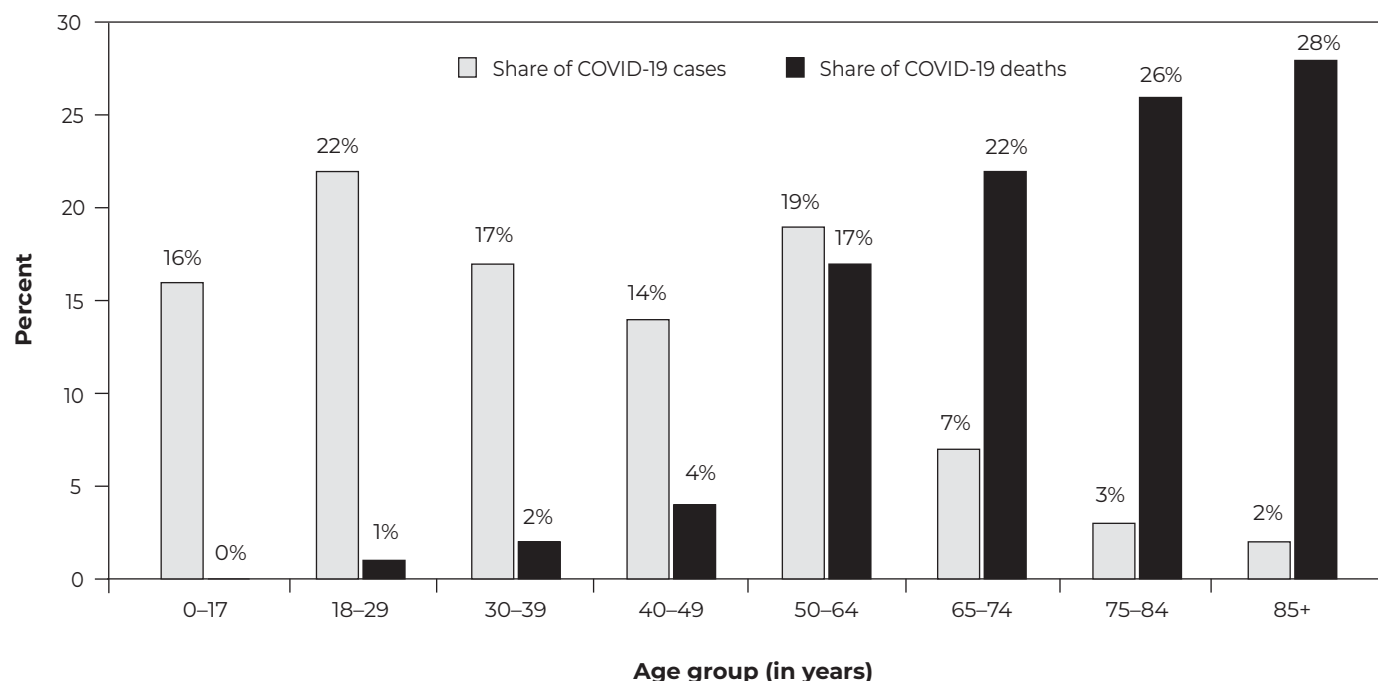
for Disease Control and Prevention 2022b). Although “breakthrough” cases of symptomatic COVID-19 have emerged, the majority of COVID-19 deaths have been among the unvaccinated. As of the end of 2021, unvaccinated adults were 14 times more likely to die from COVID-19 than fully vaccinated adults and 20 times more likely to die from COVID-19 than adults who had also had boosters (Centers for Disease Control and Prevention 2022c).

Access to care has largely been maintained during the pandemic

Clinicians have had to adjust to new care delivery approaches and priorities during the coronavirus pandemic—at times switching from providing in-

**FIGURE
1-2**

In 2020 and 2021, elderly individuals constituted a low share of COVID-19 cases but a high share of COVID-19 deaths



Note: Reflects age distribution of 46,940,086 cases and 713,261 deaths reported to the Centers for Disease Control and Prevention as of January 10, 2022.

Source: Centers for Disease Control and Prevention, "Demographic trends of COVID-19 cases and deaths in the US reported to the CDC," as of January 10, 2022. <https://covid.cdc.gov/covid-data-tracker/#demographics>.

person services to delivering them via telehealth and delaying elective procedures to preserve supplies of personal protective equipment.

By mid-2021, telehealth had become a mainstream part of U.S. health care, with nearly half of the Medicare beneficiaries in the Commission's annual telephone survey reporting using telehealth at least once in the past year. Audio-only telephone visits were most commonly used (by 37 percent of elderly Medicare beneficiaries), but interactive video visits were also used (by 23 percent). High shares of beneficiaries (89 percent) were satisfied with their telehealth visits, but only about half of telehealth users wanted to continue using telehealth after the pandemic ended.

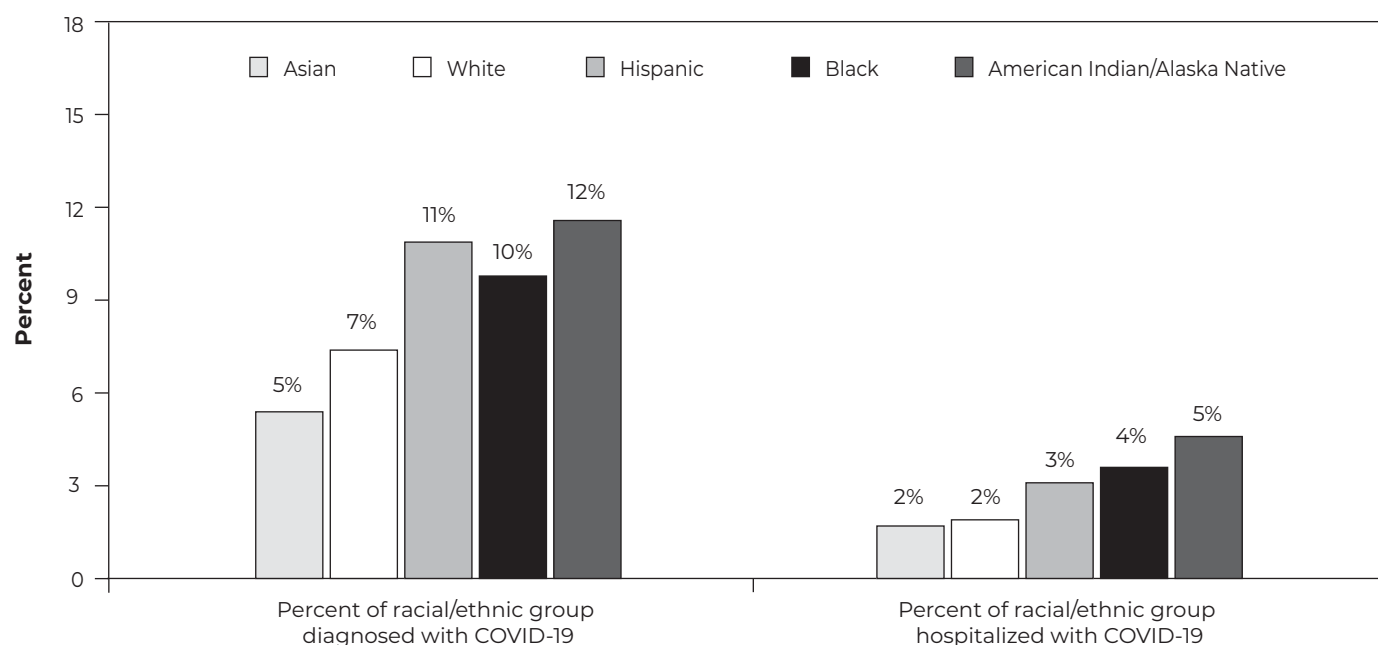
Despite the availability of telehealth, some services could not be provided through this medium and needed to be postponed in the early months of the pandemic. According to special fieldings of CMS's

Medicare Current Beneficiary Survey, 21 percent of beneficiaries reported forgoing care during the first few months of the pandemic (Centers for Medicare & Medicaid Services 2020). By summer 2020, access had largely been restored: Only 7 percent to 8 percent of Medicare beneficiaries surveyed in fall 2020 and spring 2021 reported forgoing care in the prior few months (Centers for Medicare & Medicaid Services 2021a, Centers for Medicare & Medicaid Services 2021b). The most common types of care that Medicare beneficiaries reported forgoing have been dental care, regular check-ups, treatment for an ongoing condition, and diagnostic or medical screening tests (Centers for Medicare & Medicaid Services 2021a, Centers for Medicare & Medicaid Services 2021b, Centers for Medicare & Medicaid Services 2020).

Notably, when survey respondents reported forgoing or delaying care "in the past few months," much of this

**FIGURE
1-3**

Hispanic, Black, and American Indian/Alaska Native Medicare beneficiaries had higher rates of COVID-19 diagnoses and hospitalizations than White and Asian beneficiaries during the first year and a half of the coronavirus pandemic



Source: CMS's Preliminary Medicare COVID-19 data snapshot: Medicare claims and encounter data: January 1, 2020 to August 21, 2021, received by September 17, 2021. <https://www.cms.gov/files/document/medicare-covid-19-data-snapshot-services-through-2021-08-21.pdf>.

care may ultimately have been obtained in subsequent months. The Commission's 2020 and 2021 surveys, fielded from approximately April to September among elderly Medicare beneficiaries, found that only 10 percent of beneficiaries had completely forgone care they thought they should have obtained in the past year. Since our survey is fielded annually, we are able to compare rates of care avoidance to prepandemic periods, unlike many surveys that have been fielded only during the pandemic. Importantly, we have found that the shares of beneficiaries reporting forgoing care during the entirety of the year in both 2020 and 2021 are consistent with prepandemic years and are the same for beneficiaries who live in urban and rural areas. (Rates of forgone care for other key beneficiary subpopulations appear in Chapter 4 of this report.)

Researchers have found that when people did delay or avoid medical care early in the pandemic, they were

far more likely to put off routine care than urgent or emergency care. A CDC survey fielded a few months into the pandemic found that 30 percent of elderly respondents reported delaying or avoiding *routine* care because of the pandemic, but only 4 percent reported delaying or avoiding *urgent or emergency* care. Similar trends were observed for disabled respondents: 43 percent reported delaying or avoiding routine care, while 23 percent delayed or avoided urgent or emergency care (Czeisler et al. 2020). Throughout the pandemic, elderly individuals have been less likely to delay or avoid medical care than younger individuals (National Center for Health Statistics 2021b).

Many of the findings above are reinforced by what we heard from beneficiaries and clinicians in Commission focus groups held virtually during the summer of 2020. Many beneficiaries in these focus groups expressed reluctance to seek in-person care because of fear of

contracting COVID-19, especially during the first two months of the pandemic. Telehealth visits replaced many in-person visits, while other services—such as routine procedures and tests (e.g., colonoscopies, laboratory tests)—were canceled or delayed. By the summer of 2021, beneficiaries and clinicians participating in our focus groups reported that they had now resumed all types of in-person care. Many clinicians said they continued to offer telehealth visits, but this type of visit was less commonly delivered than in-person visits.

The impacts of the pandemic on providers and the Medicare program are only beginning to be understood

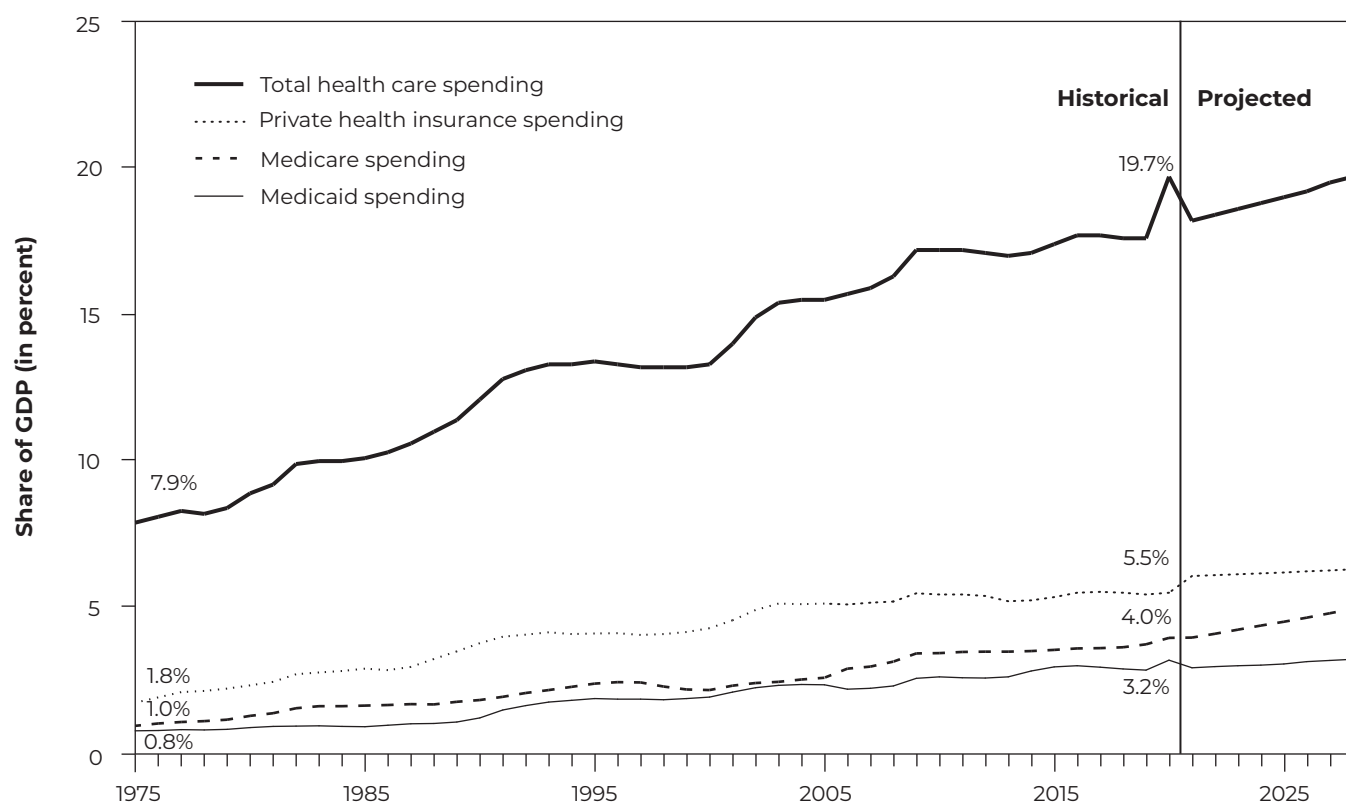
As the virus that causes COVID-19 continues to circulate and mutate, new variants are emerging that put patients at increased risk and extend the burden on clinicians and staff of providing health care during a pandemic. Two years into the pandemic, hospitals still periodically need to halt elective procedures to divert resources to treating COVID-19 patients. Sizable shares of clinicians and staff report experiencing fear of contracting COVID-19, anxiety and depression, heavier workloads, and feelings of “burnout” (Prasad et al. 2021).

At the time of publication, there were signs that the nursing workforce had sustained material impacts from the pandemic. According to one study, the national supply of licensed practical nurses (LPNs) had declined 20 percent and the supply of nursing aides (NAs) had declined 10 percent in the first 15 months of the pandemic compared with the 15 months before the pandemic—as these lower-paid types of nurses were temporarily furloughed and then did not return to the workforce despite rising wages (wages for LPNs rose 9 percent during the first 15 months of the pandemic, and wages for NAs rose 6 percent). The supply of (higher-paid) registered nurses declined only 1 percent during the first 15 months of the pandemic, and their wages rose just 2 percent. The supply of nurses (of any type) working in hospitals declined by only 2 percent during the first 15 months of the pandemic, due to steady demand for hospital services (Buerhaus et al. 2022). In late 2021, however, dozens of news reports described hospitals that are now having difficulty retaining an adequate nursing workforce and have resorted to contracting with costly temporary traveling nurses and offering large signing and retention bonuses to attract

and retain permanent nursing staff—suggesting that further changes to the nursing workforce may be under way.

The ongoing pandemic's effects on health care providers' revenues are not yet fully understood. In 2020, spending on nearly all health care services and goods slowed compared with 2019, although \$175 billion in federal COVID-19 relief funds for providers offset revenue declines—resulting in essentially no deceleration in hospital spending in 2020 (as hospital revenues increased 6.4 percent) and an acceleration in clinician spending (with clinician revenues increasing 5.4 percent). COVID-19 relief funds for providers mainly took the form of Provider Relief Fund payments (\$122 billion) and forgivable loans through the Paycheck Protection Program (\$53 billion) (Hartman et al. 2022); these two funding sources made additional disbursements after 2020.¹

As of the time of publication of this report, the pandemic is not expected to have a long-term financial impact on the Medicare program. In their mid-2021 report, Medicare's Trustees announced that they still expect the program's Hospital Insurance Trust Fund (which finances Part A services) to become insolvent in 2026. This projection is unchanged from their prepandemic projections, because the Trustees expect the pandemic to last only a few years, and they expect reductions in payroll taxes (which finance the trust fund) to be accompanied by reductions in hospital use. The Trustees also assume that potential decreases in spending due to COVID-19 deaths will be balanced by potential increases in spending due to treating COVID-19 survivors with lingering symptoms (Boards of Trustees 2021). Meanwhile, CBO has observed higher-than-expected payroll tax collections during the pandemic and projects a strong postpandemic economy, prompting CBO to extend the date when it expects the trust fund to become insolvent by two years, to 2027 (Congressional Budget Office 2021a, Congressional Budget Office 2021b). Regardless of which year the trust fund becomes insolvent, there is an urgent need to address the trust fund's approaching funding shortfall—by reducing Part A spending, increasing the payroll tax that funds the trust fund, or pursuing a combination of these strategies (see pp. 19–20).

**FIGURE
1-4****Health care spending has grown as a share of the country's GDP**

Note: GDP (gross domestic product). Spending projections in this graph are based on data released in March 2020 and do not reflect the impact of the coronavirus pandemic; historical spending levels in this graph are based on data released in December 2021 and do reflect the pandemic. First projected year in graph is 2021. Percentages labeled on graph are for 1975 and 2020. Beginning in 2014, private health insurance spending includes federal subsidies for both premiums and cost sharing for the health insurance marketplaces created by the Affordable Care Act of 2010. Health care spending also includes the following expenditures (not shown): out-of-pocket spending; spending by other health insurance programs (the Children's Health Insurance Program, the Department of Veterans Affairs, and the Department of Defense); and other third-party payers and programs and public health activity (including Indian Health Service; Substance Abuse and Mental Health Services Administration; maternal and child health; school health; workers' compensation; worksite health care; vocational rehabilitation; other federal, state, and local programs; other private revenues; and general assistance).

Source: MedPAC analysis of CMS's National Health Expenditure Data (projected data released in March 2020 and historical data released in December 2021).

National health care spending

For decades, health care spending in the United States has grown as a share of the nation's gross domestic product (GDP) (Figure 1-4). From 1975 to 2020, health care spending as a share of GDP more than doubled, from 7.9 percent to 19.7 percent. Private health insurance spending as a share of GDP tripled (increasing from 1.8 percent to 5.5 percent). And Medicare spending as a share of GDP quadrupled

(rising from 1.0 percent to 4.0 percent). In 2020, Medicare spending reached \$829.5 billion (Hartman et al. 2022).

In 2020, total health care spending increased by 9.7 percent, reaching \$4.1 trillion, as the federal government allocated new funding in response to the coronavirus pandemic (Figure 1-4). This funding supported the development and stockpiling of COVID-19 vaccines and therapeutics, COVID-19 testing, supplemental revenue to health care providers (mostly

Rapid price growth in the private sector has not affected Medicare beneficiaries' access to care

Spending per enrollee on health care in the private sector has grown faster than spending per enrollee in the Medicare program (Centers for Medicare & Medicaid Services 2021f). Between 2010 and 2020, spending per enrollee for private health insurance grew by an average of 2.8 percent annually. By comparison, over that same period, Medicare spending per enrollee increased an average of 1.9 percent annually—nearly the same as the general inflation rate of 1.8 percent over this period (Bureau of Labor Statistics 2021, Centers for Medicare & Medicaid Services 2021f).

The difference between private sector spending growth and Medicare spending growth becomes more stark once patient cost sharing is taken into account. Between 2014 and 2019, total health care spending per capita (including cost sharing) grew 27 percent for the privately insured, compared with 14 percent for beneficiaries in traditional fee-for-service Medicare (Figure 1-5, p. 14). (These figures do not include retail spending on prescription drugs.) Actual spending amounts are lower for the privately insured, who tend to be younger and healthier than Medicare beneficiaries.

Increased prices were largely responsible for this faster private spending growth, which occurred at a time of low growth in private sector health care utilization (Health Care Cost Institute 2020). Our analysis of payer data and review of the literature

suggest that, although there is wide variation geographically and by service, private insurers generally pay rates about twice as high as Medicare for hospital services and about one and a half times Medicare rates for physician services (Chernew et al. 2020, Kaiser Family Foundation 2020, Medicare Payment Advisory Commission 2017).

One key driver of the private sector's higher prices is provider market power (Baker et al. 2014a, Baker et al. 2014b, Cooper et al. 2015, Gaynor and Town 2012, Medicare Payment Advisory Commission 2020b, Medicare Payment Advisory Commission 2017, Robinson and Miller 2014, Scheffler et al. 2018). Hospitals and physician groups have increasingly consolidated, in part to gain leverage in negotiating higher payment rates with private insurers (which themselves have become more concentrated).

Hospitals have consolidated steadily over the past several decades. From 2003 to 2017, the share of hospital markets that were “super”-concentrated (with a single dominant system that accounts for a majority of hospital discharges) rose from 47 percent to 57 percent.³ Hospital consolidation can influence prices because hospital systems with larger market shares are in a stronger bargaining position to negotiate higher payment rates from commercial insurers (Abelson 2018, Department of Justice and the Federal Trade Commission 1996, Federal Trade Commission 2016a, Federal Trade Commission

(continued next page)

through the Provider Relief Fund and the Paycheck Protection Program), and temporary increases to state Medicaid programs (Hartman et al. 2022).

More specific trends can be discerned by examining the subset of national health care spending devoted to medical services and products (known as personal health care spending).² The largest driver of personal health care spending growth is rising prices, which account for 43 percent of projected growth; for the 2019 to 2028 period, actuaries expect prices to grow at

an average annual rate of 2.4 percent, compared with 1.2 percent for the 2014 to 2018 period. The accelerated growth in health care prices is partly a result of an expected acceleration in economy-wide inflation, but general economy-wide inflation does not fully explain growth in personal health care prices, since these prices are expected to grow faster than prices economy-wide. (Rapid price growth in the private health care sector is discussed in the accompanying text box.) The second-largest driver of projected growth in personal health care spending is the

Rapid price growth in the private sector has not affected Medicare beneficiaries' access to care (cont.)

2016b). While most literature supports this position, the hospital industry disputes the assertion that increased provider market power causes price increases and in contrast asserts that readmission and mortality rates improve following mergers (American Hospital Association 2019, Noether and May 2017). However, a more recent study suggests that postmerger mortality and readmission rates do not improve and patient satisfaction declines slightly (Beaulieu et al. 2020). Another study of commercial hospital prices and consolidation finds that prices tend to increase faster in markets where consolidation increases (Health Care Cost Institute

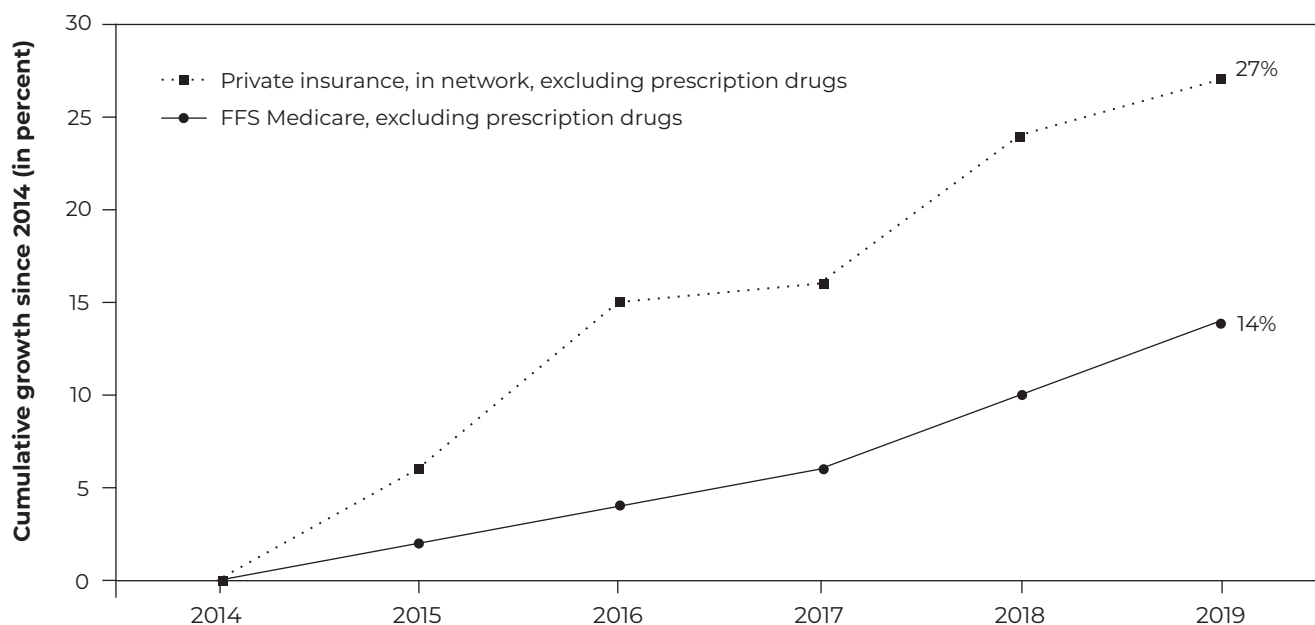
2019). A third study finds higher prices for hospital services in California markets with higher levels of concentration (California Healthcare Foundation 2019). Taken together, the preponderance of evidence suggests that hospital consolidation leads to higher prices (Medicare Payment Advisory Commission 2020b).

Hospitals and their advocacy organizations may assert that losses on Medicare patients force them to increase private prices or force them to merge into larger systems with pricing power (Dobson et al. 2006, Fox and Pickering 2008, Frakt 2015). However,

(continued next page)

FIGURE 1-5

Health care spending per enrollee has grown faster for the privately insured than for beneficiaries in traditional FFS Medicare, 2014–2019



Note: FFS (fee-for-service). The figure shows cumulative growth since 2014. It reflects payments to providers from health insurers and patients (i.e., cost sharing) but not payments from other sources (e.g., worker's compensation or auto insurance). Data for spending on retail prescription drugs is not available for the privately insured, so it is excluded from both lines in this graph. Spending on out-of-network services for the privately insured is not available for that group and thus is not included in this graph. "Private insurance" reflects spending contributed by national and regional plans and third-party administrators nationwide for adults ages 18 to 64 in self-insured plans (i.e., employer self-funded plans) and fully insured plans, including individual and group plans, marketplace plans, and Medicare Advantage plans for nonelderly disabled individuals. The figure reflects spending for individuals with full-year insurance coverage (including individuals with \$0 of health care spending).

Source: MedPAC analysis of Medicare's Master Beneficiary Summary File; FAIR Health analysis of its National Private Insurance Claims database (which reflects 150 million covered lives) for the subset of enrollees ages 18 to 64.

Rapid price growth in the private sector has not affected Medicare beneficiaries' access to care (cont.)

in contrast with this assertion, the Congressional Budget Office finds: “The share of providers’ patients who are covered by Medicare and Medicaid is not related to higher prices paid by commercial insurers. That finding suggests that providers do not raise the prices they negotiate with commercial insurers to offset lower prices paid by government programs (a concept known as cost shifting)” (Congressional Budget Office 2022).

The market for physician services is changing rapidly through both horizontal consolidation among practices and vertical integration between practices and health systems or health plans. In turn, these changes can also affect commercial prices. The American Medical Association’s survey of physicians indicates that, over time, physicians have shifted from smaller to larger practices or have become practice employees rather than owners (Kane 2021).⁴ Between 2016 and 2018, the share of all physicians affiliated with health systems grew from 40 percent to 51 percent (Furukawa et al. 2020).⁵ Some of Medicare’s policies may have created incentives for physicians to consolidate into larger organizations—through higher payment rates for hospital-owned physician practices and the Merit-based Incentive Payment System’s burdensome reporting requirements, for example (Gaynor et al. 2017). Other factors likely also play a role, such as the desire to join a larger provider organization that has more leverage when negotiating payment rates with commercial insurers and a desire by a growing number of physicians to have the lifestyle of an employee rather than an independent practitioner.

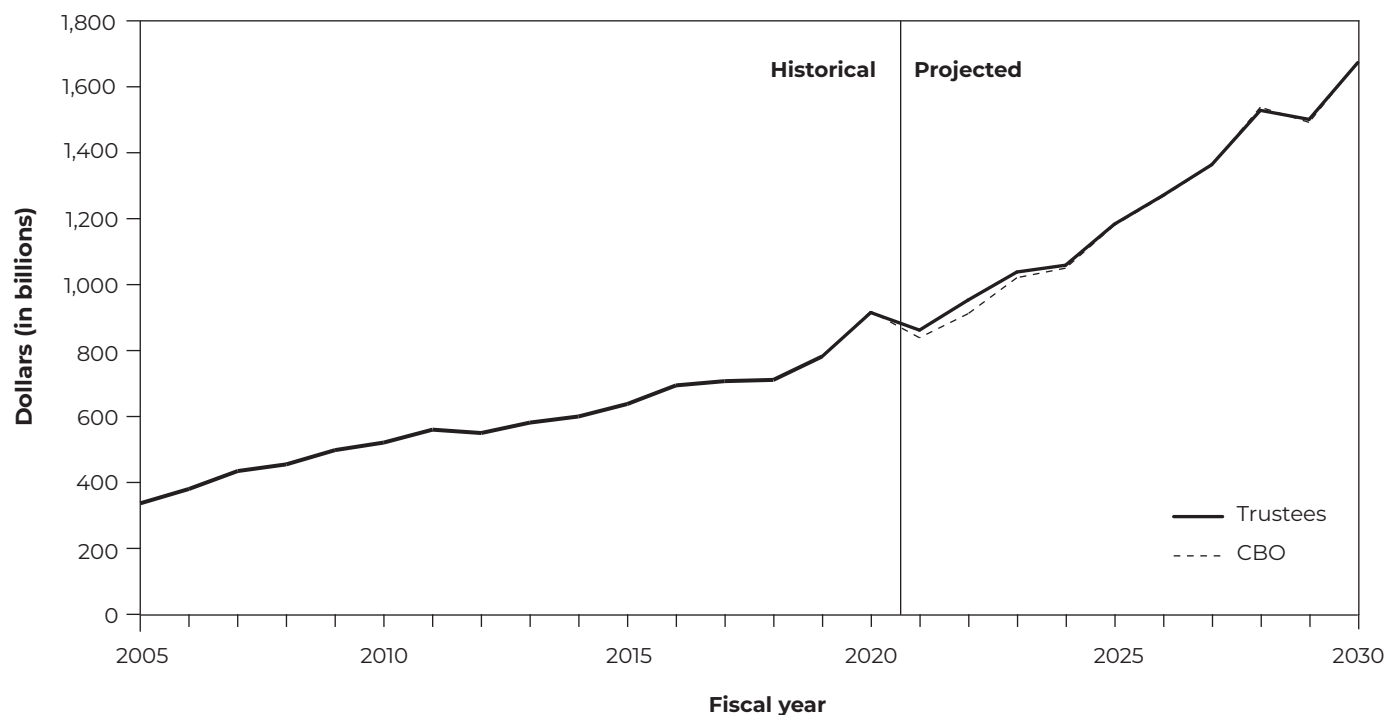
After controlling for the level of horizontal concentration of physician services, three studies found that hospital–physician integration led to commercial price increases ranging from 3 percent to 14 percent (Capps et al. 2018, Medicare Payment Advisory Commission 2017, Neprash et al. 2015). As hospitals have acquired increasing numbers of physician practices, large health plans have responded in kind, perhaps to assert their own market power or to counter the market power of

health systems. In addition, although just 4 percent of physicians reported private equity ownership in their practice in 2020 (Kane 2021), private equity funds compete with health systems and plans for physician practices and may contribute to the increasing pace of consolidation (Medicare Payment Advisory Commission 2021b).⁶ The Federal Trade Commission has observed that “providers increasingly pursue alternatives to traditional mergers such as affiliation arrangements, joint ventures, and partnerships, all of which could also have significant implications for competition” (Federal Trade Commission 2016b).

To date, the rise in commercial prices has had little direct impact on the Medicare program, because of Medicare’s ability to unilaterally set prices for most health care services. Even as commercial prices have risen relative to Medicare payments, most clinicians continue to participate in the Medicare program. That said, there is a risk of private sector trends influencing Medicare trends. Market concentration effects could lead to higher Medicare spending if commercial prices are “imported” into Medicare. The Commission has tried to counteract these effects by recommending restrained payment updates and site-neutral payments (i.e., paying the same for a service regardless of the setting of care). But over time, if the private sector is unable to constrain price growth, the profitability of caring for commercially insured patients will increase relative to the profitability of caring for Medicare beneficiaries. Eventually, the difference between commercial rates and Medicare rates could grow so large that providers have an incentive to focus primarily on patients with commercial insurance, which could create pressure to increase Medicare’s payment rates. Higher private prices enabled by consolidation could also prompt providers to raise their costs; if Medicare payment rates do not keep pace with these higher costs, then Medicare beneficiaries’ access to care could become threatened. Thus, in the long term, Medicare beneficiaries’ access to care may in part depend on commercial payers restraining rates paid to hospitals (Medicare Payment Advisory Commission 2009, Stensland et al. 2010, White and Wu 2014). ■

**FIGURE
1-6**

Medicare spending is expected to double in the next 10 years



Note: CBO (Congressional Budget Office). Figure shows spending per fiscal year (as opposed to calendar year).

Source: 2021 annual report of the Boards of Trustees of the Medicare trust funds and CBO's July 2021 Medicare baseline.

escalating volume and intensity of services delivered per patient, which account for about a third of the projected spending growth between 2019 and 2028. Only about a tenth of the projected growth in personal health care spending is explained by the aging of the population (Keehan et al. 2020).

Medicare spending projections

Similar to national health care spending trends, Medicare spending is projected to increase in the coming years. Over the next 10 years (2020 to 2030), Medicare spending is expected to nearly double—rising from just over \$900 billion to nearly \$1.7 trillion (Figure 1-6).

Beyond general economy-wide inflation, Medicare's projected spending in the next 10 years is driven by the increasing number of beneficiaries (which

is set to grow a little more than 2 percent per year) and the increasing volume and intensity of services delivered per beneficiary (which is expected to grow by 3.6 percent per year) (Table 1-1). (The changing demographic mix of beneficiaries in the program is not likely to cause increased spending in the next 10 years, since beneficiaries have been getting healthier over time, and the average age of Medicare beneficiaries will decline over the next 10 years as the baby boom generation joins the program.)

Because enrollment growth is largely outside of the program's control and the Medicare program already pays lower payment rates than many other insurers, one way to slow Medicare spending growth may be to incentivize clinicians to shift care from high-cost clinical settings to lower-cost settings. Another way to slow the growth in Medicare spending may be to

**TABLE
1-1****Factors contributing to Medicare's projected spending growth, 2021–2030 (not including economy-wide inflation)**

Average annual percent change in:

Medicare Part	Medicare prices (not including inflation)	Number of beneficiaries	Beneficiary demographic mix	Volume and intensity of services used	Medicare's projected spending (not including inflation)
Part A	–0.2%	2.1%	–0.6%	2.4%	3.8%
Part B	–1.2	2.2	–0.2	5.1	6.0
Part D	–0.4	2.4	–0.2	1.8	3.5
Total*	–0.7	N/A**	–0.4	3.6	4.7

Note: N/A (not available). Includes Medicare Advantage enrollees. "Medicare prices" reflects Medicare's annual updates to payment rates (not including inflation, as measured by the consumer price index), multifactor productivity reductions, and any other reductions required by law or regulation. Part A prices are expected to decrease to a smaller degree than Part B and Part D in part due to statutorily required increases. Specifically, in each of fiscal year 2020 through 2023, there is a statutory 0.5 percent increase in inpatient operating payments due to unwinding a temporary reduction in payments that was put in place to recoup past overpayments resulting from changes in providers' documentation and coding. "Volume and intensity" is the residual after the other three factors shown in the table (growth in "Medicare prices," "Number of beneficiaries," and "Beneficiary demographic mix") are removed. Much of the 2.4 percent projected increase in Part A "Volume and intensity" may be due to increased coding of hospital severity of illness, which could reflect real changes in patients' needs, changes in coding practices, or both; the 2.4 percent projected increase is not likely to reflect growth in volume per capita, given that the number of discharges per beneficiary has been declining for several decades. The "Medicare's projected spending" column is the product of the other columns in the table.

*The "Total" row is the sum of the other rows of the table, each weighted by their part's share of total Medicare spending in 2020 (as measured by shares of GDP).

**We are unable to calculate the total contribution of the growth in "Number of beneficiaries" to projected spending growth because there is beneficiary overlap in enrollment in Part A, Part B, and Part D.

Source: MedPAC analysis of data from the 2021 annual report of the Boards of Trustees of the Medicare trust funds.

change the quantity and/or mix of services used by beneficiaries, such as by incentivizing clinicians to reduce their delivery of low-value care—defined as services with little or no clinical benefit or that have more risk of harm than potential benefit. Consumption of low-value care varies by geographic area, reflecting different practice patterns—with previous Commission analyses finding high levels of low-value care delivered in parts of Florida, for example. CMS has tested a number of alternative payment models that incentivize more efficient use of services, but results from these experiments have been mixed. The Commission is exploring ways to improve alternative payment models and, as a first step, has recommended that CMS implement a more harmonized portfolio of fewer alternative payment models that are designed to work together (Medicare Payment Advisory Commission 2021b).

Another way to slow the growth in Medicare spending would be to reform the Medicare Advantage (MA) program, which is likely to enroll a majority of eligible Medicare beneficiaries within the next several years.⁷ The Commission has found that payments to MA plans are inflated as a result of plans maximizing the diagnoses they report for their enrollees in order to gain higher payments, while the underlying risk-adjustment model relies on diagnoses collected from claims from fee-for-service (FFS) providers, who lack the same incentives to code diagnoses. MA plans also receive quality bonuses that increase Medicare spending for the majority of MA enrollees, yet the MA quality rating system does not provide meaningful information about plans' quality of care. MA spending is also driven up by plan benchmarks that are set so high that the Medicare program ends up subsidizing

FIGURE 1-7

Medicare enrollment is rising, while number of workers per beneficiary is declining

Figure 1-7a. Medicare enrollment

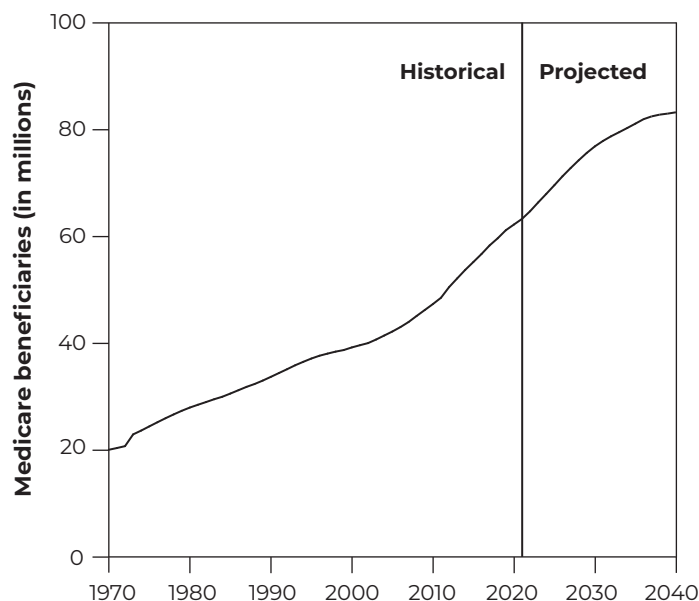
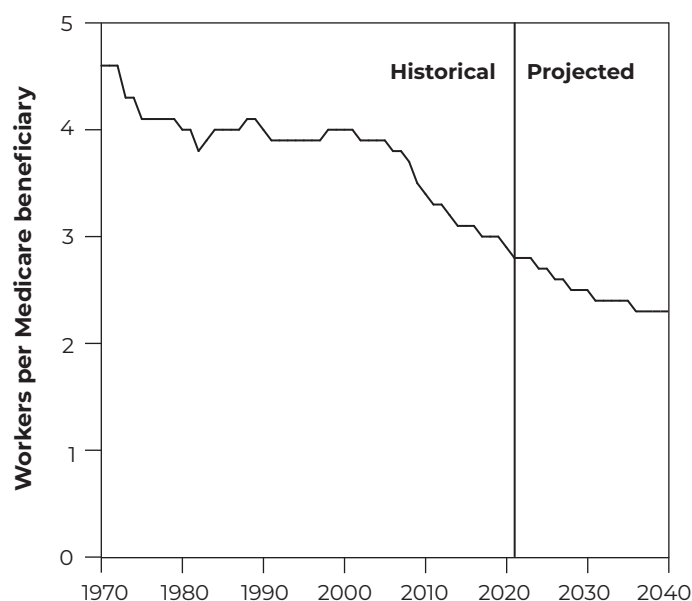


Figure 1-7b. Workers per Medicare beneficiary



Note: "Beneficiaries" referenced in these graphs are beneficiaries enrolled in Medicare Part A (including beneficiaries in Medicare Advantage). Part A is financed by Medicare's Hospital Insurance Trust Fund.

Source: 2021 annual report of the Boards of Trustees of the Medicare trust funds.

the substantial extra benefits that MA plans offer to their enrollees—benefits that are not available to FFS enrollees. Over the past few years, the Commission has recommended policies to address each of these issues (Medicare Payment Advisory Commission 2021b, Medicare Payment Advisory Commission 2020a, Medicare Payment Advisory Commission 2016). Implementing any one (or more) of these recommendations would have a meaningful impact on Medicare spending.

Medicare's financing challenge

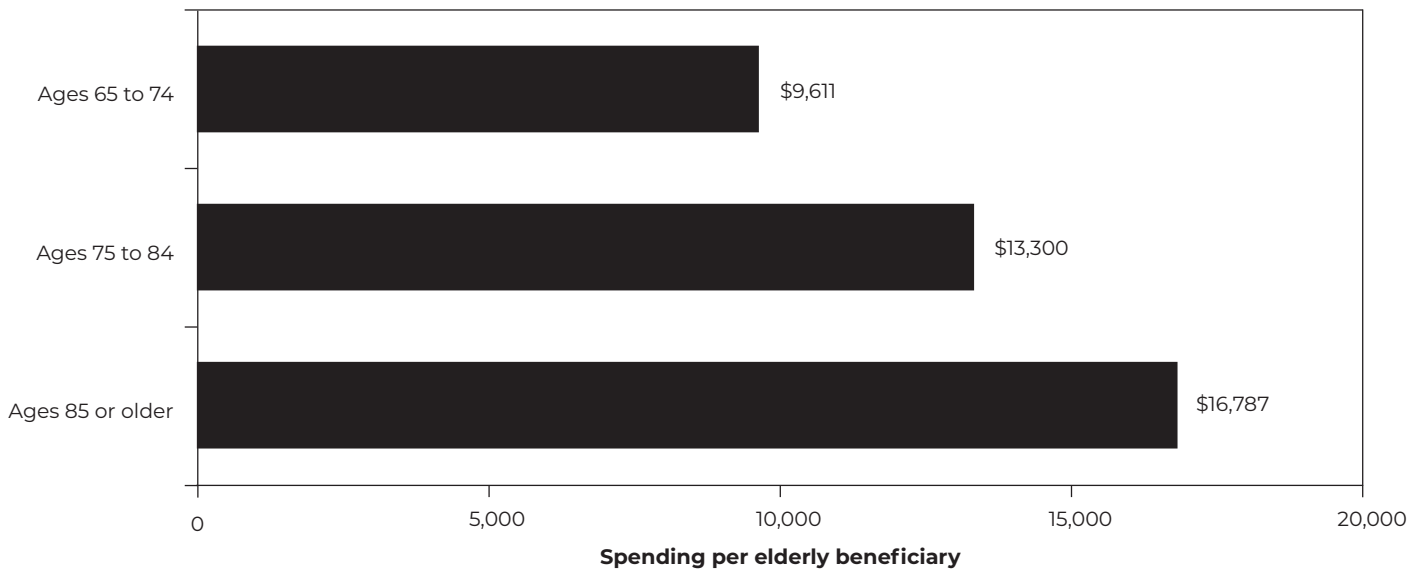
The aging of the baby-boom generation will have an impact on both the Medicare program and the taxpayers who support it. By 2030, the entire baby-boom generation will be eligible for Medicare.⁸

That year, Medicare is projected to have 77 million beneficiaries—up from 62 million beneficiaries in 2020 (Figure 1-7a). Meanwhile, the number of workers helping to finance Medicare through their taxes relative to the number of Medicare beneficiaries is expected to continue to decline. Around the time of Medicare's inception, there were 4.6 workers for every one Medicare beneficiary; by 2020, there were only 2.9 workers per beneficiary, and by 2030 there are expected to be only 2.5 workers per beneficiary (Figure 1-7b).

Baby boomers aging into Medicare will also affect Medicare spending per beneficiary, lowering pressure on spending per beneficiary in the near term and then raising pressure over the longer term. From now through 2028, baby boomers turning 65 and joining the Medicare program will lower the average beneficiary age, but after that, the average beneficiary age will rise

**FIGURE
1–8**

Spending per elderly beneficiary increased with age, 2018



Note: Includes beneficiaries in fee-for-service Medicare and Medicare Advantage dwelling in the community and in institutions. Spending per beneficiary for nonelderly enrollees (who are eligible for Medicare due to end-stage renal disease or disability) was \$18,250 (not shown above).

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost Supplement file, 2018.

as baby boomers continue to age (Boards of Trustees 2021). This aging will have cost implications for the Medicare program because average spending per beneficiary rises with age (Figure 1-8).

These demographics create a financing challenge for the Medicare program. Medicare Part A (which covers inpatient hospital stays and other institutional services) is mainly financed through workers' payroll taxes, which are deposited into Medicare's Hospital Insurance (HI) Trust Fund. Payroll tax revenues are not growing as fast as Part A spending, and Medicare often spends more on Part A services than it collects through HI Trust Fund revenues—creating annual deficits.⁹ Leftover surpluses from prior years have been used in recent years to pay for this deficit spending. As a result, the trust fund's reserves have been dwindling; as noted earlier, Medicare's Trustees estimate that by 2026, the HI Trust Fund's prior surpluses will be depleted—meaning it will be unable to fully cover its obligations

each year (Boards of Trustees 2021). CBO also tracks the trust fund's financial status and projects that it will become insolvent within a similar time frame, by 2027 (Congressional Budget Office 2021a, Congressional Budget Office 2021b).

According to Medicare's Trustees, if Medicare's HI Trust Fund is depleted, "Medicare could pay health plans and providers of Part A services only to the extent allowed by ongoing tax revenues—and these revenues would be inadequate to fully cover costs," which they warn could rapidly curtail beneficiary access to care. However, the Trustees note that lawmakers have never allowed the HI Trust Fund assets to become depleted (Boards of Trustees 2021).

To keep the HI Trust Fund solvent over the next 25 years, the Trustees estimate that either the Medicare payroll tax would need to be raised immediately from its current rate of 2.9 percent to 3.7 percent or Part A spending would need to be permanently reduced

**TABLE
1-2**

Higher Medicare payroll tax or lower Medicare Part A spending needed to maintain solvency of the Hospital Insurance Trust Fund

To maintain Hospital Insurance Trust Fund solvency for:	Increase 2.9% payroll tax to:	Or decrease Part A spending by:
25 years (2021–2045)	3.71%	17.8%
50 years (2021–2070)	3.73	17.7
75 years (2021–2095)	3.67	16.2

Note: Part A spending includes spending on inpatient hospital, skilled nursing facility, home health agency, and hospice services and includes spending for beneficiaries in fee-for-service Medicare and Medicare Advantage.

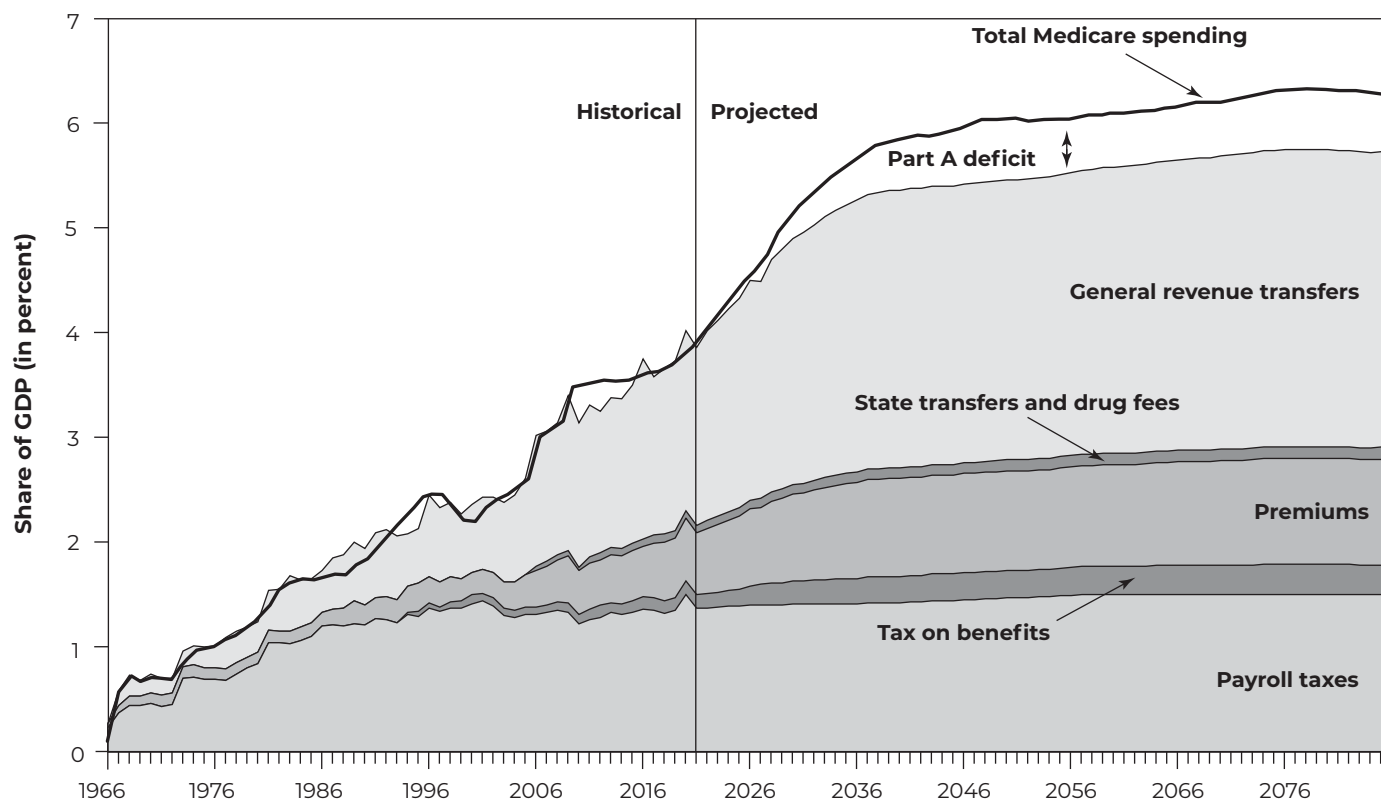
Source: MedPAC analysis of Table III.B8 in 2021 annual report of the Boards of Trustees of the Medicare trust funds.

by about 18 percent (Table 1-2), which is equivalent to about \$70 billion in 2022 (Boards of Trustees 2021).¹⁰ Reducing Part A spending by \$70 billion in a single year would require major changes to the Medicare program and is not likely to be achieved through incremental changes. For example, our recommendation to replace the Medicare Advantage quality bonus program with a redesigned value incentive program would have saved \$10 billion in 2022 (Congressional Budget Office 2018), through a mix of Part A and Part B savings—but this is only a fraction of the \$70 billion in one-year Part A savings needed to extend the solvency of the trust fund.

The HI Trust Fund is a major financing mechanism for the Medicare program, but it covers less than half of Medicare spending (43 percent in 2020); that share has been steadily declining since 2010 and is expected to continue to do so (Boards of Trustees 2021). The rest of Medicare spending, under Part B (which covers clinician and outpatient services) and Part D (which covers prescription drugs), is financed through the Supplementary Medical Insurance (SMI) Trust Fund. The SMI Trust Fund is funded by premiums paid by beneficiaries and transfers from the general fund of the Treasury.¹¹ Since premiums and transfers are set to grow at the same rate as Part B and Part D spending, the SMI Trust Fund automatically remains solvent. However, as Part B and Part D spending rises, so do premiums and transfers from the Treasury—increasing

deficits, the debt, and the strain on Medicare beneficiaries' household budgets (Figure 1-9).

While these projections are sobering enough in and of themselves, they reflect assumptions about constraints on spending growth that may not materialize. Medicare spending is projected to grow rapidly through the mid-2030s, then grow at a slower rate in subsequent decades (Figure 1-9). This slowdown is a result of various cost-reduction measures written into current law, which Medicare's Trustees are in turn required to use as the basis for their spending projections. For example, Medicare's Trustees assume that starting in 2026, clinicians who are not in advanced alternative payment models (A-APMs) will receive lower annual updates to their Medicare physician fee schedule payment rates (+0.25 percent per year) than clinicians who are in A-APMs (+0.75 percent per year)—and that these updates will not be replaced with updates that are more reflective of inflation (+2 percent per year). Medicare's Trustees also assume that the bonuses clinicians currently receive for participating in A-APMs or demonstrating “exceptional” performance under the Merit-based Incentive Payment System (MIPS) will end in 2025—and not be extended through legislative intervention. The Medicare actuaries that prepare the Trustees' projections have cautioned that assuming that cost-reduction measures like these will stand, and not be repealed, may be “overly optimistic.” They explain that if cost-reduction measures in current law

**FIGURE
1-9****General revenues have overtaken Medicare payroll taxes
as the largest source of Medicare funding**

Note: GDP (gross domestic product). These projections are based on the Trustees' intermediate set of assumptions. "Tax on benefits" refers to the portion of income taxes that higher-income individuals pay on Social Security benefits, which is designated for Medicare. "State transfers" (often called the Part D "clawback") refers to payments from the states to Medicare, required by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, for assuming primary responsibility for prescription drug spending. "Drug fees" refers to the fee imposed by the Affordable Care Act of 2010 on manufacturers and importers of brand-name prescription drugs; these fees are deposited in the Part B account of the Supplementary Medical Insurance Trust Fund. Graph does not include interest earned on trust fund investments (which makes up 1 percent of the Hospital Insurance Trust Fund's income and is expected to decline in coming years as trust fund assets decline).

Source: 2021 annual report of the Boards of Trustees of the Medicare trust funds.

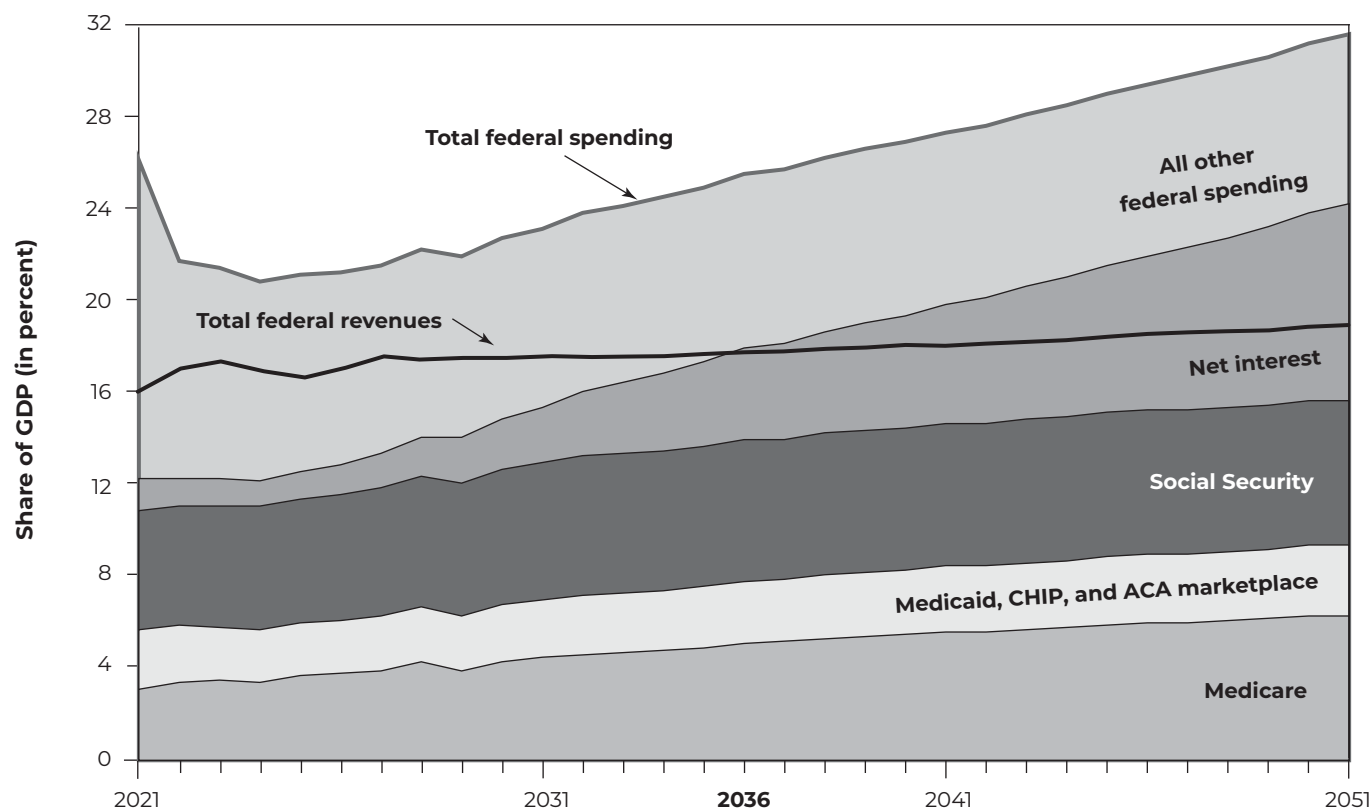
are replaced with more generous payment policies, Medicare spending will increase at a rate that is more in line with past spending growth and more in line with spending growth for the overall health care sector. This would mean that by 2045, instead of Medicare spending constituting 6.15 percent of GDP (as shown in Figure 1-9), Medicare spending could constitute 6.5 percent of GDP. The Medicare Trustees' long-term spending projections should therefore be viewed as presenting a lower bound of what future Medicare spending could look like and "should not be interpreted as the

most likely expectation of actual Medicare financial operations," according to Medicare's actuaries (Boards of Trustees 2021, Centers for Medicare & Medicaid Services 2021e).

The large and growing share of Medicare spending funded through general revenues is an additional financing challenge. In 2020, general revenues paid for 44 percent of Medicare spending, and by 2037 they are projected to cover 54 percent of Medicare spending. In this context, general revenues include both general

**FIGURE
1-10**

Spending on Medicare, other major health programs, Social Security, and net interest is projected to exceed total federal revenues by 2036



Note: GDP (gross domestic product), CHIP (Children's Health Insurance Program), ACA (Affordable Care Act of 2010).

Source: Congressional Budget Office's long-term budget projections, published March 2021.

tax revenue and federal borrowing to cover Medicare's funding deficit. As the amount of general revenues needed to finance Medicare increases, it reduces resources available for other priorities, including making investments that expand future economic output (e.g., federal investments in education, transportation, and research and development).

The increasing expenditure of general revenues is a looming problem because the federal government already spends more than it collects in revenues each year (Figure 1-10). The thick gray line at the top of Figure 1-10 represents total federal spending as a share of GDP; the thick black line below it represents total federal revenues. The difference between these

two lines represents the budget deficit, which must be covered by federal borrowing. The stacked layers in Figure 1-10 depict federal spending by program. By 2036, spending on Medicare, the other mandatory programs shown in the figure, and net interest payments are projected to reach 17.9 percent of the nation's GDP and, by themselves, will exceed total federal revenues.¹² At that point, every dollar spent on programs funded through annual discretionary appropriations—such as the military, the NIH, the FBI, the national highway system, and air traffic control, just to name a few—will need to be financed through federal borrowing. Before the pandemic, this juncture was predicted to arrive in 2038, but additional federal

spending prompted by the coronavirus pandemic has caused this point to arrive two years sooner than previously expected.

The affordability of health care for Medicare beneficiaries

As Medicare spending grows, it affects beneficiaries' ability to afford health care by raising their premiums and cost sharing. Medicare beneficiaries typically do not pay premiums for Part A (hospital insurance) coverage, but the annual cost of Part B (supplementary medical insurance) premiums was \$1,782 in 2021, and the average annual cost of Part D prescription drug plan premiums was \$456 (Medicare Payment Advisory Commission 2021a). In addition, in 2019, cost sharing for beneficiaries in traditional FFS Medicare averaged \$406 for Part A services, \$1,582 for Part B services, and \$432 for beneficiaries with Part D coverage (Medicare Payment Advisory Commission 2021a). Taken together, beneficiary spending on Medicare premiums and cost sharing consumed 23 percent of the average Social Security benefit in 2021, up from 14 percent 20 years earlier (Boards of Trustees 2021).¹³ Medicare's Trustees estimate that in another 20 years, premiums and cost sharing will consume 34 percent of the average Social Security benefit. (As a point of reference, Social Security benefits account for more than 60 percent of income for seniors, on average, and for 100 percent of income for a fifth of seniors (Social Security Administration 2016).)

At present, the cost of care is manageable for most beneficiaries—but not all. In CMS's 2019 Medicare Current Beneficiary Survey, 16 percent of beneficiaries who had received care in the past year were dissatisfied with their out-of-pocket costs for medical services, and 10 percent reported problems paying a medical bill. Certain subpopulations of Medicare beneficiaries had more trouble affording care than others, including non-elderly beneficiaries (who tend to be disabled), Black, Multiracial, and Hispanic beneficiaries, and lower-income beneficiaries. Rural beneficiaries were only slightly more dissatisfied with their out-of-pocket costs than urban beneficiaries (18 percent vs. 16 percent), and there was no statistically significant difference in the share of rural and urban beneficiaries who had a problem paying a medical

bill. (For a more thorough discussion of disparities in different subpopulations' access to care, see Chapter 4 of this report.) Although some beneficiaries experience difficulties affording health care, becoming a Medicare beneficiary typically improves patients' ability to afford health care: A recent analysis of federal Medical Expenditure Panel Survey data found that, around age 65, when most people gain eligibility for Medicare, there is a reduction in reports of being unable to get necessary care and being unable to get needed care because of the cost (Jacobs 2021).

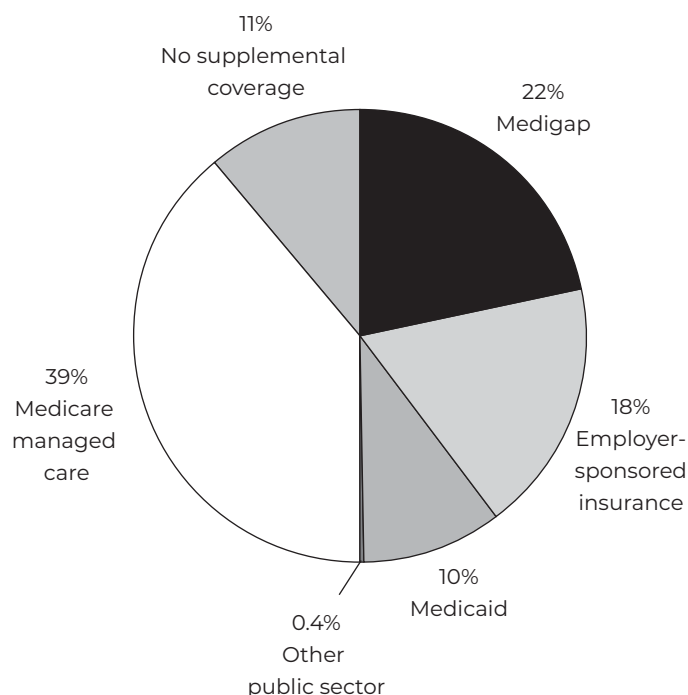
Although rising premiums and cost sharing can strain a small share of beneficiaries' household budgets, cost sharing can be beneficial to the Medicare program, because it can help deter overuse of services. (To ensure that cost sharing does not deter beneficiaries' use of high-value services, Medicare waives cost sharing for many preventive services.) The effectiveness of Medicare's cost sharing as a mechanism for discouraging unnecessary care is blunted, however, by the fact that most beneficiaries have private plans that cover some or all of their cost sharing (Figure 1-11, p. 24). Specifically, in 2018, 22 percent of beneficiaries had traditional FFS Medicare plus supplemental insurance that they purchased from private companies (Medigap plans). (This amounted to 36 percent of FFS beneficiaries having Medigap plans.) Medigap plans cost an extra \$50 to \$300 per month and in turn lower beneficiaries' cost sharing. Figure 1-11 also shows that 39 percent of beneficiaries were enrolled in private Medicare Advantage plans or some other Medicare managed care plan. Another 18 percent were insured through employer-sponsored retiree health plans subsidized by Medicare. And 10 percent of Medicare beneficiaries were dually enrolled in both Medicare and Medicaid due to low income and resources. This left 11 percent of Medicare beneficiaries in traditional FFS Medicare without any other type of coverage that year. Only this small share of beneficiaries face Medicare's full cost sharing.

Medicare spending trends

Medicare spending can be divided into three program components: A little under half of Medicare spending is devoted to traditional FFS Medicare coverage; 40 percent pays for Medicare Advantage and other private

FIGURE 1-11

Most Medicare beneficiaries had supplemental coverage or were enrolled in a Medicare Advantage plan that reduced their cost sharing, 2018



Note: Our analysis assigned beneficiaries to the supplemental coverage category they were in for the most time in 2018; beneficiaries could have had coverage in other categories during 2018. The analysis includes only beneficiaries not living in institutions such as nursing homes. It excludes beneficiaries who were not in both Part A and Part B throughout their enrollment in 2018 or who had Medicare as a secondary payer.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Survey file 2018.

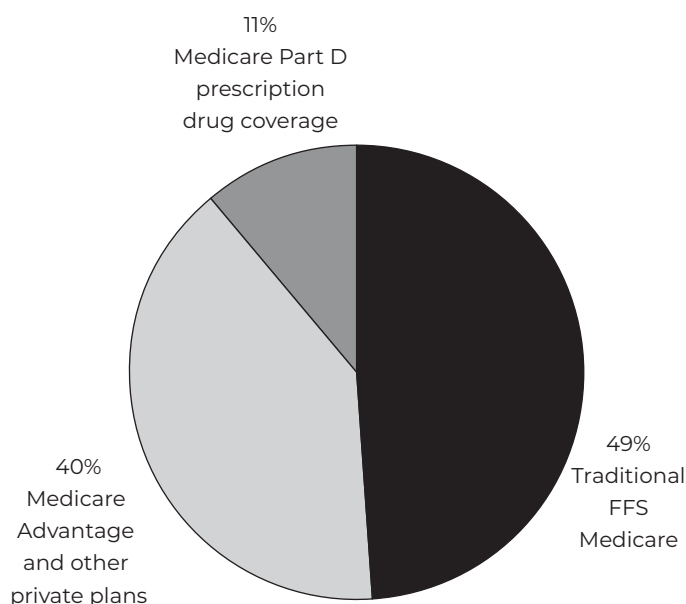
plans; and about a tenth pays for Medicare Part D drug coverage (Figure 1-12).

- **Traditional Medicare.** In the traditional FFS Medicare program, Medicare pays health care providers directly for health care goods and services furnished to Medicare beneficiaries at prices set through legislation and regulation.
- **MA and other types of private plans.** Beneficiaries can choose, as an alternative to traditional Medicare, to enroll in MA, which consists of private health plans that receive capitated payments per

enrollee to provide Part A and Part B coverage. MA plans pay health care providers for health care goods and services furnished to their enrollees at prices negotiated between the plans and providers, using FFS payment approaches or other payment models such as partial capitation. MA is funded through a combination of the Hospital Insurance (Part A) Trust Fund and the Supplementary Medical Insurance (Part B) Trust Fund, just like traditional FFS Medicare. The share of beneficiaries enrolled in MA plans has grown rapidly from 2011 to 2021—rising from 26 percent to 46 percent (Figure 1-13).

FIGURE 1-12

Share of Medicare spending on different program components, 2020

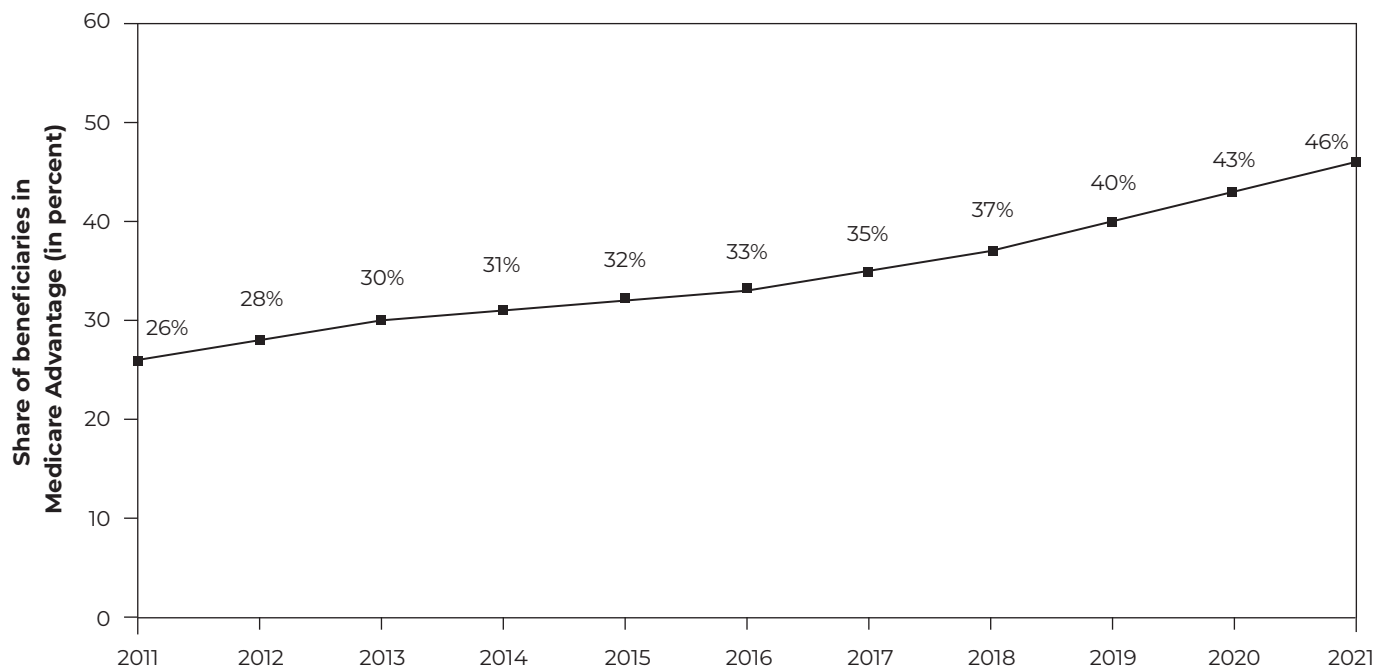


Note: Fee-for-service (FFS). Figure shows share of aggregate reimbursement amounts on an incurred basis. Includes spending for all FFS Medicare beneficiaries, including those with only Part A or Part B coverage. Medicare Advantage spending does not include medical education, hospice, and nonhospice Part A and Part B services received by hospice enrollees; when these services are furnished to Medicare Advantage enrollees, FFS Medicare incurs the spending.

Source: MedPAC analysis of Tables IV.A3, IV.B6, and IV.B10 in the 2021 annual report of the Boards of Trustees of the Medicare trust funds.

FIGURE
1-13

The share of Medicare beneficiaries enrolled in Medicare Advantage has grown rapidly



Note: Figure shows the share of Medicare beneficiaries enrolled in Medicare Advantage plans, from among those beneficiaries with both Part A and Part B coverage. For detailed information on Medicare Advantage enrollment and spending, see Chapter 12 of this report.

Source: MedPAC analysis of CMS enrollment files, July 2011–2021.

For beneficiaries, differences between MA and FFS Medicare include the fact that MA plans typically include Part D coverage for prescription drugs and have an out-of-pocket cap on beneficiaries' in-network costs. In addition, most MA plans use a portion of their capitated payments to offer lower cost sharing, cover supplemental benefits (e.g., vision, dental, and hearing benefits), or pay down some or all of beneficiaries' Part B and Part D premiums. In exchange for these benefits, beneficiaries in MA agree to a narrower network of providers than beneficiaries in traditional FFS Medicare, in-network services that may be subject to utilization management (e.g., prior authorization, referrals, and alternative cost sharing), and potentially higher cost sharing or no coverage for services sought outside of a plan's network.

In addition to MA, other types of private health plans are available to Medicare beneficiaries:

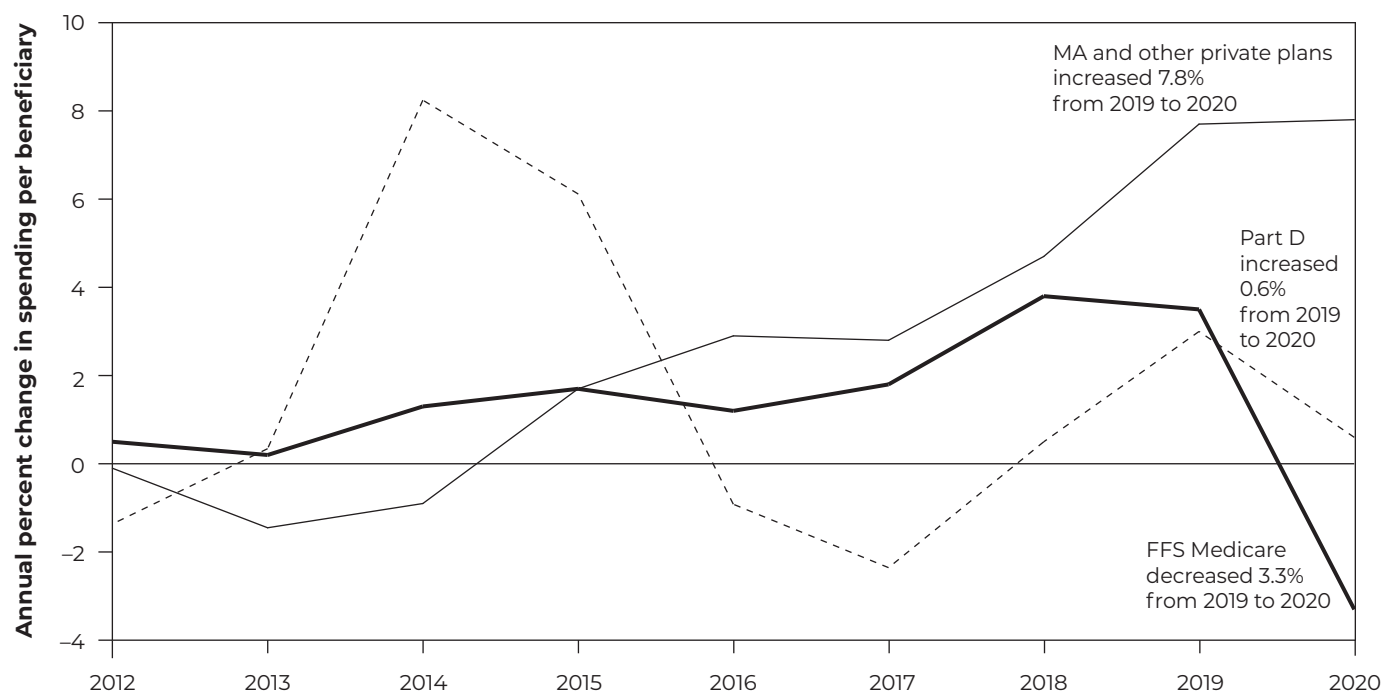
Medicare–Medicaid plans, Program of All-Inclusive Care for the Elderly (PACE) plans, and cost-based (as opposed to capitated) plans. Only about 6 percent of the beneficiaries in private plans are in one of these non-MA plans.

- **Medicare Part D prescription drug coverage.** Through Part D, beneficiaries can obtain subsidized prescription drug coverage from private insurers by purchasing a stand-alone drug plan or by enrolling in an MA plan that includes prescription drug coverage.

Growth in spending per beneficiary differs across Medicare's three program components (Figure 1-14, p. 26).¹⁴ Since 2016, spending per beneficiary (not risk standardized) in MA and other private plans has grown faster than in traditional FFS Medicare and

**FIGURE
1-14**

Since 2016, spending per beneficiary has grown faster for Medicare Advantage than for traditional FFS Medicare and Medicare Part D



Note: FFS (fee-for-service), Medicare Advantage (MA). Percent change is calculated using annual spending on an incurred basis that is not risk standardized. Spending per beneficiary is not adjusted for health status or coding differences between MA and FFS. Private plans include MA plans, Medicare-Medicaid plans, Program of All-Inclusive Care for the Elderly (PACE) plans, and cost-based (as opposed to capitated) plans. Spending per beneficiary on MA and other private plans is calculated by summing Part A spending on private health plans and Part B spending on private health plans, then dividing that by the number of enrollees in Part C (in private health plans). FFS Medicare spending per beneficiary is calculated by summing (1) Part A FFS spending divided by Part A FFS enrollees and (2) Part B FFS spending divided by Part B FFS enrollees. Part D is calculated by taking total Part D spending, subtracting premiums (mostly paid by enrollees), then dividing that by the number of enrollees in Part D.

Source: MedPAC analysis of data from the 2021 annual report of the Boards of Trustees of the Medicare trust funds.

Part D. From 2018 to 2019 alone, Medicare private plan spending per beneficiary rose by 7.7 percent, compared with 3.5 percent in FFS Medicare and 3.0 percent in Part D. (Medicare private plan spending includes spending on extra benefits that many private plans provide.) The relatively faster growth in private plan spending per beneficiary in recent years at least partially reflects MA demographic changes, the growing number of MA plans receiving higher payments due to their quality bonus status, growth in the risk scores MA plans report for their enrollees, and Medicare enrollment growth in areas of the country where MA payment benchmarks are set at 115 percent of FFS Medicare's spending per beneficiary (Medicare

Payment Advisory Commission 2020a, Medicare Payment Advisory Commission 2020b, Medicare Payment Advisory Commission 2018).

From 2019 to 2020, private plan spending per beneficiary continued its high rate of growth (increasing 7.8 percent), while spending per beneficiary for FFS Medicare and Part D slowed substantially (changing by -3.3 percent and 0.6 percent, respectively), as growth in the utilization of health care services and drugs slowed during the first year of the coronavirus pandemic. Consequently, Medicare paid \$1,538 more per beneficiary in private plans than it spent on beneficiaries with FFS coverage in 2020

New Alzheimer's drug exemplifies the challenges Medicare faces with high-priced new drugs and biologics

Prescription drugs and biologics are a significant driver of Medicare spending growth. Between 2009 and 2019, Part B drug spending grew on average nearly 10 percent per year. The largest contributing factor was the change in the prices Medicare paid for Part B drugs, which reflects higher prices for existing products and shifts in the mix of drugs used, including the introduction of expensive new drugs. Part D spending is increasingly driven by the less than 10 percent of enrollees who incur spending high enough to reach the catastrophic phase of the benefit (high-cost enrollees). Aggregate spending for high-cost enrollees grew from about 40 percent of Part D spending before 2010 to 62 percent in 2020. Rapid growth in the average price of prescriptions filled by high-cost enrollees explains most of the overall growth in spending for these beneficiaries.

Because the growth in prescription drug spending has been a source of concern, the Commission has recommended ways to improve how Medicare pays for prescription drugs in Part B and Part D (Medicare Payment Advisory Commission 2020a, Medicare Payment Advisory Commission 2017). The Commission is now embarking on a new round of analysis examining drug prices to determine what further changes to the Medicare program might be warranted. This work is especially timely, given the Food and Drug Administration's (FDA's)

recent approval of Aduhelm (aducanumab), a high-cost biologic for early-stage Alzheimer's disease.¹⁵ Aduhelm exemplifies the challenges that the Medicare program faces with coverage of and payment for new drugs and biologics. The FDA approved Aduhelm under the accelerated approval pathway with limited, conflicting data on its clinical effectiveness using surrogate endpoints.

Medicare coverage of Aduhelm

For Part A and Part B services furnished in fee-for-service (FFS) Medicare, statute requires that the program cover items and services that are included in a Medicare benefit category, are not statutorily excluded, and are "reasonable and necessary for the diagnosis or treatment of illness or injury or to improve the functioning of a malformed body member." There are several ways for a new item or service to be covered under FFS Medicare:

- If a new item or service falls under a Medicare benefit category and can be reimbursed on the basis of an existing billing code or a bundled payment system (e.g., inpatient prospective payment system), Medicare may cover it without a formal coverage policy.
- Medicare's administrative contractors develop most formal coverage policies. Local coverage determinations assess whether and under what

(continued next page)

(\$12,847 vs. \$11,309), as MA plans received capitated payments in 2020 that were set before the pandemic and assumed that a typical year of service utilization would occur. If high payments and low utilization cause private plans to have medical expenses below 85 percent of their revenues, private plans must refund some of their payments to CMS to meet the 85 percent minimum medical expenditure requirement. Figure 1-14 does not reflect any such refunds from plans, which CMS could begin receiving in July of 2022.

One of the drivers of growth in Medicare spending is the increasing volume and intensity of services and items consumed by beneficiaries—including the use of expensive new drugs and biologics with high launch prices. Aduhelm, a new Alzheimer's drug with a \$28,200 annual price tag, illustrates the potential that exists for new drugs to have a significant impact on overall Medicare spending (see text box).

New Alzheimer's drug exemplifies the challenges Medicare faces with high-priced new drugs and biologics (cont.)

circumstances a new item or service will be covered in the contractor's jurisdiction.

- For a small subset of new items or services, the Secretary also develops formal coverage policies, referred to as national coverage determinations (NCDs), that define a service's coverage nationwide. The Secretary may initiate an NCD for a variety of reasons, including when a new item or service represents a substantial clinical advance with the potential for rapid diffusion, but the existing clinical evidence does not adequately address questions about its impact on beneficiaries.

In January 2022, CMS proposed an NCD policy that would cover monoclonal antibodies that target amyloid for the treatment of Alzheimer's disease, including Aduhelm, through coverage with evidence development (CED). Under the proposal, Medicare would cover Aduhelm and other FDA-approved products in its class only for beneficiaries enrolled in qualifying clinical trials. The proposal noted that although there was insufficient evidence that this therapeutic class is reasonable and necessary for the treatment of Alzheimer's disease, the condition is a particularly important disease that affects many beneficiaries. Consequently, the agency stated that "the CED paradigm provides the most appropriate pathway to provide Medicare coverage while additional evidence is developed" (Centers

for Medicare & Medicaid Services 2022). After reviewing comments submitted by the public, CMS will issue a final national coverage determination policy by April 11, 2022.

Implications of Aduhelm on spending by beneficiaries and Medicare

Though there are only limited, conflicting data on Aduhelm's clinical effectiveness, Medicare would pay a high price for the product under its Part B payment system. (Because this biologic is administered in a physician's office or hospital outpatient department, it is paid for under Medicare Part B, rather than through a Medicare Part D drug plan.) For Part B-covered single-source drugs and biologics, manufacturers effectively determine Medicare's payment rate for their products because Medicare generally pays 106 percent of the average sales price.¹⁶ Aduhelm's manufacturer, Biogen, initially set the price for a one-year supply at \$56,000. In December 2021, in order to increase the uptake of its product, the manufacturer reduced the price for a one-year supply to \$28,200 (Biogen 2021b).^{17,18,19}

Spending implications of the product could be very large if there is significant uptake of Aduhelm. An estimated 6.2 million adults age 65 and older have Alzheimer's dementia (Alzheimer's Association 2021). Though it is unknown what share is likely to receive the product, its manufacturer (Biogen) has stated
(continued next page)

Trends in Medicare beneficiaries' morbidity and mortality

In addition to trends in spending, trends in beneficiaries' health status, chronic health conditions, and longevity also impact the Medicare program. In recent decades, the shares of people eligible for Medicare who have reported being in "fair" or "poor" health have declined (Figure 1-15, p. 30). Between 1991

and 2018, the share of people ages 65 to 74 reporting "fair" or "poor" health status fell from 26 percent to 19 percent. The share of people ages 75 and older reporting "fair" or "poor" health status also fell, from 34 percent to 27 percent. Less consistent patterns have been observed among adults of any age who reported difficulty in functional domains (and thus may serve as a proxy for disabled Medicare beneficiaries), but

New Alzheimer's drug exemplifies the challenges Medicare faces with high-priced new drugs and biologics (cont.)

that the product is appropriate for between 1 million and 2 million individuals. However, Biogen has stated that it expects uptake will be gradual and not all of these patients will receive the product (Biogen 2021a). In December 2021, in announcing a lower price, Biogen stated that it projected 50,000 patients would begin treatment in 2022 (Biogen 2021b). Thus, Medicare spending on Aduhelm could vary widely, depending on how many beneficiaries receive the product. For example, at a price of \$28,200 for a year of maintenance therapy, annual Medicare Part B FFS spending and beneficiary cost sharing could total \$1.5 billion if 50,000 FFS beneficiaries received the product and \$15 billion if 500,000 FFS beneficiaries received the product. Thus, with substantial uptake, the product has the potential to swamp current Part B drug spending, which totaled \$39 billion in 2019.

In addition to spending on Aduhelm, use of the product is likely to increase use of, and therefore spending on, MRIs (which the FDA requires be done at certain intervals to monitor for brain swelling) and potentially positron emission tomography (PET) scans (which Medicare currently covers under an NCD to diagnose Alzheimer's disease in limited circumstances). Higher spending on Aduhelm and related services also has implications for Medicare Part B premiums and deductibles and Medigap premiums for beneficiaries with supplemental coverage and could have substantial spending implications for Medicare Advantage plans, which

generally must cover Part A and Part B services covered by traditional FFS Medicare (including following NCDs and, in some cases, local coverage determinations).

Implications of Aduhelm for Part B premium

The effect of Aduhelm on the 2022 Part B premium illustrates the potential that exists for new drugs to have a significant impact on overall Medicare spending. The 2022 Part B monthly premium increased \$21.60, or nearly 15 percent, from \$148.50 in 2021 to \$170.10 in 2022. CMS indicated that several factors contributed to the premium increase, including the need to create contingency reserves due to uncertainty over the potential use of Aduhelm (Centers for Medicare & Medicaid Services 2022).²⁰ Press reports citing statements by CMS officials suggest that Aduhelm accounted for about half of the Part B premium increase (Alonso-Zaldivar 2021). CMS established the premium amount before the manufacturer of Aduhelm reduced the product's prices in late December 2021. At the time of writing this report, in light of Aduhelm's price change, the Secretary of Health and Human Services instructed CMS to reassess the Part B premium amount (Department of Health and Human Services 2022). The 2022 Part B premium was also established before CMS issued the proposed NCD that, if finalized later this spring, would cover Aduhelm only for clinical trial participants. ■

overall, the share of these individuals reporting fair or poor health has also declined.

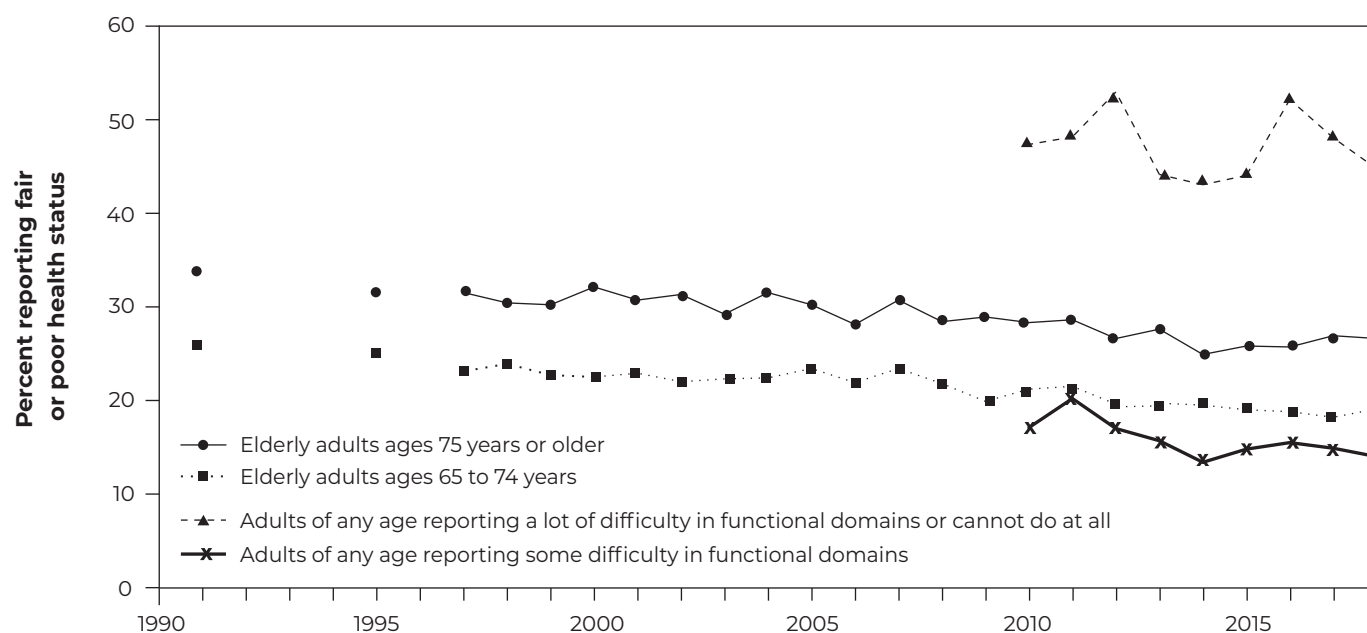
Most common chronic conditions and causes of death

The most prevalent chronic conditions among Medicare beneficiaries are hypertension (high blood pressure), hyperlipidemia (high cholesterol), certain types of arthritis (joint inflammation), ischemic heart

disease (plaque in the arteries), and diabetes (Table 1-3, p. 31). Other conditions are less common but more expensive to treat per Medicare beneficiary. The most expensive chronic conditions are acute myocardial infarctions (heart attacks), lung cancer, strokes (when blood to the brain is reduced), heart failure (when the heart muscle cannot pump enough blood), and colorectal cancer (colon cancer) (Table 1-3, p. 31). (Although a stroke is typically a one-time event, it

**FIGURE
1-15**

The share of Medicare eligibles reporting fair or poor health status has changed over time, 1991-2018



Note: "Adults reporting a lot of difficulty in functional domains or cannot do at all" and "Adults reporting some difficulty in functional domains" include people 18 years and older who report one or more of the following six functional limitations: seeing (even if wearing glasses), hearing (even if wearing hearing aids), mobility (walking or climbing stairs), communication (understanding or being understood by others), cognition (remembering or concentrating), and self-care (such as washing all over or dressing). These measures of functional limitations among adults 18 years and older did not begin being reported until 2010.

Source: National Center for Health Statistics. 2021. *Health, United States, 2019*, Table 16. <https://www.cdc.gov/hchs/hus/contents2019.htm#Table-016>.

can cause ongoing health problems, such as paralysis, seizures, and difficulty communicating.)

Until the coronavirus pandemic, there was little change in the leading causes of death in the United States, with the CDC finding that heart disease and cancer were the first and second most common causes of death in both 1980 and 2018—both among people ages 65 and older (Table 1-4, p. 32) and among the general population overall (not shown) (Hoyert 2012, National Center for Health Statistics 2021a, National Center for Health Statistics 2018).

Newer research has estimated the relative prevalence of COVID-19 as a cause of death and found that it was the third-leading cause of death in the United States in most months of 2020 and briefly became the leading

cause of death in December 2020 through February 2021. By June 2021, as vaccines became widely available in the United States, COVID-19 fell to the seventh-leading cause of death (Ortaliza et al. 2021).

Disparities among Medicare beneficiaries

Race and ethnicity are associated with variations in life expectancy among Medicare beneficiaries. Before the coronavirus pandemic, for individuals who live to age 65, Black individuals could expect to live an additional 18 years, White individuals could expect an additional 19.4 years, and Hispanic individuals could expect another 21.4 years (Table 1-5, p. 33).²¹ According

**TABLE
1-3****The most prevalent and costly chronic conditions in traditional FFS Medicare, 2019**

	Prevalence among beneficiaries in traditional FFS Medicare	Average spending per beneficiary for those with the specified condition
Most prevalent chronic conditions		
Hypertension	59%	\$16,115
Hyperlipidemia	50	15,591
Rheumatoid arthritis / osteoarthritis	35	17,515
Ischemic heart disease	28	21,927
Diabetes	28	18,152
Most costly conditions		
Acute myocardial infarction	1	57,864
Lung cancer	1	42,382
Stroke / transient ischemic attack	4	35,814
Heart failure	15	31,878
Colorectal cancer	1	30,073

Note: Fee-for-service (FFS). Beneficiaries may be counted in more than one chronic condition category. The information in this table should not be used to attribute utilization or payments strictly to the condition selected because beneficiaries with any of the conditions presented could have other health conditions that contribute to their Medicare utilization and spending amounts. Spending per beneficiary is actual spending, as opposed to age- or risk-standardized spending. Spending data for chronic conditions are not directly comparable to spending data reported in prior years' Commission reports due to a change in our data source in 2022.

Source: Centers for Medicare & Medicaid Services' Chronic Conditions Warehouse, Table B.2a. Medicare beneficiary prevalence for chronic conditions using fee-for-service (FFS) claims, 2010–2019, May 2021, <https://www2.ccwdata.org/documents/10280/19096644/ccw-website-table-b2a.pdf>; Centers for Medicare & Medicaid Services' Mapping Medicare Disparities by Population interactive tool, October 29, 2021, <https://data.cms.gov/tools/mapping-medicare-disparities-by-population>.

to more recent data, individuals in 2019 who lived to age 65 could expect to live 19.6 more years, but by 2020 individuals who reached age 65 could only expect to live 18.5 more years—a 1.1 year drop in life expectancy, largely due to COVID-19 (Murphy et al. 2021). (As of the date of publication, breakouts by race/ethnicity and sex were not available for 2019 and 2020.)

Demographic characteristics are associated not only with life expectancy but also with care experiences. The Commission's 2021 telephone survey and CMS's 2019 Medicare Current Beneficiary Survey both found that beneficiaries of certain races and ethnicities had different access to care than White beneficiaries on some dimensions (but not others). For example, our 2021 survey found that lower shares of Hispanic beneficiaries were satisfied with the quality of their

care (88 percent) compared with White beneficiaries (95 percent). It also found that higher shares of Black beneficiaries reported waiting longer than they wanted for various types of appointments compared with White beneficiaries. (For a fuller description of differences in care experiences by race and ethnicity, see Chapter 4 of this report.)

Alternative payment models incentivize clinicians to deliver care more efficiently

One way traditional FFS Medicare has attempted to slow the growth in its spending is through alternative payment models (APMs). APMs are intended to give

**TABLE
1-4**

Leading causes of death at ages 65 and older, 1980 and 2018

Table 1-4a. Leading causes of death at ages 65 and older, 1980

Cause of death	Share of deaths
1. Heart disease	44%
2. Cancer	19
3. Stroke	11
4. Pneumonia and influenza	3
5. Chronic lower respiratory diseases	3
6. Atherosclerosis	2
7. Diabetes	2
8. Unintentional injuries	2
9. Nephritis, nephrotic syndrome, and nephrosis	1
10. Chronic liver disease and cirrhosis	1

Table 1-4b. Leading causes of death at ages 65 and older, 2018

Cause of death	Share of deaths
1. Heart disease	25%
2. Cancer	21
3. Chronic lower respiratory diseases	6
4. Stroke	6
5. Alzheimer's disease	6
6. Diabetes	3
7. Unintentional injuries	3
8. Pneumonia and influenza	2
9. Nephritis, nephrotic syndrome, and nephrosis	2
10. Parkinson's disease	2

Note: "Chronic lower respiratory diseases" was formerly known as "chronic obstructive pulmonary diseases." Starting with 1999 data, the rules for selecting chronic lower respiratory diseases and pneumonia as the underlying cause of death changed, resulting in a higher number of deaths for chronic lower respiratory diseases and a lower number of deaths for pneumonia. Therefore, trend data for these two causes of death should be interpreted with caution. Also, starting with 2011 data, the rules for selecting renal failure as the underlying cause of death were changed, affecting the number of deaths in the nephritis, nephrotic syndrome, nephrosis, and diabetes categories. The result is a lower number of deaths attributed to nephritis, nephrotic syndrome, and nephrosis, and a higher number of deaths attributed to diabetes. Therefore, trend data for these two causes of death should also be interpreted with caution.

Source: National Center for Health Statistics. 2021. *Health, United States, 2019*, Table 7. https://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/Health_US/hus19tables/table007.xlsx.

providers financial incentives to deliver care efficiently, to counteract FFS payment systems' incentives to maximize the volume of services provided. APMs are often layered on top of traditional Medicare's FFS payment systems and are intended to give participating providers incentives to avoid low-value services (including inappropriate services that could actually harm patients), select more efficient sites of care, and more closely manage and coordinate their Medicare beneficiaries' care to reduce their need for more costly services. Other payers besides FFS Medicare are also experimenting with APMs to pay the providers in their networks.

The most prominent types of APMs are population-based models (such as accountable care organization models), episode-based models (such as for hip and knee replacements), and advanced primary care models. In population-based and episode-based

payment models, CMS offers participating providers bonuses (and, in some models, collects financial penalties) based on the degree to which providers can keep beneficiaries' spending below a target while maintaining care quality. Advanced primary care models typically offer primary care providers supplemental monthly payments per beneficiary to expand the breadth and depth of services they offer and pay bonuses based on performance on quality measures (e.g., measures of avoidance of hospital utilization).

Most APMs are piloted in different parts of the country for three to six years at a time. Models are evaluated by researchers, and CMS uses findings from these evaluations to develop successor APMs that build on lessons learned. CMS is allowed to make permanent any APMs that save Medicare money while

**TABLE
1-5**

Years of life expectancy at age 65, by race/ethnicity and sex, 2008 to 2018

	2008	2017	2018	Change 2008–2018 (in years)	Change 2017–2018 (in years)
All races and ethnicities, both sexes	18.8	19.4	19.5	0.7	0.1
White, not Hispanic, both sexes	18.8	19.3	19.4	0.6	0.1
Black, not Hispanic, both sexes	17.4	18.1	18.0	0.6	–0.1
Hispanic, both sexes	20.4	21.4	21.4	1.0	0
All races and ethnicities, female	20.0	20.6	20.7	0.7	0.1
White, not Hispanic, female	20.0	20.5	20.6	0.6	0.1
Black, not Hispanic, female	18.8	19.5	19.5	0.7	0
Hispanic, female	21.6	22.7	22.7	1.1	0
All races and ethnicities, male	17.4	18.0	18.1	0.7	0.1
White, not Hispanic, male	17.4	18.0	18.1	0.7	0.1
Black, not Hispanic, male	15.4	16.2	16.1	0.7	–0.1
Hispanic, male	18.7	19.7	19.7	1.0	0

Note: Table shows most recent available data for different combinations of race/ethnicity and sex.

Source: National Center for Health Statistics. 2021. *Health, United States, 2019*, Table 4. https://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/Health_US/hus19tables/table004.xlsx.

maintaining quality or that improve quality without increasing spending. Despite mixed results to date, the Commission believes that APMs hold great promise and is currently exploring potential improvements to APMs that could increase their success rate.

The Commission's recommendations for Medicare

Several aspects of Medicare's payment systems hamper the program's ability to maximize program efficiencies and beneficiaries' access to care. The Commission highlights some of Medicare's key payment policy challenges and recommends ways to address them below.

MEDICARE CHALLENGE: Medicare pays higher prices in some care settings than in others—for the same service. Because of the different payment systems used for different care settings, Medicare in some

cases has different payment rates for the same or similar services. Under these circumstances, providers have an incentive to shift care to the more profitable setting, which leads to increased program spending and higher beneficiary cost sharing, often without any corresponding increase in quality.

- **COMMISSION RECOMMENDATION: Make payments site neutral.** The Commission supports equalizing payments when the same services are delivered in different care settings. In this regard, the Commission has made the following recommendations:
 - **March 2012 and March 2014**—Medicare should reduce or eliminate differences between hospital outpatient departments (HOPDs) and physician offices in payment rates for evaluation and management (E&M) office visits and selected other services. (This recommendation was partially implemented: The Congress required CMS to reduce payment

rates for HOPD services provided at off-campus HOPDs that began billing Medicare on or after November 2, 2015. In addition, CMS reduced payment rates for E&M office visits at all off-campus HOPDs, regardless of when they began billing Medicare.)

- **March 2014**—Medicare should set long-term care hospital base payment rates for non-chronically critically ill cases equal to those of acute care hospitals and redistribute the savings to create additional inpatient outlier payments for chronically critically ill cases treated in inpatient prospective payment system hospitals. (In 2013, the Congress directed CMS to pay the standard long-term care hospital payment rate for certain beneficiaries and lower payments for beneficiaries with lower-severity illnesses; this policy was phased in starting in 2016 and will be fully in effect after the coronavirus public health emergency ends.)
- **June 2016**—Medicare should implement a unified prospective payment system for post-acute care (in place of the separate payment systems for skilled nursing facilities, home health agencies, inpatient rehabilitation facilities, and long-term care hospitals).

MEDICARE CHALLENGE: Medicare overvalues specialist services. In the process of setting payment rates for thousands of physician fee schedule services, Medicare underprices certain services, such as E&M office visits, relative to other services, such as procedures (Medicare Payment Advisory Commission 2011). This imbalance contributes to significantly higher incomes for physicians in procedural specialties relative to those in primary care specialties, which influences the pipeline of physicians in primary care specialties. Starting in 2021, CMS increased fee schedule payment rates for E&M office visits (commonly provided by primary care clinicians), which will begin to rebalance the fee schedule toward primary care. However, more can be done to improve the accuracy of the fee schedule.

- **COMMISSION RECOMMENDATION: Improve the accuracy of physician fee schedule payments and increase payments to primary care providers.**

The Commission has made the following recommendations:

- **October 2011**—Regularly collect data from a cohort of efficient practices to establish more accurate relative value units (RVUs) for physician fee schedule services. Use this information to identify overpriced services and reduce their RVUs. The Congress should also specify an annual numeric goal for RVU reductions. (This recommendation was partially implemented: The Congress specified an annual numeric target for reductions to the RVUs of overpriced services, which expired at the end of 2018.)
- **March 2015**—Establish a prospective payment per beneficiary for primary care practitioners, funded by reducing fees for non-primary care services in the fee schedule.

MEDICARE CHALLENGE: Spending on drugs is growing rapidly. Hospitals that participate in the 340B Drug Pricing Program qualify for deeply discounted prices from drug manufacturers, while historically, Medicare payments for Part B drugs have substantially exceeded 340B hospitals' drug acquisition costs. The Commission is also concerned about the overall price Medicare Part B pays for drugs that are administered by infusion or injection in physicians' offices and in hospital outpatient departments and the lack of price competition among drugs with similar health effects. In addition, over time, changes to Medicare Part D's benefit design combined with trends in prescription drug pricing and spending have eroded plan sponsors' incentives to control costs.

- **COMMISSION RECOMMENDATION: Strengthen Medicare's payment systems to address rising drug prices and costs.** Specifically, the Commission has recommended the following:
 - **March 2016**—Medicare should reduce payment rates for 340B hospitals' separately payable 340B drugs by 10 percent of the average sales price (ASP) and direct these program savings to hospitals with high uncompensated care costs. (In 2018, CMS reduced payment rates for some Part B drugs furnished by 340B hospitals.)
 - **June 2017**—Medicare should improve Part B drug payment in the short term by spurring

competition, protecting Medicare beneficiaries and taxpayers from substantial price increases over time for individual drug products, and improving the accuracy of CMS's drug prices. Specifically, the Commission recommended that CMS:

- Require manufacturers of Part B drugs to report ASP data and impose civil monetary penalties for failure to report. (Noting the Commission's concerns about manufacturers not reporting ASP data for Part B drugs, as of 2020, CMS conditioned the payment of a transitional drug add-on payment under the Part B end-stage renal disease prospective payment system on the availability of ASP data for the drug in question.)
- Implement an ASP inflation rebate as protection against the potential for manufacturers to raise prices rapidly.
- Use consolidated billing codes to pay for Part B products with a reference biologic and its associated biosimilars to spur price competition.
- **June 2017**—Medicare should improve Part B drug payment in the long term by creating a voluntary market-based alternative to the current average sales price payment system: the Part B Drug Value Program (DVP). The DVP's intent is to obtain lower prices for Part B drugs by permitting private vendors to negotiate prices with manufacturers and by improving incentives for provider efficiency through shared savings opportunities. Specifically, the Commission recommended that:
 - Medicare contract with a small number of private vendors to negotiate prices for Part B drugs and biologics.
 - Vendors use tools including a formulary and, for products meeting selected criteria, binding arbitration.
 - Providers purchase all DVP products at the price negotiated by their selected DVP vendor.

- Medicare pay providers the DVP-negotiated price and pay vendors an administrative fee, with opportunities for shared savings.
- Medicare payments under the DVP not exceed 100 percent of average sales price.
- **June 2020**—Medicare should restructure Part D's benefit and its subsidies to restore the role of risk-based, capitated payments and improve pricing incentives faced by biopharmaceutical manufacturers. The Commission recommended changes that would restructure Part D's defined standard benefit as follows:
 - For spending below the catastrophic threshold, eliminate the manufacturers' coverage-gap discount that currently applies to enrollees without the low-income subsidy (LIS) and remove the coverage gap for LIS enrollees.
 - For catastrophic spending, reduce Medicare's reinsurance to 20 percent rather than the current 80 percent, require manufacturers of high-priced medicines to pay at least 30 percent, and make plan sponsors liable for the remaining 50 percent. Also provide enrollees with an annual cap on out-of-pocket costs.
 - Establish a higher copayment amount under the LIS for nonpreferred and nonformulary drugs. Plan sponsors would be provided with greater formulary flexibility for drugs in the protected classes.

MEDICARE CHALLENGE: Medicare is required to pay providers' claims, regardless of clinical appropriateness.

In traditional Medicare, providers can augment their revenue by increasing the volume of services they provide because the program pays claims for care that is "reasonable and necessary" even if that care might be considered inappropriate for a given patient. This can lead to overuse of services. And under traditional Medicare's statute, the program generally covers services delivered by any provider who is willing to meet Medicare's participation requirements. As a result, traditional Medicare does not have the authority to develop provider networks or to credential providers—tools that private payers (including MA plans) can

use to reduce the potential for overutilization as well as fraud and abuse. In some cases, the traditional Medicare program even has difficulty removing providers or suppliers whose claims histories clearly demonstrate aberrant patterns of billing, care, or both.

- **COMMISSION RECOMMENDATION: Scrutinize claims more closely to reduce overutilization, fraud, and abuse.** The Commission has recommended the following:

- **March 2010**—Review home health agencies that exhibit unusual billing patterns and implement new safeguards (such as a moratorium on new providers, prior authorization, and suspension of prompt payment requirements) in areas that appear to be high risk.
- **June 2011**—Establish a prior authorization program for practitioners who order a substantially greater number of advanced imaging services than their peers.
- **June 2013**—Develop national guidelines for physical, occupational, and speech therapy services and implement payment edits based on these guidelines to target implausible amounts of therapy. Also use existing authorities to target high-use geographic areas and aberrant providers.
- **June 2013**—Promulgate national guidelines to more precisely define medical necessity requirements for ground ambulance transports and develop national edits for claims processors based on those guidelines. Identify geographic areas and ambulance suppliers and providers that display aberrant patterns of use, and address clinically inappropriate use of ground transports that are nonemergency and require only basic life support. (In 2014, CMS began testing prior authorization requirements for repetitive, scheduled, nonemergency ambulance transports; CMS will require prior authorization for such transports nationwide after the coronavirus pandemic ends.)
- **March 2016**—Conduct focused medical record review of inpatient rehabilitation facilities that have unusual patterns of case mix and coding.

- **June 2019**—Develop and implement national guidelines for coding hospital emergency department visits, instead of allowing hospitals to use their own internal guidelines, which would give CMS a firmer foundation for assessing and auditing hospitals' coding behavior.

MEDICARE CHALLENGE: Medicare coverage interacts with beneficiaries' other coverage, sometimes resulting in fragmented care.

If a dual-eligible (that is, eligible for both Medicare and Medicaid coverage) nursing home resident is hospitalized for three days, he or she can qualify for a Medicare-covered skilled nursing facility stay, shifting responsibility from the state Medicaid program to the federal Medicare program. This creates incentives for nursing homes to frequently take residents to the hospital instead of treating conditions on-site, because Medicare's payment rates for nursing home care are higher than Medicaid's rates.

- **COMMISSION RECOMMENDATION: Encourage better integration between Medicare and Medicaid.** The Commission has made the following recommendation:

- **March 2013**—Require Medicare Advantage special needs plans serving dual-eligible beneficiaries to assume clinical and financial responsibility for Medicare and Medicaid benefits.

MEDICARE CHALLENGE: Medicare's benefit package does not protect against high out-of-pocket costs, and many beneficiaries have few incentives to choose the most efficient care.

Beneficiaries face differential cost sharing by service (for example, coinsurance for physician services is 20 percent, while home health has no coinsurance). In addition, the cost-sharing amounts, percentages, and deductibles vary by setting, and some services are not covered (for example, Medicare does not generally cover long-term care). Traditional Medicare lacks a cap on out-of-pocket (OOP) costs (a feature that exists in MA plans and nearly all private insurance policies). In response, many beneficiaries purchase supplemental coverage that includes an OOP maximum. Most supplemental policies also substantially reduce or eliminate most of the beneficiary liability for coinsurance and deductibles, thereby blunting the effect of cost sharing. As a result, there is little incentive for many beneficiaries to be

cost conscious—that is, to select only those services that are necessary and choose providers who practice efficiently (Medicare Payment Advisory Commission 2012). Separately, Part D, which provides prescription drug coverage, also lacks an OOP maximum on cost sharing.

- **COMMISSION RECOMMENDATION: Modify beneficiary cost sharing to incentivize high-value care.** The Commission has made the following recommendations:

- **June 2012**—Replace the current Part A and Part B benefit design in traditional Medicare with one that would include an OOP maximum, deductibles for Part A and Part B services, and copayments that could vary by type of service and provider or be waived for high-value services. The Commission also recommended discouraging the purchase of Medigap plans through an additional charge on supplemental insurance.
- **June 2020**—Modify the structure of the Part D benefit to include an annual OOP maximum.
- **March 2012, June 2016, June 2020**—Modify the Part D low-income subsidy copayments to encourage the use of generic drugs, preferred multisource drugs, and biosimilars.

MEDICARE CHALLENGE: Quality in MA is difficult to evaluate, and payments to MA plans have not captured savings for the Medicare program. Having complete, detailed encounter data for Medicare beneficiaries enrolled in MA plans could inform improvements to MA payment policy, but the Commission has found that MA encounter data cannot be used for such purposes at present. Despite the lack of these data, MA plans receive higher payments relative to what Medicare FFS spending would have been for similar beneficiaries, and these extra payments have financed a tremendously robust MA program. Medicare has not captured savings from MA plans for several reasons: More thorough diagnostic coding in MA has led to inappropriate risk-adjustment payments; the program finances quality bonuses to MA plans under a flawed system; and payment benchmarks are set too high to adequately leverage plan efficiencies.

- **COMMISSION RECOMMENDATION: Collect more complete MA data and set appropriate payment levels for MA plans.** In this regard, the Commission has made the following recommendations:

- **May 2016**—Develop a risk-adjustment model that uses two years of FFS and MA diagnostic data and does not include diagnoses from health risk assessments from either FFS or MA, and then apply a coding adjustment that fully accounts for the remaining differences in coding between traditional FFS Medicare and MA plans.
- **June 2019**—Give feedback to MA plans on the completeness and accuracy of their encounter data; withhold some payments from MA plans and allow plans to earn back those payments if their encounter data meet thresholds for completeness and accuracy. If necessary, require providers to submit MA encounter data to Medicare administrative contractors as a means of ensuring more accurate encounter data submissions.
- **June 2020**—Replace the current MA quality bonus program with a new MA value incentive program that scores a small set of population-based measures, evaluates quality at the local market level, uses a peer-grouping mechanism to account for differences in enrollees' social risk factors, establishes a system for distributing rewards with no "cliff" effects, and distributes plan-financed rewards and penalties at a local market level.
- **June 2021**—Replace current MA benchmark policy with a new policy that applies a relatively equal blend of per capita local area FFS spending with price-standardized per capita national FFS spending, a rebate (i.e., plan share of the difference between the plan bid and benchmark) of at least 75 percent, and a discount rate (i.e., set percentage payment reduction to reserve savings for Medicare) of at least 2 percent; uses geographic markets as payment areas and uses the FFS population with both Part A and Part B coverage; and eliminates the current pre-Affordable Care Act benchmark cap.

MEDICARE CHALLENGE: Traditional FFS Medicare lacks strong incentives to improve population-based outcomes and the coordination of care. Some key challenges for the traditional FFS Medicare program are that providers are usually paid more for providing more services and lack strong incentives to improve population-based outcomes or the coordination of their patients' care.

- **COMMISSION RECOMMENDATION: Incentivize improving population-based outcomes.** The Commission has recommended adopting quality payment programs based on meaningful outcome, patient experience, and value measures and streamlining CMS's advanced alternative payment models to improve their performance. In this regard, the Commission has made the following recommendations:
 - **March 2012**—Implement a value-based purchasing program for ambulatory surgical center services.
 - **March 2018**—Eliminate the current Merit-based Incentive Payment System for clinicians in traditional FFS Medicare and replace it with a new voluntary value program in which clinicians in voluntary groups can qualify for a value payment based on their group's performance on a set of population-based measures.
 - **March 2019**—Replace Medicare's current hospital quality programs with a new hospital value incentive program that:
 - includes a small set of population-based outcome, patient experience, and value measures;
 - scores all hospitals based on the same absolute and prospectively set performance targets; and

- accounts for differences in patients' social risk factors by distributing payment adjustments through peer grouping.
- **June 2021**—Replace Medicare's current value-based purchasing program for skilled nursing facilities with a new value incentive program that:
 - scores a small set of performance measures;
 - establishes a system for distributing rewards that minimizes cliff effects; and
 - accounts for differences in patient social risk factors using a peer-grouping mechanism.
- **June 2021**—Reduce the number of advanced alternative payment models available to providers, make models more consistent with one another, and redesign models' incentives so they do not diminish in strength when combined.

Beyond these recommended changes to Medicare's payment systems, the Commission also seeks to influence the payment rates used in each of Medicare's payment systems through the recommendations we include in our annual March report. These recommendations are based on our review of the latest available data and are aimed at obtaining good value for the program's expenditures—which means maintaining beneficiaries' access to high-quality services while encouraging efficient use of resources. ■

Endnotes

- 1 Medicare also loaned \$107 billion to health care providers (mostly hospitals) in 2020 through its COVID-19 Accelerated and Advance Payments program (Centers for Medicare & Medicaid Services 2021c). These loans are expected to be paid back within a few years of their receipt and are not included in the CMS national health expenditure data that are the basis for much of what we report in this chapter.
- 2 The most concentrated markets have a Herfindahl–Hirschman Index above 5,000, meaning that, in a market with two systems, one of the systems has more than a 50 percent market share; these have been referred to as “super-concentrated” markets (Fulton et al. 2018).
- 3 National health care spending includes spending on personal health care; government administration of public health insurance programs; the net cost of private health insurance (the difference between premiums collected and benefits paid by private health insurance plans); and government public health activities.
- 4 In 2020, 50 percent of physicians reported that they were employees, up from 42 percent in 2012, and the share with an ownership stake in their practice fell to 44 percent from 53 percent over the same period (Kane 2021).
- 5 Health systems are defined here as organizations that had at least one acute care hospital and one physician group and that were connected through common ownership or joint management.
- 6 While the share of surveyed physicians who reported private equity ownership in their practices in 2020 was well below 10 percent for most specialties, it was between 10 percent and 15 percent for emergency medicine and anesthesiology (Kane 2021).
- 7 Only Medicare beneficiaries enrolled in both Part A and Part B are eligible to enroll in a Medicare Advantage plan.
- 8 Baby boomers are people born between the years 1946 and 1964.
- 9 The HI Trust Fund’s income derives from several sources, including payroll taxes (which made up 89 percent of the trust fund’s income in 2019), taxation of Social Security benefits (8 percent), interest earned on trust fund investments (1 percent), and premiums collected from voluntary participants (1 percent) (Boards of Trustees 2021).
- 10 Workers and their employers split the cost of the payroll tax (workers pay 1.45 percent and employers pay the remaining 1.45 percent). Meanwhile, self-employed people pay both the worker’s and the employer’s share of this tax, totaling 2.9 percent of their net earnings. High-income workers pay an additional 0.9 percent of their earnings above \$200,000 for single workers or \$250,000 for married couples filing joint income tax returns.
- 11 Beneficiary premiums account for about a quarter of Part B and Part D benefit costs.
- 12 Other major health programs include Medicaid, the Children’s Health Insurance Program, and federal subsidies for the federal and state exchanges created under the Affordable Care Act of 2010. These programs are considered “mandatory” programs; their spending levels are determined by the number of people entitled by law to enroll in such programs and are not subject to the spending limits that apply to “discretionary” programs funded through the annual appropriations process.
- 13 These percentages do not include beneficiary spending on premiums for Medicare supplemental insurance, which can lower beneficiaries’ cost sharing.
- 14 Spending per beneficiary on MA and other private plans is calculated by summing Part A spending on private health plans and Part B spending on private health plans, then dividing that by the number of enrollees in Part C (in private health plans). FFS Medicare spending per beneficiary is calculated by summing (1) Part A FFS spending divided by Part A FFS enrollees and (2) Part B FFS spending divided by Part B FFS enrollees. Part D is calculated by taking total Part D spending, subtracting premiums (mostly paid by enrollees), and then dividing that by the number of enrollees in Part D.
- 15 In this chapter, the term “biologic” refers to biological products. More specifically, biologics are large-molecule medicines derived from living organisms such as yeasts or bacteria that are used to treat serious diseases like cancer, rheumatoid arthritis, and multiple sclerosis. Biologics encompass a wide range of products, including vaccines, blood and blood products, allergenics, somatic cells, gene therapy, tissues, and therapeutic proteins. Examples of biologics include human insulin, recombinant hormones, growth factors, and monoclonal antibodies. Biologics can be purified from natural substances, produced through recombinant DNA technology, or manufactured through other methods. Biologic therapies are injected or infused into the patient rather than taken orally, and they often require special handling such as refrigeration. Because many biologic

therapies require monitoring and individualized dosing, today many biologics are administered in physician offices or hospital outpatient departments, but some can be self-injected.

- 16 Medicare pays 340B hospitals 106 percent of the average sales price (ASP) for separately payable Part B drugs with pass-through status, and ASP minus 22.5 percent for Part B drugs without pass-through status. Assuming Aduhelm is granted pass-through status, as is typically the case for new separately payable drugs, 340B hospitals would be paid 106 percent of ASP for Aduhelm for the first two to three years it is on the market.
- 17 The manufacturer's initial price of \$56,000 and its newly lowered price of \$28,200 are substantially above the range of a value-based price for the product (\$3,000–\$8,400) calculated by the Institute for Clinical and Economic Review (an independent nonprofit organization that analyzes evidence on the value and effectiveness of medical interventions, including drugs, medical devices, tests, and delivery system innovations) (Institute for Clinical and Economic Review 2021).
- 18 The manufacturer, Biogen, announced that it was halving the price of Aduhelm to improve patient access, noting that “[t]oo many patients are not being offered the choice of ADUHELM due to financial considerations” (Biogen 2021b).
- 19 The FDA's approval of Aduhelm using an accelerated approval pathway and surrogate endpoint has been controversial. An FDA advisory committee recommended against the product's approval, raising concerns about two clinical trials providing conflicting results and a lack of evidence of the product's effect on patients' cognitive function. However, the FDA overruled its advisory committee and instead approved the product using an accelerated approval pathway based on its effect on a surrogate endpoint: reductions of amyloid beta plaque in the brain. Evidence tying the surrogate endpoint to improved cognitive outcomes for patients has yet to be established. The FDA is requiring the manufacturer to conduct a new randomized, controlled clinical trial to verify the drug's clinical benefit within a nine-year time frame (Food and Drug Administration 2021). If the trial does not confirm the product's benefit, the FDA can withdraw approval.
- 20 In the *Federal Register* notice announcing the 2022 premium, CMS stated that “the program cost of potential Medicare coverage of Aduhelm would be paid from the Part B account of the Supplemental Medical Insurance Trust Fund. Depending on utilization, the potential costs for this course of treatment range from negligible to very significant. To ensure that Part B is able to pay claims in full and on time, the Part B financing must be sufficient to provide for a realistic high-cost scenario of Aduhelm coverage. The contingency margin has been increased to accommodate this risk” (Centers for Medicare & Medicaid Services 2021d).
- 21 Hispanic individuals' superior longevity despite worse profiles on some social determinants of health has puzzled demographers for decades and has been referred to as the “Hispanic health paradox.” A definitive explanation for this paradox has yet to be identified, but researchers hypothesize that Hispanic individuals' longevity may be due to immigration dynamics (with Hispanics who enter the United States tending to be relatively healthy, and Hispanics who leave the United States to return to their home countries tending to be older and less healthy), low rates of cigarette smoking, and high levels of family support (Dominguez et al. 2015).

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C H A P T E R

2

**Assessing payment adequacy
and updating payments in
fee-for-service Medicare**

Assessing payment adequacy and updating payments in fee-for-service Medicare

Chapter summary

As required by law, the Commission annually makes payment update recommendations for providers paid under Medicare's traditional fee-for-service (FFS) payment systems. An update is the amount (usually expressed as a percentage change) by which the base payment for all providers in a payment system is changed relative to the prior year. To determine an update, we first assess the adequacy of Medicare payments for providers in the current year (here, 2022) by considering beneficiaries' access to care, the quality of care, providers' access to capital, and how Medicare payments compare with providers' costs. As part of that process, we examine whether payments will support the efficient delivery of services, consistent with our statutory mandate. Next, we assess how those providers' costs are likely to change in the year the update will take effect (the policy year; here, 2023). Finally, we make a judgment about what, if any, update is needed for the policy year in question. (The Commission also assesses Medicare payment systems for Part C (Medicare Advantage) and Part D (outpatient prescription drug coverage) in this report and makes recommendations as appropriate. But because they are not FFS payment systems, they are not discussed in this chapter.)

Providers' financial status and the pattern of Medicare spending in 2020 varied substantially from historical patterns. In the spring of 2020, many

In this chapter

- Are Medicare payments adequate in 2022?
- What cost changes are expected in 2023?
- How should Medicare payments change in 2023?
- Payment adequacy in context

health care sectors experienced large reductions in demand for services, resulting in temporary financial distress for some providers. In response, the Congress and CMS extended federal grants to providers and temporarily altered certain Medicare payment policies. At least in part, those actions have offset the short-term financial effects of the coronavirus public health emergency (PHE) for many providers. Some providers have returned funds to the federal government because their finances have recovered faster than expected. The extension of federal monies, even if not precisely targeted, was a commensurate response to the immediate financial effects of the public health emergency.

To fulfill our congressional mandate to update Medicare's payment systems, we must confine our focus to effects that we expect will impact payment adequacy in 2023. To the extent that the effects of the pandemic are temporary or vary significantly across individual providers, they are best addressed through targeted temporary funding policies. Because updates are cumulative—that is, they compound each year—they are not the preferred policy response to abrupt but temporary changes in demand for health care or resulting health care spending. Where we expect effects on providers' costs to persist into 2023, the policy year for our recommendations, those changes are noted in each sector's payment adequacy discussion and factor into our estimates of payment adequacy.

This year, we consider recommendations in nine FFS sectors: acute care hospitals, physicians and other health professional services, ambulatory surgical centers, outpatient dialysis facilities, skilled nursing facilities, home health agencies, inpatient rehabilitation facilities, long-term care hospitals, and hospice providers. The Commission looks at all available indicators of payment adequacy and reevaluates any assumptions from prior years, using the most recent data available to make sure its recommendations accurately reflect current conditions. We use the best available data and changes in payment policy to project margins for 2022 and make payment recommendations for 2023, accounting for anticipated changes in providers' costs between 2022 and 2023. Because of standard data lags, the most recent complete data we have are generally from 2020.

In considering updates to payment rates, we may make recommendations that redistribute payments within a payment system to correct any biases that may make treating patients with certain conditions financially undesirable, make certain procedures unusually profitable, or otherwise result in inequity among

providers. We may recommend changes to improve program integrity. Our goal is to apply consistent criteria across settings, but because conditions at baseline and anticipated changes between baseline and the policy year may vary, the recommended updates may vary across sectors.

The Commission also examines payment rates for services that can be provided in multiple settings. Medicare often pays different amounts for similar services across settings. Basing the payment on the rate in the most efficient setting would in many cases save money for Medicare, reduce cost sharing for beneficiaries, and reduce the financial incentive to provide services in the higher-paid setting. However, putting into practice this principle of the same rate for the same service across settings can be complex because it requires that the definition of the services and the characteristics of the beneficiaries be sufficiently similar across settings and that complicated potential unintended consequences be considered.

Our recommendations in this report, if adopted, could significantly change the revenues that providers receive from Medicare. Payment rates set to cover the costs of relatively efficient providers help induce all providers to control their costs. Furthermore, Medicare rates also have broader implications for health care spending because they are used in setting payments for private health insurance and for other federal and state government programs. For example, most Medicare Advantage plans pay hospitals using rates that are comparable to, or based on, Medicare FFS rates (Berenson et al. 2015, Maeda and Nelson 2017), and the Department of Veterans Affairs (VA) has been setting payment rates not to exceed Medicare FFS rates for most care provided in non-VA settings (Department of Veterans Affairs 2019). The Medicaid program also uses Medicare rates when setting maximum supplemental “upper payment limit” Medicaid FFS payments to hospitals (Medicaid and CHIP Payment and Access Commission 2019, Medicaid and CHIP Payment and Access Commission 2016). Recently, Montana’s state employee health plan fixed its inpatient and outpatient hospital payment rates to 234 percent of Medicare rates (Appleby 2018). And Washington State’s public health insurance option caps aggregate provider reimbursement at 160 percent of Medicare rates for insurers offering “Cascade Select” plans (Carlton et al. 2021).¹ Thus, while maintaining fiscal pressure on health care providers through payment-rate updates directly benefits the Medicare program, it can also help control health care spending across payers. ■

Background

The goal of Medicare payment policy should be to obtain good value for the program's expenditures, which means maintaining beneficiaries' access to high-quality services while encouraging efficient use of resources. Anything less does not serve the interests of the taxpayers and beneficiaries who finance Medicare through their taxes and premiums. Steps toward this goal involve:

- setting the base payment rate (i.e., the payment for services of average complexity) at the right level;
- developing payment adjustments that accurately reflect market, service, and patient cost differences beyond providers' control;
- adjusting payments to encourage high-quality care; and
- considering the need for annual payment updates and other policy changes.

To help determine the appropriate base payment rate for a given fee-for-service (FFS) payment system in 2023, we first consider whether payments are adequate for relatively efficient providers in 2022. To inform the Commission's judgment, we examine the most recent available data on beneficiaries' access to care, the quality of care, and providers' access to capital, as well as projected Medicare payments and providers' costs for 2022. We then consider how providers' costs are likely to change in 2023. Taking these factors into account, we recommend how Medicare payments for the sector in aggregate should change for 2023.

Within any given level of funding for a sector, we may also consider changes in payment policy to improve relative payment accuracy across patients and services. Such changes are intended to improve equity among providers or access to care for beneficiaries and may also affect the distribution of payments among providers in a sector. For example, in 2018, the Commission recommended that CMS use a blend of the setting-specific relative weights and the unified post-acute care (PAC) prospective payment system (PPS) relative weights for each of the four PAC settings to redistribute payments within each setting toward medically complex patients (Medicare Payment Advisory Commission 2018b).

We also make recommendations to improve program integrity when needed. In some cases, our data analysis reveals problematic variation in service utilization across geographic regions or providers. For example, in 2016, we recommended that the Secretary closely examine the coding practices of certain inpatient rehabilitation facilities that appeared to result in very high Medicare margins (Medicare Payment Advisory Commission 2016b).

We compare our recommendations for updates and other policy changes for 2022 with the base payment rates specified in law to understand the implications for beneficiaries, providers, and the Medicare program. As has been the Commission's policy in the past, our recommendations each year consider the most current data and, in general, recommend updates for a single year.

The most recent complete data we use in the analyses for many of our payment adequacy indicators are from 2020, the first year of the ongoing coronavirus pandemic. As of the writing of this report in early 2022, the pandemic is entering its third year. Recently, the Delta and Omicron variants of the virus have contributed to subsequent spikes in COVID-19 cases. These waves in case volume have led to surges in hospitalizations and protracted the strain on health care workers. Given the duration of the pandemic, we will continue to analyze the effects of the coronavirus public health emergency (PHE) in future years. While acknowledging that the PHE is ongoing, because many of the analyses in this report use data from 2020, we recount, below, the time line of the pandemic and related policies in 2020 to establish PHE-related conditions that affect our indicators of payment adequacy.

On January 31, 2020, the Secretary of Health and Human Services first declared the coronavirus PHE starting January 27, 2020.² In late March 2020, the nation's health care system first began to experience enormous strain as COVID-19 patients filled hospital emergency rooms and intensive care units, displacing other types of cases. Frontline health care workers faced burnout and risks to their health and safety treating COVID-19 cases. In nursing homes, the effects of COVID-19 have been devastating. Staff and residents accounted for a disproportionate share of COVID-19 cases and deaths as they faced the outbreaks with

**TABLE
2-1**

Select pandemic-related temporary Medicare policy changes

Setting	Temporary change
Hospital	<ul style="list-style-type: none"> • Provided a 20 percent Medicare IPPS add-on payment for discharges with a principal or secondary diagnosis of COVID-19 during the emergency period. • Allowed for a Medicare add-on payment to hospitals for discharges between October 1, 2021, and October 1, 2026, involving antimicrobial drugs.
Physicians and clinicians	<ul style="list-style-type: none"> • Added 80 new PFS services to the telehealth list. • Permitted physician visits to be conducted via telehealth, as appropriate. • Waived requirements that physicians and NPPs be licensed in the state where they are providing services for individuals who meet certain conditions.
SNF	<ul style="list-style-type: none"> • Waived the requirement for a 3-day prior hospitalization for coverage of a SNF stay and authorized renewed SNF coverage without starting a new benefit period.
Home health	<ul style="list-style-type: none"> • Waived the requirements for an RN to conduct an initial assessment visit, which can be performed remotely.
IRF	<ul style="list-style-type: none"> • Permitted telehealth to fulfill the face-to-face visit and supervision requirements. • Waived the rule intended to ensure that patients require an intensive rehabilitation program, typically interpreted as 3 hours of therapy at least 5 days per week. • Permitted exclusion of patient stays resulting from the PHE for purposes of calculating the applicable thresholds associated with the 60 percent rule.
LTCH	<ul style="list-style-type: none"> • Waived the site-neutral payment rate for LTCH admissions that occur during the coronavirus PHE period, thus paying all LTCH cases the higher LTCH PPS rate. • Waived the rule requiring that more than 50 percent of admitted Medicare patients qualify for the higher LTCH PPS rate. • Permitted exclusion of patient stays resulting from the PHE for purposes of calculating the facility's average length of stay.
Hospice	<ul style="list-style-type: none"> • Allowed the use of telecommunications technology by the hospice physician or NP for the face-to-face visit when such visit is solely for the purpose of recertifying a patient for hospice services during the PHE.

Note: IPPS (inpatient prospective payment system), PFS (physician fee schedule), NPP (nonphysician practitioner), SNF (skilled nursing facility), RN (registered nurse), IRF (inpatient rehabilitation facility), LTCH (long-term care hospital), PHE (public health emergency), PPS (prospective payment system), NP (nurse practitioner). This list of temporary PHE-related Medicare policies is not exhaustive. For a comprehensive list, see Podulka and Blum (2020). Changes specific to individual sectors and their effects on our payment adequacy indicators are discussed in more detail in each chapter of this report.

Source: Podulka and Blum 2020.

inadequate resources. Residents who remained in nursing homes suffered from isolation as nursing homes closed to visitors. Meanwhile, the volume of ambulatory care services dropped sharply in the early months of the pandemic as patients delayed or avoided care and access to some services was curtailed to avoid spreading the disease.

To help respond to the enormous challenges of the pandemic, the Congress and CMS altered Medicare payments and policies and granted regulatory flexibilities starting in March 2020 (Podulka and Blum 2020). Some of these measures have been phased out, but many are scheduled to remain in effect for

the duration of the PHE, which, as of the writing of this report, was renewed again for 90 days effective January 16, 2022. A plurality of the changes eased some provider eligibility requirements (Podulka and Blum 2020). Regulatory waivers allowed providers to furnish services outside the state where they are enrolled and permitted beneficiaries to receive care in settings other than acute care hospitals (e.g., homes, skilled nursing facilities (SNFs)) to allow for surge capacity in hospitals. Changes to post-acute care policies waived facility-specific criteria for payment designed to control use of specialized, high-cost settings like inpatient rehabilitation facilities (IRFs) and long-term care hospitals (LTCHs). Other changes suspended audits and quality reporting requirements or granted more flexibility over which measures to report. CMS also expanded access to telehealth services, including temporarily eliminating geographic restrictions on where such services can be provided and expanding the types of services that can be furnished remotely.³ A sample of waivers that can affect access, quality, and payments is shown in Table 2-1. We discuss policies that affected each sector in more detail in each of the chapters of this report.

The Congress also responded to the unfolding crisis by providing funding for providers (i.e., add-on payments, grants, and loans). Key sources of federal funds included suspension of the 2 percent sequestration payment adjustment applied to all Medicare FFS claims; the Provider Relief Fund, which furnished qualified providers with payments for health care expenses or lost revenue due to the pandemic; the COVID-19 Accelerated and Advance Payments Program that provided advance Medicare payments that must be repaid; and the Paycheck Protection Program loans for small businesses, including health care providers, which do not need to be repaid if recipients meet certain conditions.

In any year, factors unrelated to the adequacy of Medicare's payment rates can affect our indicators of access to care, quality, access to capital, and Medicare payments and providers' costs in the settings we examine. This year, as they will in future years, the direct and indirect effects of COVID-19 and PHE-related policy changes and emergency funding for providers made it more difficult to interpret some of our indicators of the adequacy of Medicare's payment

rates, as discussed in more detail below. In our analysis of each sector, we have identified conceptually and, where possible, empirically how our payment adequacy indicators were affected by the PHE and related policies.⁴

Are Medicare payments adequate in 2022?

The first part of the Commission's approach to developing payment updates is to assess the adequacy of current Medicare payments. For each sector, we make a judgment by examining information on the following: beneficiaries' access to care, quality of care, providers' access to capital, and Medicare payments and providers' costs for 2022.

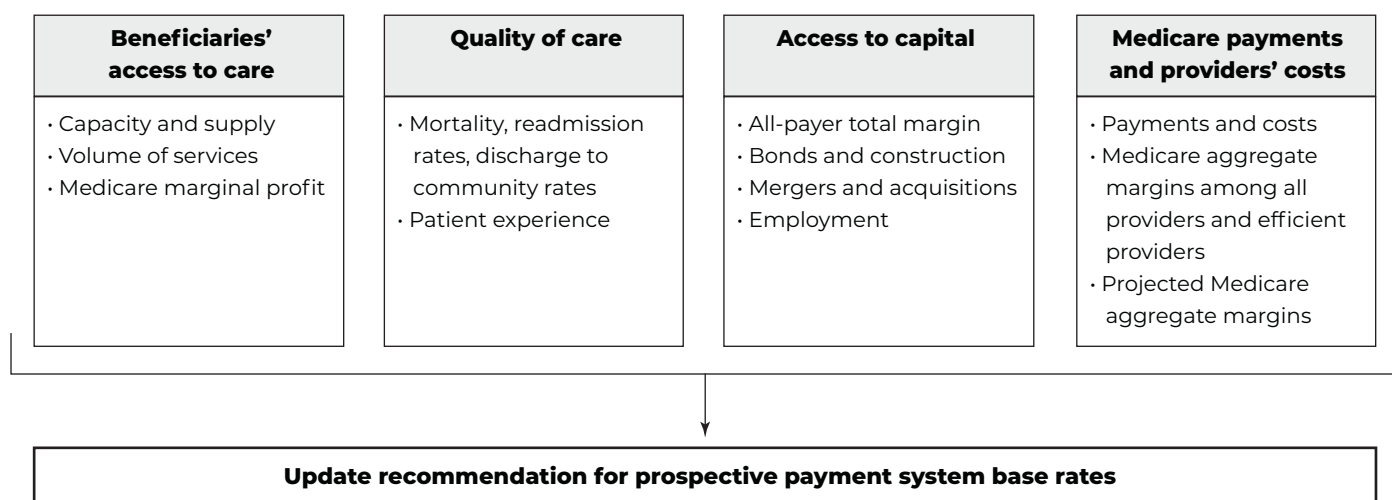
Some measures focus on beneficiaries (e.g., access to care), and some focus on providers (e.g., the relationship between payments and providers' costs). The direct relevance, availability, and quality of each type of information vary among sectors, and no single measure provides all the information needed for the Commission to judge payment adequacy. For example, to inform our assessment of payments for physicians and other health professionals, we conduct a survey of beneficiary access. Ultimately, the Commission considers as many of these factors as are available in making its recommendations. Figure 2-1 (p. 54) shows our payment adequacy framework and an example of the factors used (when they are available) for a sector.

Beneficiaries' access to care

Access to care is an important indicator of the willingness of providers to serve Medicare beneficiaries and the adequacy of Medicare payments. For example, poor access could indicate that Medicare payments are too low. However, factors unrelated to Medicare's payment policies may also affect access to care. These factors include coverage policies, changes in the delivery of health care services, beneficiaries' preferences, local market conditions, supplemental insurance, and other external factors. In March and April 2020, for example, access was profoundly influenced by the coronavirus pandemic. Many elective procedures were delayed or canceled, and many

**FIGURE
2-1**

The Commission's payment adequacy framework



Note: We use different measures of margins in our payment adequacy analysis. "Medicare marginal profit" is an indicator of access to care, where Medicare marginal profit = (Medicare payment – costs that vary with volume) / Medicare payment. The "all-payer total margin" is a measure of a sector's access to capital, where the all-payer margin = (payments from all payers and sources – total costs) / payments from all payers and sources. "Medicare aggregate margins" for a sector are a measure of the relationship between Medicare's payments and providers' costs for services, where Medicare aggregate margins = (Medicare aggregate payments for service – aggregate cost of providing service) / Medicare aggregate payment for service.

Source: MedPAC.

beneficiaries chose not to visit providers' offices and health care facilities because of the risk of contracting COVID-19 (Czeisler et al. 2020).

The measures we use to assess beneficiaries' access to care depend on the availability and relevance of information in each sector. We use results from several surveys to assess the willingness of physicians and other health professionals to serve beneficiaries and beneficiaries' opinions about their access to physician and other health professional services. For home health services, we examine data on whether communities are served by providers. To the extent that access continues to be affected by the pandemic, we will take that factor into account as well.

Access: Capacity and supply of providers

Rapid growth in the capacity of providers to furnish care may increase beneficiaries' access and indicate that payments are more than adequate to cover

providers' costs. Changes in technology and practice patterns may also affect providers' capacity. For example, as a surgical procedure becomes less invasive, it might be more frequently performed in outpatient settings, freeing up some inpatient hospital capacity. Likewise, as the prices of certain pieces of equipment fall, they can be more easily purchased by providers, increasing the capacity to provide certain services.

Rapid entry of providers into a sector, particularly by for-profit entities, may suggest that Medicare's payments are more than adequate and could raise concerns about the value of the services being furnished. However, if Medicare is not the dominant payer for a given provider type (such as ambulatory surgical centers), changes in the number of providers may be influenced more by other payers and their demand for services and thus may be difficult to relate to Medicare payments. When the number of providers declines because of facility closures, we

try to distinguish between closures that have serious implications for access to care and those that may have resulted from excess capacity. For example, in 2016, the Congress significantly reduced Medicare's payment rates for certain cases in LTCHs; since the dual payment-rate system began, 83 LTCHs have closed, representing more than 16 percent of beds. However, the closures occurred primarily in market areas with multiple LTCHs.

The PHE has had several potential effects on provider capacity and supply, confounding our ability to interpret changes as indicators of Medicare payment adequacy in 2020 (and for the duration of the PHE). Supplemental funds or policies to waive Medicare's payment rules may have subsidized providers that would have exited the market otherwise, absent the PHE. Provider capacity was constrained in some settings and expanded in others due to the pandemic and policy changes, including waivers of payment rules and expanded telehealth access. Effects of the PHE on capacity also varied by geography and over time. Changes in the capacity and supply of providers we observe during the pandemic are not an indicator of inadequate Medicare base payment rates.

Access: Volume of services

The volume of services furnished by health care providers can be an indirect indicator of beneficiary access. An increase in volume shows that beneficiaries are receiving more services and suggests sufficient access in aggregate, although it does not necessarily demonstrate that the services are necessary or appropriate. Volume is also an indicator of payment adequacy: An increase in volume beyond what would be expected relative to the increase in the number of beneficiaries could suggest that Medicare's payment rates are too high. Very rapid increases in the volume of a service might even raise questions about program integrity or whether the definition of the corresponding benefit is too vague. By contrast, reductions in the volume of services can sometimes be a signal that revenues are inadequate for providers to continue operating or to provide the same level of service. Finally, rapid changes in volume between sectors whose services can be substituted for one another may suggest distortions in payment and raise questions about provider equity. For example, over the last several years, the volume of evaluation and

management (E&M) office visits provided in hospital outpatient departments (HOPDs) has increased while the volume of E&M visits in physicians' offices has decreased. This shift in site of service is likely driven at least in part by much higher payment rates for E&M visits in HOPDs than in physicians' offices.

However, changes in the volume of services are not direct indicators of access; increases and decreases can be explained by other factors such as population changes, changes in disease prevalence among beneficiaries, dissemination of new and improved medical knowledge and technology, deliberate policy interventions, and beneficiaries' preferences. For example, the number of beneficiaries in traditional FFS Medicare varies from year to year; therefore, we look at the volume of services per FFS beneficiary as well as the total volume of services. Explicit policy decisions can also influence volume. For example, during fiscal year 2016, LTCHs—as expected—changed their admitting practices largely in response to the implementation of the dual payment-rate system, and the number of LTCH admissions decreased markedly.

Changes in the volume of physician services must be interpreted particularly cautiously. Evidence suggests that when payment rates for discretionary services are reduced, providers may attempt to make up for lost revenue by increasing volume—the so-called “volume offset” (Codespote et al. 1998, Congressional Budget Office 2007). Whether a volume offset phenomenon exists within other sectors depends on how discretionary the services are and the degree to which providers are able to influence beneficiaries' demand for them.

During the early months of the 2020 coronavirus pandemic, the volume of services provided in many sectors decreased rapidly due to changes in demand and PHE-related shutdowns. In addition to the effects of the coronavirus itself, ongoing waivers related to the PHE also had the potential to affect the volume and mix of cases. In the physician sector, decline in volume was accompanied by a rapid rise in the volume of telehealth services. By June, the number of office visits and telehealth visits combined was close to the volume experienced for office visits in previous years (during which the volume of telehealth visits was minimal). In most other sectors, volume rebounded by late June or

July 2020. However, the volume of SNF services has not fully recovered.

Access: Medicare marginal profit

Another factor we consider when evaluating access to care is whether providers have a financial incentive to expand the number of Medicare beneficiaries they serve. In considering whether to treat a patient, a provider with excess capacity compares the marginal revenue it will receive (e.g., the Medicare payment) with its marginal costs—that is, the costs that vary with volume in the short term. If Medicare payments are larger than the marginal costs of treating an additional beneficiary, a provider has a financial incentive to increase its volume of Medicare patients. In contrast, if payments do not cover the marginal costs, the provider may have a disincentive to care for Medicare beneficiaries. We note, however, that in instances in which a sector does not have substantial excess capacity, where demand is suppressed, or in which Medicare composes a dominant share of a sector's patients, marginal profit may be a less useful indicator of access to care.

Quality of care

The relationship between quality of care and the adequacy of Medicare payment is not direct. Simply increasing payments through an update for all providers in a sector is unlikely to influence the overall quality of care that beneficiaries receive because there is no imperative for providers to devote the additional revenue to actions that are known to improve quality. Indeed, historically, Medicare payment systems created little or no incentive for providers to spend additional resources on improving quality.

The Medicare program has in more recent years implemented quality-based payment policies in several sectors; however, some issues have arisen. First, differentiating quality performance among providers when the number of cases per provider is relatively low is difficult. This issue has been particularly vexing in measuring quality performance for individual clinicians. Second, the Commission has been concerned that Medicare scores too many quality measures focused on process as opposed to patient outcomes (Medicare Payment Advisory Commission 2018a). Many current process measures are weakly correlated with outcomes

such as mortality and readmissions. Most process measures focus on addressing the underuse of services, while the Commission believes that overuse and inappropriate use are also of concern. Third, reliance on provider-reported measures can create a burden on providers and can lead to biased reporting in response to strong financial incentives.

In our June 2018 report to the Congress, we formalized principles for designing Medicare quality incentive programs, which address these issues. In 2019, we applied these principles to recommend a hospital value incentive program that scores a small set of outcome, patient experience, and cost measures, and in 2020, we recommended changing the quality incentive program for Medicare Advantage to better evaluate quality and reward high-quality plans (Medicare Payment Advisory Commission 2020, Medicare Payment Advisory Commission 2019).

While we examine our quality indicators using 2020 data, the trends in 2020 were challenging to interpret due to the effects of the PHE on many of our outcome measures. We cannot draw conclusions about the relationship of quality measures to Medicare payment adequacy because our indicators reflect circumstances unique to the PHE. For example, increased mortality related to COVID-19 and capacity constraints at acute care hospitals could affect measures such as rates of readmission and discharge to the community. Further, our quality metrics rely on risk-adjustment models that do not explicitly account for the effects COVID-19.

Reflecting the difficulty of measuring and interpreting quality measures for 2020, many of CMS's quality reporting programs were revised during the pandemic and were suspended for at least a portion of 2020. Quality payment programs (e.g., value-based payments, the Hospital Readmissions Reduction Program) are suppressing some or all of 2020 data (Centers for Medicare & Medicaid Services 2020).

Providers' access to capital

Providers must have access to capital to maintain and modernize their facilities and to improve patient care delivery. Widespread ability to access capital throughout a sector may reflect the adequacy of Medicare payments. Some sectors such as hospitals require large capital investments, and access to capital

can be a useful indicator. Other sectors such as home health care do not need large capital investments, so access to capital is a more limited indicator. In some cases, a broader measure such as changes in employment may be a useful indicator of financial health within a sector. Similarly, in sectors where providers derive most of their payments from other payers (such as ambulatory surgical centers) or other lines of business, or when conditions in the credit markets are extreme, access to capital may be a limited indicator of the adequacy of Medicare payments.

One indicator of a sector's access to capital is its all-payer profitability, reflecting income from all sources. We refer to this amount as the sector's all-payer margin, which is calculated as aggregate income, minus costs, divided by income. All-payer margins can inform our assessment of a sector's overall financial condition and hence its access to capital. All-payer margins in 2020 reflect take-up of relief funds to the extent that they were included on providers' cost reports.

Medicare payments and providers' costs for 2022

For most payment sectors, we estimate Medicare payments and providers' costs for 2022 to inform our update recommendations for 2023. To maintain Medicare beneficiaries' access to high-quality care while keeping financial pressure on providers to make better use of taxpayers' and beneficiaries' resources, we investigate whether payments are adequate to cover the costs of relatively efficient providers, where available data permit such providers to be defined.

Relatively efficient providers use fewer inputs to produce quality outputs. Efficiency is higher if the same inputs are used to produce a higher-quality output or if fewer inputs are used to produce the same quality output. The Commission's approach is to develop a set of criteria and then examine how many providers meet those criteria. It does not establish a set share of providers to be considered efficient and then define criteria to meet that pool size.

For providers that submit cost reports to CMS—acute care hospitals, SNFs, home health agencies, outpatient dialysis facilities, IRFs, LTCHs, and hospices—we estimate total Medicare-allowable costs and assess the relationship between Medicare's payments and those costs. We typically express the relationship between

payments and costs as a Medicare aggregate margin, which is calculated as aggregate Medicare payments for a sector, minus costs, divided by Medicare payments. By this measure, if costs increase faster than payments, margins will decrease.

In general, to estimate payments, we first apply the annual payment updates specified in law for 2021 and 2022 to our base data (2020 for most sectors). We then model the effects of other policy changes that will affect the level of payments in 2022. Estimated Medicare payments reflect current law and expected volume. To estimate 2022 costs, we consider the rate of input price inflation or historical cost growth, and, as appropriate, we adjust for changes in the unit of service (such as fewer visits per episode of home health care) and trends in key indicators (such as changes in the distribution of cost growth among providers).

The coronavirus pandemic and PHE-related policy changes and their interactions can affect Medicare payments and providers' costs in several ways. For example, during the PHE, Medicare cost per case may have increased due to decreased volume and pandemic-related costs. Provider Relief Fund payments, if accepted, at least partly covered these costs associated with lower Medicare volume. However, relief funds are not counted as Medicare revenue because they are not specifically tied to Medicare per case payments. As a result, Medicare margins could appear lower than they would, all else equal, if relief fund revenue were considered as Medicare payment. In our analysis of Medicare payments, we calculate a Medicare aggregate margin exclusive of relief funds (and assuming all else equal) as well as a Medicare aggregate margin inclusive of relief funds. To make this latter calculation, for most sectors, we allocated to Medicare payments a portion of relief funds received by a provider, using the ratio of Medicare to all-payer revenue in 2019.

Use of Medicare aggregate margins

The adequacy of Medicare payments is assessed relative to the costs of treating Medicare beneficiaries, and the Commission's recommendations address a sector's Medicare payments, not total payments. We calculate a sector's Medicare aggregate margin to determine whether aggregate Medicare payments cover providers' aggregate costs for treating Medicare

patients and to inform our judgment about payment adequacy.⁵ Margins will always be distributed around the average, and a judgment of payment adequacy does not mean that every provider has a positive Medicare margin. To assess whether changes are needed in the distribution of payments, we calculate Medicare margins for certain subgroups of providers with unique roles in the health care system. For example, because location and teaching status enter into the payment formula, we calculate Medicare margins based on where hospitals are located (in urban or rural areas) and their teaching status (major teaching, other teaching, or nonteaching).

In accordance with our authorizing statute, the Commission also, when feasible, computes a Medicare margin for efficient providers.⁶ The Commission follows two principles when identifying a set of efficient providers. First, the providers must do relatively well on cost and quality metrics. Second, the performance must be consistent, meaning that the provider cannot have poor performance on any metric over the past three years. For example, in the hospital sector, the variables we use to identify relatively efficient hospitals are risk-adjusted all-condition mortality, risk-adjusted potentially preventable readmissions, and standardized inpatient Medicare costs per case. Our assessment of efficiency is not in absolute terms but, rather, relative to a comparison group—in this example, other inpatient prospective payment system hospitals. (We also make such assessments for the SNF, home health, and IRF sectors.) These assessments of efficient providers in a sector help us identify what may be a reasonable level of costs in a sector and hence the relationship between payments and costs needed to support Medicare beneficiaries' access to relatively high-quality care in that sector.

Multiple factors can contribute to changes in the Medicare margin, including changes in the efficiency of providers, changes in coding that may change case-mix adjustment, and other changes in the product (e.g., reduced lengths of stay at inpatient hospitals). Knowing whether these factors have contributed to margin changes may inform decisions about whether and how much to change payments.

In sectors where the data are available, the Commission makes a judgment when assessing the adequacy of payments relative to costs. No single standard governs this relationship for all sectors, and margins are only one indicator for determining payment adequacy. Moreover, although payments can be ascertained with some accuracy, there may be no “true” value for reported costs, which reflect accounting choices made by providers (such as allocations of costs to different services) and the relationship of service volume to capacity in a given year. Further, even if costs are accurately reported, they reflect strategic investment decisions of individual providers, and Medicare—as a prudent payer—may choose not to recognize some of these costs or may exert financial pressure on providers to encourage them to reduce their costs.

Appropriateness of current costs

Our assessment of the relationship between Medicare's payments and providers' costs is complicated by differences in providers' efficiency, responses to changes in payment systems, product changes, and cost reporting accuracy. Measuring the appropriateness of costs is particularly difficult in new payment systems because changes in response to the incentives in the new system are to be expected. In other systems, coding may change. As an example, the hospital inpatient PPS introduced a new patient classification system in 2008 to improve payment accuracy. However, for several years after its implementation, it resulted in higher payments because provider coding became more detailed, making patient complexity appear higher—although the underlying patient complexity was largely unchanged. Any kind of rapid change in policy, technology, or product can make it difficult to measure costs per unit.

To assess whether reported costs reflect the efficient provision of service, we examine recent trends in the average cost per unit, variation in standardized costs and cost growth, and evidence of change in the product. Our goal is to pay enough to provide access to high-quality care for Medicare patients. We do not seek to adjust Medicare payments if other payers under- or overpay. For example, one issue Medicare faces is the extent to which private payers exert pressure on providers to constrain costs. If private payers do not exert pressure, providers' costs may increase and, all

other things being equal, margins on Medicare patients would decrease. Providers that are under pressure to constrain costs generally have managed to slow their growth in costs more than those who face less pressure (Medicare Payment Advisory Commission 2011, Robinson 2011, White and Wu 2014). Some have suggested that, in the hospital sector, costs are largely outside the control of hospitals and that hospitals shift costs onto private insurers to offset Medicare losses. This belief assumes that costs are immutable and not influenced by whether the hospital is under financial pressure. We find that costs do vary in response to financial pressure and that low margins on Medicare patients can result from a high cost structure that has developed in reaction to high private-payer rates. In other words, when providers (particularly not-for-profit providers) receive high payment rates from insurers, they face less pressure to keep their costs low, and so, all other things being equal, their Medicare margins are low because their costs are high. (For-profit providers may prefer to keep costs low to maximize returns to stockholders and, indeed, often have higher Medicare margins than similar nonprofit providers.) Lack of pressure is more common in markets where a few providers dominate and have negotiating leverage over payers. This situation is becoming more common as providers continue to consolidate. We do not lower payments because of generous payments from private plans or raise them if other payers (for example, Medicaid) pay less. That said, we do recognize that access to care for Medicare beneficiaries will be affected by the payment policies outside of Medicare. Moreover, we recognize that in some sectors, Medicare itself can, and should, exert greater pressure on providers to reduce costs.

Variation in cost growth among a sector's providers can give us insight into the range of performance that facilities can achieve. For example, if some providers' costs grow more rapidly than others in a sector, we might question whether those rapid increases are appropriate. Changes in product can also significantly affect unit costs. In home health care services, for instance, one would expect that substantial reductions in the number of visits per 30-day home health care period would reduce costs per period. If costs per period instead were to increase while the number of visits decreased, one would question the

appropriateness of the cost growth and not increase Medicare payments in response.

In summary, Medicare payment policy should not be designed simply to accommodate whatever level of cost growth a sector demonstrates. Cost growth can oscillate from year to year depending on factors such as economic conditions and relative market power. Payment policy should accommodate cost growth only after considering a broad set of payment adequacy indicators, including the current level of Medicare payments.

What cost changes are expected in 2023?

The second part of the Commission's approach to developing payment update recommendations is to consider anticipated policy and cost changes in the next payment year. For each sector, we review evidence about the factors that are expected to affect providers' costs. One factor is the change in input prices, as measured by the price index that CMS uses for that sector. (These indexes are estimated quarterly; we use the most recent estimate available when we do our analyses.) For each sector of facility providers (e.g., hospitals, SNFs), we start with the forecasted increase in a sector-specific index of national input prices, called a "market basket index." For physician services, we start with a CMS-derived weighted average of price changes for inputs used to provide physician services. Forecasts of these indexes approximate how much providers' costs are projected to change in the coming year if the quality and mix of inputs they use to furnish care remained constant—that is, if there were no change in efficiency. Other factors may include the trend in actual cost growth, which could be used to inform our estimate if it differs significantly from the projected market basket.

This year, to the extent that we anticipate that changes in costs from the pandemic are likely to persist into 2023, those changes are considered in our analyses of each sector. To the extent that wages increase because of the PHE, the market basket for each sector, our measure of price inflation, will capture that increase, and there is no need to proactively make other

adjustments to reflect potential future increases in labor costs. For most sectors, the final payment rate update for fiscal year 2023 will include August 2022 estimates of 2023 growth in wages and other inputs. These could be lower or higher than the current projected update, given future projections of input price inflation and productivity in each sector. To the extent that wages are projected to grow, Medicare's payment rates (which are adjusted for input inflation) will be increased accordingly under current law.

How should Medicare payments change in 2023?

The Commission's judgments about payment adequacy, forthcoming policy changes, and expected cost changes result in an update recommendation for each payment system. An update is the amount (usually expressed as a percentage change) by which the base payment for all providers in a payment system is changed relative to the prior year. In considering updates, the Commission makes its recommendations for 2023 relative to the 2022 base payment as defined in Medicare's authorizing statute—Title XVIII of the Social Security Act. The Commission's recommendations may call for an increase, a decrease, or no change from the 2022 base payment. For example, if the statutory base payment for a sector were \$100 in 2022, an update recommendation of a 1 percent increase for a sector means we are recommending that the base payment in 2023 for that sector be 1 percent greater, or \$101. If the Congress or the Secretary does not adopt the Commission's recommendation for a payment update, current law will continue to apply unless other actions are taken.

When our recommendations differ from current law or regulation, as they often do, the Congress and the Secretary of Health and Human Services would have to act and change law or regulation to put them into effect. Each year, we look at all available indicators of payment adequacy and reevaluate prior-year assumptions using the most recent data available. The Commission does not start with any presumption that an update is needed or that any increase in costs should be automatically offset by a payment update. Instead, an update (which may be positive, zero, or

negative) is warranted only if it is supported by the empirical data, in the judgment of the Commission.

In conjunction with the update recommendations, we may also make recommendations to improve payment accuracy that might in turn affect the distribution of payments among providers. These distributional changes are sometimes, but not always, budget neutral. Our recommendation to shift payment weights from therapy to medically complex PAC cases is one example of a distributional change that affects providers differentially based on their patients' characteristics (Medicare Payment Advisory Commission 2016a).

The Commission, as it makes its update recommendations, may in some cases take into consideration payment differentials across sectors and make sure the relative update recommendations for the sectors do not exacerbate existing incentives to choose a site of care based on payment considerations. The difficulty of harmonizing payments across sectors to remove inappropriate incentives illustrates one weakness of FFS payment systems specific to each provider type and highlights the importance of moving beyond FFS to more global and patient-centric payment systems. As we continue to support moving Medicare payment systems toward those approaches, we will also continue to look for opportunities to rationalize payments for specific services across sectors to approximate paying the costs of the most efficient sector and lessen financial incentives that reward one sector over another.

Consistent payment for the same service across settings

A beneficiary can sometimes receive a similar service in different settings. Depending on which setting the beneficiary or the treating clinician chooses, Medicare and the beneficiary may pay different amounts. For example, when leaving the hospital, patients with joint replacements requiring physical therapy might be discharged with home health care or outpatient therapy, or they might be discharged to a SNF or IRF, and Medicare payments (and beneficiary cost sharing) would differ widely as a result.

A core principle guiding the Commission is that Medicare should pay the same amount for the same service, even when the service is provided in different

settings. Putting this principle into practice requires that the definition of services in the settings and the characteristics of the patients be sufficiently similar. Where these conditions are not met, offsetting adjustments would have to be made to ensure comparability. Because Medicare's payment systems were developed independently and have had different update trajectories, payments for similar services can vary widely. Such differences create opportunities for Medicare and beneficiary savings if payment is set at the level applicable to the lowest-priced setting in which the service can be safely performed. For example, under the current payment systems, a beneficiary can receive the same physician visit service in a hospital outpatient clinic or in a physician's office. In fact, the same physician could see the same patient and provide the same service but, depending on whether the service is provided in an outpatient clinic or in a physician's office, Medicare's payment and the beneficiary's coinsurance can differ by 80 percent or more.

In 2012, the Commission recommended that payments for E&M office visits in the outpatient and physician office sectors be made equal, recognizing that those services are comparable across the two settings. Specifically, we recommended setting payment rates for E&M office visits both in the outpatient department and physician office sectors equal to those in the physician fee schedule, lowering both program spending and beneficiary liability (Medicare Payment Advisory Commission 2012). In 2014, we extended that principle to additional services for which payment rates in the outpatient PPS should be lowered to better match payment rates in the physician office setting (Medicare Payment Advisory Commission 2014). In the Bipartisan Budget Act of 2015, the Congress made payment for outpatient departments for the same services equal to the physician fee schedule rates for those services at any new outpatient off-campus clinic beginning in 2018. We also recommended consistent payment between acute care hospitals and long-term care hospitals for certain categories of patients, and the Congress enacted a similar reform in the Pathway to SGR Reform Act of 2013 (Medicare Payment Advisory Commission 2014). In 2016, we recommended elements of a unified PAC PPS that would make payments based on patients' needs and characteristics, generally irrespective of the PAC entity that provides their care (Medicare Payment Advisory Commission 2016a). The

Commission will continue to study other services that are provided in multiple sites of care to find additional services for which the principle of the same payment for the same service can be applied.

Budgetary consequences

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 requires the Commission to consider the budgetary consequences of our recommendations. Therefore, this report documents how spending for each recommendation would compare with expected spending under current law. We also assess the effects of our recommendations on beneficiaries and providers. Although we recognize budgetary consequences, our recommendations are not driven by any specific budget target but instead reflect our assessment of the level of payment that efficient providers would need to ensure adequate beneficiary access to appropriate care.

Payment adequacy in context

As discussed in Chapter 1, it is essential to look at payment adequacy not only within the context of individual payment systems but also in terms of Medicare as a whole. The Commission is concerned by any increase in Medicare spending per beneficiary without a commensurate increase in value, such as higher quality of care or improved health status. Growth in spending per beneficiary, combined with the aging of the baby boomers, will result in the Medicare program absorbing increasing shares of the gross domestic product and federal spending. Medicare's rising costs are projected to exhaust the Hospital Insurance Trust Fund (which funds Medicare Part A) and significantly burden taxpayers. Therefore, moderating growth trends in Medicare spending per beneficiary is necessary and will require vigilance to be achieved. The financial future of Medicare prompts us to look at payment policy and ask what can be done to develop, implement, and refine payment systems to reward quality and efficient use of resources while improving payment equity.

In many past reports, the Commission has stated that Medicare should institute policies that improve the program's value to beneficiaries and taxpayers. CMS

is beginning to take such steps, and we discuss them in the sector-specific chapters that follow. Ultimately, increasing Medicare's value to beneficiaries and taxpayers requires knowledge about the costs and health outcomes of services. Until more information about the comparative effectiveness of new and existing health care treatments and technologies is available, patients, providers, and the program will have difficulty determining what constitutes high-quality care and effective use of resources.

As we examine each of the payment systems, we also look for opportunities to develop policies that create incentives for providing high-quality care efficiently across providers and over time. Some

of the current payment systems create strong incentives for increasing volume, and very few of these systems encourage providers to work together toward common goals. Alternative payment models are meant to stimulate delivery system reform toward more integrated and value-oriented health care systems and may address these issues. In the near term, the Commission will continue to closely examine a broad set of indicators, make sure there is consistent pressure on providers to control their costs, and set a demanding standard for determining which sectors qualify for a payment update each year. In the longer term, pressure on providers may cause them to increase their participation in alternative payment models. We will continue to contribute to the development of those models and to increase their efficacy. ■

Endnotes

- 1 Cascade Select plans must also pay no less than 101 percent of allowable costs, as defined by CMS, to rural hospitals, and no less than 135 percent of Medicare rates for primary care services (Carlton et al. 2021).
- 2 The Secretary of Health and Human Services may determine that a disease or disorder presents a PHE or that a PHE otherwise exists (Office of the Assistant Secretary for Preparedness and Response 2021).
- 3 We addressed these temporary telehealth expansions in our March 2021 report, noting that policymakers should analyze data collected during the PHE before deciding whether any permanent policy changes should be implemented and should consider the effects on access, quality, and cost (Medicare Payment Advisory Commission 2021).
- 4 The timing of cost reports affects our analysis of the impact of the PHE on providers' costs and Medicare's payments in 2020 and subsequent years of the PHE. Within each sector, 2020 cost reports included in this year's analysis of Medicare margins will reflect varying numbers of months overlapping with the PHE because providers' cost reports can start and end on different months of the year. To the extent that providers' cost reporting periods overlap with the PHE, Medicare payments will reflect add-on payments and suspension of the sequester and providers' costs will reflect PHE-related costs (e.g., personal protective equipment, supplies, labor).
- 5 In most cases, we assess Medicare margins for the services furnished in a single sector (e.g., SNF or home health care services) and covered by a specific payment system. However, in the case of hospitals, which often provide services that are paid for by multiple Medicare payment systems, our measures of payments and costs for an individual sector could become distorted because of the allocation of overhead costs or the presence of complementary services. For example, having a hospital-based SNF or IRF may allow a hospital to achieve shorter lengths of stay in its acute care units, thereby decreasing costs and increasing inpatient margins. For hospitals, we assess the adequacy of payments for the whole range of Medicare services they furnish—inpatient and outpatient (which together account for about 90 percent of Medicare payments to hospitals), SNF, home health care, psychiatric, and rehabilitation services—and compute an overall Medicare hospital margin encompassing costs and payments for all the sectors. The hospital update recommendation in Chapter 3 applies to hospital inpatient and outpatient payments; the updates for other distinct units of the hospital, such as SNFs, are covered in separate chapters.
- 6 Section 1805[11] of the Social Security Act [42 U.S.C. 1395b-6]:

“Specifically, the Commission shall review payment policies under parts A and B, including—

 - (i) the factors affecting expenditures for the efficient provision of services in different sectors, including the process for updating hospital, skilled nursing facility, physician, and other fees, (ii) payment methodologies, and (iii) their relationship to access and quality of care for Medicare beneficiaries.”

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C H A P T E R

3

Hospital inpatient and outpatient services

R E C O M M E N D A T I O N

- 3** For fiscal year 2023, the Congress should update the 2022 Medicare base payment rates for acute care hospitals by the amount specified in current law.

COMMISSIONER VOTES: YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0

Hospital inpatient and outpatient services

Chapter summary

Medicare generally sets fee-for-service (FFS) payment rates for hospital inpatient and outpatient services under the inpatient prospective payment systems (IPPS) and the outpatient prospective payment system (OPPS). In 2020, about 3,100 short-term acute care hospitals paid under the IPPS provided about 7.5 million inpatient stays to 4.8 million FFS Medicare beneficiaries. That same year, roughly 3,600 hospitals paid under the OPPS provided 78.1 million visits to 18.2 million FFS Medicare beneficiaries. The IPPS and OPPS payments for these services totaled \$172.6 billion, including \$8.3 billion in uncompensated care payments.

In this chapter, we make a recommendation on a payment rate update for 2023. Because of standard data lags, the most recent complete data we have are from 2020 for most payment adequacy indicators. We have considered the effects of the coronavirus public health emergency (PHE) and associated relief policies on our indicators and whether those effects are likely to be temporary or permanent. To the extent that the effects of the PHE are temporary changes—even across multiple years—or vary significantly across individual hospitals, they are best addressed through targeted temporary funding policies rather than a permanent change to all hospitals' payment rates in 2023 and future years. Based on information available at the time of publication, we do not anticipate any PHE-related

In this chapter

- Are Medicare payments adequate in 2022?
- How should Medicare payments change in 2023?
- Mandated report on Bipartisan Budget Act of 2018 changes to the low-volume hospital payment adjustment

effects in 2023 other than increased wage rates, which should be accounted for under the current-law annual updates to the hospital market basket. To the extent that the PHE continues, any additional needed financial support should be targeted to affected hospitals that are necessary for beneficiary access to high-quality care.

Assessment of payment adequacy

In 2020, some hospital payment adequacy indicators improved while others declined; however, indicators varied substantially across hospitals and largely reflect temporary changes during the PHE rather than changes in the overall adequacy of Medicare payments to hospitals.

Beneficiaries' access to care—At certain points during the PHE, FFS Medicare beneficiaries' access to hospital care was disrupted and inpatient capacity was stressed. At the same time, fewer hospitals closed in 2020 and 2021 compared to prior years, hospitals maintained excess inpatient capacity in aggregate, and hospitals continued to have a financial incentive to serve FFS Medicare beneficiaries.

- **Capacity and supply of providers**—Short-term acute care hospitals continued to have significant excess inpatient capacity in 2020, as indicated by an aggregate occupancy rate of 62 percent. However, inpatient capacity—especially in intensive care units—was stressed at times in some states. In 2020 and 2021, the number of hospital closures declined substantially from the high in 2019.
- **Volume of services**—In 2020, inpatient stays and outpatient services per FFS beneficiary declined, driven by a decrease of over 40 percent in spring 2020, followed by partial rebounds by the end of the year.
- **Marginal profit**—IPPS hospitals with excess capacity continued to have financial incentives to provide inpatient and outpatient services to Medicare beneficiaries, as indicated in 2020 by a positive Medicare marginal profit of about 5 percent.

Quality of care—Quality of care in 2020 is difficult to assess. While we report 2020 mortality, readmissions, and patient experience results, we do not draw conclusions about whether any changes reflect the adequacy of Medicare's payments. In March 2019, the Commission recommended a redesign of the current hospital quality payment programs, including removing the current penalty-only quality programs and enacting a new hospital value incentive program that balances rewards and penalties and has the potential to drive further improvement in hospital quality.

Providers' access to capital—In 2020, IPPS hospitals' all-payer total margin remained strong but declined to 6.3 percent (a level similar to the average over the past 15 years). Within this aggregate result, the all-payer total margin reached a near record high for rural hospitals, reflecting targeted federal relief funds. In addition, certain large hospital systems reported that their 2021 all-payer operating margins (which exclude investment income) exceeded 2019 levels, suggesting that hospitals' access to capital strengthened in 2021.

Medicare payments and providers' costs—In 2020, Medicare's payments to hospitals continued to be below hospitals' costs. Because federal relief funds were intended to help cover lost revenue and payroll costs—including lost revenue from Medicare patients and the cost of staff who help treat these patients—we report a Medicare margin that includes a portion of these relief funds (based on FFS Medicare's share of 2019 all-payer operating revenue). After including the Medicare share of relief funds, IPPS hospitals' Medicare margin improved slightly in 2020, indicating that the federal relief funds did their intended job.

- **Medicare payments and providers' costs per service**—In 2020, IPPS payments per stay grew 8.7 percent, faster than in prior years; however, costs per stay grew even faster, rising 12.6 percent. Similarly, OPIS payments per service grew 13.5 percent, faster than in prior years, but costs per service grew even faster at 24.4 percent. For both IPPS stays and OPIS services, the faster growth in costs relative to payments is likely due to a combination of factors unique to the PHE, including spreading fixed costs over lower volume, increased wage rates, and pandemic-related protocols and supplies.
- **Medicare margin**—IPPS hospitals' Medicare margin across service lines declined between 2019 and 2020, from -8.7 percent to -12.6 percent without including relief funds. However, after including Medicare's share of reported federal relief funds, IPPS hospitals' Medicare margin was -8.5 percent, slightly above the 2019 margin. Among relatively efficient hospitals, the median Medicare margin was -1 percent in 2019 but declined to -3 percent in 2020, excluding relief funds. With relief funds, relatively efficient hospitals' median Medicare margin increased to 1 percent.
- **Projected Medicare margin**—The coronavirus PHE has made 2020 and 2021 anomalous years in many respects, and it is impossible to predict with certainty the extent to which the effects will continue into 2022 and beyond. Under these circumstances, we project that IPPS hospitals'

Medicare margin in 2022 will be close to –10 percent prior to allocating relief funds. We project that IPPS hospitals' Medicare margin including relief funds will be around –9 percent, and the median Medicare margin for relatively efficient hospitals will remain at about 1 percent. We anticipate that hospitals' declining pandemic-related costs and increasing patient volume in 2022 relative to 2020 will be roughly offset by declining relief funds and uncompensated care payments. However, hospitals' actual 2022 Medicare margin will depend in part on the duration and severity of the coronavirus pandemic, volume changes, case-mix changes, and changes in costs relative to the forecast for input price inflation, as well as any additional payment or other policy changes enacted due to the pandemic.

How should Medicare payment rates change in 2023?

Under current law, Medicare's base payment rates under the IPPS and OPPS increase annually based on the projected increase in the hospital market basket minus a projected increase in productivity. In addition, in each of years 2018 through 2023, the IPPS base payment rate increases by an additional 0.5 percent to phase out adjustments that were put in place to recoup prior coding-induced overpayments. The final update for 2023 will not be set until summer 2022, but CMS's 2021 third-quarter projections of the market basket and productivity (and the additional statutory increase to IPPS payments) would produce a 2.5 percent increase in the IPPS base payment rate and a 2.0 percent increase in the OPPS base payment rate. These projections for 2023 are based in part on an estimated 3.1 percent growth in wages and benefits, which is higher than in prior years. The final update will include August 2022 estimates of 2023 growth in wages and other inputs and thus could be lower or higher than the current projected update, given future projections of input price inflation and productivity.

Our payment adequacy indicators are mixed but generally positive, and we anticipate changes caused by the PHE to be temporary (other than potentially increased wage rates, which should be accounted for under the current-law annual updates to the hospital market basket). Given these factors, the Commission's recommendation is that the Congress should update IPPS and OPPS payment rates by the amount specified under current law in 2023. The Commission anticipates that this recommendation will be enough to maintain beneficiaries' access to hospital inpatient and outpatient care and keep IPPS and OPPS payment rates close to the cost of delivering high-quality care efficiently.

Mandated report on the Bipartisan Budget Act of 2018 changes to the low-volume hospital payment adjustment

Setting Medicare payments proportionate to an efficient provider's costs requires accounting for factors beyond providers' control that can affect the costs of furnishing services. Patient volume is one such factor, particularly in small and isolated communities where some providers (in particular, those with 200 or fewer all-payer inpatient stays) cannot achieve the economies of scale and service scope of their larger counterparts and thus have higher costs per inpatient stay. For these reasons, in 2001, the Commission recommended that CMS develop a graduated adjustment to IPPS payment rates for isolated hospitals with lower volumes of all-payer inpatient stays.

Starting in 2005, the Congress mandated that the Department of Health and Human Services (HHS) implement an empirically justified low-volume hospital adjustment to IPPS payments of no more than 25 percent for hospitals that had no more than 800 all-payer inpatient stays and were at least 25 miles from the nearest IPPS hospital. Subsequent laws, most recently the Bipartisan Budget Act (BBA) of 2018, temporarily modified the eligibility criteria for the low-volume hospital (LVH) payment adjustment for fiscal years 2019 through 2022. The law mandated that hospitals with fewer than 3,800 all-payer inpatient stays be eligible for the LVH adjustment (instead of hospitals with fewer than 1,600 Medicare stays, as mandated by the Affordable Care Act of 2010 (ACA)). However, the BBA of 2018 kept other aspects of the ACA changes to LVH policy, including specifying the exact adjustment (instead of having HHS determine an empirically justified adjustment) and the lower isolation requirement of fewer than 15 miles from the nearest IPPS hospital. The BBA of 2018 also required the Commission to evaluate and report on the effects of the LVH policy change.

Our analysis found that in 2019, the BBA of 2018 policy change raised the number of LVHs by 5 percent and increased LVH payments by about 19 percent, due to increases in LVHs, the average number of FFS Medicare stays per LVH, and the average LVH adjustment.

The BBA of 2018 requirement that LVH eligibility be based on all-payer volume (and not Medicare volume) is consistent with the Commission's prior recommendation, and LVH policy will become more consistent with our prior recommendation beginning in 2023 when CMS's authority to determine an empirically justified LVH adjustment is restored. Still, concerns remain that the policy is not well targeted to isolated hospitals and is duplicative for the majority of LVHs that already receive cost-based payments through their designation as a sole-community or Medicare-dependent hospital. ■

Background

In 2020, the Medicare fee-for-service (FFS) program and its beneficiaries paid hospitals \$172.6 billion for inpatient and outpatient services under the inpatient prospective payment systems (IPPS) and outpatient prospective payment system (OPPS) (Table 3-1)—down 7 percent from \$185.5 billion in 2019. The decline was driven by FFS Medicare beneficiaries' lower use of hospital services during the coronavirus pandemic.¹ In fiscal year 2020, about 3,150 hospitals received \$104.1 billion in IPPS payments from the Medicare program and its beneficiaries for 7.5 million inpatient stays by 4.8 million FFS Medicare beneficiaries. Approximately 2,700 of these hospitals received an additional \$8.3 billion from the Medicare program for uncompensated care (charity care and non-Medicare bad debts). In calendar year 2020, about 3,600 hospitals received \$60.2 billion in OPPS payments from the Medicare program and its beneficiaries for 78.1 million outpatient visits by 18.2 million FFS Medicare beneficiaries.²

How Medicare sets hospital payment rates

Medicare generally sets FFS payment rates for hospital inpatient and outpatient services under the IPPS and OPPS.^{3,4} CMS adjusts these systems' payment rates for factors outside hospitals' control, such as regional wage rates and patient characteristics. One rationale for

paying hospitals on a prospective basis is to increase hospitals' incentive to control their costs. Indeed, as we have reported in previous years' March reports, hospitals with higher costs are often those under less pressure to constrain costs.

Inpatient prospective payment systems

The IPPS primarily pays hospitals prospectively determined rates per inpatient stay for hospitals' operating and capital costs. The IPPS payments per stay are derived through a series of adjustments applied to separate, annually updated operating and capital base payment rates. Adjustments to base rates include those for geographic factors, case mix (the expected relative costliness of inpatient treatment for patients with similar clinical conditions), and certain hospital characteristics (such as teaching hospitals or those that serve a disproportionate share of low-income patients). The IPPS has additional special payments for new technologies, extraordinarily high-cost cases, and certain rural hospitals, as well as quality incentives and penalties.

In addition to the IPPS payments per stay, each IPPS disproportionate share hospital (DSH) receives uncompensated care payments from a fixed pool of dollars to help cover their costs of treating the uninsured. Because these are separate payments not tied to an FFS Medicare beneficiary's inpatient stay, we

**TABLE
3-1**

Medicare payments under the IPPS and OPPS, 2020

Medicare payment system	Number of hospitals	Payments (in billions)
IPPS—Inpatient services	3,150	\$104.1
IPPS—Uncompensated care	2,700	8.3
OPPS—Outpatient services	3,600	60.2
Total		172.6

Note: IPPS (inpatient prospective payment systems), OPPS (outpatient prospective payment system). The number of hospitals is rounded to the nearest 50. Payments include applicable beneficiary cost-sharing responsibilities. The year refers to fiscal year for inpatient services and calendar year for outpatient services.

Source: MedPAC analysis of Medicare Provider Analysis and Review data, IPPS final rule, and outpatient claims.

report uncompensated care payments separately from other IPPS payments.⁵

Outpatient prospective payment system

The unit of payment in the OPPTS consists of a primary service and ancillary items that are bundled, or “packaged,” with the primary service. Examples of primary services include emergency department visits, computed tomography (CT) scans, and surgical procedures. The OPPTS pays a predetermined amount for each primary service. CMS classifies the services into ambulatory payment classifications (APCs) based on clinical and cost similarity. For each APC, CMS determines a base payment rate using the geometric mean cost that hospitals incur when providing the services in the APC. CMS adjusts the base payment rate for geographic differences in input prices. The OPPTS also has special payments for new technologies, designed for situations in which individual services cost the hospital much more than the base payment, and for certain hospital types (such as cancer centers, children’s hospitals, and sole community hospitals). The OPPTS also pays separately for drugs that have costs that exceed a threshold, as well as for corneal tissue acquisition and blood and blood products.⁶

Are Medicare payments adequate in 2022?

To assess whether FFS Medicare payments in 2022 are adequate for relatively efficient hospitals (i.e., hospitals that consistently perform relatively well on cost and quality metrics), we examined payment adequacy indicators in four categories:

- beneficiaries’ access to hospital inpatient and outpatient care;
- quality of hospital care;
- hospitals’ access to capital; and
- the relationship between FFS Medicare payments and hospitals’ costs, both across all IPPS hospitals and for an identified group of relatively efficient hospitals.

In 2020—the most recent year of data for most of our measures—some hospital payment adequacy indicators

improved while others worsened; however, indicators varied substantially across hospitals, and the aggregate changes reflect temporary changes during the coronavirus public health emergency (PHE) rather than changes in the overall adequacy of Medicare payments to hospitals. (For a description of how the coronavirus pandemic has been incorporated into our payment adequacy framework, see text box.)

While it is impossible to precisely predict the future, especially given the evolving coronavirus pandemic, we anticipate that hospital payment adequacy indicators will return to historical trends in 2022. Including relief funds, we project that IPPS hospitals’ Medicare margin in 2022 will remain about –9 percent among all IPPS hospitals and will remain at about 1 percent for relatively efficient hospitals, as we expect that hospitals’ declining COVID-19 costs and rising patient volume in 2022 relative to 2020 will be roughly offset by reduced relief funds and uncompensated care payments.

Beneficiaries’ access to hospital inpatient and outpatient services was disrupted during the PHE but remained good overall

FFS Medicare beneficiaries’ access to hospital care was disrupted during the PHE; however, fewer hospitals closed in fiscal years 2020 and 2021 than in 2019, and hospitals continued to have excess inpatient capacity in aggregate and a financial incentive to serve FFS Medicare beneficiaries.

While the variable effects of the PHE continued in fiscal year 2021 and will continue to some extent in 2022, we anticipate that, in aggregate, indicators of beneficiaries’ access to care will remain positive.

In 2020 and 2021, hospitals had significant excess inpatient capacity in aggregate, but capacity was stressed at times

Short-term acute care hospitals continued to have significant excess inpatient capacity in aggregate, with just under two-thirds (62 percent) of all bed-days occupied during 2020, similar to the 64 percent rate in 2019. Occupancy rates continued to vary across types of hospitals in 2020, including a lower occupancy rate at critical access hospitals (34 percent) and a higher rate at hospitals that both treated a disproportionate share of low-income patients and were teaching hospitals (69 percent).

Assessing Medicare payment adequacy during the coronavirus public health emergency

On January 31, 2020, the Secretary of Health and Human Services first declared the coronavirus public health emergency (PHE). By late March 2020, the nation's health care system began to experience major changes in service utilization, as elective procedures were postponed to preserve clinical staffs availability and equipment for COVID-19 patients. The PHE has had tragic and disproportionate effects on Medicare beneficiaries. (For details on the effects of the pandemic on beneficiaries' health and access to care, see Chapter 1.) It has also had damaging effects on the nation's health care workforce, with frontline health care workers facing burnout and risks to their health and safety while treating COVID-19 cases.

From the perspective of assessing the adequacy of Medicare payments, the PHE also has had material effects on all of the Commission's payment adequacy indicators. Because of standard data lags, the most recent complete data we have are from 2020 for most payment adequacy indicators; however, we also include preliminary data from 2021 where possible. The effects of the PHE on indicators of Medicare's payment adequacy to hospitals include:

- dramatic drops in inpatient and outpatient volume in spring 2020, partially rebounding by the end of 2020;
- increases in mortality from COVID-19, as well as the suspension of collecting certain quality data;
- substantial federal funding that hospitals received and recorded as revenue during their 2020 fiscal year, which appears to have been slightly less than hospitals' pandemic-related costs, on average (although rural hospitals,

which received targeted relief funds, had a near record high all-payer total margin, and certain large hospital systems have reported 2021 all-payer operating margins that exceeded 2019 levels); and

- increased payments to hospitals, due to PHE-related Medicare payment policy changes, including the suspension of the 2 percent sequestration of Medicare payments and a 20 percent increase in payments for COVID-19 inpatient stays.

In this chapter, we use available data and changes in payment policy to project hospitals' Medicare margin for 2022 and recommend payment rate updates for 2023. However, significant uncertainty remains about the extent to which the pandemic will last or whether certain changes to hospital volume and financial performance will persist past the end of the PHE. Therefore, though analyzing 2020 data is important to understand what happened to beneficiaries' access to care, quality of care, providers' access to capital, and Medicare's payments and providers' costs, it will be more difficult to interpret these indicators than is typically the case.

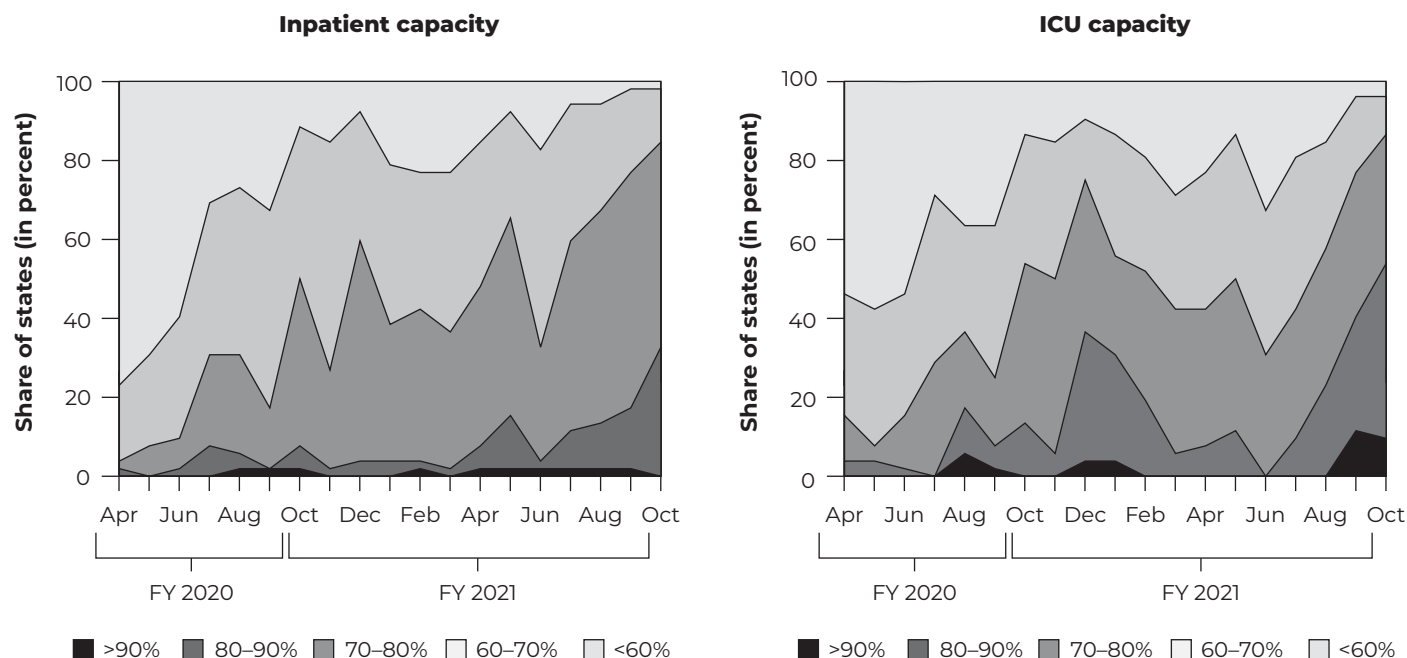
As the Commission stated last year, to the extent that the effects of the coronavirus pandemic are temporary—even if over multiple years—or vary significantly across individual hospitals, they are best addressed through targeted temporary funding policies rather than a permanent change to all hospitals' payment rates in 2023 and future years. Only permanent effects of the pandemic will be factored into our recommended changes to Medicare base payment rates. ■

However, both inpatient occupancy rates and intensive care unit (ICU) rates varied by month and state, with more states having higher occupancy rates as the coronavirus pandemic continued into 2021. Early in the pandemic, in April 2020, volume declined such

that four in five states had an inpatient occupancy rate of less than 60 percent and half of states had an ICU occupancy rate of less than 60 percent. In contrast, during the December 2020 surge in COVID-19 cases, nearly all states had inpatient and ICU occupancy rates

**FIGURE
3-1**

Hospitals had excess inpatient capacity in aggregate, but certain states' inpatient or intensive care unit capacity was stressed at times during the pandemic



Note: ICU (intensive care unit). Analysis includes state-aggregated data for inpatient and ICU bed utilization, developed from facility-level reporting. No statistical analysis is applied to account for non-response or for missing data within HealthData.gov-sourced data, but such analysis is applied for data from the Centers for Disease Control and Prevention.

Source: MedPAC analysis of Centers for Disease Control and Prevention National Healthcare Safety Network COVID-19 module reported data (April to July 2020) and HealthData.gov COVID-19 Reported Patient Impact and Hospital Capacity by State data (August 2020 to October 2021).

over 60 percent, and nearly half of states had an ICU occupancy rate of at least 80 percent. Capacity limits were further stressed in the surge of cases in October 2021, when over half of states had an ICU occupancy rate of at least 80 percent, including several southern states with ICU occupancy rates over 90 percent (Figure 3-1).

Fewer hospital closures in fiscal years 2020 and 2021 after a peak in 2019

The number of hospital closures declined substantially in fiscal years 2020 and 2021, falling from 46 in 2019 to 25 in 2020 and 10 in 2021.⁷ The decline in closures was likely a result of the substantial financial support provided by the federal government to hospitals during the PHE. In addition, some state and local governments

may have worked with hospitals to avoid closures during the pandemic to prevent situations where the demand for hospital care outstripped the local supply.

Of the 10 hospitals that closed in fiscal year 2021, 6 were in metropolitan areas and 4 were in rural areas. The majority of the hospitals that closed were small (8 of the 10 had 100 or fewer beds). Seven were paid under the IPPS, while three were critical access hospitals.

A majority of the hospitals that closed in 2021 cited financial reasons as a driving factor for closure. However, Medicare's payment policies were not a main contributor to the financial difficulties of the closed hospitals. Instead, substantial reductions in volume—due both to the pandemic and a longer-term trend of patients bypassing their local hospitals—was

cited by several hospitals as a main reason for closure. Rural hospitals often face the greatest challenges with declining admissions, in part due to rural beneficiaries increasingly bypassing their local hospitals to seek care at urban hospitals. In 2010, 40 percent of rural beneficiaries' hospital admissions were in urban hospitals; by 2018, this share had grown to 48 percent of their admissions. In addition to lower volume, 7 of the 10 closed hospitals were located in states that have not expanded Medicaid, which could lead to relatively higher uncompensated care burdens for hospitals in these states.

The effect of recent hospital closures on beneficiaries' access to hospital services varied. Three closures involved hospitals that were 25 to 35 miles from the next nearest hospital, but none were farther than 35 miles away from the nearest hospital. This suggests that most beneficiaries continued to have access to inpatient and emergency services in their region, but some faced moderately longer travel times. In addition, some of the former hospital locations still offered some services, such as urgent care or clinic services. While moderate increases in travel time may have a limited effect on access for some services, the Commission has expressed concern that the cumulative effect of years of rural hospital closures (with few offsetting new hospitals) could lead to longer travel times to access emergency care. In 2018, the Commission recommended that Medicare allow isolated freestanding emergency departments (EDs) to bill Medicare and that annual payments be made to such EDs to assist with fixed costs (Medicare Payment Advisory Commission 2018). Along these lines, the Congress recently enacted a program that will allow hospitals to convert to "rural emergency hospitals." These new hospitals will not provide inpatient care but will provide round-the-clock ED care and will be able to furnish other services. Medicare will pay these new providers a monthly fixed rate, enhanced outpatient rates, and standard rates for other types of care. The program starts on January 1, 2023.

In contrast to the decline in closures, the number of hospitals that opened has been relatively consistent over the last several years. In fiscal year 2021, 11 new hospitals opened. Similar to the previous few years, the hospitals that opened were small (all had 100 or fewer beds), and all but one were located in urban areas.

The coronavirus PHE made 2020 and 2021 anomalous years in many respects. Once the effects of the federal government's substantial financial support fades, it is unclear whether the rate of closures will remain low or revert to prepandemic levels.

Inpatient stays and outpatient services declined in 2020, driven by sharp declines in spring 2020

In 2020, the number of inpatient stays and outpatient services per FFS Medicare beneficiary declined, driven by sharp declines in spring 2020, followed by partial rebounds.

The decline in inpatient and outpatient hospital services in 2020 reflects both a decline in absolute access—as many hospitals canceled all but the most urgent procedures during parts of 2020 to help ensure capacity for COVID-19 patients—and beneficiaries' decisions to delay or forgo care, given the PHE. To help increase beneficiaries' access to hospital services during the PHE, CMS enacted multiple waivers (see text box on waivers to increase access, p. 78).

While the future duration and severity of the coronavirus PHE is unclear, we do not anticipate that it will cause any long-term deviations from the historical trend of slow declines in FFS Medicare beneficiaries' inpatient stays per capita and increases in outpatient services per capita as care continues to shift to outpatient settings.

Inpatient stays per capita declined in 2020 Inpatient stays per FFS Medicare beneficiary declined in 2020, driven by a large drop in spring 2020, followed by a partial rebound as beneficiaries and providers continued to postpone care because of the coronavirus pandemic (Figure 3-2, left panel, p. 79). As more discretionary and less severe inpatient stays were more likely to be postponed, the average reported case mix of inpatient stays increased in spring 2020, followed by a partial decline as more inpatient volume returned (Figure 3-2, right panel). For the first five months of fiscal year 2020 (from October 2019 through February 2020), inpatient stays per capita were slightly below 2019 levels, while average case mix was slightly higher—both consistent with historical trends. However, in March 2020, inpatient volume began to decline, and by April, inpatient stays per capita were 40 percent below the level in 2019.⁸ Average case mix followed an inverse trend, increasing to 7 percent above 2019 levels in April

Medicare waivers to increase access to hospital services during the coronavirus public health emergency

CMS has enacted numerous blanket waivers to increase Medicare beneficiaries' access to hospital services during the coronavirus public health emergency (PHE).⁹ These blanket waivers include:

- **Allowing hospitals to provide services in temporary expansion locations.** CMS has waived numerous requirements so that hospitals can provide inpatient and outpatient services in a variety of temporary expansion locations. Hospitals can provide acute inpatient services in areas of the hospital typically reserved for other types of inpatient care (such as rehabilitation or psychiatric care); change the status of provider-based outpatient departments; and screen patients at a location offsite from the hospital's campus.
- **Allowing new locations to enroll as hospitals.** CMS has waived certain hospital conditions of

participation so that hospitals can establish new locations and ambulatory surgical centers can enroll as hospitals.

- **Waiving certain hospital telehealth requirements.** CMS has waived requirements related to written agreements between telehealth locations so that additional hospitals can serve as distant-site locations for telehealth services.

In addition, CMS has allowed hospitals to apply for individual waivers. A key individual waiver for hospitals concerns acute hospital care at home. CMS has created the Acute Hospital Care at Home program that allows hospitals to apply for a waiver to provide certain health care services in a patient's home. As of the end of fiscal year 2020, about 80 hospital systems had been approved under the Acute Hospital Care at Home program.¹⁰ ■

2020. Inpatient volume partially rebounded by summer 2020 but remained about 15 percent below 2019 levels through the end of fiscal years 2020 and 2021, and case mix remained about 6 percent higher than 2019 levels. On average, across the entire fiscal year, inpatient volume declined 11.5 percent to 214 inpatient stays per 1,000 FFS Part A beneficiaries and average reported case mix increased 3.8 percent (data not shown).

Within this aggregate decline in inpatient stays per FFS Medicare beneficiary in 2020, the rate of decline differed across types of stays and types of hospitals. In particular:

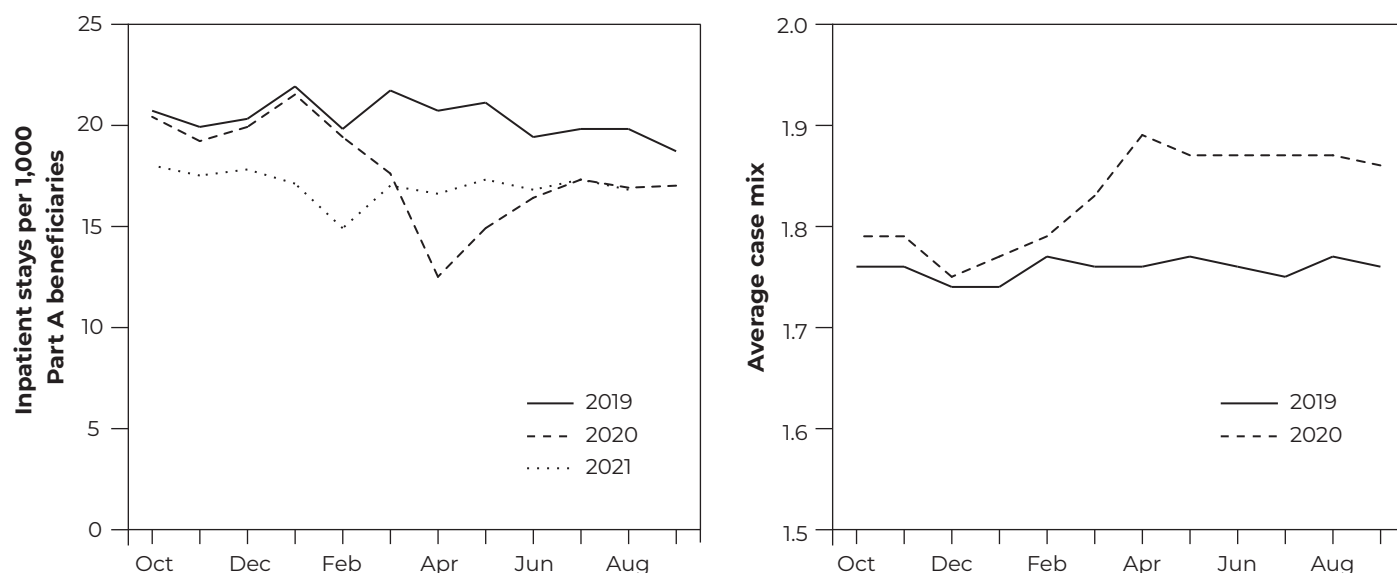
- **Inpatient stays for conditions with major complications and comorbidities declined at a slower rate than similar but less severe cases.** For example, inpatient stays for septicemia with major complications or comorbidities—the most

common type of stay—fell only 0.7 percent in 2020, while inpatient stays for septicemia without major complications or comorbidities declined 14.7 percent. Similarly, inpatient hip and knee joint replacements with major complications and comorbidities fell 6.2 percent, while those without major complications or comorbidities declined 33.8 percent.

- **Inpatient stays for respiratory conditions declined at a slower rate than those for musculoskeletal and circulatory conditions.** In 2020, inpatient stays per capita for respiratory conditions declined 6.5 percent, a slower rate than for the other two most common diagnostic categories—musculoskeletal conditions (18.6 percent) and circulatory conditions (14.0 percent). While inpatient stays across all respiratory conditions declined, there were large

**FIGURE
3-2**

In spring 2020, FFS Medicare beneficiaries' inpatient stays per capita declined sharply but rebounded by summer 2020 to about 15 percent below 2019 levels, with inverse trends in case mix



Note: FFS (fee-for-service). Analysis includes FFS Medicare beneficiaries' inpatient stays across all short-term acute care hospitals in the U.S. per 1,000 FFS Medicare Part A beneficiaries. "Case mix" refers to average Medicare severity-diagnosis related group weight. Years listed are fiscal years.

Source: MedPAC analysis of Medicare Provider Analysis and Review, Common Medicare Environment data, and preliminary 2021 claims data.

increases in inpatient stays per capita among the subset of Medicare severity-diagnosis related groups used for COVID-19 diagnoses, including an over 140 percent increase in respiratory infections and inflammation with major complications and comorbidities.

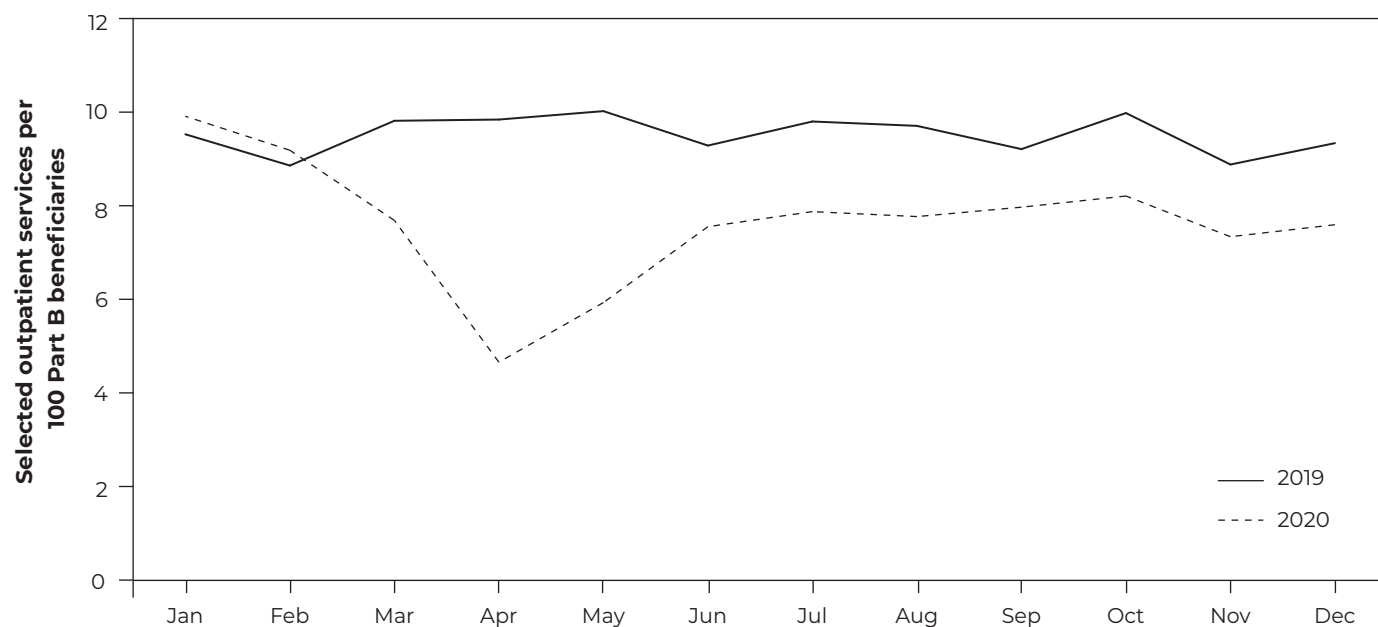
- **Very short and long inpatient stays declined at a slower rate than other inpatient stays.** In 2020, inpatient stays per capita shifted toward the extremes of one-day stays and long stays. For example, one-day stays fell 9.6 percent and stays of at least one week dropped 5.2 percent. In contrast, three-day inpatient stays per capita declined 17.6 percent, which likely reflects in part the waiver during the PHE of the three-day stay requirement for skilled nursing facilities (see Chapter 7).

- **Inpatient stays at urban hospitals declined at a slower rate than at rural hospitals.** In 2020, inpatient stays per capita at urban hospitals declined 11.2 percent, a slower rate than at rural hospitals in micropolitan areas (13.0 percent) or nonmicropolitan areas (14.1 percent). The continued shift of inpatient stays from rural hospitals to urban hospitals reflects, primarily, beneficiaries bypassing their local rural hospital for inpatient care.

Outpatient hospital services per capita declined in 2020 Similar to inpatient services, FFS Medicare beneficiaries' outpatient services per capita declined in 2020, driven by a large drop in spring 2020, followed by partial rebounds as beneficiaries continued to postpone care because of the coronavirus pandemic (Figure 3-3, p. 80). For January and February 2020, outpatient services per capita were similar to 2019

FIGURE
3-3

In spring 2020, FFS Medicare beneficiaries' outpatient services per capita declined markedly but rebounded by summer 2020 to about 20 percent below 2019 levels



Note: FFS (fee-for-service). Analysis includes 20 of the most common separately payable outpatient services across all outpatient prospective payment system hospitals in the U.S., per 100 FFS Medicare Part B beneficiaries.

Source: MedPAC analysis of outpatient claims and Common Medicare Environment data.

levels. However, in March 2020, outpatient volume began to decline, and by April, outpatient services per capita were more than 50 percent below the 2019 level. Outpatient volume partially rebounded by summer 2020 but remained about 20 percent below 2019 levels through the end of 2020.¹¹ Across the entire 2020 calendar year, outpatient volume fell 17.4 percent, to 4.3 outpatient services per 100 FFS Part B beneficiaries (data not shown). In 2021, outpatient services per capita declined to 25 percent below 2019 levels in January and February as COVID-19 cases rose throughout much of the country; that figure rebounded by June 2021 to 10 percent below 2019 levels.

In 2020, the volume of outpatient services declined in each of the four broad outpatient service categories

and for key hospital groups, but the rate of decline differed:

- **Tests and procedures declined at a slower rate than evaluation and management (E&M) and imaging services.** In 2020, the number of services per capita fell by 2.2 percent for tests and 13.0 percent for procedures. In contrast, E&M services fell 24.8 percent and imaging services fell 17.6 percent. The magnitude of the decline in the test category was mitigated by the large number of COVID-19 specimen collections. The smaller decline in procedures relative to E&M and imaging could have been due to the procedures being less elective than the services in the E&M and imaging categories.

- **Outpatient services at critical access hospitals declined at a slower rate than at other hospitals.**
In 2020, outpatient services per capita declined 14 percent at critical access hospitals but 20 percent at OPPS hospitals.

One component of outpatient services that continued to grow in 2020 was separately payable drugs, though the growth was slower than in previous years. While it is difficult to directly measure changes in volume of drugs over time, given the difference in units, Medicare spending per capita for separately payable drugs furnished in hospital outpatient departments (HOPDs) grew by 6.7 percent (including nearly 1 percentage point from the suspension of sequestration of Medicare payments). This increase is smaller relative to previous years. From 2015 through 2019, per capita spending on separately payable drugs rose by 14.7 percent per year, on average. The higher spending on separately payable drugs in 2020 was due largely to growth in administration of chemotherapy drugs. The most frequently used method for administering chemotherapy rose by 1.8 percent.

In 2020, hospitals with excess capacity continued to have a financial incentive to serve Medicare beneficiaries

Hospitals with excess capacity continued to have financial incentives to provide inpatient and outpatient services to FFS Medicare beneficiaries: In 2020, IPPS hospitals' marginal profit on IPPS and OPPS services was about 5 percent—lower than the 8 percent in 2019 but still positive. We calculate hospitals' Medicare marginal profit by comparing Medicare's IPPS and OPPS payments to the *variable* cost of treating an additional FFS Medicare patient. To make a conservative estimate of hospitals' Medicare marginal profit, we use a broad definition of variable costs that is consistent with our prior estimates of the share of costs that varied over a one-year period. We have found that roughly 80 percent of costs are variable, including in 2020; to the extent that a higher share of costs is fixed, the marginal profit would be higher.

The rapid response to the coronavirus pandemic has demonstrated that at least some hospitals can substantially lower their costs over a matter of months. For example, the largest hospital systems were able to substantially reduce costs in the second quarter of

2020 relative to the prior year, despite the expectation that the reduction in volume would be temporary.¹² We expect that hospitals will have an even greater ability to adjust costs when they have a longer period to adjust to environmental changes and the resulting long-term changes in volume that can be anticipated.

Quality of care is difficult to assess

Quality of care in 2020 is difficult to assess due to effects of the coronavirus pandemic on beneficiaries and providers. Each year we track changes in mortality, hospital readmissions, and patient experience and determine whether they have improved, worsened, or stayed the same. While we report 2020 results, we do not draw conclusions about whether any changes reflect the adequacy of Medicare's payments. The 2020 results reflect temporary changes in the delivery of care and data limitations unique to the PHE rather than trends in the quality of care provided to beneficiaries. Further, some of the Commission's quality metrics rely on risk-adjustment models that use performance from previous years to predict beneficiary risk. COVID-19 is a new diagnosis and is not included in the current risk-adjustment models, though many associated conditions are. As a result, our models may not adequately represent the acuity and mix of patients receiving care in 2020.

Mortality

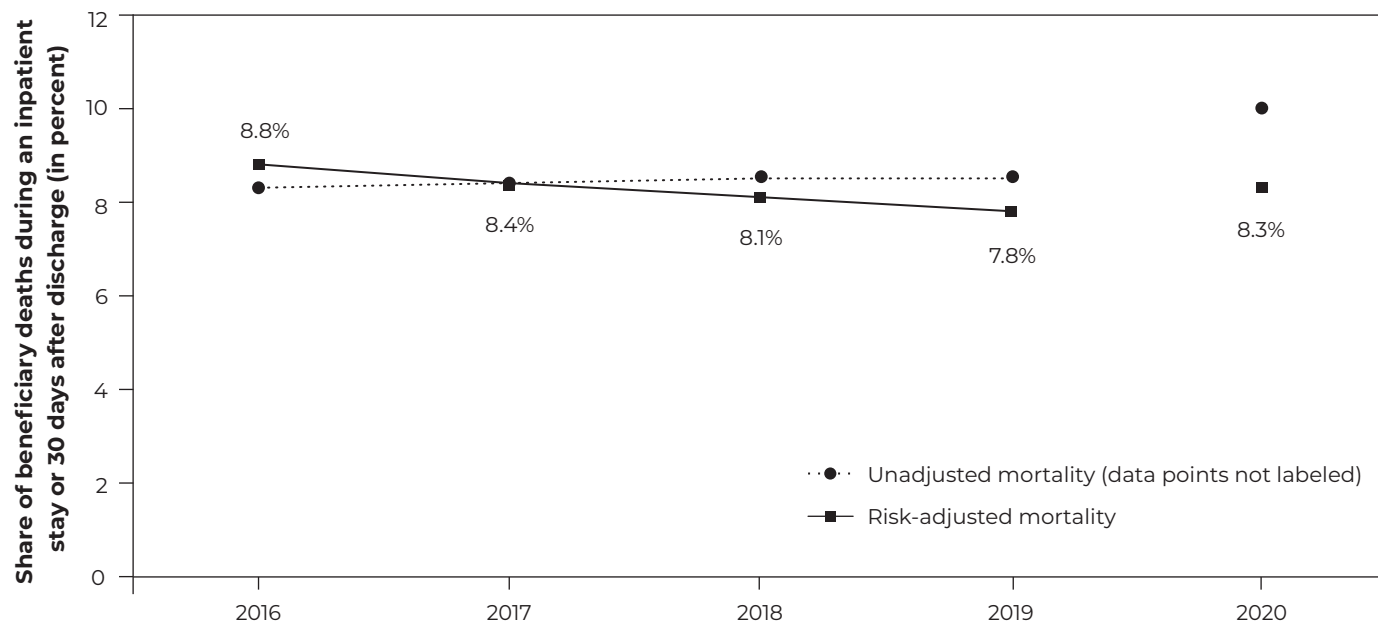
In 2020, mortality rates rose nationwide due to deaths from COVID-19. FFS Medicare beneficiaries' risk-adjusted mortality rate (death during a hospital stay or 30 days after discharge) was 8.3 percent (Figure 3-4, p. 82). From 2016 to 2019, the risk-adjusted mortality rate fell (that is, improved) by 1.0 percentage point, including a 0.3 percentage point decline in 2019 to 7.8 percent. Over the four-year period, unadjusted mortality rates were relatively stable, but expected mortality increased because beneficiaries admitted to hospitals in recent years tended to have more comorbidities and thus a higher risk of mortality.

Readmissions

Many factors related to the coronavirus pandemic affected hospitalization rates, including both greater demand for beds for patients suffering from COVID-19, which strained hospital capacity at times in some

FIGURE
3-4

FFS Medicare beneficiaries' risk-adjusted, all-condition mortality rates, 2016-2020



Note: FFS (fee-for-service). Analysis includes FFS Medicare beneficiaries ages 65 or older. The 2016–2019 risk-adjusted values differ from what was presented in the March 2021 report to the Congress because of the use of an updated version of the 3M™ all-patient refined–diagnosis related group software. The 2019 and 2020 value points are not connected because we cannot draw conclusions on the quality of care due to the effects of the coronavirus pandemic.

Source: MedPAC analysis of Medicare Provider Analysis and Review data.

states, and lower demand for beds as some patients avoided hospitals due to fears of infection. In 2020, the risk-adjusted readmission rate (FFS Medicare beneficiaries over age 65 readmitted within 30 days after discharge) was 14.8 percent (Figure 3-5). From 2016 to 2019, the risk-adjusted readmission rate declined (that is, improved) by 0.4 percentage point, to 15.3 percent. In part, the improvement can be attributed to the Hospital Readmission Reduction Program that the Congress enacted in 2010 (Medicare Payment Advisory Commission 2018).

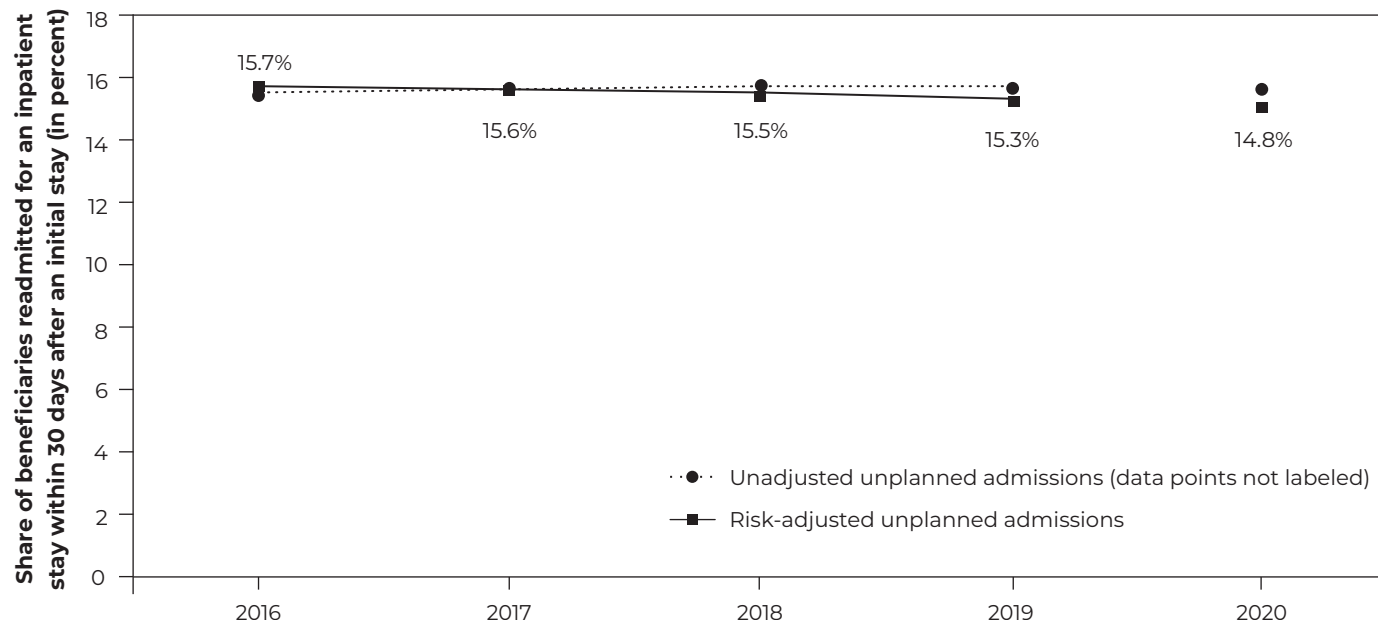
Patient experience

Hospitals collect Hospital Consumer Assessment of Healthcare Providers and Systems® (H-CAHPS®) surveys from a sample of admitted patients, which CMS uses to calculate results for 10 measures of patient

experience included in hospitals' overall ratings.¹³ The H-CAHPS measures key components of quality by assessing whether something that should happen during a hospital stay (such as clear communication) actually happened or how often it happened. In the last half of 2020, 72 percent of surveyed patients rated their overall hospital experience a 9 or 10 on a 10-point scale, which is 1 percentage point less than in previous years (Table 3-2, p. 84).¹⁴ Communication with nurses, communication with doctors, and receipt of discharge information had the highest scores, with at least 80 percent of surveyed patients answering with the most positive response. From 2019 to 2020, responsiveness of hospital staff, communication about medicines, and cleanliness of hospital environment scores dropped by 3 percentage points. In 2020, the care-transition measure result continued to be the lowest score, with

FIGURE
3-5

FFS Medicare beneficiaries' risk-adjusted, all-condition readmission rates, 2016-2020



Note: FFS (fee-for-service). Analysis includes FFS Medicare beneficiaries ages 65 or older. The 2016–2019 risk-adjusted values differ from what was presented in the March 2021 report to the Congress because of the use of an updated version of the 3M™ all-patient refined–diagnosis related group software and use of CMS’s updated unplanned admissions definition. The 2019 and 2020 value points are not connected because we cannot draw conclusions on the quality of care due to the effects of the coronavirus pandemic.

Source: MedPAC analysis of Medicare Provider Analysis and Review data.

only 52 percent of surveyed patients responding with “Strongly Agree” that they understood their care plan when they left the hospital.

Need for a redesign of hospital quality payment programs

In March 2019, the Commission recommended that the Congress replace Medicare’s current hospital quality programs (including the penalty-only programs) with a single, outcome-focused quality-based payment program for hospitals—that is, the hospital value incentive program (HVIP)—that balances rewards and penalties and has the potential to drive further improvement in hospital quality (Medicare Payment Advisory Commission 2019). Initially, the HVIP can incorporate existing quality measure domains such as readmissions, mortality, spending, patient experience, and hospital-acquired conditions (or infection rates).

A key feature of the HVIP design is that it accounts for differences in providers’ patient populations by incorporating a peer-grouping methodology. Quality-based payments are distributed to hospitals separated into 10 peer groups, defined by the share of treated beneficiaries with full dual eligibility for Medicare and Medicaid (as a proxy for income). The grouping of hospitals into peer groups that serve similar populations makes payment adjustments more equitable than existing quality payment programs.

Hospitals’ access to capital remained strong in 2020, and preliminary data suggest it strengthened in 2021

Hospitals’ access to capital remained strong in 2020. IPPS hospitals’ all-payer total margin declined slightly in 2020 but reached near record highs for rural

**TABLE
3-2****Hospital patient experience measures, 2016–2020**

H-CAHPS® measure	2016	2017	2018	2019	2020	Percentage point change, 2019–2020
Hospital rating	73%	73%	73%	73%	72%	–1
Recommend the hospital	72	72	72	72	71	–1
Communication with nurses	80	80	81	81	80	–1
Communication with doctors	82	82	81	82	81	–1
Responsiveness of hospital staff	69	70	70	70	67	–3
Communication about medicines	65	66	66	66	63	–3
Cleanliness of hospital environment	75	75	75	76	73	–3
Quietness of hospital environment	63	62	62	62	63	1
Discharge information	87	87	87	87	86	–1
Care transition	52	53	53	54	52	–2

Note: H-CAHPS® (Hospital Consumer Assessment of Healthcare Providers and Systems®). H-CAHPS is a standardized 32-item survey of patients' evaluations of hospital care. The survey items are combined to calculate measures of patient experience for each hospital. The H-CAHPS measures included in the table are the "top-box," or the most positive, response to H-CAHPS survey items. The top-box response is "Always" for four H-CAHPS composite measures (communication with nurses, communication with doctors, responsiveness of hospital staff, and communication about medicines) and two individual items (cleanliness of hospital environment and quietness of hospital environment), "Yes" for the discharge information composite, "9" or "10" (high) for the hospital rating item, "Definitely yes" for the recommend the hospital item, and "Strongly agree" for the care transition composite. Each year's results are based on a sample of hospital surveys of hospitals' patients from January to December. Results in 2020 include only surveys from patients discharged July to December 2020 rather than the customary full year.

Source: MedPAC analysis of Medicare Provider Analysis and Review claims and IPPS final rules.

hospitals, which received targeted federal relief funds. Preliminary data for large publicly traded hospital systems suggest that hospitals' all-payer operating margin increased in 2021 relative to the prior record high in 2019.

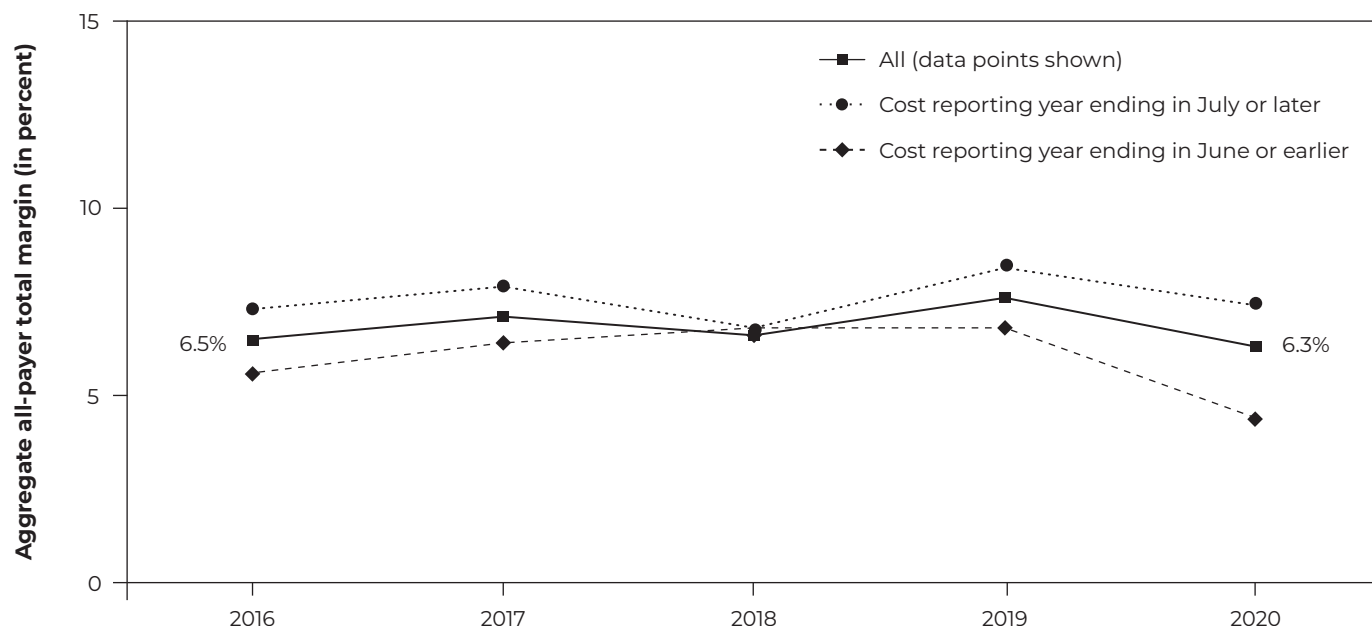
In addition, while hospital employment declined slightly in 2020, hospitals' strong all-payer operating margin and the tight labor market in the overall economy suggest that the decline in hospital employment reflects a shortage of labor supply rather than an inability of hospitals to continue paying their workers.

Finally, hospitals maintained strong access to capital bond and equity markets.

Hospitals' all-payer total margin remained strong but declined in 2020

IPPS hospitals' all-payer total margin remained strong but declined in 2020; however, there was wider

variation across hospitals than in prior years. This greater variation in 2020 reflects differences in both the extent to which hospitals received targeted relief funds and the extent to which their cost reporting periods included the receipt of these funds. While the 2020 all-payer margins described below were calculated using the best available data, payment adequacy metrics that include federal relief funds need to be interpreted with caution. In particular, the amount of relief funds providers will end up retaining is still not known. Furthermore, timing differences in cost reporting periods and when providers received federal relief funds can lead otherwise similar providers to appear to have very different measures of financial performance. In 2022, we will know more about hospitals' final 2020 financial performance, when reporting periods for 2020 funds close and selected audits begin.

**FIGURE
3-6****In 2020, IPPS hospitals' all-payer total margin declined but remained strong with the support of federal relief funds**

Note: IPPS (inpatient prospective payment systems). Hospitals' margin is calculated as aggregate payments minus aggregate allowable costs, divided by aggregate payments. "All-payer total margin" includes payments from all payers, from investments, and, in 2020, reported federal relief funds.

Source: MedPAC analysis of hospital cost reports.

IPPS hospitals' all-payer total margin remained strong but declined from the record high of 7.6 percent in 2019 to 6.3 percent in 2020 (similar to the 15-year average) (Figure 3-6). However, this margin includes hospitals with cost reporting years that ended prior to attestation deadlines for federal relief funds. When limited to IPPS hospitals with a cost reporting year ending before July 2020—that is, before hospitals' 90-day deadline to attest to the receipt of the general Provider Relief Fund payments announced in April—the all-payer total margin was only 4.4 percent, more than 2 percentage points lower than these hospitals' margin in 2019. In contrast, when limited to IPPS hospitals with a cost reporting year ending in July or later, the all-payer total margin was 7.4 percent, less than 1 percentage point lower than these hospitals' margin in 2019. Between 2019 and 2020, IPPS hospitals' all-payer

operating margin (which excludes investment income) had a similar pattern, declining from 6.5 percent to 5.2 percent (data not shown).

Across all fiscal year 2020 cost reporting periods, IPPS hospitals reported receiving over \$32 billion in federal relief funds through the Provider Relief Fund and Paycheck Protection Program. These funds may not yet be completely reported, as about one-third of IPPS hospitals did not report receiving any relief funds during their 2020 cost reporting year. However, this absence likely reflects a combination of factors, including some hospitals receiving or attesting to funds after their cost reporting deadline, some including relief funds in their total revenue but not recording them on the new cost report line, and others—such as hospitals that are part of HCA or Kaiser Permanente—returning received relief funds.¹⁵ Without these

reported relief funds, we estimate that IPPS hospitals' all-payer total margin would have declined to 3.0 percent, equivalent to a drop in net income of \$50 billion—substantially less than the American Hospital Association's estimate of \$320 billion (American Hospital Association 2020).

In 2020, all-payer total margin for rural hospitals reached a near record high due to targeted relief funds Rural hospitals received substantial federal relief funds during the PHE. In addition to 2 percent of their prior year's gross revenue received through the general distribution of payments from the Provider Relief Fund, rural hospitals also received the majority of the \$11 billion in Provider Relief Fund payments that were targeted to rural hospitals and clinics. Each rural hospital's targeted distribution was calculated as a graduated base payment of \$1 million to \$3 million plus nearly 2 percent of the hospitals' operating expenses in the prior year.¹⁶ Because of the floor on the graduated minimum payment, the smallest rural hospitals disproportionately benefited from these targeted distributions. In addition, many rural hospitals have fewer than 500 employees and therefore were eligible for a forgivable Paycheck Protection Program loan up to \$10 million.¹⁷

Thanks to these targeted funds, rural hospitals' all-payer total margin reached a near record high in 2020 and rural hospital closures declined in 2021 (Figure 3-7). Rural IPPS hospitals' all-payer total margin increased to 6.6 percent in 2020—the highest in over 20 years—and critical access hospitals' all-payer total margin reached a record high of 6.4 percent. Without the federal relief funds, rural IPPS hospitals' all-payer total margin would have declined to 2.6 percent and critical access hospitals' all-payer total margin would have declined to 2.1 percent. Furthermore, the record high margins in 2020 were achieved even including rural hospitals with cost reporting years that ended prior to attestation deadlines for federal relief funds. When limited to rural hospitals with a cost reporting year ending July or later, the all-payer total margin was even higher, at 7.4 percent for rural IPPS hospitals and 6.7 percent for critical access hospitals (data not shown).

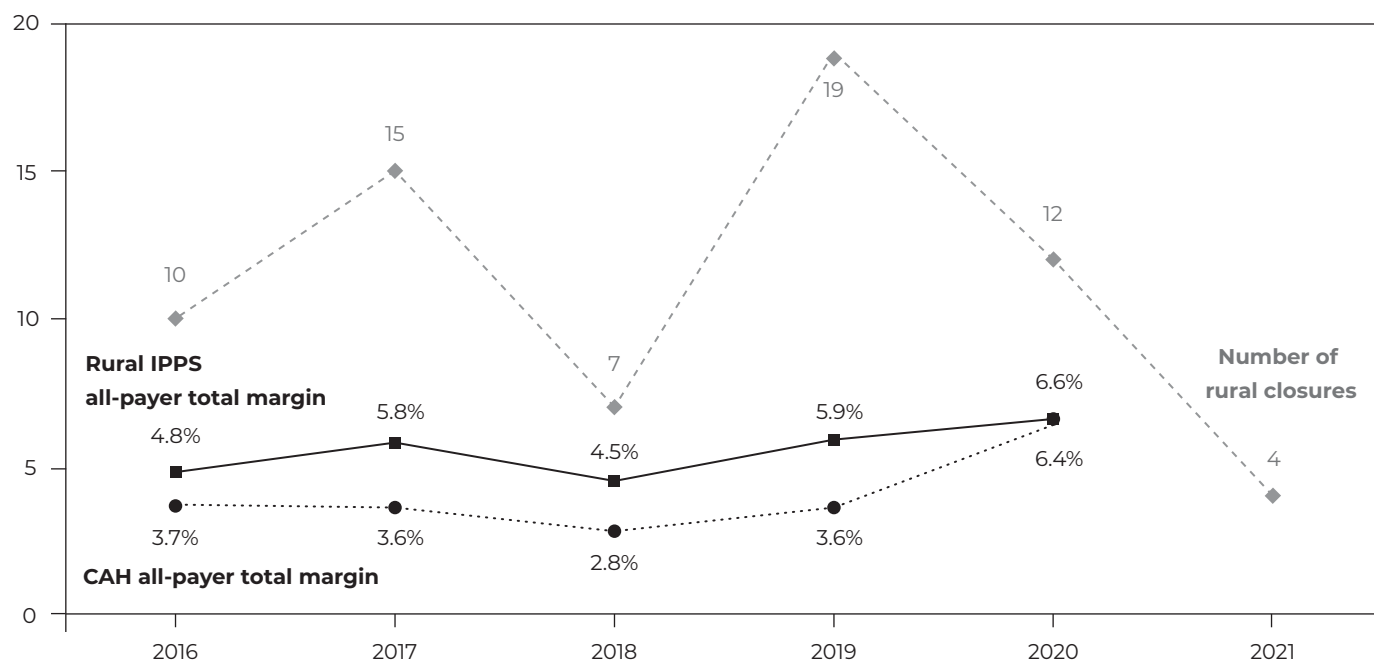
In 2020, all-payer total margin for disproportionate share hospitals declined slightly despite receipt of targeted relief funds DSH hospitals also received substantial federal relief funds during the PHE. In

addition to receiving 2 percent of their prior year's gross revenue through the general distribution of Provider Relief Fund payments, DSH hospitals received \$13 billion in Provider Relief Fund payments targeted to safety-net hospitals (defined as those that treated a disproportionate share of low-income patients, had high uncompensated care costs, and had low profit margins), with a minimum distribution per hospital of \$5 million and a maximum distribution of \$50 million. DSH hospitals also received a portion of the \$20.8 billion targeted to hospitals with a large number of COVID-19 cases.¹⁸

While DSH hospitals' all-payer total margin in 2020 remained strong, it declined from 2019 levels, despite DSH hospitals receiving targeted relief funds.¹⁹ Between 2019 and 2020, DSH hospitals' all-payer total margin dropped from the relative high of 7.5 percent to 6.1 percent. Among those with a cost report year ending in October 2020 or later—after the 90-day period hospitals had to attest to the June 2020 first round of targeted relief funds—the all-payer total margin was higher, at 8.0 percent, but still slightly below these hospitals' margin in 2019.

Preliminary data from 2021 suggest that hospitals' all-payer operating margins exceeded prepandemic levels

For the six largest hospital systems (representing over 20 percent of IPPS hospitals), profits in 2021 were larger than profits in 2019 (Ascension 2021, CommonSpirit 2021, Community Health Systems 2021, HCA Healthcare 2021, Tenet Health 2021, Trinity Health 2021). The most recent cost report data for most hospitals is fiscal year 2020. However, larger nonprofit systems have reported data through June 30, 2021, through disclosures to their bond investors, and for-profit hospitals have reported data through September 30, 2021, to their shareholders. The three largest nonprofit systems (representing over 10 percent of IPPS hospitals) reported that operating profits were higher in their fiscal year ending June 30, 2021, than they were in their 2019 or 2020 fiscal years. All three of the largest publicly traded for-profit acute care hospital chains (representing 10 percent of IPPS hospitals) reported higher profits during the first nine months of 2021 than in the first nine months of 2019 (Community Health Systems 2021, HCA Healthcare 2021, Tenet Health 2021).

**FIGURE
3-7****Rural hospitals' all-payer total margins reached record highs in 2020, with corresponding declines in fiscal year 2021 closures**

Note: IPPS (inpatient prospective payment systems), CAH (critical access hospital). Hospitals' margins are calculated as aggregate payments minus aggregate allowable costs, divided by aggregate payments. "All-payer total margin" includes payments from all payers, from investments, and, in 2020, from reported federal relief funds. "Closures" refers to hospital locations that ceased providing inpatient services and does not include the relocation of inpatient services from one hospital to another under common ownership within 10 miles, nor does it include hospitals that both opened and closed within a 5-year time period.

Source: MedPAC analysis of hospital cost reports, CMS Provider of Services file, census data on metropolitan and micropolitan areas, internet searches, and personal communication with the Department of Health and Human Services Office of Rural Health Policy.

While margins reflect current year profitability, we can look to changes in stock prices to see opinions regarding hospitals' future prospects. During the first two years of the pandemic, from the start of 2020 to the end of 2021, the stock prices of the three largest publicly traded acute care hospital companies all rose by more than 70 percent compared with a rise of less than 50 percent for the overall S&P 500. This increase suggests that financial markets look favorably on hospitals' earning prospects and are willing to invest equity capital in hospital operators.

Therefore, while the effect of the coronavirus pandemic on hospitals' finances varied substantially across hospitals, we have no evidence that it has had a negative effect on hospitals' long-term access to the capital markets.

In 2020, hospital employment declined

In fiscal year 2020, hospital employment declined to 6.1 million employees from 6.3 million in 2019, driven by a 2 percent drop in spring 2020 followed by a partial rebound; by the end of 2021, hospital employment remained about 1 percent below the 2019 level.²⁰

The lower number of hospital employees reflects a combination of factors, including furloughs during the initial wave of the coronavirus pandemic as procedures were canceled, followed by hospitals (like other employers) having difficulty filling vacant positions. To help fill these short-term shortages, some hospitals turned to travel nurses (Gottlieb and Zenilman 2020). In the short run, these efforts to relieve staffing shortages may have increased hospitals' labor costs and

contributed to staffing shortages at other hospitals, as nurses left to become travel nurses. However, we have not yet seen these increased labor costs or shifts in labor force contribute to materially lower profits or access issues. The combination of hospitals' continued high all-payer total margin and worker shortages suggests a labor supply shortage rather than an inability of hospitals to continue paying their workers.

Future hospital employment trends are less clear. For example, in the short term, some groups have forecasted a nursing shortage as the PHE contributes to burnout and induces retirement (Berlin et al. 2021). However, longer term, the Bureau of Labor Statistics projects employment of registered nurses from 2020 to 2030 to grow 9 percent, about as fast as the average for all occupations. In addition, student enrollment in nursing schools increased in 2020 (American Association of Colleges of Nursing 2021).

In sum, labor shortages are straining hospitals, but we do not see evidence that this trend is due to a lack of financial resources. In addition, it is not clear that the shortage will be a long-term issue. To the extent that wages are projected to grow, Medicare's payment rates (which are adjusted for input inflation) will be increased accordingly under current law.

In 2020 and 2021, hospitals maintained strong access to bonds and federal loans

In 2020 and 2021, hospitals maintained strong access to bonds. In both 2020 and 2021, hospitals issued about \$17 billion in new financing, which was below 2019 levels but higher than in 2018. In contrast, during this period, hospitals' refunding of bonds fell to about \$4 billion, lower than in 2018 or 2019. In 2020, hospital construction spending also remained strong, at about \$25 billion, similar to prior years.

In addition, in 2020, hospitals' temporary access to capital increased substantially, as hospitals received over \$83 billion in accelerated Medicare payments.²¹

In 2020, Medicare payments were near costs for relatively efficient hospitals when including relief funds

Between 2019 and 2020, IPPS hospitals' Medicare margin fell from -8.7 percent to -12.6 percent, and the median Medicare margin among relatively efficient hospitals fell from -1 percent to -3 percent when

excluding federal relief funds. However, because federal relief funds were intended to help cover lost revenue and payroll costs—including lost revenue from Medicare patients and the cost of staff that help treat these patients—we also report a Medicare margin that includes a portion of these relief funds (based on FFS Medicare's share of 2019 all-payer operating revenue). With these relief funds, IPPS hospitals' Medicare margin increased slightly to -8.5 percent, and the median Medicare margin for relatively efficient hospitals rose to 1 percent. While our 2020 Medicare margin calculations use the best available data, payment adequacy metrics involving federal relief funds need to be interpreted with caution, since they are still subject to change and are sensitive to hospitals' cost reporting periods.

Projecting IPPS hospitals' Medicare margin in 2022 involves substantial uncertainty, but we project that it will be around -10 percent excluding relief funds and about -9 percent including relief funds. Among relatively efficient hospitals, we project the median Medicare margin to be close to break-even (about 0 percent excluding relief funds and 1 percent with relief funds).

In 2020, growth in IPPS payments per inpatient stay was faster than in prior years, but costs per stay rose even faster

In 2020, both IPPS payments per inpatient stay and costs per stay grew faster than in prior years, but costs grew faster than payments. In 2020, IPPS payments per inpatient stay rose 8.7 percent to almost \$14,000 per stay, nearly three times the 3.2 percent average from 2016 to 2019 (Table 3-3, p. 90). The faster growth in 2020 relative to prior years resulted primarily from:

- **A higher annual update to payment rates.** In 2020, the annual update to IPPS operating base rates was 2.6 percent, and there was an additional 0.5 percent statutory increase.²² These were both higher than in prior years primarily because of faster estimated growth in input prices and the expiration of budgetary reductions mandated through 2019.²³
- **Faster growth in case mix.** In 2020, there was a 3.5 percent increase in reported inpatient case mix, net of the changes from annual updates to relative weights. This growth was faster than in prior

Medicare payment policy changes to increase payments for inpatient care during the public health emergency

The Congress and CMS have enacted numerous changes to Medicare's hospital payment policies in response to the coronavirus public health emergency (PHE).

Suspension of Medicare sequestration

Pandemic relief laws have suspended the 2 percent sequestration of the Medicare program's share of fee-for-service (FFS) Medicare payments from May 1, 2020, through March 31, 2022, and have suspended half of the 2 percent sequestration from April 1, 2022, through June 30, 2022.

We estimate that in fiscal year 2020, the five months of the suspension of Medicare sequestration raised Medicare inpatient prospective payment systems (IPPS) payments by nearly \$0.8 billion, equivalent to a 0.7 percent increase in IPPS payments.

A 20 percent increase for COVID-19 stays

Pandemic relief laws also have established a 20 percent increase to IPPS payments for beneficiaries diagnosed with COVID-19 during the PHE.²⁴

We estimate that in fiscal year 2020, the 20 percent increase in COVID-19 stays raised Medicare's payments by about \$0.7 billion, equivalent to a 0.7 percent increase in IPPS payments.

New COVID-19 treatments add-on payment (NCTAP)

To mitigate potential financial disincentives for hospitals to provide new COVID-19 treatments during the COVID-19 PHE, effective November 2, 2020, through the end of the PHE, CMS has implemented an enhanced inpatient PPS payment—called the new COVID-19 treatments add-on payment (NCTAP)—for eligible inpatient cases that involve use of certain new products authorized or approved to treat COVID-19. CMS set the NCTAP at the lesser of (1) 65 percent of the operating outlier threshold for the claim or (2) 65 percent of the cost of a COVID-19 stay beyond the inpatient operating PPS Medicare payment (including the 20 percent add-on payment). Because these payments first became effective in fiscal year 2021, we do not yet have any claims information regarding NCTAP payments. ■

years because the PHE led to both an increase in severe respiratory conditions and a drop in lower-severity inpatient stays as beneficiaries deferred nonurgent care.

- **Increases in Medicare payments during the PHE.** During the PHE, the Congress increased Medicare IPPS payments, including suspending the 2 percent sequestration of the Medicare program's share of all FFS payments beginning May 1, 2020, and a 20 percent increase to IPPS payments for COVID-19 cases beginning April 1, 2020 (see text box on increased Medicare payments for inpatient care during the PHE). We estimate that these two payment changes each raised IPPS payments by 0.7 percent.

In 2020, hospitals' IPPS costs per stay grew even faster than payments per stay: 12.6 percent, or more than four times the 2.8 percent average from 2016 to 2019 (Table 3-3, p. 90). This faster growth in IPPS costs per stay resulted primarily from:

- **Faster growth in case mix.** In 2020, the case mix grew more quickly than in previous years as the PHE raised the average complexity of inpatient stays. Some of the 3.5 percent growth in case mix in 2020 likely reflects increases in coding intensity, but most of the faster growth in reported case mix reflects a rise in the average relative costs of inpatient stays.

TABLE
3-3

In 2020, IPPS payments per stay grew 8.7 percent while costs per stay grew 12.6 percent

	Annual change 2020	Average of annual changes, 2016–2019
IPPS payments per stay	8.7%	3.2%
Annual update to IPPS operating rates	2.6	1.5
Other non-budget-neutral updates to operating rates	0.5	–0.3
Reported case mix (net)	3.5	1.5
Sequestration suspension and increase for COVID-19 stays	1.4	0.0
All other factors	0.4	0.4
IPPS costs per stay	12.6	2.8
Input prices	2.0	2.3
Reported case mix (net)	3.5	1.5
All other factors	6.7	–1.0

Note: IPPS (inpatient prospective payment systems). “IPPS payments per stay” exclude those for uncompensated care because these are not payments for Medicare fee-for-service beneficiaries’ inpatient stays. The “annual update to IPPS operating rates” includes estimates of changes in market basket and productivity as of the time of the final rule, as well as the budgetary reductions required by the Affordable Care Act of 2010 in each of 2010 to 2019. “Other non-budget-neutral updates” includes the statutory adjustments for coding and documentation improvements. “Reported case mix (net)” reflects the change in average relative (transfer-adjusted) weight assigned to inpatient stays, less the change anticipated and accounted for through budget neutrality factors. “Input prices” reflects CMS’s estimate of actual change in inpatient hospital market basket as of the third quarter of 2021 (and does not include change in the capital market basket). Components may not sum due to rounding.

Source: MedPAC analysis of Medicare Provider Analysis and Review claims, IPPS final rules, hospital cost reports, and CMS market basket data.

- **Factors unique to the public health emergency.** In most years, the growth in IPPS costs per stay is below the change in input prices and reported case mix, implying that hospitals have improved their productivity, coded patients more extensively, or both. However, in 2020, costs per case grew 6.7 percentage points faster than the combined growth in input prices and reported case mix. This additional cost growth is likely due to a combination of several factors unique to the PHE, including:
 - **Spreading fixed costs over fewer inpatient stays.** As inpatient stays across all payers declined over 8 percent in 2020, hospitals’ fixed costs were spread over fewer inpatient stays. The share of inpatient costs that are fixed depends on the length of time examined and whether the changes in volume are anticipated to be temporary or permanent. Historically, an

estimated 20 percent of hospitals’ costs were fixed over a one-year period, in part because that is a sufficient amount of time for hospitals to adjust labor costs for longer-term trends in patient volume. However, it is more difficult to adjust staffing costs for a shorter, temporary reduction in volume. For that reason, more than 20 percent of costs could have been fixed in 2020. Nevertheless, the publicly reported systems showed a material decline in costs when volume declined in the second quarter of 2020, suggesting that even over a short period of time, a large share of costs is variable.

- **Increase in patient severity beyond reported case mix.** The reported 3.5 percent growth in case mix may be an underestimate of the actual severity of cases, since COVID-19 cases were likely more costly to treat than typical respiratory infections in prior years. While

COVID-19 inpatient stays received a 20 percent increase in payments to help cover these additional costs, across all cases, hospitals' outlier costs per case increased.

- **Higher labor costs per stay.** While total hours worked by hospital employees declined during parts of the PHE, hospitals' labor costs per stay likely rose in 2020, as hospitals hired additional, more expensive staff (such as traveling nurses); in addition, some existing hospital staff worked overtime to handle COVID-19 surges and to cover for other staff on sick leave.
- **Higher supply costs per stay.** During the PHE, services required more supplies than in prior years, such as personal protective equipment and COVID-19 tests; in addition, costs for certain supplies increased because of shortages.
- **Lower productivity per stay.** The addition of new COVID-19 safety protocols and the need for staff to work outside of their typical roles could have lowered productivity.

While IPPS per stay payments and costs grew substantially in 2020, aggregate IPPS payments and costs declined. Payment and cost growth per stay were more than offset by an over 11 percent drop in IPPS stays per FFS Medicare beneficiary and a nearly 3 percent drop in number of FFS Part A Medicare beneficiaries (largely driven by the continued shift of Medicare beneficiaries from FFS to Medicare Advantage).

In 2020, OPPS payments per service grew faster than in prior years, but costs per service increased even faster

In 2020, OPPS payments per separately paid service rose by 13.5 percent, much higher than the 7.1 percent average from 2016 to 2019 (Table 3-4, top rows, p. 92). The growth in 2020 resulted primarily from:

- **Annual update to payment rates.** In 2020, the OPPS update increased payments per service by 1.2 percent. While the OPPS update is set at the IPPS update, the effect of the annual OPPS update is smaller than the effect of the IPPS update for two reasons. First, the OPPS update for 2020 was reduced by a budget-neutrality adjustment to

offset a large amount of “pass-through” spending for expensive drugs and devices. This adjustment reduced the OPPS base payment rate increase to 1.6 percent. Second, the OPPS update does not affect the base payment rates of separately payable drugs and devices, which are based on costs and represent 23 percent of OPPS payments. Therefore, the average effect of the update across OPPS services was 1.2 percent ($77 \text{ percent} \times 1.6 \text{ percent} + 23 \text{ percent} \times 0 \text{ percent}$).

- **Faster growth in complexity.** In 2020, OPPS payments per service rose 6.1 percent due to the mix of outpatient services, measured by the OPPS relative weights of the services. This growth was faster than in prior years because the PHE led to a larger reduction in services that have low relative weights (such as E&M services) compared with services that have high relative weights (such as procedures). This increase in service complexity increased OPPS spending by 4.6 percent.
- **Continued growth in spending on separately payable drugs despite the decline in separately payable outpatient services.** Payments for separately payable drugs grew 29 percent per service, net of the effect of the relaxation of the sequester in May 2020. Separately paid drugs are about 23 percent of total OPPS spending, so this increase in drug spending boosted OPPS spending per service by 6.6 percent (net of the sequester). While this growth rate was slower than in recent years, the fact that drug and device spending grew while the volume of separately paid services declined contributed strongly to the large increase in OPPS spending per separately payable service.
- **Increases in Medicare payments during the PHE.** We estimate that the suspension of the 2 percent sequestration of the Medicare program's share of FFS payments beginning May 1, 2020, raised OPPS payments per service by \$0.5 billion in 2020, which increased spending per OPPS service by 0.9 percent.

In 2020, hospitals' OPPS costs per separately payable service grew even faster than payments per service, at an estimated 24.4 percent, four times the average 6.1 percent growth from 2016 to 2019 (Table 3-4, bottom rows, p. 92). The faster per service cost growth relative to prior years resulted in part from faster growth in the

**TABLE
3-4****In 2020, OPPS payments per service grew 13.5 percent
while costs per service grew 24.4 percent**

	Annual change 2020	Average of annual changes, 2016–2019
OPPS payments per service	13.5%	7.2%
Annual update to OPPS rates	1.2	2.1
Average relative weight of services	4.6	2.3
Separately payable drugs and devices	6.6	2.9
PHE payment changes: suspension of sequestration	0.9	0.0
All other factors	0.0	0.0
OPPS costs per service	24.4	6.1
Input prices	1.6	1.8
Resource requirements of services provided	6.2	2.8
Separately payable drugs and devices	5.7	2.5
All other factors	9.0	-1.0

Note: OPPS (outpatient prospective payment system). Components may not sum due to rounding. "Annual update to OPPS rates" includes estimates of changes in the inpatient operating market basket and productivity as of the time of the final rule, budgetary reductions required by the Affordable Care Act of 2010 in each year from 2010 to 2019, adjustments for year-to-year changes in OPPS spending on outliers and pass-through items to maintain budget neutrality, and the share of OPPS payments for separately payable drugs that are not affected by the annual update. "Input prices" reflects CMS's estimate of actual change in inpatient market basket as of the third quarter of 2021. The effect of separately paid drugs and devices is smaller on costs than on payments because we assumed the payments for separately paid drugs and costs for separately paid drugs are equal. The costs for outpatient care are higher than the payments, so the increase in drug costs from 2019 to 2020 had a smaller effect on costs than on payments.

Source: MedPAC analysis of OPPS claims, OPPS final rules, hospital cost reports, and CMS market basket data.

average resource requirements of the services provided and higher costs of separately payable drugs. However, given that these factors and input price growth accounted for only 14.1 percentage points of the 24.4 percent growth, we estimate that other factors resulted in costs rising by about an additional 9 percent. Similar to the additional growth in inpatient costs per stay, this additional per service cost growth was likely driven by factors unique to the PHE, including increased time associated with providing outpatient services due to COVID protocols, increased testing and protective equipment costs, and spreading fixed costs over fewer services.

The higher growth in OPPS payments and costs than in IPPS payment and costs reflects continued growth in the use and prices of separately payable drugs. These drugs are profitable to hospitals in aggregate because

many hospitals acquire the drugs through the 340B drug pricing program, which enables covered hospitals to purchase drugs at significantly reduced prices.

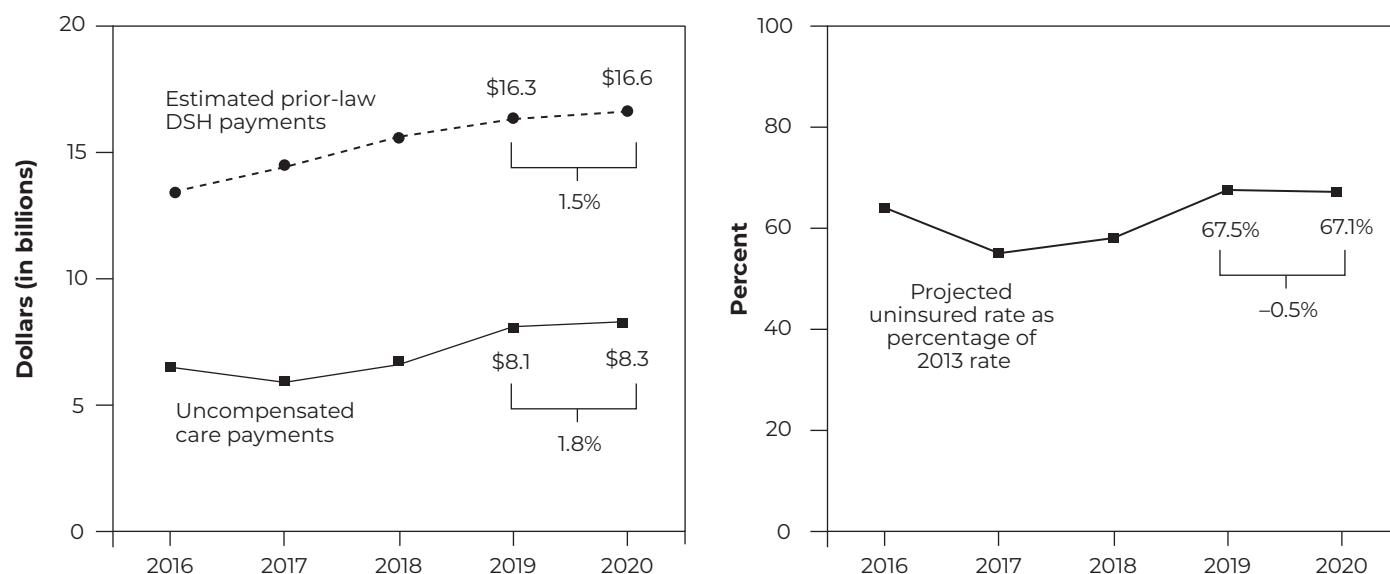
While OPPS payments and costs per service grew substantially in 2020, aggregate OPPS payments and costs declined. Growth in per visit payments and costs were more than offset by an over 17 percent decline in OPPS visits per FFS Medicare beneficiary and a 2.6 percent decline in FFS Part B Medicare beneficiaries (largely driven by the continued shift of Medicare beneficiaries from FFS to Medicare Advantage).

In 2020, uncompensated care payments increased about 2 percent

In addition to IPPS payments for FFS Medicare beneficiaries' inpatient stays, the Medicare program also makes uncompensated care payments to hospitals

FIGURE
3-8

Medicare's uncompensated care payments to hospitals increased nearly 2 percent in 2020



Note: Uncompensated care payments are post sequestration; the 2 percent sequestration of Medicare payments was suspended in May 2020. CMS estimated that from 2019 to 2020, the uninsured rate declined from 9.5 percent to 9.4 percent, equivalent to a change from 67.7 percent to 67.1 percent of the 2013 uninsured rate of 14 percent. There was also a 0.2 percentage point mandatory reduction through 2019, bringing the projected uninsured rate in 2019 down to 67.5 percent.

Source: MedPAC analysis of inpatient prospective payment systems final rules.

to help cover their costs of treating the uninsured. When the rate of the uninsured rises and hospitals have greater losses on uncompensated care, the Medicare program makes higher uncompensated care payments to hospitals.

In 2020, uncompensated care payments grew 1.8 percent to \$8.3 billion (Figure 3-8). Under current law, the uncompensated care pool is the product of two factors: 75 percent of the estimated DSH payment under prior law and the uninsured rate as a percentage of the rate in 2013. This amount is subject to sequestration (when it is in effect). Thus, the 1.8 percent growth in the 2020 uncompensated care pool was the result of:

- an estimated 1.5 percent increase in what DSH payments would have been under prior law (from \$16.3 billion up to \$16.6 billion);²⁵

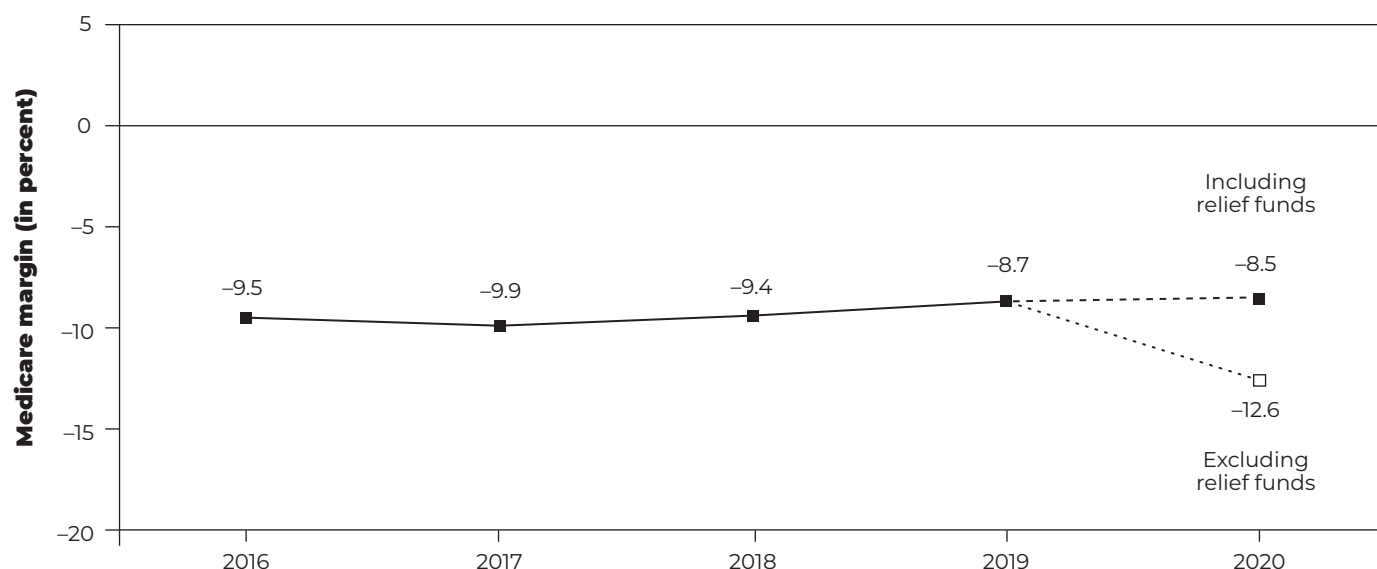
- a projected 0.5 percent decline in the national uninsured rate relative to 2013 (after taking into account the mandatory 0.2 percent point reduction through 2019); and
- a 0.8 percent increase from the suspension of the 2 percent sequestration of Medicare payments starting in May 2020.

In 2020, IPPS hospitals' Medicare margin remained negative but increased slightly when Medicare's share of federal relief funds is included

In 2020, IPPS hospitals' Medicare margin declined from -8.7 percent to -12.6 percent when excluding the reported federal relief funds.²⁶ However, because federal relief funds were intended to help cover lost revenue and payroll costs—including lost revenue from Medicare patients and the cost of staff who help

**FIGURE
3-9**

In 2020, IPPS hospitals' Medicare margin remained negative but increased slightly when including Medicare's share of federal relief funds



Note: IPPS (inpatient prospective payment systems). "Relief funds" refers to Provider Relief Fund payments and Paycheck Protection Program forgiven loans recorded on hospitals' cost reports, with the Medicare share calculated using fee-for-service Medicare's share of 2019 all-payer operating revenue. Hospitals' "Medicare margin" is calculated as aggregate Medicare payments minus aggregate allowable Medicare costs, divided by aggregate payments. Payments and costs include multiple hospital service lines (including inpatient, outpatient, swing bed, skilled nursing, rehabilitation, psychiatric, and home health services) as well as direct graduate medical education and uncompensated care payments.

Source: MedPAC analysis of hospital cost reports.

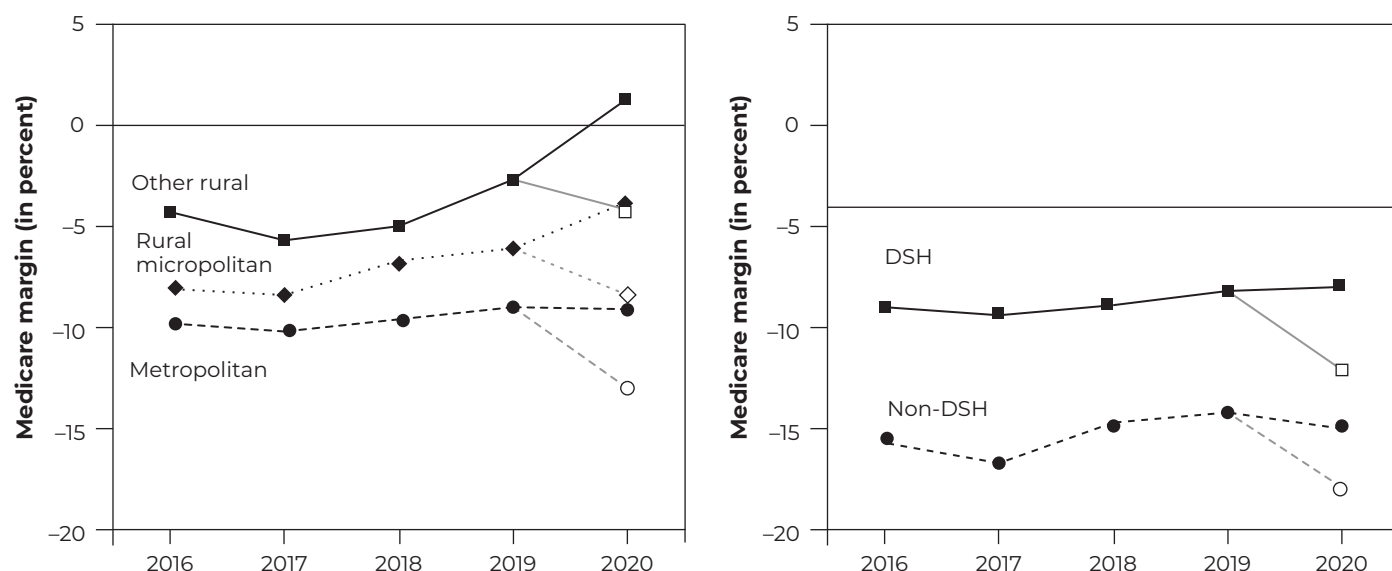
treat these patients—we include a portion of these relief funds (based on FFS Medicare's share of 2019 all-payer operating revenue) in our Medicare margins. Using this method, we allocated \$6.4 billion of the \$33 billion in federal funds that hospitals reported on their cost reports toward hospitals' care of FFS Medicare beneficiaries. With these relief funds, IPPS hospitals' 2020 Medicare margin increased slightly to -8.5 percent (Figure 3-9). Our 2020 Medicare margins use the best available data, but payment adequacy metrics involving federal relief funds need to be interpreted with caution, as they are still subject to change and are sensitive to hospitals' cost reporting periods. Nonetheless, the existing data show that the federal relief funds did their job of keeping hospitals' financial performance on trend.

Consistent with historical trends, in 2020 the Medicare margin continued to vary substantially across hospital characteristics, and some variations widened due to targeted relief funds and differences in the extent to which hospitals controlled their costs. In particular:

- **In 2020, rural hospitals continued to have a higher Medicare margin than urban hospitals and had a larger increase when including federal relief funds.** Between 2019 and 2020, the Medicare margin fell at both rural and urban hospitals when excluding relief funds, but the decline was smaller at rural hospitals: Rural nonmicropolitan ("other rural") IPPS hospitals' Medicare margin fell from -2.6 percent to -4.2 percent and rural micropolitan hospitals' Medicare margin fell from -6.1 percent

**FIGURE
3-10**

IPPS hospitals' Medicare margin was higher among rural hospitals and those that treat a high share of low-income patients, with increases over 2019 when including Medicare's share of federal relief funds



Note: IPPS (inpatient prospective payment systems), DSH (disproportionate share hospital). "Relief funds" refers to Provider Relief Fund payments and Paycheck Protection Program forgiven loans recorded on hospitals' cost reports, with the Medicare share calculated using fee-for-service Medicare's share of 2019 all-payer operating revenue; the lower unfilled markers in 2020 (connected with a gray line) show the margin when excluding relief funds. Hospitals' "Medicare margin" is calculated as aggregate Medicare payments minus aggregate allowable Medicare costs, divided by aggregate payments. Payments and costs include multiple hospital service lines (including inpatient, outpatient, swing bed, skilled nursing, rehabilitation, psychiatric, and home health services) as well as direct graduate medical education and uncompensated care payments. Metropolitan (urban) counties contain an urban cluster of 50,000 or more people, and rural micropolitan counties contain a cluster of 10,000 to 50,000 people.

Source: MedPAC analysis of hospital cost reports.

to -8.4 percent, while urban hospitals' Medicare margin fell from -9.0 to -13.0 percent. Rural hospitals received substantial federal relief funds during the PHE. After allocating a share of these relief funds to Medicare, the Medicare margin at rural hospitals increased: Rural nonmicropolitan IPPS hospitals' Medicare margin rose to 1.3 percent—the first time it was positive since 2015—and rural micropolitan IPPS hospitals' Medicare margin rose to -3.8 percent—its highest level since 2013.²⁷ In contrast, metropolitan IPPS hospitals' Medicare margin remained steady at about -9 percent with relief funds (Figure 3-10, left panel).

- **In 2020, disproportionate share hospitals continued to have a higher Medicare margin than other hospitals and had a larger increase after allocating federal relief funds.** Between 2019 and 2020, both DSH hospitals' and non-DSH IPPS hospitals' Medicare margin declined by similar amounts when excluding relief funds: DSH hospitals' Medicare margin fell from -8.2 percent to -12.1 percent and IPPS non-DSH hospitals' Medicare margin fell from -14.2 percent to -17.9 percent. However, DSH hospitals received substantial federal relief funds during the PHE. After allocating a share of these relief funds to Medicare, DSH hospitals' Medicare margin rose to a five-year high of -8.0 percent, a

slight increase.²⁸ In contrast, non-DSH hospitals' Medicare margin still declined relative to 2019, to -15.0 percent with relief funds (Figure 3-10, right panel, p. 95).

- **For-profit hospitals continued to have a higher Medicare margin than nonprofits and maintained a positive Medicare margin even prior to relief fund allocation.** Between 2019 and 2020, for-profit IPPS hospitals' Medicare margin held steady at 0.5 percent when excluding relief funds, while nonprofit IPPS hospitals' Medicare margin declined from -10.1 percent to -14.8 percent. In part, this disparity reflects how for-profit hospitals were able to control their costs in concert with their declining Medicare payments, while nonprofit hospitals lowered their costs by only about half of their decline in Medicare payments. When relief funds were included, for-profit IPPS hospitals' Medicare margin increased to 3.1 percent, the highest level since 2002. In contrast, nonprofit hospitals' Medicare margin still declined slightly relative to 2019, to -10.5 percent with relief funds.

In 2020, relatively efficient hospitals' median Medicare margin increased slightly when including Medicare's share of federal relief funds Because hospitals vary in the extent to which they control costs and provide quality care, the Commission also examines Medicare margins among relatively efficient hospitals (see text box). In each year from 2015 to 2019, the median Medicare margin for each cohort of hospitals we identified as relatively efficient was between -2 percent and 0 percent. In 2020, the median Medicare margin among the 15 percent of hospitals we identified as relatively efficient was -3 percent when excluding reported relief funds and 1 percent when Medicare's share of relief funds and actual hospital costs were included (Table 3-5, p. 98).²⁹ This is consistent with data over the last several years showing relatively efficient hospitals approximately breaking even on Medicare.³⁰ In 2020, the relatively efficient hospitals' lower costs per inpatient stay (91 percent of the national median) allowed them to generate better Medicare margins than the comparison group. The relatively efficient group also had better patient satisfaction, with 72 percent of H-CAHPS respondents rating the hospital a 9 or 10 in 2020, compared with 69 percent for other hospitals. In addition, while mortality rates increased in 2020 at both relatively

efficient and other hospitals because of the effects of the pandemic, the relatively efficient hospitals (those that had relatively good prepandemic quality metrics) continued to have lower risk-adjusted median mortality and readmission rates than other hospitals during the pandemic. Among our sample of 292 relatively efficient hospitals, relative mortality was 8 percentage points below the national median and relative readmission rates were 4 percentage points below the national median in 2020—levels similar to prior years. These results suggest that relatively efficient and other hospitals' mortality metrics were equally affected on average by the pandemic.

As in past years, relatively efficient hospitals were spread across the country and represented diverse categories of hospitals, including teaching, nonteaching, rural, urban, for-profit, and nonprofit hospitals, as well as hospitals serving large shares of low-income patients. On average, the shares of Medicare and Medicaid patients are similar in both groups. While most types of hospitals were represented in the efficient group, a disproportionate share of efficient hospitals had relatively high volumes of admissions. Volume primarily affects our efficiency measures in two ways. First, higher-volume hospitals tended to have lower risk-adjusted mortality. Second, we require some consistency of results over three years and remove from the efficient group any hospital that performed in the bottom third on any metric in a single year.³¹ Thus, random variation in smaller hospitals may make them more likely to be excluded from our efficient group. About 34 percent of the relatively efficient hospitals had a high share of patients receiving supplemental security income (SSI) payments (a share above the median); the underrepresentation of hospitals serving low-income patients could reflect higher readmission rates for low-income patients.³² For-profit and nonprofit hospitals were both deemed relatively efficient between 15 percent and 16 percent of the time. While for-profit hospitals tended to have lower costs, nonprofit hospitals tended to perform slightly better on our quality metrics.

Projected Medicare aggregate margin for 2022

We project IPPS hospitals' Medicare margin in 2022 based on payments and costs from the most recent year of available data (2020) and policy and environmental changes that took place in 2021 and are anticipated in 2022. While the coronavirus PHE has

Identifying relatively efficient hospitals

The Commission follows two principles when identifying a set of efficient providers. First, the providers must do relatively well on cost and quality metrics. Second, the performance has to be consistent, meaning that the provider cannot have poor performance on any metric over the past three years. In the hospital sector, the variables we use to identify relatively efficient hospitals are hospital-level mortality rates (risk-adjusted, all-condition mortality during an inpatient stay through 30 days after discharge), readmission rates (risk-adjusted, all-condition readmission rates within 30 days after an initial stay), and standardized inpatient Medicare costs per case. Our assessment of efficiency is not in absolute terms but, rather, relative to a comparison group of other hospitals paid under Medicare's inpatient prospective payment systems (IPPS).³³

Categorizing hospitals as relatively efficient

We assigned IPPS hospitals to the relatively efficient group or the control group according to each hospital's performance relative to the national median on a set of risk-adjusted cost and quality metrics for the three years prior to the most recent cost report year. We then examined the performance of the two hospital groups in the most recent cost report year.

Hospitals were identified as relatively efficient if they met four criteria in each of the three prior years:

- Risk-adjusted mortality rates were among the best two-thirds of all hospitals.
- Risk-adjusted readmission rates were among the best two-thirds of all hospitals.
- Standardized costs per inpatient stay were among the best two-thirds of all hospitals.
- Risk-adjusted mortality or standardized costs per stay were among the best one-third of all hospitals.

The objective was to identify a sample of hospitals that consistently performed at an above-average level on at least one measure (cost or quality) and that always performed reasonably well on all measures. Because we screen out hospitals that have few Medicaid patients or have poor performance in a single year, our methodology does not seek to identify all efficient hospitals, only a subsample of relatively efficient hospitals. The rationale for this methodology and the details of computing the various measures are discussed in our March 2011 report (Medicare Payment Advisory Commission 2011). As a secondary check on hospital quality, we use the Consumer Assessment of Healthcare Providers and Systems survey to require that at least 60 percent of the hospital's patients rated the hospital a 9 or 10 on a 10-point scale (in the year prior to the performance period).³⁴ ■

made 2020 and 2021 anomalous years in many respects and it is impossible to predict with certainty the extent to which these effects will continue into 2022, we project that IPPS hospitals' Medicare margin in 2022 will be approximately -10 percent when excluding relief funds and will remain around -9 percent with relief funds. Among relatively efficient hospitals, we project that the median Medicare margin in 2022 will remain close to break-even.

We project that Medicare's payments to hospitals will be higher in 2022 than in 2020 owing to the inclusion of relief funds, but slightly lower when excluding these funds. The key changes to Medicare's payments to hospitals in 2021 and 2022 are:

- **Lower annual updates to hospital rates.** The annual update to the IPPS and OPIS base rates was 2.4 percent in 2021 and 2.0 percent in 2022—both

**TABLE
3-5**

Performance of relatively efficient hospitals

Relative performance measure	Type of hospital	
	Relatively efficient	Other
Number of hospitals	292	1,598
Share of hospitals in our study sample	15%	85%
Historical performance, 2017–2019 (percent of national median)		
Mortality rate	89%	101%
Readmission rate	92	102
Standardized Medicare costs per stay	90	103
Performance metrics, 2020 (percent of national median)		
Mortality rate	92%	101%
Readmission rate	96	102
Standardized Medicare costs per stay	91	104
Share of patients rating the hospital a 9 or 10 (out of 10), 2020	72	69
Median Medicare margin, 2020		
Medicare margin excluding relief funds	–3%	–10%
Medicare margin with relief funds	1	–6
All-payer total margin	7	5

Note: “Relatively efficient hospitals” and “other hospitals” were identified based on their mean performance during the period from 2017 to 2019 relative to the median hospital’s performance during those years. We removed hospitals with a low share of Medicaid patient days reported on cost reports (the bottom 10 percent of hospitals) and hospitals in markets with high service use (top 10 percent of hospitals) due to concerns that socioeconomic conditions and aggressive treatment patterns can influence unit costs and risk-adjusted quality metrics. “Mortality rate” is the risk-adjusted rate of mortality within an inpatient stay through 30 days after the stay. “Readmission rate” is the risk-adjusted rate of readmission within 30 days of an inpatient stay. “Standardized Medicare costs per stay” are standardized for area wage rates, case-mix severity, prevalence of outlier and transfer cases, interest expense, low-income shares, and teaching intensity. “Share of patients rating the hospital a 9 or 10 (out of 10)” is based on Hospital Consumer Assessment of Healthcare Providers and Systems survey data collected from patients discharged July to December 2020.

Source: MedPAC analysis of Medicare cost report and claims-based quality data.

lower than the 2.6 percent update in 2020 but higher than levels in 2018 and 2019. In addition, for fiscal years 2018 through 2023, IPPS operating rates have increased/will increase 0.5 percent to offset prior coding overpayments (as required by the Medicare Access and CHIP Reauthorization Act of 2018).

- **Declines in the uncompensated care pool.** In 2021, the uncompensated care pool declined slightly, but it will fall 13 percent in 2022. This drop is driven by a nearly 13 percent overestimate of 2021

DSH payments (in part from much lower than anticipated volume in 2020), an over 5 percent increase in DSH payments from 2021 to 2022 (largely from anticipated increases in inpatient stays), and a nearly 6 percent decline in the uninsured rate from 2021 to 2022 (in part from temporary Medicaid enrollment support in recent legislation).³⁵

- **Declining federal relief funds and Medicare payment changes.** Some federal relief funds and Medicare payment changes during the PHE

continued into 2021 and will continue into at least part of 2022. For example, Provider Relief Fund payments—a portion of which support providers’ care of FFS Medicare beneficiaries—began in 2020 and over \$25 billion is scheduled to be distributed in fiscal year 2022.³⁶ In addition, the 2 percent sequester reduction in Medicare’s share of payment rates was suspended starting May 1, 2020, lasting through March 31, 2022, and then phased in at a 1 percent reduction through June 30, 2022. The additional 20 percent payment for COVID-19 inpatient stays will be in effect through the end of the PHE.

- Increases in volume.** We expect that FFS Medicare volume per capita will be higher in 2022 than in 2020 (i.e., will return to closer to historical trends), since we do not anticipate any months comparable to the dramatic volume decline in April 2020. As the pandemic eventually subsides, we anticipate that some beneficiaries and providers will reschedule previously delayed care and some beneficiaries will require more care than they would have if they had not delayed. However, there may also be some offsetting declines due to the higher mortality during 2020 and 2021 of the highest-need patients.

An area of greater uncertainty is hospitals’ cost growth. However, we anticipate that in 2022, cost growth will once again be less than the combined growth in input prices and case mix, consistent with historical trends (Medicare Payment Advisory Commission 2020). Based on CMS’s most recent projections, we account for increased wage growth in 2022 in our cost growth estimates. While hospitals will continue to have COVID-19 cases in 2022 and incur associated costs, we expect that these costs will not be as high as they were in 2020 or 2021. Furthermore, because hospitals will continue to receive some relief funds in 2022 as well as additional Medicare payments for COVID-19 cases through the end of the PHE, we anticipate that these additional payments will roughly offset hospitals’ COVID-19 costs.³⁷

Based on these factors, we project IPPS hospitals’ Medicare margin in 2022 to be about -10 percent excluding relief funds and -9 percent with relief funds. We also project relatively efficient hospitals’ median Medicare margin in 2022 to be about 0 percent excluding relief funds and 1 percent with relief funds. The exact increase in hospitals’ Medicare margin will

depend in large part on the duration and severity of the coronavirus pandemic, volume changes, case-mix changes, and changes in costs relative to input price inflation, as well as any congressional or federal response to the pandemic in 2022.

How should Medicare payments change in 2023?

Under current law, Medicare’s base payment rates under the IPPS and OPPS are increased annually based on the projected increase in the hospital market basket less a projected increase in productivity. In addition, in each year from 2018 through 2023, the IPPS base payment rate is increased by an additional 0.5 percent to phase out adjustments that were put in place to recoup prior coding-induced overpayments. The final update for 2023 will not be set until summer 2022, but CMS’s third-quarter 2021 projections of the market basket and productivity (and the additional statutory increase to IPPS payments) would result in the IPPS base payment rate increasing by 2.5 percent and the OPPS base payment rate increasing by 2.0 percent. These projections are based in part on an estimated 3.1 percent growth in wages and benefits in 2023, which is higher than in prior years. The final update will include August 2022 estimates of 2023 growth in wages and other inputs and thus could be lower or higher than the current projected update, given future projections of input price inflation and productivity.

The update recommendation for hospital payment rates in 2023 is based on indicators of beneficiaries’ access to care, quality of care, hospitals’ access to capital, and the relationship between FFS Medicare payments and hospital costs.

RECOMMENDATION 3

For fiscal year 2023, the Congress should update the 2022 Medicare base payment rates for acute care hospitals by the amount specified in current law.

RATIONALE 3

Our payment adequacy indicators in 2020 were mixed but generally positive. FFS Medicare beneficiaries continued to have good access to inpatient and outpatient acute hospital care, and hospitals

The Bipartisan Budget Act of 2018 mandated that the Commission report on the modification of the low-volume hospital payment adjustment

SEC. 50204. EXTENSION OF INCREASED INPATIENT HOSPITAL PAYMENT ADJUSTMENT FOR CERTAIN LOW-VOLUME HOSPITALS.

(b) MEDPAC REPORT ON EXTENSION OF INCREASED INPATIENT HOSPITAL PAYMENT ADJUSTMENT FOR CERTAIN LOW-VOLUME HOSPITALS.—

(1) IN GENERAL.—Not later than March 15, 2022, the Medicare Payment Advisory Commission shall submit to Congress a report on the extension of the increased inpatient hospital payment adjustment for certain low-volume hospitals under section 1886(d)(12) of the Social Security Act (42 U.S.C. 1395ww(d)(12)) under the provisions of, and amendments made by, this section.

(2) CONTENTS.—The report under paragraph (1) shall include an evaluation of the effects of such extension on the following:

- (A) Beneficiary utilization of inpatient hospital services under title XVIII of the Social Security Act (42 U.S.C. 1395 et seq.).
- (B) The financial status of hospitals with a low volume of Medicare or total inpatient admissions.
- (C) Program spending under such title XVIII.
- (D) Other matters relevant to evaluating the effects of such extension. ■

maintained strong access to capital markets. Federal relief funds largely offset hospitals' pandemic costs on average and more than offset costs for groups of hospitals that received targeted funds. In other words, federal relief funds did their intended job of meeting hospitals' additional financial challenges during the pandemic.

Furthermore, we anticipate that changes caused by the PHE will be temporary (other than possibly increased wage rates, which should be accounted for under the current-law annual updates to the hospital market basket) and that relatively efficient hospitals' median Medicare margin will remain near break-even in 2022.

The Commission anticipates that a current-law update to hospital payment rates in 2023 would be enough to maintain beneficiaries' access to hospital inpatient and outpatient care and keep IPPS and OPDS payment rates close to the cost of delivering high-quality care efficiently.

Importantly, the current-law update will be tied to August 2022 forecasts of how much wages and other input prices will grow in fiscal year 2023. The current forecast of a 2.0 percent current-law update in 2023 includes a 3.1 percent growth in wages and benefits (which is higher than in prior years), slower growth in other inputs, and a productivity adjustment. However, the final update could be lower or higher than 2.0 percent, given future projections of input price inflation and productivity.

IMPLICATIONS 3

Spending

- Maintaining the current-law update would not change spending relative to current law.

Beneficiary and provider

- We do not expect the recommendation, relative to current law, to materially affect beneficiaries' access to care or providers' willingness to treat Medicare beneficiaries.

Mandated report on Bipartisan Budget Act of 2018 changes to the low-volume hospital payment adjustment

By law, CMS adjusts the per stay payments of hospitals with low inpatient volume to account for their higher costs due to a lack of economies of scale. The Congress dramatically altered the low-volume hospital (LVH) policy in 2010 by temporarily shifting away from empirical analyses conducted by CMS to set the LVH adjustments and eligibility by relying on statutorily defined, broader criteria and a specified sliding scale payment adjustment. The Commission noted several concerns with the modified LVH policy, including that the adjustment was not well targeted to hospitals most in need of support. Subsequently, the Bipartisan Budget Act (BBA) of 2018 temporarily extended and modified the LVH payment adjustment in the IPPS and mandated that the Commission evaluate the effects of this policy change (see text box on the mandate).

Background

In its June 2001 report to the Congress, the Commission recommended that the Congress require the Secretary to implement a graduated adjustment to IPPS payments per inpatient stay for isolated hospitals with low all-payer inpatient volume. The rationale behind the recommendation was that low-volume hospitals (in particular, those with 200 or fewer all-payer inpatient stays per year) lack economies of scale and thus have higher standardized costs per inpatient stay (Medicare Payment Advisory Commission 2001). The Commission stated that a low-volume adjustment was justified for isolated hospitals because the low-volume challenge was beyond those hospitals' control due to their location in low-population-density rural areas. The key policy questions were which hospitals should get an adjustment and how large of an adjustment should be applied to IPPS payment rates.

Consistent with the Commission's 2001 recommendation, the Medicare Modernization Act of 2003 required CMS to implement an IPPS payment adjustment for low-volume, isolated hospitals, beginning in 2005. The law required that CMS determine the empirical relationship between all-payer volume and standardized costs per case and set the LVH adjustment accordingly, subject to three

limitations: First, CMS could not give adjustments to hospitals with more than 800 stays; second, the hospitals must be more than 25 miles from another IPPS hospital; and third, the adjustment could not be more than 25 percent (Table 3-6, p. 102).

In implementing the LVH adjustment for 2005, CMS limited the adjustment to hospitals with fewer than 200 stays that were more than 25 miles from another IPPS hospital and set the adjustment at 25 percent for all qualifying hospitals. In making this decision, CMS cited the Commission's work and its own analysis, which found that hospitals with fewer than 200 stays had sufficiently higher costs relative to payments to justify an adjustment, and that, for a large majority of these hospitals, the maximum adjustment of 25 percent would be appropriate. CMS also noted that its evidence was not robust and that the relationship between standardized costs and stays is becoming less significant over time (Centers for Medicare & Medicaid Services 2004). CMS updated its analysis in the 2006 final rule but maintained the 2005 criteria in each year through 2010. Under these criteria, 10 or fewer hospitals received the LVH adjustment each year.

In the ACA, the Congress dramatically altered the program by temporarily shifting from having CMS set the LVH adjustment based on its empirical analyses to statutorily specifying broader eligibility criteria and a sliding-scale payment adjustment. Specifically, starting in 2010, the LVH eligibility criteria were expanded to apply to all hospitals with fewer than 1,600 Medicare inpatient stays that were more than 15 miles from the nearest IPPS hospital. Qualifying hospitals with fewer than 200 Medicare inpatient stays would receive the maximum 25 percent adjustment, with a smaller adjustment for hospitals with a larger number of stays.³⁸ As a result, between 2010 and 2011, the number of hospitals qualifying for the LVH adjustment increased from 3 to nearly 500 hospitals. Subsequent legislation continued to extend these temporary criteria through 2017.

The Commission noted several concerns with the modified LVH policy:

- The adjustment was not well targeted, because it is based on Medicare inpatient stays rather than total inpatient stays, while economies of scale depend on total stays.

**TABLE
3-6**

Legislative history of the low-volume hospital IPPS payment adjustment and eligibility criteria, 2005 to present

Law	Effective fiscal years	Inpatient volume criterion	Isolation criterion	Low-volume payment adjustment percentage
Medicare Modernization Act of 2003	2005–2010	< 800 <i>all-payer</i> inpatient stays	> 25 road miles to nearest IPPS hospital	Empirically justified by CMS (up to 25%); CMS set adjustment at 25% for hospitals with less than 200 stays, 0% for all others
Affordable Care Act of 2010 and subsequent laws	2011–2018	< 1,600 <i>Medicare</i> inpatient stays	> 15 road miles	Up to 25% (linear decline between 200 and 1,599 stays)
Bipartisan Budget Act of 2018	2019–2022	< 3,800 <i>all-payer</i> inpatient stays	> 15 road miles	Up to 25% (linear decline between 500 and 3,799 stays)
Bipartisan Budget Act of 2018	2023 and beyond	< 800 <i>all-payer</i> inpatient stays	> 25 road miles	Empirically justified by CMS (up to 25%)

Note: IPPS (inpatient prospective payment systems). The “inpatient volume criterion” is assessed by CMS using a year 2 to 3 years prior to the year in which the adjustment is made. The “isolation criterion” initially required a low-volume hospital to be more than 25 road miles from the nearest “Subsection (d) hospital” (i.e., a short-term acute care hospital paid under the IPPS or a state waiver) and did not require any minimum distance to the nearest critical access or specialty hospital. The Consolidated Appropriations Act of 2018 altered the distance criterion such that the distance criterion for Subsection (d) hospitals not operated by the Indian Health Service (IHS) applied to only other non-IHS Subsection (d) hospitals, and vice-versa. The “low-volume payment adjustment percentage” is applied to all IPPS payments (exclusive of certain quality payment adjustments), including cost-based hospital-specific rate payments, uncompensated care payments, and indirect medical education payments for Medicare Advantage beneficiaries. “Subsequent laws” refers to the American Taxpayer Relief Act of 2012 (§605); Pathway for SGR Reform Act of 2013 (§1105); Protecting Access to Medicare Act of 2014 (§105); and the Medicare Access and CHIP Reauthorization Act of 2015 (§204).

Source: MedPAC analysis of 42 USC 1395ww(d)(12) and cited laws, regulations (42 CFR 412.101), and CMS final rules.

- The empirical support for adjustments at the higher volume limit is unclear.
- Under both the prior and modified LVH policies, the policy was not well targeted to isolated hospitals (as LVHs can be within any distance of critical access hospitals).
- The LVH adjustment was duplicative for the subset of LVHs that already received cost-based payments through their designation as a sole-community or Medicare-dependent hospital (Medicare Payment Advisory Commission 2012a, Medicare Payment Advisory Commission 2012b).

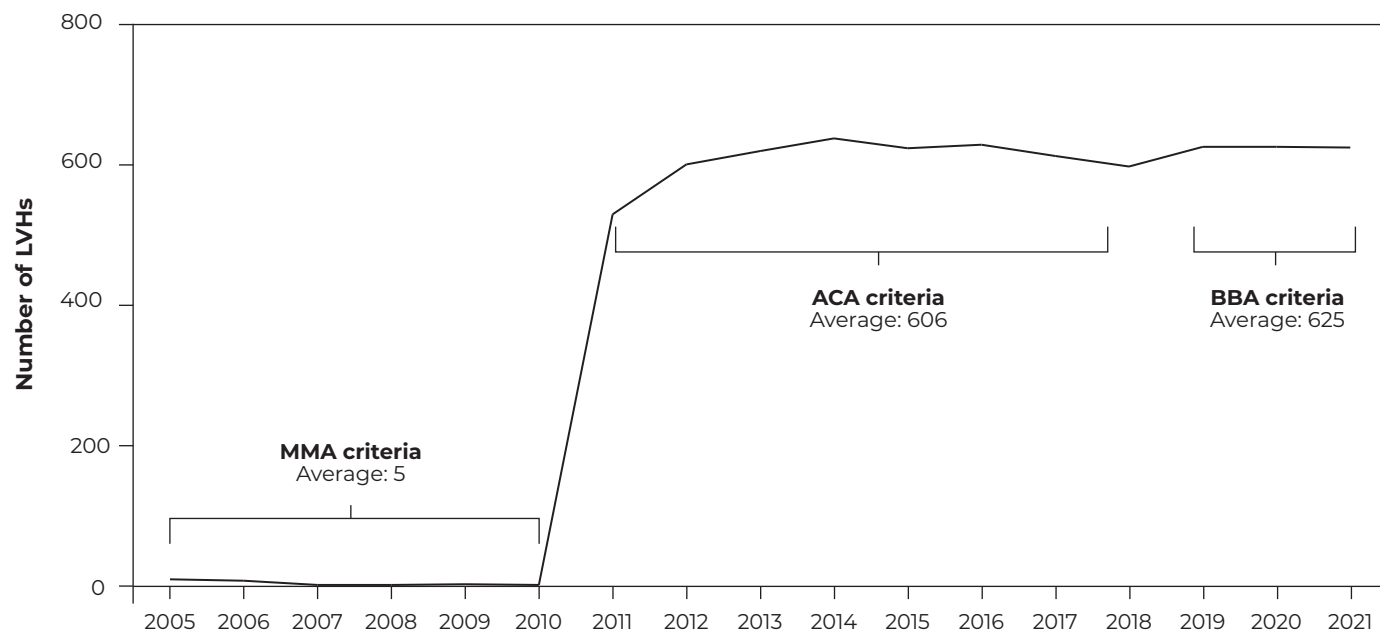
The BBA of 2018 modified the eligibility criteria to revert to basing the low-volume criteria on all-payer

inpatient stays, addressing one of the Commission’s concerns. However, the modified volume criteria—up to 3,800 all-payer inpatient stays—was still substantially higher than the criterion of a maximum of 800 stays in the Medicare Modernization Act of 2003, and the extension maintained a statutorily specified sliding-scale adjustment, with qualifying hospitals with fewer than 500 Medicare stays receiving the maximum 25 percent adjustment, instead of letting CMS determine an adjustment empirically.³⁹

Absent additional congressional action, in fiscal year 2023, the LVH payment adjustment policy will revert to the narrower eligibility criteria established in the Medicare Modernization Act of 2003.

**FIGURE
3-11**

**Number of LVHs increased about 3 percent after
Bipartisan Budget Act of 2018 modifications**



Note: LVH (low-volume hospital), MMA (Medicare Modernization Act of 2003), ACA (Affordable Care Act of 2010), BBA (Bipartisan Budget Act).

Source: MedPAC analysis of CMS final inpatient prospective payment systems rules, Medicare Provider Analysis and Review data, and the inpatient provider specific file.

Effects of changes to LVH policy enacted in the BBA of 2018

The modified LVH policy enacted in the BBA of 2018, effective beginning in 2019, had a modest effect on the number and characteristics of LVHs but a larger effect on total LVH payments, as the policy shifted LVH adjustments toward those hospitals with fewer all-payer inpatient stays and resulted in an increased number of hospitals receiving the maximum 25 percent adjustment.

BBA modifications modestly increased the number of LVHs and shifted adjustment toward LVHs with lower all-payer inpatient volume

The change in eligibility criteria in the BBA of 2018 resulted in a slight increase in the number of LVHs (Figure 3-11). Across the three years since the BBA modified LVH criteria based on all-payer volume (2019

to 2021), there were an average of 625 LVHs. This was about 3 percent above the average number of LVHs from 2011 to 2018 (606) and a 5 percent increase from the number of LVHs in 2018, but very similar to the number from 2014 to 2016. Since 2011, nearly 20 percent of IPPS hospitals were LVHs (data not shown).

In 2019, the vast majority (92 percent) of LVHs retained their 2018 status; thus, the change in eligibility criteria in the BBA of 2018 had a minimal effect on LVHs' characteristics. Both before and after the policy change, LVHs were more likely than other hospitals to be located in rural areas (75 percent vs. 12 percent) and to be government owned (31 percent vs. 11 percent). LVHs were also more likely than other hospitals to receive additional payments from other IPPS adjustments—that is, hospitals designated as disproportionate share hospitals (90 percent vs. 81 percent), sole-community

**TABLE
3-7**

Bipartisan Budget Act of 2018 modifications better targeted support to hospitals with fewer economies of scale: Illustrative example

Example hospital	Inpatient stays			LVH adjustment percentage	
	All-payer	Medicare	Non-Medicare	ACA criteria	BBA criteria
Medium all-payer stays					
Hospital A: High Medicare share (70%)	1,400	980	420	11.1%	18.2%
Hospital B: Low Medicare share (30%)	1,400	420	980	21.1	18.2
Low all-payer inpatient stays					
Hospital C: High Medicare share (70%)	700	490	210	19.8	23.5
Hospital D: Low Medicare share (30%)	700	210	490	24.8	23.5

Note: LVH (low-volume hospital), ACA (Affordable Care Act of 2010), BBA (Bipartisan Budget Act of 2018).

Source: MedPAC example based on LVH criteria in CMS regulations.

hospitals (42 percent vs. 7 percent), or Medicare-dependent hospitals (17 percent vs. 2 percent).

The BBA of 2018 set the new LVH eligibility criteria such that virtually all LVHs eligible in 2018 would remain eligible in 2019, but it also allowed some hospitals with low all-payer volume but relatively higher Medicare volume to become eligible. The altered low-volume eligibility criterion did not affect LVHs' median all-payer inpatient stays (about 1,400) or FFS Medicare inpatient stays (slightly over 500); however, in 2020, the average number of FFS Medicare inpatient stays per LVH increased 6 percent, since the 8 percent of LVHs in 2019 that were added after 2018 had higher FFS Medicare inpatient stays.

In addition, the change to a criterion based on all-payer volume shifted the LVH adjustments toward the subset of LVHs with lower all-payer inpatient volume, consistent with MedPAC's original 2001 recommendation. The prior ACA criterion favored hospitals with lower Medicare shares, while the BBA criterion favors hospitals with lower all-payer volume, regardless of Medicare share (Table 3-7). This modification to LVH eligibility improved the targeting of the LVH adjustment, since it is all-payer volume that determines economies of scale.

LVH payments increased after BBA policy change

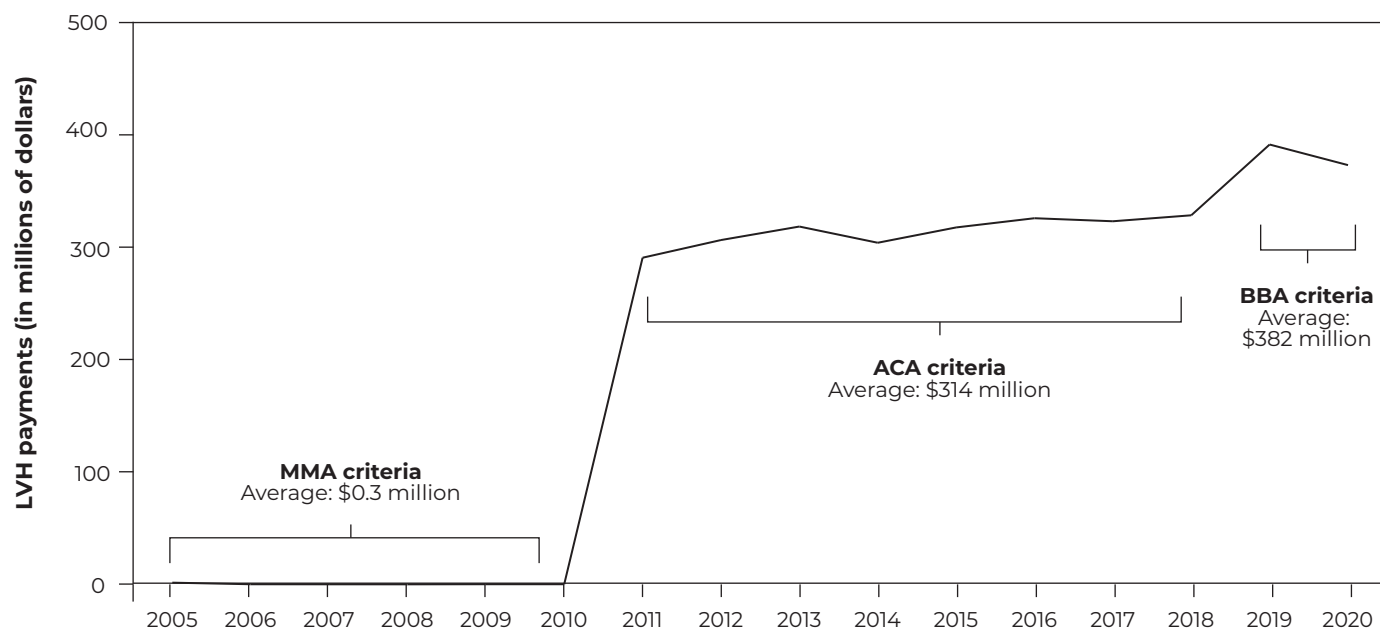
While the change in eligibility criteria enacted in the BBA of 2018 resulted in a modest change in the number and characteristics of LVHs, it had a larger effect on aggregate LVH payments (Figure 3-12). Specifically, across 2019 and 2020, annual LVH payments averaged \$382 million, up 22 percent from the 2010 to 2018 annual average, including a 19 percent increase from 2018 to 2019. The dramatic growth in LVH payments in 2019 was driven by the higher number of LVHs (5 percent), the rise in average FFS Medicare cases per LVH (6 percent), and the increase in the average LVH adjustment percentage (5 percent).⁴⁰ The higher average LVH adjustment percentage between 2018 and 2019 was produced in part by the larger share of LVHs receiving the maximum adjustment (11 percent vs. 15 percent) (data not shown).

Before and after BBA modifications, LVHs had a higher Medicare margin but lower all-payer total margin than other hospitals

Both before and after the LVH payment policy changes in the BBA of 2018, LVHs had a higher Medicare margin than other hospitals but a lower all-payer total margin (Table 3-8, p. 106). For example, in 2018, LVHs' inpatient Medicare margin was about 7 percentage points higher

**FIGURE
3-12**

**Bipartisan Budget Act of 2018 modifications
increased LVH payments by 19 percent in 2019**



Note: LVH (low-volume hospital), MMA (Medicare Modernization Act of 2003), ACA (Affordable Care Act of 2010), BBA (Bipartisan Budget Act).

Source: MedPAC analysis of CMS final inpatient prospective payment systems rules and Medicare Provider Analysis and Review data.

than other hospitals', and this difference increased to 8 percentage points in 2019. This finding suggests that (1) the LVH adjustment—in combination with the other inpatient payment adjustments received by many LVHs—increases Medicare payments by an amount that more than offsets the extra inpatient costs that LVHs may incur due to a lack of economies of scale and (2) the switch to an all-payer volume criterion slightly helped LVHs' inpatient Medicare margins. LVHs also had a higher overall Medicare margin than other hospitals, but to a lesser extent than the difference in inpatient Medicare margin, suggesting that LVHs often struggle with economics of scale across all service lines (because they receive a low-volume payment adjustment only for their inpatient services).⁴¹ Despite these higher overall Medicare margins, LVHs had an all-payer total margin that was about 3 percentage

points below that of other hospitals in both 2018 and 2019. That LVHs' all-payer total margin was lower despite a higher Medicare margin suggests lower profit levels from commercially insured patients, owing to a combination of factors, including a lack of low-volume adjustment by commercial insurers, relatively less market power in negotiating rates than larger hospitals, and possibly a different payer mix on average.

Conclusion

The BBA of 2018 required that LVH volume criteria be based on a low number of all-payer inpatient stays (instead of Medicare stays) and modified the statutorily set adjustment. This modification expanded the number of LVHs in 2019 by 5 percent but increased LVH payments by 19 percent, reflecting the increased number of LVHs as well as the increase in the average

**TABLE
3-8**

Both before and after the Bipartisan Budget Act of 2018 modifications, LVHs had a higher Medicare margin but lower all-payer total margin than other hospitals

Aggregate margin	2018			2019		
	LVHs	Non-LVHs	Difference	LVHs	Non-LVHs	Difference
Inpatient Medicare	-5.9%	-13.0%	7.1	-4.5%	-12.6%	8.0
Overall Medicare	-8.6	-9.3	0.7	-6.2	-8.8	2.6
All-payer total margin	3.9	6.8	-2.9	4.8	7.7	-2.9

Note: LVH (low-volume hospital). A margin is calculated as aggregate payments minus aggregate allowable costs, divided by aggregate payments. "Inpatient Medicare" includes all inpatient services reimbursed under the IPPS exclusive of uncompensated care payments. "Overall Medicare" margin refers to the aggregate margin across multiple hospital service lines (including inpatient, outpatient, swing bed, skilled nursing, rehabilitation, psychiatric, and home health services) as well as direct graduate medical education and uncompensated care payments. "All-payer total margin" includes all patient care services funded by all payers plus nonpatient revenue such as investment income. Difference in components may not equal "difference" due to rounding.

Source: MedPAC analysis of hospital cost report data.

number of FFS Medicare stays per LVH and in the average LVH adjustment.

The current requirement that LVH eligibility be based on all-payer volume (and not Medicare volume) is consistent with Commission's prior recommendation, and LVH policy will become more consistent with that recommendation beginning in 2023 when CMS's authority to determine an empirically justified LVH adjustment is restored. Still, concerns remain that the policy is not well targeted to isolated hospitals and is

duplicative for the majority of LVHs that already receive cost-based payments through their designation as a sole-community or Medicare-dependent hospital.

The Commission continues to support higher payment rates for providers that have high costs due to factors outside of their control, such as isolated providers with low patient volume. However, these special payments should be empirically determined, narrowly targeted, and not duplicative of other payment adjustments. ■

Endnotes

- 1 Throughout this chapter, we use the term “FFS Medicare” as equivalent to the CMS term “Original Medicare.” In addition, unless otherwise noted, throughout this chapter, all years referring to inpatient services refer to fiscal year while those referring to outpatient services refer to calendar year, consistent with when CMS updates these two payment systems.
- 2 Medicare uses the OPPS to pay for outpatient services at all IPPS hospitals (other than those that are part of the Indian Health Service); at certain specialized short-term acute care hospitals (cancer and children’s hospitals); and at other types of hospitals, such as psychiatric, long-term care, and rehabilitation hospitals.
- 3 The IPPS and OPPS reimburse hospitals for their facility costs; clinicians that provide services at hospitals are paid separately under the physician fee schedule (see Chapter 4). Examples of other Medicare payment methodologies for inpatient and outpatient services at short-term acute care hospitals include cost-based payment to small hospitals designated as critical access hospitals and Maryland’s all-payer global budget. In addition, even at IPPS hospitals, certain inpatient costs are paid separately, such as organ acquisition costs and costs of medical education. Hospitals also receive separate Medicare payments for post-acute care services. These other payment methodologies are beyond the scope of this chapter.
- 4 Under the IPPS and OPPS, Medicare pays a prospective rate minus any beneficiary liability, such as a deductible or copayment; the provider collects the remaining amount from the beneficiary or a supplemental insurer. Medicare reimburses hospitals for 65 percent of bad debts resulting from beneficiaries’ nonpayment of deductibles and copayments after hospitals have made reasonable efforts to collect the unpaid amounts.
- 5 More information on the IPPS is available at https://www.medpac.gov/wp-content/uploads/2021/11/medpac_payment_basics_21_hospital_final_sec.pdf.
- 6 More information on the OPPS is available at https://www.medpac.gov/wp-content/uploads/2021/11/medpac_payment_basics_21_opd_final_sec.pdf.
- 7 Hospital closures are defined as cessation of Medicare beneficiaries’ access to inpatient services at a general short-term acute care hospital or critical access hospital in the United States (exclusive of territories). Closures do not include the relocation of inpatient services from one hospital to another under common ownership within 10 miles, nor do closures include hospitals that both opened and closed within a five-year time period. The number of hospital closures and openings in a given year can change over time as hospitals reopen or dates of closure are updated.
- 8 The extent of the spring 2020 declines varied across types of inpatient stays, with smaller decreases among emergency stays. For example, FFS Medicare beneficiaries’ inpatient stays with heart attacks declined 30 percent during the initial wave of the COVID-19 pandemic in April 2020, while the volume of inpatient total hip replacements declined 75 percent in April 2020.
- 9 For more details on waivers enacted by CMS, see <https://www.cms.gov/files/document/covid-19-emergency-declaration-waivers.pdf>.
- 10 For more details on the Acute Hospital Care at Home program, see <https://qualitynet.cms.gov/acute-hospital-care-at-home>.
- 11 The volume of elective services appeared to have declined in 2020 to a greater degree than nonelective services. For example, the volume per capita of a chest X-ray with two views was 49 percent lower in December 2020 than in December 2019, but volume per capita of the most common method for chemotherapy administration was 4 percent higher in December 2020 than in December 2019.
- 12 For example, during the second quarter of 2020, HCA Healthcare had a 12 percent drop in revenue from 2019. But for every dollar of revenue lost, they were able to reduce expenses by 73 cents and remain profitable (HCA Healthcare 2020). Over longer periods, we would expect more than 73 percent of costs to be variable.
- 13 CAHPS® is a registered trademark of the Agency for Healthcare Research and Quality.
- 14 CMS is not publicly reporting H-CAHPS results based on surveys collected the first two quarters of 2020.
- 15 Both HCA and Kaiser reported returning CARES act funding. See <https://hcahealthcareimpact.com/protecting-our-organization/cares-act-funding/> and <https://wa-business.kaiserpermanente.org/kaiser-permanente-cares-act-funding/>.

- 16 In addition to rural hospitals and clinics, certain hospitals in small metropolitan areas and rural specialty hospitals were also eligible for a portion of the targeted distribution of Provider Relief Fund payments for providers in rural areas. For more details on the targeted Provider Relief Fund distributions, see <https://www.hrsa.gov/provider-relief/past-payments/targeted-distribution>.
- 17 For more details on the Paycheck Protection Program, see <https://www.sba.gov/funding-programs/loans/covid-19-relief-options/paycheck-protection-program>.
- 18 For more details on the targeted Provider Relief Fund distributions, see <https://www.hrsa.gov/provider-relief/past-payments/targeted-distribution>.
- 19 Consistent with prior years, in 2020, hospitals with a higher share of FFS Medicare stays for beneficiaries dually eligible for Medicaid and Medicare had a lower median all-payer margin than those with a lower share.
- 20 Employment estimates are per the Bureau of Labor Statistics' national current employment statistics (<https://www.bls.gov/ces/data/>) and include private general medical and surgical hospitals and government (federal, state, and local) hospitals. End of fiscal year estimates are from September.
- 21 For more details on the COVID-19 Accelerated and Advance Payments program, see <https://www.cms.gov/files/document/covid-medicare-accelerated-and-advance-payments-program-covid-19-public-health-emergency-repayment.pdf>.
- 22 The 0.5 percent statutory increase is from phasing out adjustments that were put in place to recoup prior coding-induced overpayments.
- 23 The Affordable Care Act of 2010 required a budgetary reduction to IPPS payments in each of the years 2010 to 2019. Other factors contributing to the higher growth in 2020 include lower-than-average productivity offsets.
- 24 CMS applied the 20 percent increase only to inpatient operating PPS payments (and not to inpatient capital PPS payments). To address potential Medicare program integrity risks, starting September 1, 2020, claims for COVID-19 admissions were eligible for the 20 percent increase only if they also had a positive COVID-19 laboratory test documented in the patient's medical record. For more information on CMS's implementation, see <https://www.cms.gov/files/document/se20015.pdf>.
- 25 The 1.5 percent increase in estimated 2020 DSH payments under prior law was a result of a 3.1 percent annual update in 2020 (inclusive of the 0.5 percent statutory increase) and a 1.6 percent overestimate of projected 2019 DSH payments.
- 26 Hospitals' Medicare margin refers to the aggregate margin across hospitals and multiple hospital service lines (including inpatient, outpatient, swing bed, skilled nursing, rehabilitation, psychiatric, and home health services), as well as direct graduate medical education and uncompensated care payments. It does not include payments and costs for clinician services provided in hospitals.
- 27 From 2019 to 2020, critical access hospitals' Medicare margin increased slightly when excluding relief funds and reached a record high of 3.6 percent with relief funds.
- 28 As the safety-net hospital targeted relief funds had a minimum distribution of \$5 million, the effect of the relief funds was greater on DSHs' median Medicare margin. For example, among DSHs in the highest quartile of Medicare FFS inpatient stays for beneficiaries dually eligible for Medicaid and Medicare, the median Medicare margin in 2020 increased to -1.5 percent when including relief funds and to +1.8 percent when limited to those with cost reporting periods after June 30, 2020.
- 29 If costs would have been reduced more in the absence of relief funds, the margin decline would have been smaller.
- 30 We have also found that hospitals under financial pressure (those that do not have material profits on non-Medicare patients) have a stronger incentive to control costs and roughly broke even on Medicare in recent years. For-profit hospitals, which have an incentive to maximize shareholder returns, have also roughly broken even on Medicare in recent years (Medicare Payment Advisory Commission 2021).
- 31 We do not adjust our costs per inpatient stay for economies of scale. However, we excluded all hospitals with fewer than 500 Medicare inpatient stays from our analysis. For the remaining hospitals, economies of scale are not a material factor when evaluating costs per discharge because costs are roughly proportionate to the volume of stays for hospitals with over 500 Medicare stays per year (generally over 1,000 all-payer stays). Teaching hospitals tend to have higher costs per stay, but we standardize costs per stay by adjusting for the effect of case mix, outlier cases, and the cost of training residents. After these adjustments, teaching hospital costs on average are similar to non-teaching hospital costs. For a more complete description of the methodology, see online Appendix 3-B from our 2016 report to the Congress, available at <http://www.medpac.gov>.
- 32 We adjust costs per stay for the share of Medicare patients that are on SSI. This is consistent with the rationale behind the DSH program, which was based on the empirical finding that hospitals with higher shares of low-income Medicare patients had higher costs. However, we do not adjust readmission or mortality metrics for patient income. This

is based on our policy of not adjusting quality metrics for income. Because hospitals with high shares of low-income patients tend to have higher readmission rates, only 100 of the 292 relatively efficient hospitals had high levels of low-income Medicare patients on SSI. Prior to accounting for relief funds, the median Medicare margin for the 100 hospitals with a higher share of Medicare patients was 3 percent in 2020, and it was 6 percent after accounting for relief funds. The higher margins at hospitals with low-income patients reflects the fact that these hospitals receive more DSH and uncompensated care add-on payments.

- 33 The objective of this analysis is to find a subset of the relatively efficient hospitals rather than to identify all efficient hospitals. For example, we exclude small hospitals with under 500 inpatient stays from our analysis, not because we know they are inefficient but because we have an insufficient volume of claims to know whether or not they performed at a relatively efficient level.
- 34 We use medians rather than means to limit the influence of outliers on our set of efficient providers.
- 35 The Families First Coronavirus Response Act provided a significant incentive (a 6.2 percentage point increase in the Federal Medical Assistance Percentage rate) to states to forgo disenrolling beneficiaries throughout the PHE. For more information on CMS's projections of the uninsured rate in 2022, see <https://www.cms.gov/files/document/addendum-certification-rates-uninsured-update-fy-2022-final.pdf-0>.
- 36 For more information on the Provider Relief Fund Phase 4 distribution and relief funds from the American Rescue Plan, see <https://www.hhs.gov/about/news/2021/09/10/hhs-announces-the-availability-of-25-point-5-billion-in-covid-19-provider-funding.html>.
- 37 We do not expect the temporary changes to hospital quality programs during the coronavirus PHE to affect IPPS

hospitals' 2022 Medicare margin. Under the hospital value-based purchasing program (HVBP), CMS is applying neutral payment adjustments, instead of rewards or penalties, to all hospitals for fiscal year 2022. This will change the distribution of HVBP funds from earlier years. However, because the Medicare margin includes payments and costs across all hospitals, this temporary change will not affect the aggregate margin computation. The hospital readmissions and health-care-acquired conditions penalty programs continue in fiscal year 2022.

- 38 CMS implemented the sliding scale LVH adjustment for hospitals with more than 200 and fewer than 1,600 Medicare inpatient stays as $((4/14) - (\text{stays}/5,600))$, equivalent to $((1,600 - \text{stays})/5,600)$.
- 39 CMS implemented the sliding scale LVH adjustment for hospitals with more than 500 and fewer than 3,800 all-payer stays as $((95/330) - (\text{stays}/13,200))$, equivalent to $((3,800 - \text{stays})/13,200)$.
- 40 Other factors that increased LVH payments in 2019 included a 51 percent increase in uncompensated care payments to LVHs, as the LVH adjustment is applied to uncompensated care payments. This is greater than the 22 percent increase in aggregate uncompensated care payments across all IPPS hospitals, as LVHs were more likely than non-LVHs to treat a disproportionate share of low-income patients.
- 41 Between 2018 and 2019, the overall Medicare margin rose for both LVHs and other hospitals. As discussed in our March 2021 report, several factors contributed to hospitals' higher Medicare margin in 2019, including growth in uncompensated care payments (Medicare Payment Advisory Commission 2021). Since LVHs are more likely to also be disproportionate share hospitals, they benefit differentially from increased uncompensated care payments.

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C H A P T E R

4

Physician and other health professional services

R E C O M M E N D A T I O N S

- 4-1** For calendar year 2023, the Congress should update the 2022 Medicare base payment rate for physician and other health professional services by the amount determined under current law.

COMMISSIONER VOTES: YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0

-
- 4-2** The Secretary should require that clinicians use a claims modifier to identify audio-only telehealth services.

COMMISSIONER VOTES: YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0

Physician and other health professional services

Chapter summary

Clinicians—including physicians, nurse practitioners, and other health professionals—deliver a wide range of services, including office visits, surgical procedures, and diagnostic and therapeutic services, in a variety of settings. Medicare pays for these services using the physician fee schedule. In 2020, Medicare paid \$64.8 billion for clinician services, accounting for just under 17 percent of traditional fee-for-service (FFS) Medicare spending. In the same year, almost 1.3 million clinicians billed the fee schedule, including physicians, nurse practitioners, physician assistants, therapists, chiropractors, and other practitioners.

In this chapter we recommend a 2023 update to the conversion factor (a fixed dollar amount) used in Medicare’s physician fee schedule. Because of standard data lags, the most recent complete data we have for many of our analyses of payment adequacy indicators are from 2020. Where relevant, we have considered the effects of the coronavirus public health emergency (PHE) on our indicators and whether those effects are likely to be temporary or permanent. To the extent that the effects of the PHE are temporary or vary significantly across clinicians, they are best addressed through targeted temporary funding policies rather than a permanent change to all clinicians’ payment rates in 2023 and future years. Based on information available at the time of publication, we do not anticipate

In this chapter

- Are Medicare payments adequate in 2022?
- How should Medicare payments change in 2023?
- Adding a claims modifier for audio-only telehealth services
- Appendix: Key findings from the Commission’s 2021 access-to-care telephone survey

any long-term effects related to the coronavirus pandemic that would warrant changing the annual update to the physician fee schedule for 2023.

Assessment of payment adequacy

To assess the adequacy of current payment rates for clinician services, we assess beneficiaries' access to care, the quality of their care, and providers' payments and costs.

Beneficiaries' access to care—Overall, beneficiary access to clinician services is comparable to that of privately insured people ages 50 to 64 and comparable to access in prior years, despite the ongoing PHE.

- **Beneficiaries continue to report relatively good access to care.** When we surveyed Medicare beneficiaries ages 65 and over in mid-2021, 93 percent were satisfied with the quality of the care they had received in the past year, and, despite the PHE, only 10 percent reported forgoing care that they thought they should have obtained in the past year. Half of beneficiaries reported that during the past year they had accessed clinicians through telehealth, which CMS has temporarily made widely available to allow Medicare beneficiaries to maintain access to care during the PHE. Over 90 percent of beneficiaries in our survey had a primary care provider and had not needed to find a new primary care provider in the past year. However, among those looking for a new clinician, larger shares reported problems finding a new primary care provider than a new specialist—a phenomenon we have observed in our survey for many years, among both Medicare beneficiaries and the privately insured. This difficulty finding a new primary care provider has been one of the core drivers of the Commission's work to improve beneficiary access to primary care services over the last decade.
- **The supply of clinicians has been growing.** From 2015 to 2019, the total number of clinicians billing the physician fee schedule grew by about 130,000, and the ratio of clinicians to all Medicare beneficiaries also grew during that period. While the number of clinicians held steady in 2020, the ratio of clinicians to beneficiaries dipped slightly that year because of enrollment growth. Over the 2015 to 2020 period, the mix of clinicians changed: The number of primary care physicians plateaued and then began to shrink, while the number of specialists steadily increased, and the number of advanced practice registered nurses and physician assistants grew rapidly. The share of providers billing Medicare who are enrolled in Medicare's participating provider program—meaning they accept physician fee schedule amounts as payment in full—remains very high, and the share

of beneficiaries who report encountering a clinician who does not accept Medicare is extremely low.

- **The number of clinician encounters per beneficiary grew before 2020 but declined in 2020.** From 2015 to 2019, the total number of clinician encounters per beneficiary rose modestly (1.3 percent per year, on average), but in 2020, this number dropped sharply (11.1 percent) due to the effects of the pandemic. Rates of change varied by specialty and type of provider. From 2015 to 2019, before the pandemic, the number of encounters per beneficiary with primary care physicians fell by an average of 2.5 percent per year, while encounters per beneficiary with advanced practice registered nurses and physician assistants rose by an average of 11.2 percent per year.

Quality of care—Quality of care provided by clinicians is difficult to assess in the best of circumstances. In 2020, those difficulties were compounded by the effects of the pandemic on beneficiaries and providers. While we report 2020 results for our quality measures (ambulatory care–sensitive hospitalizations and emergency department visits and patient experience), we have not used those results to inform our conclusions about whether overall quality has improved, worsened, or stayed the same. The 2020 results may reflect temporary changes in the delivery of care and data limitations unique to the PHE rather than trends in the quality of care provided to beneficiaries.

Medicare payments and providers' costs—Although Medicare's total payments for clinician services declined in 2020, overall physician compensation grew slowly.

- **Medicare payments per beneficiary fell in 2020.** After growing at an average annual rate of 2 percent from 2015 to 2019, Medicare's allowed charges (i.e., aggregate payments to providers, including beneficiary cost sharing) for clinician services per FFS beneficiary fell in 2020 by 10.6 percent due to care being postponed or forgone during the PHE. Among broad service categories, allowed charges for evaluation and management services fell by 9.4 percent, while imaging services fell by 11.4 percent, major procedures fell by 9.9 percent, other procedures fell by 12.0 percent, tests fell by 14.1 percent, and anesthesia fell by 14.1 percent.
- **Clinicians' lost revenue during the first year of the pandemic was at least partially offset by federal relief funds.** Medicare spending on clinician services in 2020 was \$8.7 billion lower than it was in 2019; it is too soon to tell whether clinicians experienced revenue declines in 2021. The Congress

has provided clinicians with tens of billions of dollars to offset their pandemic-related revenue losses. This support accelerated the growth of national spending on clinician services, with spending on these services (by all sources, not just Medicare) growing by 5.4 percent in 2020 (up from 4.2 percent growth in 2019). We estimate that, in 2020 and 2021, clinicians received at least \$17 billion through the Provider Relief Fund and up to \$18 billion in forgiven loans through the Paycheck Protection Program.

- **Private insurance payment rates continue to be higher than Medicare payment rates.** In 2020, private insurance payment rates for clinician services were 138 percent of Medicare FFS rates, up from 136 percent in 2019. The growth of private insurance prices could be a result of greater consolidation of physician practices and the acquisition of practices by hospitals, which gives providers more leverage to negotiate higher prices for clinician services with private plans.
- **Physician compensation continues to rise.** Despite reduced Medicare spending on clinician services due to the pandemic, median physician compensation from all payers across all specialties continued to grow in 2020, rising 1.0 percent. During the prepandemic period (2016 to 2019), compensation grew at an average annual rate of 2.5 percent. Median compensation in 2020 remained much lower for primary care physicians than for many specialists—underscoring concerns about the mispricing of physician fee schedule services and its impact on the number of physicians who choose to practice primary care. Although CMS recently raised payment rates for evaluation and management office/outpatient visits (commonly furnished by primary care clinicians), more should be done to improve the accuracy of the fee schedule and increase payments for primary care services. The Commission has made several recommendations and discussed other policies to accomplish these goals over the last decade.
- **Clinicians' input costs are growing.** In 2020, the Medicare Economic Index—which measures the annual change in input prices and is adjusted for economy-wide productivity—grew by 1.9 percent, and CMS currently projects that it increased in 2021 by 2.2 percent and will increase in 2022 and 2023 by 2.3 percent and 1.8 percent, respectively.

How should Medicare payment rates change in 2023?

The Medicare Access and CHIP Reauthorization Act of 2015 mandates no update for clinicians for 2023 (however, clinicians are eligible for annual performance-based payment adjustments through Medicare's Merit-based Incentive Payment System, or they can receive an annual bonus worth 5

percent of their Medicare professional services payments if they participate in advanced alternative payment models). The Commission's analyses suggest that, in aggregate, Medicare's payments for clinician services are adequate. Although clinicians have experienced declines in their Medicare service volume and revenue due to the pandemic, the Congress has provided tens of billions of dollars in relief funds to clinicians during the PHE, and we expect volume and revenue to rebound to prepandemic levels (or higher) by 2023. Therefore, the Commission's recommendation is that, for calendar year 2023, the Congress should update the 2022 Medicare base payment rate for physician and other health professional services by the amount determined under current law. Consistent with the Commission's process for developing a payment update recommendation for 2023, we will continue to monitor our indicators of payment adequacy each year using the most current available data and will make recommendations accordingly in future years.

Adding a claims modifier for audio-only telehealth services

Before the coronavirus public health emergency (PHE), CMS paid for telehealth services under the physician fee schedule only if the services were provided using an interactive telecommunications system that included two-way audio and video communication technology. During the PHE, however, CMS waived this requirement for certain services because not all beneficiaries have the capability to engage in a video telehealth visit from their home. In our March 2021 report to the Congress, the Commission presented a policy option whereby CMS would continue to temporarily cover some telehealth services (including those delivered through an audio-only interaction) after the PHE when the agency determines there is potential for clinical benefit. During this limited period (e.g., one to two years after the expiration of the PHE), policymakers would gather more evidence about the impact of telehealth services (including audio-only services) on access, quality, and cost, and they should use this evidence to decide whether to pay for certain telehealth services (including audio-only interactions) permanently.

However, apart from telehealth services for mental health and substance use disorders and certain evaluation and management services, there is no information on Medicare claims that indicates whether a telehealth service was delivered by an audio-only interaction or an audio-video interaction. Consequently, CMS and others are unable to use claims data to assess the impact of many audio-only telehealth services on access, quality, and cost.

Therefore, the Commission recommends that CMS require clinicians to use a claims modifier to identify all audio-only telehealth services, as the agency has done for audio-only telehealth services for mental health conditions and substance use disorders. This recommendation applies whether Medicare is covering these services temporarily (as during the current PHE) or permanently. ■

The Commission's prior work to improve the accuracy of physician fee schedule payments and increase payments for primary care

High-quality primary care is essential for creating a coordinated health care delivery system. The Commission has a long-standing interest in ensuring that Medicare payments for primary care services—such as ambulatory evaluation and management (E&M) visits—are accurate.¹ Ambulatory E&M visits make up a large share of the services provided by primary care clinicians and certain other specialties (e.g., psychiatry, endocrinology, rheumatology, and neurology). These services have historically been underpriced in the physician fee schedule relative to other services, and the nature of fee-for-service payment allows certain specialties to increase the volume of services they provide—and the

payments they receive—more easily than primary care clinicians. These issues have contributed to substantial compensation disparities between primary care physicians and certain other specialties (see pp. 147–148). In response to these concerns, the Commission has made several recommendations over the years to improve the accuracy of payments for fee schedule services and increase payments for primary care services.

The physician fee schedule's work relative value units (RVUs), which account for the amount of clinician work required to provide a service, are based on an assessment of how much time and intensity (e.g., mental effort and technical skill)

(continued next page)

Background

Clinicians—including physicians, nurse practitioners, and other health professionals—who bill under Medicare's physician fee schedule deliver a wide range of services, including office visits, surgical procedures, and diagnostic and therapeutic services, in a variety of settings. In 2020, the Medicare program paid \$64.8 billion for clinician services, which is \$8.7 billion less than in 2019 and equivalent to just under 17 percent of spending in traditional fee-for-service (FFS) Medicare (Boards of Trustees 2021).² In 2020, almost 1.3 million clinicians, including physicians, nurse practitioners, physician assistants, therapists, chiropractors, and other practitioners, billed Medicare for at least one beneficiary.

To determine Medicare payment rates for clinician services, CMS uses a fee schedule, known as the physician fee schedule, that consists of relative values for about 8,000 services. The relative values are based on the amount of clinician work required to provide each service, along with estimates of expenses related to maintaining a practice and professional liability

insurance costs. These three factors are adjusted for variation in the input prices in different markets, and the sum of these factors is multiplied by the physician fee schedule's conversion factor (a fixed dollar amount equal to \$34.61 in 2022) to produce a total payment amount.³ When clinician services are provided in certain facilities, such as hospitals or skilled nursing facilities, CMS also makes payments to the facilities through other Medicare payment systems, which are discussed in separate chapters in this report.

For many years, the Commission has expressed concern about the accuracy of the physician fee schedule, the underpricing of primary care services relative to other services, and the impact of these problems on the pipeline of future primary care physicians. The underpricing of primary care services likely contributes to compensation disparities among specialties and may be a substantial factor in the decline of primary care physicians that we have observed since 2015. We have made several recommendations to improve the accuracy of the fee schedule and increase payments for primary care services (see text box).

The Commission's prior work to improve the accuracy of physician fee schedule payments and increase payments for primary care (cont.)

services require relative to one another. Some types of services—such as procedures, imaging, and tests—experience efficiency gains over time, as advances in technology, technique, and clinical practice enable clinicians to deliver them faster. However, ambulatory E&M visits do not lend themselves to such efficiency gains because they consist largely of activities that require the clinician's time. When efficiency gains reduce the amount of work needed for a service but the work RVUs for the affected service are not decreased, the service becomes overvalued. Because budget-neutrality rules apply to changes in RVUs, a reduction in the payment rates of these overvalued services would raise the payment rates for all other services, such as ambulatory E&M visits. But this two-step sequence tends not to occur (Medicare Payment Advisory Commission 2018a). As a result, ambulatory E&M visits have become passively devalued over time.

To establish more accurate prices for clinician services, the Commission recommended in 2011 that the Congress direct the Secretary to regularly collect data—including service volume and work time—from a cohort of efficient practices (Medicare Payment Advisory Commission 2011a, Medicare Payment Advisory Commission 2011b). These data should be used to calculate the amount of time that a clinician worked over the course of a week or month and compare it with the time estimates in the physician fee schedule for all of the services that the clinician billed for over the same period. If the fee schedule's time estimates exceed the actual time worked, this finding could indicate that the time estimates—and, hence, the RVUs—are too high. This recommendation has not been adopted by the Congress.

In 2015, the Commission recommended that the Congress establish a per beneficiary payment for primary care clinicians to replace the expired Primary Care Incentive Payment (PCIP) program, which provided a 10 percent bonus payment

on physician fee schedule payments for certain E&M visits provided by primary care clinicians (Medicare Payment Advisory Commission 2015). These additional payments to primary care clinicians should be in the form of a per beneficiary payment to move away from the approach of paying separately for each discrete service. The payment would provide funds to support the investment in infrastructure and staff that facilitate care coordination. Primary care clinicians who receive the per beneficiary payment would continue to receive fee schedule payments for each service they provide to beneficiaries; the per beneficiary payment would supplement their existing fee schedule payments. Funding for the per beneficiary payment would come from reducing payment rates for all services in the fee schedule other than ambulatory E&M visits provided by any clinician. This method of funding would be budget neutral and would help rebalance the fee schedule toward primary care clinicians. This recommendation has not been adopted by the Congress.

In our June 2018 report to the Congress, the Commission described a budget-neutral approach to rebalance the physician fee schedule that would increase payment rates for ambulatory E&M services while reducing payment rates for other services (e.g., procedures, imaging, and tests) (Medicare Payment Advisory Commission 2018a). Under this approach, the higher payment rates would apply to ambulatory E&M services provided by all clinicians, regardless of specialty. In the report, we estimated that a 10 percent increase would raise annual spending for ambulatory E&M services by \$2.4 billion. To maintain budget neutrality, payment rates for all other fee schedule services would be reduced by 3.8 percent. Primary care specialties would receive a substantial increase in their total fee schedule payments (on net) as a result of this change. For example, family practice physicians would receive a 4.9 percent net increase in fee schedule payments, on average.

(continued next page)

The Commission's prior work to improve the accuracy of physician fee schedule payments and increase payments for primary care (cont.)

In 2019, the American Medical Association/Specialty Society Relative Value Scale Update Committee recommended that CMS substantially increase the work RVUs for E&M office/outpatient visits—the most common type of ambulatory E&M visit (Centers for Medicare & Medicaid Services 2020c). In response, CMS increased the RVUs for E&M office/outpatient visits in 2021, thus raising payment rates for these services (Centers for Medicare & Medicaid Services 2020c). For example, CMS increased the total RVUs for a Level 3 E&M visit for an established patient in a freestanding office (Healthcare Common Procedure Coding System code 99213) by 27 percent between 2020 and 2021. Owing to budget-neutrality requirements, CMS offset the increase to rates for E&M office/outpatient visits in 2021 by reducing rates for all physician fee schedule services. The Congress subsequently scaled back this across-the-board reduction by raising 2021 payment rates for all fee schedule services by 3.75 percent and delaying by three years the implementation of a new add-on code for E&M office/outpatient visits.⁴ Recently, the Congress increased 2022 payment rates by 3.0 percent. In 2023, these two temporary payment increases will expire and the full rebalancing of the fee schedule will take effect.

The Commission strongly supported raising the RVUs for E&M office/outpatient visits because this action is an important first step in addressing the long-term devaluation of these services (Medicare Payment Advisory Commission 2020). We also supported CMS's decision to implement this change in a budget-neutral manner because doing so will help to rebalance the fee schedule from services

that have become overvalued (e.g., procedures, imaging, and tests) to services that have become undervalued—thus improving payment accuracy (Centers for Medicare & Medicaid Services 2020c). Maintaining budget neutrality could also help to reduce the large gap in compensation between primary care physicians and certain specialists.

The Commission has also explored ideas to increase the share of physicians choosing to practice primary care. In our June 2019 report to the Congress, we described a potential scholarship or loan repayment program for physicians who provide primary care to Medicare beneficiaries (Medicare Payment Advisory Commission 2019b). By reducing or eliminating educational debt, a scholarship or loan repayment program could provide medical students and residents with a financial incentive to choose a primary care specialty, such as geriatrics. At our November 2019 meeting, we presented ideas for raising payments to primary care physicians that came from our interviews with two dozen primary care experts, ideas such as testing alternative payment models that support primary care on a national basis instead of only in certain regions and creating new billing codes for comprehensive geriatric assessments and fall risk assessments (Medicare Payment Advisory Commission 2019a). Interviewees also suggested ways to increase residents' exposure to high-functioning, community-based primary care practices, such as requiring residency programs that receive Medicare graduate medical education funding to have geriatric rotations. ■

The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) established a schedule of annual updates to the physician fee schedule's conversion factor. At the same time, MACRA also established: (1) bonuses for clinicians who participate in advanced alternative

payment models (A-APMs), such as accountable care organization models that require providers to take on financial risk, and (2) payment adjustments for clinicians who participate in the Merit-based Incentive Payment System (MIPS) (Table 4-1, p. 122). A-APM

**TABLE
4-1****Clinicians are eligible for MIPS performance-based payment adjustments or A-APM bonuses but no updates to their base payment rates in 2023**

	2021	2022	2023	2024	2025	2026 and later
A-APM clinicians						
Update	0%	0%	0%	0%	0%	0.75%
A-APM bonus*	5%	5%	5%	5%	N/A	N/A
Other clinicians						
Update	0%	0%	0%	0%	0%	0.25%
MIPS adjustments*	(-7% to +7%)	(-9% to +9%)	(-9% to +9%)	(-9% to +9%)	(-9% to +9%)	(-9% to +9%)
Additional MIPS adjustments for "exceptional" performance*	\$500 million	\$500 million	\$500 million	\$500 million	N/A	N/A
All clinicians						
Payment increase*	3.75%	3.0%	N/A	N/A	N/A	N/A
Sequestration*	0%	0% (3 months), -1% (3 months), -2% (6 months)	-2%	-2%	-2%	-2%

Note: MIPS (Merit-based Incentive Payment System), A-APM (advanced alternative payment model), N/A (not applicable). A-APM bonuses and MIPS adjustments are based on clinicians' A-APM participation decisions and quality measure performance from two years prior. The annual change to the conversion factor (a fixed dollar amount) for Medicare's physician fee schedule is based on the statutory payment updates listed above and an adjustment to ensure that changes to the fee schedule's work relative value units are budget neutral (not shown). Subsequent to the Medicare Access and CHIP Reauthorization Act of 2015, the Congress increased 2021 fee schedule payments by 3.75 percent and increased 2022 payments by 3.0 percent relative to 2020 payment rates. The Congress also suspended the 2 percent sequester, which normally reduces Medicare payments, from May 2020 through March 2022 and changed the size of the sequester to 1 percent from April through June of 2022; absent additional congressional intervention, the 2 percent sequestration will resume in July 2022.

*Applies in the given year only and is not included in subsequent years' payment rates.

Source: MedPAC analysis of the Medicare Access and CHIP Reauthorization Act of 2015; the Coronavirus Aid, Relief, and Economic Security (CARES) Act of 2020; the Consolidated Appropriations Act, 2021; An Act to Prevent Across-the-Board Direct Spending Cuts, and for Other Purposes, 2021; and the Protecting Medicare and American Farmers from Sequester Cuts Act of 2021.

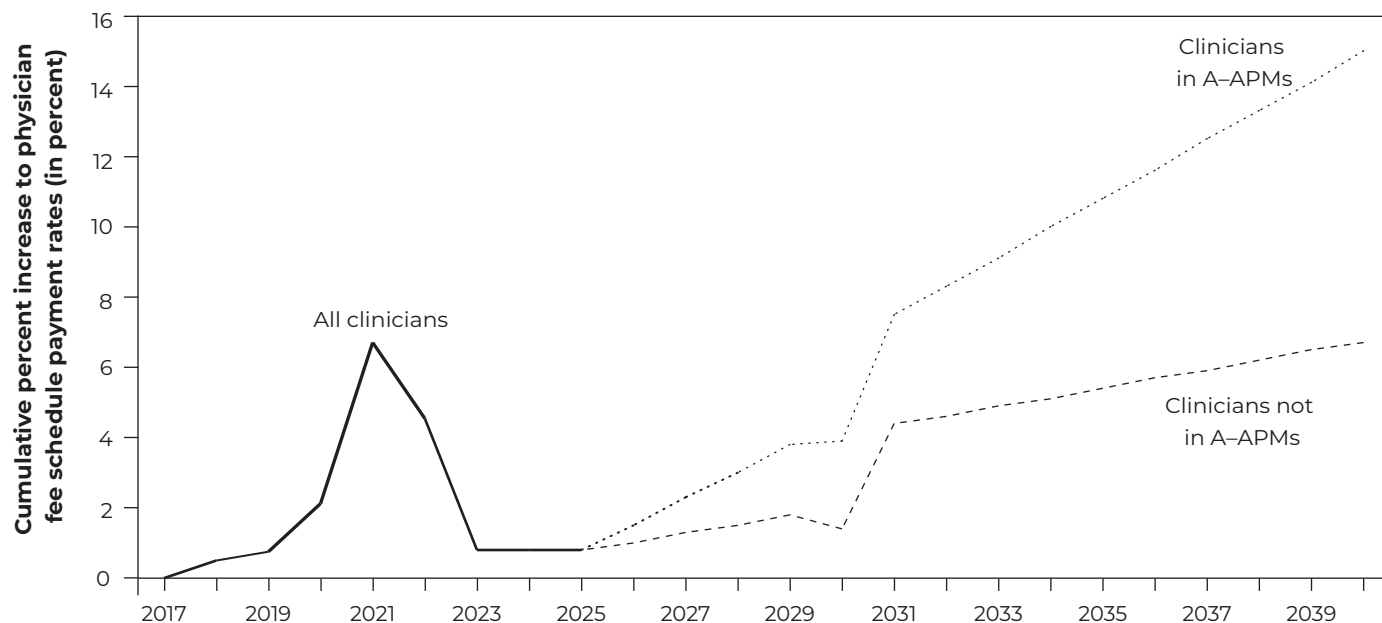
bonuses and MIPS adjustments are based on clinicians' A-APM participation and quality measure performance from two years prior.

Under MACRA, there is no statutory update to the fee schedule's conversion factor in 2023. Instead, clinicians qualifying for the A-APM incentive payment will receive a lump-sum payment worth 5 percent of their annual Medicare professional services payments. MACRA allows CMS to give the clinicians in MIPS payment

adjustments between -9 percent and +9 percent (or higher) in 2023 based on their performance, but historically CMS has given much smaller adjustments of less than +2 percent. For example, in 2021, top performance on MIPS measures yielded a +1.79 percent MIPS adjustment, which is comparable to prior years' top MIPS adjustments. In 2021, about 1 million clinicians received additional payments beyond their base Medicare payment rates: About 800,000 received a

FIGURE
4-1

Cumulative effect of statutory updates to Medicare physician fee schedule base payment rates under current law, relative to 2017 payment rates



Note: A-APM (advanced alternative payment model). Figure shows increases to payment rates in nominal terms. Figure does not show annual Merit-based Incentive Payment System (MIPS) adjustments, which can increase or decrease payments to individual clinicians based on performance measures, or annual 5 percent A-APM bonuses available from 2019 to 2024 because these annual adjustments are not built into subsequent years' payment rates. Figure also does not show CMS adjustments to ensure that changes to the fee schedule's work relative value units are budget neutral.

Source: MedPAC analysis of the Medicare Access and CHIP Reauthorization Act of 2015; the Coronavirus Aid, Relief, and Economic Security (CARES) Act of 2020; the Consolidated Appropriations Act, 2021; An Act to Prevent Across-the-Board Direct Spending Cuts, and for Other Purposes, 2021; and the Protecting Medicare and American Farmers from Sequester Cuts Act of 2021.

positive MIPS adjustment, and about 200,000 received the 5 percent A-APM bonus. Hundreds of thousands of clinicians received no payment adjustment because they are exempt from MIPS (e.g., due to a low volume of Medicare patients). About 3,000 clinicians received negative MIPS adjustments of up to -7 percent, primarily because they failed to report MIPS measure data (Centers for Medicare & Medicaid Services 2020d, Centers for Medicare & Medicaid Services 2018).

As currently implemented, MACRA creates incentives for clinicians to participate in A-APMs, first through bonuses that have historically been larger than MIPS adjustments and then through differential payment updates: Starting in 2026, Medicare payment rates for clinicians in A-APMs will increase by 0.75 percent

per year, while rates for MIPS clinicians will increase by only 0.25 percent per year (Figure 4-1). Over time, the difference between payment rates for clinicians in A-APMs and MIPS will grow, making nonparticipation in A-APMs increasingly unattractive financially. Since clinicians who practice in a wide variety of clinical settings are paid under the physician fee schedule, using the fee schedule to incentivize participation in A-APMs has the potential to encourage a variety of provider types to participate in A-APMs.

Figure 4-1 also captures temporary increases to clinicians' payment rates in 2020, 2021, and 2022:

- In response to the coronavirus pandemic, the Congress suspended the 2 percent sequester that normally applies to Medicare payments for part of

2020, all of 2021, and part of 2022. (In 2030, the size of the sequester will increase, and in 2031 it will expire—raising payment rates from then on.⁵)

- Unrelated to the pandemic, the Congress enacted onetime increases to the physician fee schedule conversion factor of 3.75 percent in 2021 and 3.0 percent in 2022 to partially offset a reduction to the conversion factor. The conversion factor was reduced in 2021 to accommodate an increase to the work relative value units (RVUs) of evaluation and management office/outpatient visits because aggregate changes to the work RVUs of fee schedule services must be budget neutral under current law. (These onetime payment increases in 2021 and 2022 are not included in subsequent years' payment rates.)

Together, these payment increases boosted clinicians' payments per service in 2021 by nearly 6 percent compared with 2019 and by nearly 4 percent in 2022 compared with 2019. In 2023, as these temporary payment policies expire, clinicians' payment rates will return to prepandemic levels (Figure 4-1, p. 123).

Are Medicare payments adequate in 2022?

To assess whether FFS Medicare payments for clinician services are adequate, we examine indicators in three categories:

- **Beneficiaries' access to care**—including beneficiaries' reports of their experience accessing care, growth in the supply of clinicians, and growth in the number of clinician encounters per beneficiary;
- **The quality of beneficiaries' care**—including rates of ambulatory care-sensitive hospitalizations and emergency department visits and patient experience; and
- **Medicare payments and providers' costs**—including growth in Medicare payments per beneficiary, the ratio of commercial payment rates to Medicare's rates for clinician services, growth in physician compensation from all payers, and the change in input costs for clinician services.

Several payment adequacy indicators show significant change from prior years due to the PHE (e.g., reductions in service volume and allowed charges). However, we contend that the changes are largely temporary and are not an indication that payment rates are inadequate (see text box on implications of the pandemic).

Beneficiaries' access to care

According to the Commission's annual survey, Medicare beneficiaries' access to clinician services is largely comparable to that of privately insured individuals. Despite the PHE, most beneficiaries reported no difficulty obtaining the care they needed over the past year. Recent analysis of Medical Expenditure Panel Survey data has also found that around age 65, when most people gain eligibility for Medicare, there is a reduction in reports of being unable to get necessary care and being unable to get needed care because of the cost (Jacobs 2021). In addition, the number of clinicians billing the physician fee schedule grew faster than beneficiary enrollment in Medicare before the pandemic, and the number of clinician encounters per beneficiary was growing steadily before the pandemic.

Beneficiaries continue to report relatively good access to care

Overall, findings from the surveys and focus groups we use to assess Medicare beneficiaries' access to care (see text box, p. 126) are consistent with one another and similar to prior years. The vast majority of beneficiaries report being satisfied with their care and not experiencing trouble accessing care. Yet a few subgroups of Medicare beneficiaries—non-elderly beneficiaries, beneficiaries in certain racial and ethnic groups, and lower-income beneficiaries—report more difficulties accessing care than others.

Continued high satisfaction with health care quality

Medicare beneficiaries remain highly satisfied with their care. Our mid-2021 survey found that among the 94 percent of beneficiaries who received health care in the past year, 93 percent were satisfied with the overall quality of their care. This satisfaction rate is not significantly different statistically from the satisfaction rate for privately insured people ages 50 to 64.⁶ We also heard during our focus groups that most beneficiaries were satisfied with their insurance coverage.

The coronavirus public health emergency and the Commission's payment adequacy assessment for physician and other health professional services

The coronavirus pandemic has had tragic effects on beneficiaries and material effects on providers' patient volume, costs, and overall profitability. It has also had a damaging impact on the nation's health care workforce, with frontline health care workers facing burnout and risks to their health and safety treating COVID-19 cases. The effects of the pandemic have varied considerably over time, and it is not clear when they will end.

From the perspective of assessing the adequacy of Medicare payments, the public health emergency (PHE) has also affected the Commission's payment adequacy indicators. Because of standard data lags, the most recent complete data we have for most payment adequacy indicators are from 2020.

Although it is important to analyze 2020 data to understand what happened to beneficiaries' access to care, quality of care, and Medicare's payments and providers' costs, it will be more difficult to interpret these indicators than is typically the case.

As the Commission stated last year, to the extent that the effects of the coronavirus PHE are temporary—even if over multiple years—or vary significantly across individual clinicians, they are best addressed through targeted temporary funding policies rather than a permanent change to all clinicians' payment rates in 2023 and future years. Only permanent effects of the pandemic will be factored into the Commission's recommended changes in Medicare base payment rates. ■

Most beneficiaries did not forgo care during the pandemic According to a special supplement to CMS's Medicare Current Beneficiary Survey, fielded by phone several times during the PHE, the first few months of the pandemic saw reduced access to care (with 21 percent of beneficiaries reporting forgoing care during these early months) (Centers for Medicare & Medicaid Services 2020a). Fortunately, access was largely restored by summer 2020: When surveyed in fall 2020 and spring 2021, only 7 percent to 8 percent of beneficiaries reported forgoing some care in the prior few months (Centers for Medicare & Medicaid Services 2021a, Centers for Medicare & Medicaid Services 2021b). This finding is consistent with what we heard from clinicians and beneficiaries during our focus groups, with care mainly being delayed during the early months of the pandemic. The most common types of care that Medicare beneficiaries have forgone have been dental care, regular check-ups, treatment for an ongoing condition, and diagnostic or medical screening

tests (Centers for Medicare & Medicaid Services 2021b, Centers for Medicare & Medicaid Services 2021a, Centers for Medicare & Medicaid Services 2020a).

The Commission's annual telephone survey assesses Medicare beneficiaries' access to care over a longer, one-year period. When we surveyed people in mid-2021, 10 percent of Medicare beneficiaries reported forgoing care over the past year—which is not a statistically significant difference from prior years or from privately insured survey respondents ages 50 to 64. Notably, every year our survey consistently finds that a small subset of respondents forgo care—usually because they did not think a problem was serious enough to warrant medical attention or because they just put it off. In our 2020 and 2021 surveys, respondents' reasons for forgoing care shifted—with more respondents pointing to the pandemic as their reason for forgoing care—but the overall share of respondents forgoing care was consistent with prepandemic years.

We use beneficiary surveys and focus groups to assess access to care

We use three data sources to assess beneficiaries' access to clinician services:

- **The Commission's annual telephone survey of 4,000 Medicare beneficiaries ages 65 and over and 4,000 privately insured individuals ages 50 to 64.** The goal in surveying these two populations is to assess whether any access concerns reported by Medicare beneficiaries are unique to the Medicare population or are part of trends in the broader health care delivery system. This year's survey was fielded from April through September of 2021. Our survey includes beneficiaries in fee-for-service (FFS) Medicare and Medicare Advantage (MA), since it is difficult to differentiate between these two types of coverage in a brief survey. MA plans also often pay providers rates that are comparable to those of FFS Medicare, and our analyses of CMS's beneficiary survey find no substantial differences in these two types of beneficiaries' care experiences (Trish et al. 2017). Key findings from the Commission's survey can be found in the appendix to this chapter.
- **CMS's 2019 Medicare Current Beneficiary Survey, a nationally representative in-person survey fielded among 14,000 community-dwelling Medicare beneficiaries.** CMS's beneficiary survey is not as timely as the Commission's survey, but it includes more questions and is fielded among a larger sample of beneficiaries (including non-elderly beneficiaries). We use CMS's beneficiary survey to confirm and supplement the trends we observe in the Commission's 2021 phone survey. Like the Commission's survey, CMS's survey is fielded among beneficiaries in FFS Medicare and MA.
- **Focus groups conducted annually by the Commission to obtain an in-depth description of beneficiary and provider experiences with the Medicare program.** In the summer of 2021, we conducted three virtual focus groups with Medicare beneficiaries (in both FFS Medicare and MA) in each of three different urban markets. One of the groups in each market was composed of beneficiaries dually eligible for Medicare and Medicaid. We also conducted three focus groups with beneficiaries residing in rural areas of Midwestern plains and mountain states. In addition, we conducted three virtual focus groups with clinicians in each of the three urban markets: primary care physicians, specialist physicians, and primary care nurse practitioners and physician assistants. ■

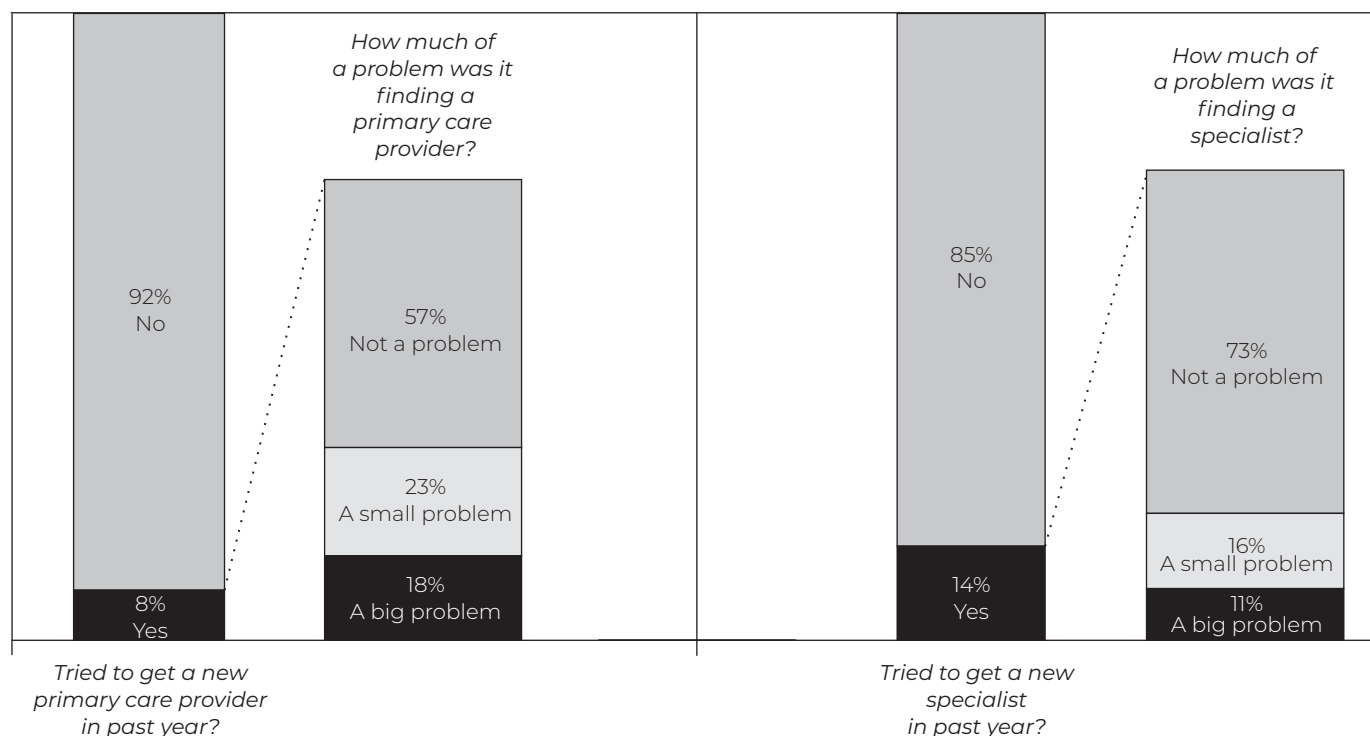
During the PHE, the Congress and CMS have temporarily expanded coverage of telehealth services to ensure that beneficiaries continue to have access to care and to reduce the risk of exposure to COVID-19 (see text box on the use of telehealth during the PHE, p. 128).

More problems finding new primary care physicians than specialists Consistent with prior years, higher shares of Medicare beneficiaries reported having a primary care provider (93 percent) compared with

privately insured people ages 50 to 64 (87 percent) in the Commission's 2021 survey. However, among the 8 percent of Medicare beneficiaries looking for a new primary care provider, 41 percent reported a problem finding a new one (equivalent to 3 percent of all beneficiaries) (Figure 4-2). Beneficiaries have an easier time finding a new specialist: Among the 14 percent of beneficiaries looking for a new specialist, only 27 percent reported a problem finding a new one (equivalent to 4 percent of all beneficiaries). We have observed this finding in our annual beneficiary survey

**FIGURE
4-2**

Medicare beneficiaries had more problems finding a new primary care provider than a new specialist, 2021



Note: Numbers may not sum to 100 percent because the figure does not show the share of respondents who said they didn't know or refused to answer the question.

Source: MedPAC's annual access-to-care telephone survey, 2021.

for many years, among both Medicare beneficiaries and the privately insured. To shore up the declining supply of primary care physicians in the United States, the Commission has made several recommendations over the last decade to increase Medicare payments for primary care services (see text box, pp. 119–121).

Across our focus groups, most primary care and specialty clinicians were accepting new Medicare patients. Beneficiaries' access to specialty care varied, with wait times to see a new specialist ranging from a few days to months. A few beneficiaries reported that wait times had been exacerbated by the pandemic. Clinicians described particular specialties—especially

psychiatry—as having access challenges for Medicare beneficiaries.

Fewer delays in getting appointments for illnesses or injuries than for routine care As we have observed for many years, beneficiaries responding to our survey continue to experience fewer delays in getting appointments for illnesses or injuries than for routine care (Table 4A-1, p. 152). In 2021, among beneficiaries who needed appointments, 31 percent reported waiting longer than they wanted for an appointment for routine care, while 20 percent waited longer than they wanted for an appointment for an illness or injury. In our focus groups, most beneficiaries described having timely access to primary care, especially when

Expansion of telehealth during the public health emergency

During the coronavirus public health emergency (PHE), the Congress and CMS temporarily expanded coverage of telehealth services, giving providers broad flexibility to furnish such services to ensure that beneficiaries continued to have access to care while reducing the risk of exposure to COVID-19. For example, clinicians can bill for telehealth services provided to beneficiaries in their homes in both urban and rural areas; before the PHE, Medicare paid for telehealth services only if they were provided to beneficiaries in a clinician's office or facility in a rural area. (For more information on the telehealth expansions, see the Commission's March 2021 report, Chapter 14 (Medicare Payment Advisory Commission 2021).) Clinicians responded to these changes by rapidly adopting telehealth services. The following is an update on the use of telehealth services in Medicare and clinicians' and beneficiaries' experiences with telehealth during the PHE.

Use of telehealth services in Medicare in 2020

As providers and beneficiaries shifted from in-person to telehealth services during the PHE, traditional fee-for-service (FFS) Medicare spending for telehealth services grew dramatically. In 2020, allowed charges for telehealth services paid under the physician fee schedule (PFS) totaled \$4.2 billion (about 5 percent of PFS spending), compared with \$59 million in 2019 (less than 1 percent of PFS spending). Evaluation and management services accounted for almost all (98 percent) of the allowed charges for telehealth.

In 2020, 14.3 million FFS Medicare beneficiaries received at least 1 telehealth service (40 percent of FFS beneficiaries with Part B). The monthly number of beneficiaries who received telehealth services peaked at 5.7 million in April, then declined to 2.6 million by October as in-person visits began to rebound, and then rose again to 3.3 million in December. The increase at the end of the year likely reflected the growth of new COVID-19 cases during the pandemic's third wave in winter 2020.

We also examined changes in the share of primary care services in 2020 that were delivered to FFS Medicare beneficiaries through telehealth. The growth in telehealth primary care services partially offset the steep drop in the use of in-person primary care services in March and April (Figure 4-3). In April, telehealth accounted for 6.9 million primary care services, or 47 percent of the total. As in-person services began growing after April, telehealth's share of primary care visits declined, making up 19 percent of primary care visits by June. Telehealth's share of primary care services continued to fall before rising again in November and December, climbing to 17 percent of primary care visits in December. More recent data (not shown) indicate that telehealth accounted for about 10 percent of primary care visits in September 2021, which suggests that telehealth continues to have an important role in the delivery of primary care during the PHE.

We also examined the use of telehealth services in FFS Medicare in 2020 by disease category.⁷ Mental, behavioral, and neurodevelopmental disorders accounted for the highest share of allowed charges for telehealth (25 percent), which indicates that telehealth services have played an important role in treating mental and behavioral health conditions during the PHE.⁸ Diseases of the circulatory system (e.g., hypertension and heart disease) also represented a substantial share of allowed charges for telehealth services (14 percent).

Beneficiaries' experiences with telehealth

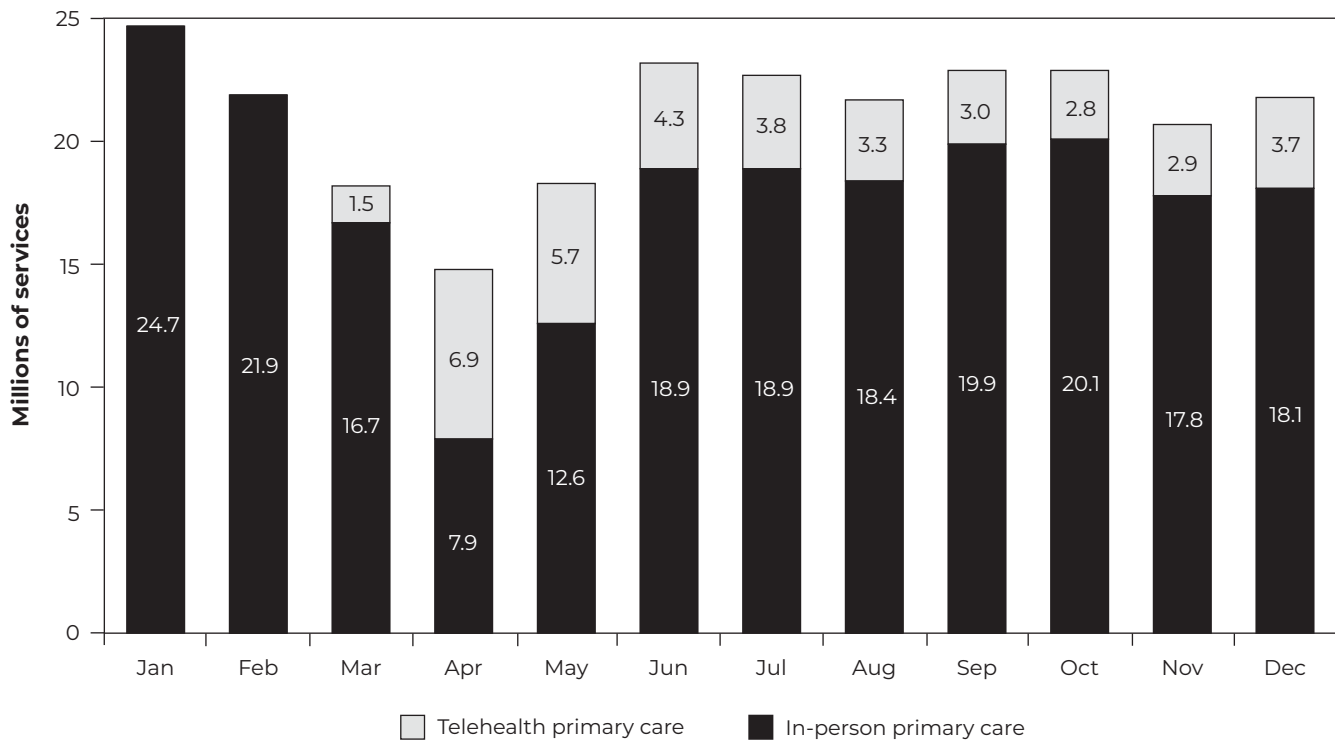
Large shares of Medicare beneficiaries in the Commission's 2021 survey and focus groups (see text box, p. 126) reported using telehealth at some point in the past year. About half of Medicare respondents to our survey (47 percent) had one or more telehealth appointments over the past year, with more than a third (37 percent) having an audio-only telephone visit and a quarter (23 percent) having a video visit. In our focus groups, most beneficiaries said that they had received a telehealth visit in 2021—usually to see clinicians with whom they had

(continued next page)

Expansion of telehealth during the public health emergency (cont.)

**FIGURE
4-3**

Telehealth accounted for almost half of all primary care services in April 2020, then declined to 19 percent in June



Note: Primary care services include the following physician fee schedule services: office/outpatient evaluation and management (E&M) visits, home E&M visits, E&M visits to patients in certain non-inpatient hospital settings (nursing facility, domiciliary, rest home, and custodial care), audio-only E&M visits, chronic care management, transitional care management, Welcome to Medicare visits, annual wellness visits, e-visits, and advance care planning services.

Source: MedPAC analysis of Medicare claims data for 100 percent of fee-for-service beneficiaries.

an existing relationship, although a few beneficiaries used telehealth to see new clinicians for the first time.

Beneficiaries' views about telehealth were mixed. Among respondents to our survey who had received a telehealth visit, 89 percent were very or somewhat satisfied with their visits. However, only about half of

the respondents who had received a telehealth visit reported that they would be interested in continuing to use telehealth after the PHE. Similarly, in our focus groups, beneficiaries appreciated having the option of telehealth visits, especially during the height of the PHE, but there was a common perception that telehealth visits are not as thorough and are not appropriate for all health issues.

(continued next page)

Expansion of telehealth during the public health emergency (cont.)

Clinicians' experiences with telehealth

Clinicians in our focus groups reported that the volume of telehealth visits varied considerably by specialty, but most of them offered a mix of telehealth and in-person visits. Some clinicians appreciated the convenience and flexibility of telehealth in terms of the visit length or location (working from home or the office), while others preferred in-person visits due to perceived better quality of care or because procedures and tests require in-person care. Clinicians agreed that certain conditions or services were better suited to in-person visits than telehealth. Examples included services that involve a physical examination (e.g., checking a patient's blood pressure, listening to a

patient's heart, or assessing a patient's pulmonary function) and services that require lab tests. Clinicians also described situations in which telehealth is suitable, such as for patients with stable medical conditions; medication refills; chronic disease management; remote monitoring, such as continuous glucose monitoring for patients with diabetes; and psychiatry visits.

Clinicians in our focus groups believed that telehealth will remain a permanent part of the health care landscape, and most of them planned to continue offering audio and video telehealth visits after the PHE. Clinicians thought a combination of in-person and telehealth care would be ideal in the future. ■

they had an acute care issue. Beneficiaries said that for acute issues, they could usually be seen quickly—sometimes the same day, and usually within a few days. In a departure from previous years, in our 2021 survey, higher shares of Medicare beneficiaries ages 65 and up reported waiting longer than they wanted for appointments for both routine care and for illnesses or injuries than did privately insured people ages 50 to 64. Among beneficiaries who had to wait longer than they wanted for an appointment, most took the appointment date offered to them.⁹

The Commission's 2021 survey also found that, compared with prepandemic years, more Medicare beneficiaries (21 percent) and privately insured people (17 percent) reported seeing a nurse practitioner (NP) or physician assistant (PA) for most or all of their primary care. Beneficiaries' reported access to specialists appears to have been unaffected by the pandemic: Compared with 2019, there was no statistically significant change in 2020 or 2021 in the number of specialists that Medicare beneficiaries reported having seen in the past year. That said, analysis of claims data

suggests that the *number* of visits beneficiaries had with specialists likely declined during the early months of the pandemic.

In our focus groups, nearly all beneficiaries reported having a usual source of primary care. Most beneficiaries—including beneficiaries in rural areas—had a physician as their designated primary care provider, but a few had an NP or PA as their primary care provider.

Beneficiaries report good access to care in CMS's 2019 beneficiary survey As with the Commission's survey, CMS's 2019 Medicare Current Beneficiary Survey (the most recent year available) found that beneficiaries generally had good access to care. In 2019, CMS's survey found that:

- 91 percent of beneficiaries had a usual source of care that was not a hospital emergency department or an urgent care center;
- 95 percent of those who received health care in the past year were satisfied with their care;

- 95 percent of those who received care were satisfied with the ease with which they could get to the doctor from where they live;
- 91 percent of those who received care were satisfied with the availability of care during nights and weekends;
- 94 percent of those who received care from their usual care provider in the past year said their provider usually or always spent enough time with them;
- 83 percent of those who received care were satisfied with their out-of-pocket costs;
- 10 percent of Medicare beneficiaries had a problem paying a medical bill;
- the average wait for beneficiaries' last appointment with a specialist was 20 days (when scheduled by the beneficiary, as opposed to the practice); and
- 7 percent of beneficiaries had a health problem that they thought they should see a doctor for in the past year but did not.

Results from CMS's survey and the Commission's survey are not expected to match perfectly because the two surveys are fielded among different types of Medicare beneficiaries in different years and, in some cases, ask about slightly different concepts. The Commission's survey reflects the experiences of beneficiaries ages 65 and over in 2021, whereas CMS's survey reflects the experiences of beneficiaries of all ages (including beneficiaries under age 65) in 2019.

Care experiences of subpopulations of Medicare beneficiaries The Commission's survey and CMS's survey allow us to identify disparities in the care experiences of different subgroups of Medicare beneficiaries. Specifically, we find that non-elderly beneficiaries (most of whom are disabled), beneficiaries of certain races and ethnicities, and beneficiaries with lower incomes have worse care experiences than other beneficiaries. We find little to no difference in the care experiences of rural and urban beneficiaries or of elderly beneficiaries of different ages.

Non-elderly (mostly disabled) beneficiaries reported worse access to care than elderly beneficiaries. CMS's 2019 survey found that non-elderly beneficiaries (the

vast majority of whom are disabled) consistently had worse care experiences than elderly beneficiaries ages 65 and over. (We rely entirely on CMS's survey for this particular analysis, since the Commission's survey does not include beneficiaries under age 65.)

According to CMS's survey, a much higher share of non-elderly beneficiaries said that they had a problem paying a medical bill compared with elderly beneficiaries (29 percent vs. 7 percent). And lower shares of non-elderly beneficiaries were satisfied with their out-of-pocket costs compared with elderly beneficiaries (73 percent vs. 85 percent). Non-elderly beneficiaries were more likely to report forgoing care in the past year than were elderly beneficiaries (15 percent vs. 6 percent).

A lower share of non-elderly beneficiaries was satisfied with the availability of care on nights and weekends compared with elderly beneficiaries (85 percent vs. 92 percent). And a lower share reported having a usual source of care that was not a hospital emergency department or an urgent care center (86 percent vs. 92 percent). Lower shares of non-elderly beneficiaries were satisfied with the ease with which they could get to the doctor from where they live compared with elderly beneficiaries (89 percent vs. 96 percent). And a slightly lower share of non-elderly beneficiaries said their usual care provider usually or always spent enough time with them compared with elderly beneficiaries (92 percent vs. 95 percent).

Some of the difficulties reported by non-elderly Medicare beneficiaries could stem from the fact that they have lower incomes, on average, than elderly beneficiaries (Jacobson et al. 2017).

Given these findings, it is perhaps not surprising that lower shares of non-elderly beneficiaries reported being satisfied with the overall quality of the care they had received in the past year compared with elderly beneficiaries (90 percent vs. 96 percent).

Some disparities exist in care experiences by race and ethnicity. Our survey found a number of differences in the care experiences of Black, Hispanic, and White beneficiaries (Table 4A-2, p. 153).¹⁰ In many cases, the difference between one racial or ethnic group and White beneficiaries' experience is statistically significant, but the difference between another racial

or ethnic group and White beneficiaries' experience is not; in the passage that follows, we identify only those differences that are statistically significant.

Our 2021 survey found that lower shares of Hispanic beneficiaries reported having a primary care provider (90 percent) compared with White beneficiaries (94 percent). Meanwhile, a different pattern was observed among the privately insured, with lower shares of Hispanic individuals (86 percent) and White individuals (87 percent) having a primary care provider compared with Black individuals (91 percent).

Higher shares of Hispanic Medicare beneficiaries reported seeing no specialists in the past year (40 percent) compared with White beneficiaries (31 percent). A similar disparity was observed among the privately insured.

Lower shares of Hispanic beneficiaries reported being satisfied with the quality of their care (88 percent) compared with White beneficiaries (95 percent). Meanwhile, among the privately insured, there was no statistically significant difference by race on this metric.

Higher shares of Black Medicare beneficiaries reported forgoing care that they thought they should have obtained in the past year (13 percent) compared with White beneficiaries (9 percent). Among beneficiaries who needed appointments for an illness or injury, a higher share of Black beneficiaries reported having to wait longer than they wanted for these appointments (30 percent) compared with Hispanic (20 percent) and White beneficiaries (19 percent). And among beneficiaries who needed an appointment for routine care in the past year, higher shares of Black beneficiaries reported waiting longer than wanted for such appointments (40 percent) compared with White beneficiaries (29 percent). Similar disparities were observed among the privately insured.

A lower share of Hispanic beneficiaries reported getting most or all of their care from an NP or PA (16 percent) compared with White beneficiaries (22 percent) and Black beneficiaries (24 percent)—which may reflect the low share of Hispanic beneficiaries who live in rural areas (5 percent), where NPs and PAs are more prevalent. Differences among the privately insured were smaller and not statistically significant.

CMS's 2019 Medicare beneficiary survey includes a larger number of beneficiaries, thus allowing us to examine experiences of other racial groups, in addition to Black, Hispanic, and White beneficiaries. Like the Commission's survey, CMS's survey found some differences by race and ethnicity. The largest differences were in the share of beneficiaries who had a problem paying a medical bill. A higher share of Black (20 percent), Multiracial (19 percent), and Hispanic (13 percent) beneficiaries had a problem compared with White (9 percent) and Asian (5 percent) beneficiaries. Similarly, the share who were satisfied with their out-of-pocket costs was lower among Black (77 percent) and Multiracial (77 percent) beneficiaries than White beneficiaries (84 percent).

The share of beneficiaries who reported forgoing care that they thought they should have obtained was higher among Multiracial (14 percent) and Hispanic (9 percent) beneficiaries compared with White (7 percent) beneficiaries. (Only 8 percent of Black beneficiaries reported forgoing care, which was not statistically significantly different from White beneficiaries.)

The share of beneficiaries with a usual source of care that was not a hospital emergency department or an urgent care center was somewhat lower among Black (87 percent), Multiracial (88 percent), and Hispanic (90 percent) beneficiaries compared with White (92 percent) beneficiaries.

A number of factors may be driving differences in care experiences for Black, Hispanic, and White beneficiaries. One factor may be income, since income influences a person's ability to afford health care: Our 2021 survey found that notably higher shares of Hispanic and Black beneficiaries had household incomes of \$50,000 or less compared with White beneficiaries, and that beneficiaries in lower-income households had slightly worse experiences accessing care. Health status is another factor that could be influencing disparities in care experiences: A prior analysis found that higher shares of Black and Hispanic Medicare beneficiaries report being in "fair" or "poor" health compared with White beneficiaries (Kaiser Family Foundation 2016), and our own analysis of CMS's 2019 survey finds that beneficiaries who report "fair" or "poor" health status tend to report worse care experiences. Black and Hispanic beneficiaries may also obtain care from lower-quality providers, which could

in turn influence their care experiences: A recent study found that Black and Hispanic beneficiaries are more likely to be hospitalized at one-star hospitals than at five-star hospitals (Ochieng et al. 2021). Another study found that among Medicare beneficiaries experiencing heart attacks, Black patients were more likely to be taken to lower-performing hospitals than White patients, even when these patients all lived in the same ZIP code (Chandra et al. 2020).

Although Asian beneficiaries' care experiences tended to be similar to, or better than, those of White beneficiaries, Asian beneficiaries were the least likely to feel that their usual care provider spent enough time with them (88 percent) compared with Black (90 percent), Hispanic (92 percent), and White (95 percent) beneficiaries. Prior studies have hypothesized that this may be due to cultural differences; for example, when an Asian patient smiles and nods at a doctor, they may be intending to show respect for a doctor, yet the doctor may mistake this body language for agreement with a treatment plan and end an appointment before a patient is ready to do so (Ngo-Metzger et al. 2004).

On a more positive note, there were little or no differences by race or ethnicity in the share of beneficiaries who were satisfied with the quality of the care they received in the past year, were satisfied with the ease with which they could get to a doctor's office from where they live, and were satisfied with the availability of care on nights and weekends.

Individuals with lower incomes have slightly worse care experiences. This year, we examined differences in care experiences by income, comparing Medicare beneficiaries with household incomes of less than \$50,000 (our lower-income group), \$50,000 to \$100,000 (our middle-income group), and more than \$100,000 (our higher-income group). We found that, on most indicators, individuals with less income had slightly worse experiences accessing care.

In CMS's 2019 survey, fewer lower-income beneficiaries reported having a usual source of care that was not an emergency department or an urgent care center (89 percent) compared with middle-income and higher-income beneficiaries (93 percent and 94 percent). The Commission's 2021 survey found a similar disparity, with a lower share of lower-income beneficiaries reporting having a primary care provider (92 percent)

compared with higher-income beneficiaries (96 percent). The Commission's 2021 survey also found that lower-income beneficiaries were more likely to report getting most or all of their primary care from an NP or PA compared with middle-income and higher-income beneficiaries (24 percent vs. 18 percent vs. 16 percent).

The Commission's 2021 survey found that lower-income and middle-income beneficiaries were more likely to report waiting longer than they wanted for appointments for routine care (32 percent and 31 percent) compared with higher-income beneficiaries (24 percent). Similarly, a higher share of lower-income beneficiaries reported unwanted delays in getting appointments for illnesses or injuries than did higher-income beneficiaries (22 percent vs. 15 percent). CMS's 2019 survey found that lower-income beneficiaries were slightly less likely to report that their usual care provider usually or always spent enough time with them compared with middle-income and higher-income beneficiaries (93 percent vs. 95 percent vs. 96 percent).

CMS's 2019 survey found that lower-income beneficiaries were more likely to report forgoing care that they thought they should have obtained compared with middle-income and higher-income beneficiaries (9 percent vs. 6 percent vs. 3 percent). Similarly, the Commission's 2021 survey found that lower-income beneficiaries were slightly more likely to report forgoing care compared with higher-income beneficiaries (11 percent vs. 8 percent).

The Commission's survey also found that lower-income beneficiaries were more likely to have seen no specialists in the past year compared with middle-income and higher-income beneficiaries (36 percent vs. 29 percent vs. 26 percent). CMS's 2019 survey found that lower-income beneficiaries were less likely to report being satisfied with their out-of-pocket costs than middle-income and higher-income beneficiaries (81 percent vs. 87 percent vs. 90 percent) and were more likely to report problems paying a medical bill (15 percent vs. 4 percent vs. 2 percent).

On a more positive note, the Commission's 2021 survey found no statistically significant difference in the shares of beneficiaries of different incomes who reported problems finding a new primary care provider or a new specialist. And the surveys found only slight

differences in the share of beneficiaries of different incomes who were satisfied with the quality of their care, satisfied with how easy it was to get to a doctor from where they live, and satisfied with the availability of care on nights and weekends.

Very few differences exist in the care experiences of rural and urban beneficiaries. We find only a few statistically significant differences in the care experiences of urban and rural Medicare beneficiaries.¹¹ The biggest difference between rural and urban beneficiaries in our 2021 survey was the share who reported receiving most or all of their primary care from an NP or PA, as 30 percent of rural beneficiaries reported, compared with 19 percent of urban beneficiaries. This discrepancy was also observed among the privately insured and is a trend we have observed for a number of years. The other difference seen this year was a small decline in the share of rural beneficiaries who were satisfied with the quality of their care; this resulted in a lower share of rural beneficiaries being satisfied with the quality of their care compared with urban beneficiaries (90 percent vs. 94 percent). Satisfaction rates fluctuate from year to year in our survey: In some years, there is no statistically significant difference between urban and rural beneficiaries, while in other years (including this year), urban beneficiaries are somewhat more satisfied.

In our 2021 survey, no statistically significant differences were seen in the shares of rural and urban beneficiaries who reported having a primary care provider, who looked for a new primary care provider or a new specialist in the past year, who had problems finding a new primary care provider or a new specialist, who had to wait longer than they wanted for an appointment for routine care or for an appointment for an illness or injury, or who reported forgoing care that they thought they should have obtained (Table 4A-3, p. 154). There was also no statistically significant difference in the number of specialists that rural and urban beneficiaries saw.

Consistent with these findings, CMS's 2019 survey found little to no difference in urban and rural beneficiaries' experiences accessing care. The few differences that were statistically significant were small. Among those who received health care in the previous year, slightly lower shares of rural beneficiaries were satisfied with their out-of-pocket costs compared with urban beneficiaries (81 percent vs.

83 percent), with the availability of care on nights and weekends (89 percent vs. 91 percent), and with the ease with which they could get to the doctor from where they live (93 percent vs. 96 percent).

There were no statistically significant differences in CMS's 2019 survey in the shares of rural and urban beneficiaries who were satisfied with the overall quality of their care, who said their usual care provider usually or always spent enough time with them, who reported forgoing care in the past year, and who had a problem paying a medical bill.

Most beneficiaries in our rural focus groups indicated that they could access primary care as soon as they needed it. Many of them said they could get in to see someone on the same day or within a few days. Some beneficiaries in rural areas had an urgent care clinic in their town or within 20 miles that they could access if they could not get in to see their doctor. Other beneficiaries would have to drive a substantial distance—for one beneficiary, about 75 miles—to go to an urgent care clinic. In general, beneficiaries in our focus groups from rural areas did not think the distance to travel for care was a problem and had not delayed care due to the travel distance.

Elderly beneficiaries of different ages have comparable care experiences. When we compare the experiences of beneficiaries ages 65 to 74, 75 to 84, and 85 and up, we find very few substantive differences in their care experiences, both in the Commission's 2021 survey and in CMS's 2019 survey. Our 2021 survey found no statistically significant differences in the shares of beneficiaries who reported being satisfied with the overall quality of their care, the shares who reported problems finding a new primary care provider or a new specialist, the shares who waited longer than they wanted for appointments, or the shares who reported forgoing care that they thought they should have obtained in the past year.

In a departure from prior years, our 2021 phone survey found that a lower share of beneficiaries ages 85 and up reported having a primary care provider (89 percent) compared with beneficiaries ages 75 to 84 (94 percent) and 65 to 74 (93 percent). We also found that a higher share of beneficiaries ages 85 and up reported getting most or all of their care from an NP or PA (27 percent), compared with beneficiaries ages 65 to 74 (20 percent) and 75 to 84 (22 percent).

**TABLE
4-2**

The number of clinicians billing Medicare's physician fee schedule increased and the mix of clinicians changed, 2015-2020

Year	Number (in thousands)					Number per 1,000 beneficiaries				
	Physicians					Physicians				
	Primary care specialties	Other specialties	APRNs and PAs	Other practitioners	Total	Primary care specialties	Other specialties	APRNs and PAs	Other practitioners	Total
2015	141	439	178	161	919	2.8	8.7	3.5	3.2	18.1
2016	141	447	198	166	952	2.7	8.6	3.8	3.2	18.3
2017	140	455	218	172	985	2.6	8.5	4.1	3.2	18.4
2018	139	462	237	178	1,015	2.5	8.4	4.3	3.2	18.6
2019	139	468	258	184	1,048	2.5	8.4	4.6	3.3	18.7
2020	135	468	268	175	1,047	2.4	8.2	4.7	3.1	18.3

Note: APRN (advanced practice registered nurse), PA (physician assistant). "Primary care specialties" includes family medicine, internal medicine, pediatric medicine, and geriatric medicine, with an adjustment to exclude hospitalists. Hospitalists are counted in "other specialties." "Other practitioners" includes clinicians such as physical therapists, psychologists, social workers, and podiatrists. The number of clinicians shown in this table includes only those with a caseload of more than 15 beneficiaries in the year. Beneficiary counts used to calculate clinicians per 1,000 beneficiaries include those enrolled in Medicare Part B, whether in fee-for-service or in Medicare Advantage, based on the assumption that clinicians generally furnish services to beneficiaries in both programs. Numbers exclude nonperson providers, such as clinical laboratories and independent diagnostic testing facilities.

Source: MedPAC analysis of Medicare claims data for 100 percent of beneficiaries and 2021 annual report of the Boards of Trustees of the Medicare trust funds.

CMS's 2019 survey yielded only a few substantive differences in the care experiences of community-dwelling (noninstitutionalized) elderly beneficiaries of different ages. The two older groups of beneficiaries were less likely to report problems paying their medical bills compared with beneficiaries ages 65 to 74 (5 percent vs. 6 percent vs. 9 percent). And the oldest beneficiaries reported much shorter waits for their last appointment with a specialist (14 days) compared with the two younger groups of elderly beneficiaries (21 days and 20 days).

In 2020, growth in the number of clinicians billing Medicare plateaued and the mix of clinicians continued to change

From 2015 to 2019, the number of clinicians billing the fee schedule grew relative to the size of the overall Medicare population, which suggests that clinicians had sufficient incentive to serve Medicare beneficiaries. However, in 2020, the ratio of clinicians to the number of Medicare beneficiaries shrank slightly

(likely due to the PHE), and the mix of clinicians has changed over time.

We limited this part of our analysis of clinicians to those who billed for more than 15 Medicare beneficiaries in a given year. This minimum threshold helps us (1) better measure clinicians who substantially participate in Medicare and are therefore likely critical to ensuring beneficiary access to care and (2) avoid year-to-year variability in clinician counts (i.e., because we exclude clinicians who billed for one or two beneficiaries in one year but may not have billed for any beneficiaries the following year).¹²

Using the 15-beneficiary threshold, we found that the number of clinicians billing the fee schedule between 2015 and 2020 grew from about 919,000 to 1,047,000 (Table 4-2). Over the 2015 to 2019 period, the total number of clinicians per 1,000 beneficiaries increased from 18.1 to 18.7 before falling to 18.3 in 2020.¹³ Although the ratio of clinicians to Medicare beneficiaries

decreased in 2020, probably due to the PHE, the effect on the overall supply of clinicians was relatively small and may be temporary. One study that compared billing patterns in 2020 with 2019 found a substantial increase in physicians who had no Medicare claims during March, April, and May 2020, but almost all of those physicians had resumed billing by June; physicians who did not return were predominantly older and closer to retirement (Neprash and Chernew 2021). Meanwhile, according to the Bureau of Labor Statistics, the number of workers (clinicians and nonclinicians) employed by physician offices declined by a few hundred thousand in 2020 but has since returned to prepandemic levels (Wager et al. 2021). The 2020 decline in the number of physician office employees suggests that physician practices were able to reduce costs in response to the pandemic.

While the total number of clinicians billing the fee schedule rose between 2015 and 2020, trends varied by type and specialty of clinicians. Since 2015, the number of primary care physicians billing the fee schedule has slowly declined—yielding a net loss of about 6,000 primary care physicians by 2020. Over the same five-year period, the number of advanced practice registered nurses (APRNs) and PAs billing the fee schedule grew rapidly from about 178,000 to 268,000.¹⁴ Meanwhile, the number of specialist physicians and other practitioners, such as physical therapists and podiatrists, who billed the fee schedule increased at a steady pace.

Medicare beneficiaries rarely encounter a clinician who does not accept Medicare According to a federal survey, 85 percent of office-based physicians in the U.S. treated Medicare patients in 2019. Among physicians taking new patients, 80 percent accepted new Medicare patients, 90 percent accepted new commercially insured patients, and 66 percent accepted new Medicaid patients (National Center for Health Statistics 2021).¹⁵ This degree of acceptance of Medicare appears to be sufficient to meet the vast majority of beneficiaries' needs: According to the Commission's 2021 telephone survey, only 1 percent of Medicare beneficiaries encountered a primary care provider or a specialist who did not accept Medicare. Specifically, among the small subset of Medicare beneficiaries who looked for a new primary care provider and had a problem finding one, only 17 percent

encountered a primary care provider who did not accept Medicare (equivalent to 1 percent of Medicare beneficiaries overall). Similarly, among the small subset of beneficiaries who looked for a new specialist and had a problem finding one, only 19 percent of this subset encountered a specialist who did not accept Medicare (equivalent to 1 percent of Medicare beneficiaries).

There are a variety of ways clinicians can participate in the Medicare program, which yield different payment rates for their services. In 2020, 98 percent of clinicians billing the physician fee schedule were “participating” providers. Participating providers agree to take assignment for all claims, which means that they accept the fee schedule amount (which includes Medicare's payment plus beneficiary cost sharing) as payment in full.

“Nonparticipating” providers can choose whether to take assignment for their claims on a claim-by-claim basis. Nonparticipating providers who take assignment on a claim receive 95 percent of the physician fee schedule amount for participating providers, with Medicare paying 80 percent of the reduced amount and beneficiaries paying 20 percent of that amount in cost sharing. Nonparticipating providers who do not take assignment on a claim may “balance bill” beneficiaries up to 109.25 percent of the physician fee schedule amount for participating providers. Medicare then repays beneficiaries a portion of the amount that was balance billed.¹⁶ While balance billing is allowed, clinicians rarely balance bill beneficiaries for physician fee schedule services; in 2020, 99.7 percent of fee schedule claims were paid on assignment.

Clinicians can also sign up as “opt-out” providers if they wish to bill beneficiaries for services directly, outside of the Medicare benefit. The 27,000 clinicians who chose to opt out of Medicare as of October 2021 were concentrated in the specialties of behavioral health (42 percent), oral health (29 percent), and primary care (13 percent) (Centers for Medicare & Medicaid Services 2021d).^{17,18,19} The number of clinicians who opted out in 2021 was comparable to the number in 2020.

Total number of clinician encounters per beneficiary grew from 2015 to 2019 before declining in 2020

We use the quantity of encounters between beneficiaries and clinicians as another measure of

**TABLE
4-3****In 2020, total encounters per FFS beneficiary fell and the mix of clinicians furnishing them changed**

Specialty category	Encounters per FFS beneficiary			Percent change	
	2015	2019	2020	Average annual (2015–2019)	2019–2020
Total (all clinicians)	21.1	22.3	19.8	1.3%	–11.1%
Primary care physicians	3.8	3.5	3.1	–2.5	–10.9
Specialists	12.7	12.9	11.4	0.4	–11.7
APRNs/PAs	1.6	2.5	2.4	11.2	–2.7
Other practitioners	3.0	3.4	2.9	3.3	–15.1

Note: FFS (fee-for-service), APRN (advanced practice registered nurse), PA (physician assistant). We define “encounters” as unique combinations of beneficiary identification numbers, claim identification numbers (for paid claims), and national provider identifiers of the clinicians who billed for the service. Numbers do not account for “incident to” billing, meaning, for example, that encounters with APRNs/PAs that are billed under Medicare’s “incident to” rules are included in the physician totals. We use the number of fee-for-service Medicare beneficiaries enrolled in Part B to define encounters per beneficiary. Components may not sum to totals due to rounding, and percent change columns were calculated on unrounded data.

Source: MedPAC analysis of Medicare claims data for 100 percent of fee-for-service beneficiaries and 2021 annual report of the Boards of Trustees of the Medicare trust funds.

access to care. Encounters are a measure of entry into the health care system. Entry can be a first step toward timely use of services (Office of Disease Prevention and Health Promotion 2019).

We use a claims-based definition of encounters.²⁰ Clinicians submit a claim when they furnish one or more services to a beneficiary in FFS Medicare. For example, if a physician billed for an evaluation and management (E&M) visit and an X-ray on the same claim, we would count that as one encounter. About 97 percent of beneficiaries enrolled in FFS Medicare had at least one encounter in 2020.²¹

We found that the number of encounters per FFS Medicare beneficiary grew modestly from 2015 to 2019 before dropping somewhat in 2020. Specifically, from 2015 to 2019, the number of total encounters per beneficiary per year rose from 21.1 to 22.3—an average annual increase of 1.3 percent (Table 4-3). From 2019 to 2020, the number of encounters per beneficiary fell from 22.3 to 19.8—a decrease of 11.1 percent. The

change in the number of encounters was not uniform throughout the year: Encounters declined sharply in spring 2020 in response to the coronavirus pandemic but largely recovered by June and remained close to 2019 levels through the remainder of the year.

Change in the number of encounters per beneficiary varied by specialty and type of provider From 2019 to 2020, the number of encounters per beneficiary with primary care physicians declined by about 10.9 percent (Table 4-3). Over the same period, the number of encounters per beneficiary with APRNs or PAs declined by only 2.7 percent, the number of encounters with specialist physicians (who account for a majority of all encounters) fell by 11.7 percent, and encounters with other practitioners (e.g., physical therapists) dropped by 15.1 percent. We are likely undercounting the number of encounters by APRNs and PAs because services performed by APRNs and PAs that are billed “incident to” a physician’s service appear as a physician’s service in claims data.²² The size of the 2020 decline in encounters is likely related to the pandemic

and therefore likely to be temporary, but it does reflect longer-term changes (from 2015 to 2019) in the mix of specialties providing services to Medicare beneficiaries. Over time, the share of encounters furnished by primary care physicians has been declining and the share of encounters provided by the other types of clinicians has been increasing (encounters with APRNs and PAs are growing the fastest).

The decline in beneficiary encounters with primary care physicians has occurred across a broad range of services. Even before the pandemic started, from 2015 to 2019, the average annual change in the number of encounters per beneficiary with primary care physicians for E&M services, other procedures, imaging services, and tests was -2.5 percent, -3 percent, -5 percent, and -5 percent, respectively (data not shown).²³

Recent research has documented that similar drops in encounters with primary care physicians also have occurred among the privately insured population (Ganguli et al. 2019). This trend suggests that primary care physicians are not filling their patient panels with privately insured patients in lieu of Medicare beneficiaries. Rather, the consistent declines across patient populations suggest that the overall supply of primary care physicians is shrinking.

The rapid growth in encounters with APRNs and PAs raises questions about whether these encounters are replacing services that were once provided by primary care physicians. Using claims data, we are unable to determine whether APRNs and PAs work in primary care practices or specialist practices. Therefore, the Commission has recommended that the Secretary collect more detailed information on the specialties in which APRNs and PAs practice (Medicare Payment Advisory Commission 2019b). Studies published between 2011 and 2019 estimate that about half of nurse practitioners (the largest subgroup of APRNs) and one-quarter of PAs work in primary care, although these practice patterns might have changed since then (Agency for Healthcare Research and Quality 2011, Health Resources & Services Administration 2014, National Commission on Certification of Physician Assistants 2019). While these studies suggest that only a portion of APRNs and PAs work in primary care, our analysis found that the decline in beneficiary encounters with primary care physicians coincided

with a dramatic rise in encounters with APRNs or PAs, suggesting that these clinicians furnish at least some services once performed by primary care physicians. These findings could also help to explain why the Commission's annual telephone survey has not found a substantial decline in the share of beneficiaries with a primary care provider in recent years (93 percent in 2021), even though our claims analysis finds that encounters with primary care physicians have declined substantially; beneficiaries are still able to access primary care, but different clinicians may be furnishing it.

Before the pandemic, encounters per beneficiary had been growing across service types Examining beneficiary encounters by service type, we found that over the 2015 to 2019 period, the number of E&M encounters per beneficiary provided by all clinicians rose by an annual average of 0.9 percent, from 12.6 to 13.1, before declining to 11.9 (a decrease of 9 percent) in 2020 (Table 4-4). From 2015 to 2019, major procedure encounters grew by an average of 1.2 percent per year before declining by 11.1 percent in 2020, and encounters involving a procedure other than a major procedure (i.e., “other” procedures) grew by 2.8 percent per year before declining by 14.7 percent in 2020. “Other procedures” include skin procedures and various forms of outpatient therapy (physical therapy, occupational therapy, and speech-language pathology).

Quality of care is difficult to assess

Quality of care provided by clinicians is difficult to assess even in the best of circumstances. In 2020, these difficulties were compounded due to the effects of the PHE on beneficiaries and providers. In previous years, we tracked changes in quality measures and determined whether they had improved, worsened, or stayed the same. While we report 2020 results for our quality measures, we have not used those results to inform our conclusions about trends in the quality of care provided to Medicare beneficiaries. The 2020 results may reflect temporary changes in the delivery of care and data limitations unique to the PHE rather than trends in quality of care.

We report on the quality of the ambulatory care environment for Medicare beneficiaries using outcome measures assessing ambulatory care-sensitive (ACS) hospitalizations and emergency department visits as

**TABLE
4-4**

Encounters per FFS beneficiary, by service type, 2015–2020

Type of service	Encounters per FFS beneficiary			Percent change	
	2015	2019	2020	Average annual (2015–2019)	2019–2020
Total (all services)	21.1	22.3	19.8	1.3%	–11.1%
Evaluation and management	12.6	13.1	11.9	0.9	–9.0
Major procedures	0.2	0.2	0.2	1.2	–11.1
Other procedures	4.3	4.8	4.1	2.8	–14.7
Imaging	4.0	4.1	3.6	1.0	–14.2
Tests	2.1	2.2	1.8	1.1	–15.4
Anesthesia	0.5	0.6	0.5	3.9	–15.2

Note: FFS (fee-for-service). We define “encounters” as unique combinations of beneficiary identification numbers, claim identification numbers (for paid claims), and national provider identifiers of the clinicians who billed for the service. We use the number of fee-for-service Medicare beneficiaries enrolled in Part B to define encounters per beneficiary. Values by type of service do not sum to the total because encounters with multiple service types are counted separately for each type of service but counted only once for the total. For example, if an imaging service and a test were billed in the same encounter, we count that as one encounter for imaging and one for tests (for a total of two encounters), but we count the services as one encounter for the total row. All numbers in the table are rounded, but unrounded data are used for calculations.

Source: MedPAC analysis of Medicare claims data for 100 percent of fee-for-service beneficiaries and 2021 annual report of the Boards of Trustees of the Medicare trust funds.

well as patient experience measures (measured using the Consumer Assessment of Healthcare Providers and Systems® (CAHPS®)).²⁴ This approach is consistent with the Commission’s principle that Medicare’s quality incentive programs should use a small set of population-based outcome, patient experience, and value measures to assess the quality of care across different populations, such as beneficiaries enrolled in Medicare Advantage (MA) plans, FFS Medicare, and accountable care organizations (ACOs) in defined market areas as well as those cared for by particular hospitals, groups of clinicians, and other providers (Medicare Payment Advisory Commission 2018a). Also, we are limited in our ability to assess the quality of clinicians’ care because Medicare does not collect FFS beneficiary–level clinical information (e.g., blood pressure, lab results) or patient-reported outcomes (e.g., improving or maintaining physical and mental health).

CMS measures the performance of clinicians using the Merit-based Incentive Payment System (MIPS).

The basic design principle of MIPS is that clinician quality of care and payment adjustments for quality can and should be determined primarily at the individual clinician level, based on measures that clinicians themselves choose to report. But a system built on this design is inequitable because clinicians are evaluated and compared on dissimilar measures. The majority of the measures focus on processes of care as opposed to patient outcomes, and many have compressed performance (i.e., “topped out,” which means that all clinicians are performing well on the measure). In addition, many clinicians are not evaluated at all because, as individuals, they do not have a sufficient number of cases for statistically reliable scores. Further, the design is at odds with the fact that quality outcomes for patients—the principal objective of any value improvement program—are determined primarily through the combined efforts of many providers rather than by the actions of any one clinician.

For these reasons, we concluded previously that despite the laudable goal of measuring the quality

**TABLE
4-5****Distribution of risk-standardized rates of ambulatory care-sensitive hospitalizations and emergency department visits across hospital service areas, 2020**

	Risk-standardized rate per 1,000 FFS beneficiaries			
	10th percentile (high performing)	50th percentile	90th percentile (low performing)	Ratio of 90th to 10th percentile
Ambulatory care-sensitive hospitalizations	24.2	34.4	46.6	1.9
Ambulatory care-sensitive ED visits	43.7	72.7	112.5	2.6

Note: FFS (fee-for-service), ED (emergency department). Lower rates are better. To measure population-based outcomes for FFS Medicare beneficiaries, we calculated the risk-standardized rates of admissions and ED visits tied to a set of acute and chronic conditions per 1,000 FFS Medicare beneficiaries in hospital service areas (HSAs). There are about 3,400 Dartmouth-defined HSAs. The average population of FFS Medicare beneficiaries in each HSA is about 10,000 beneficiaries. We excluded any hospital service area with fewer than 1,000 FFS Medicare beneficiaries.

Source: MedPAC analysis of 2020 fee-for-service Medicare claims data.

of clinician care and adjusting payments on the basis of measured quality, at its core, MIPS was too fundamentally flawed. As a result, in March 2018, the Commission recommended eliminating MIPS. In MIPS's place, we recommended a voluntary value program, through which groups of clinicians would receive increases or decreases to their payment rates based on their performance on a uniform set of measures assessing outcomes, patient experience, and value (Medicare Payment Advisory Commission 2018b).

Effectiveness and timeliness of care outside the hospital: Ambulatory care-sensitive hospitalizations and emergency department visits

Many factors related to the PHE affected rates of hospitalizations, including both higher demand for beds because of patients suffering from COVID-19, which strained hospital capacity, and lower demand for beds by other patients as nonemergency surgeries were canceled or delayed and patients avoided visiting emergency departments due to fears of infection. Further, the Commission's quality metrics rely on risk-adjustment models that use performance from previous years to predict beneficiary risk. COVID-19 is a new diagnosis and is not included in the current risk-

adjustment models, though many associated conditions are. As a result, our models may not adequately represent the acuity and mix of patients receiving care in 2020. Therefore, we report 2020 quality measure results but do not draw conclusions about whether overall quality has improved, worsened, or stayed the same.

The Commission developed two claims-based outcome measures—ACS hospitalizations and emergency department (ED) visits—to compare quality of care within and across different populations (i.e., FFS Medicare beneficiaries in different local market areas), given the adverse impact on beneficiaries and high cost of these events. Two categories of ACS conditions are included in the measures: chronic (e.g., diabetes, asthma, hypertension) and acute (e.g., bacterial pneumonia, cellulitis). Conceptually, an ACS hospitalization or ED visit refers to hospital use that could have been prevented with timely, appropriate, high-quality care. For example, if a diabetic patient's primary care physician and specialists effectively control the condition and they have a system to allow urgent visits, then the patient may be able to avoid a visit to the ED for a diabetic crisis.

In 2020, the distribution of risk-standardized rates of avoidable hospitalizations and ED visits per 1,000 FFS beneficiaries varied widely across Dartmouth-defined hospital service areas (HSAs) (Table 4-5). This variation signals opportunities to improve the quality of ambulatory care, even with the measurement issues related to the PHE.²⁵ The HSA at the 90th percentile of ACS hospitalizations had a rate that was 1.9 times the HSA at the 10th percentile. The HSA at the 90th percentile of ACS ED visits had a rate that was 2.6 times the HSA in the 10th percentile.²⁶ Relatively poor performance on a local market's ACS hospitalization and ED visit measures can identify opportunities for improvement in those ambulatory care systems, while relatively good performance on the measures can identify best practices for ambulatory care systems.

Patient experience scores

The Agency for Healthcare Research and Quality's CAHPS surveys initiative develops a variety of standardized patient surveys that ask well-tested questions using a consistent methodology across a large sample of respondents. CAHPS surveys generate standardized and validated measures of patient experience that enable health care providers, purchasers, and policymakers to track, compare, and improve patients' experiences in different health care settings. CAHPS surveys measure a key component of quality of care because they assess whether something that should happen in a health care setting (such as clear communication with a provider) actually happened or how often it happened. When patients have a better experience, they are more likely to adhere to treatments, return for follow-up appointments, and engage with the health care system by seeking appropriate care.

CMS annually fields a CAHPS survey among a subset of FFS beneficiaries. The survey questions relate to the beneficiary's experience of care with Medicare and their FFS providers. CMS halted collection of the 2019 experience survey because it was being fielded during the early months of the pandemic (i.e., March through May 2020). Because of the missing data and the effects of the pandemic on how beneficiaries experienced care, we do not interpret trends in beneficiary experience over time.

The *getting needed care and seeing specialists* measure score based on 2020 FFS CAHPS survey responses

was 83 (score on a scale of 0 to 100) and the score for *getting appointments and care quickly* was 78 (Table 4-6, p. 142). The *rating of health plan* (FFS Medicare) measure score was 84, and *rating of health care quality* score was 86. These scores have been stable since 2016. Seventy-seven percent of beneficiaries reported receiving an annual flu vaccine, which is an increase from 72 percent in 2016 (Table 4-6).

Medicare payments and providers' costs

To assess Medicare payments, we examine growth in Medicare's allowed charges (i.e., payments to providers, including beneficiary cost sharing) for physician fee schedule services. We also consider how private insurance rates paid by preferred provider organizations (PPOs) for clinician services compare with Medicare's FFS rates. In addition, we examine growth in all-payer physician compensation and compare compensation across specialties. Because clinicians do not report their costs to CMS, we assess annual changes in input prices for clinician services (adjusted for economy-wide productivity) using the Medicare Economic Index (MEI).

Although Medicare's total allowed charges for clinician services declined in 2020, overall physician compensation continued to slowly increase. We found that between 2019 and 2020, Medicare-allowed charges per FFS beneficiary for clinician services fell 10.6 percent, likely due to the reduced volume of services furnished during the PHE. In 2020, commercial payment rates for PPOs were 138 percent of Medicare FFS rates for clinician services, compared with 136 percent in 2019. From 2016 to 2019, median physician compensation across all specialties grew at an average annual rate of 2.5 percent, then grew by 1.0 percent between 2019 and 2020, despite the pandemic. Median compensation in 2020 remained much lower for primary care physicians than for physicians in many other specialties. Meanwhile, the MEI increased by 1.9 percent in 2020, and CMS projects that it will increase by 1.8 percent in 2023.

After growing from 2015 to 2019, allowed charges fell in 2020

Allowed charges are the total payments a clinician receives (including beneficiary cost sharing) from providing physician fee schedule services to FFS beneficiaries. Allowed charges are a function of the

**TABLE
4-6****Medicare FFS CAHPS performance scores, 2016–2020**

CAHPS composite measure	2016	2017	2018	2019	2020
Getting needed care and seeing specialists	84%	84%	83%	N/A	83%
Getting appointments and care quickly	77	77	77	N/A	78
Care coordination (e.g., personal doctor always or usually discusses medication, has relevant medical record, helps with managing care)	86	86	85	N/A	85
Rating of health plan (FFS Medicare)	84	83	83	N/A	84
Rating of health care quality	85	85	85	N/A	86
Annual flu vaccine	72	74	74	N/A	77

Note: FFS (fee-for-service), CAHPS® (Consumer Assessment of Healthcare Providers and Systems®), N/A (not applicable). CMS halted collection of the 2019 beneficiary experience survey at the start of the pandemic. Response options for questions in rows 1 to 3 are “Never,” “Sometimes,” “Usually,” and “Always.” CMS converts these to a linear mean score on a 0 to 100 scale. Questions in rows 4 and 5 have responses of 1 to 10, which CMS converts to a linear mean score on a 0 to 100 scale. The question in row 6 is a yes/no response. “Plan” in row 4 refers to the Medicare FFS program.

Source: FFS CAHPS mean scores provided by CMS.

physician fee schedule’s relative value units (RVUs), the fee schedule’s conversion factor, and other payment adjustments, such as those determined by geographic practice cost indexes.

We used claims data from 2015, 2019, and 2020 to analyze changes in allowed charges for the services furnished by clinicians billing under the physician fee schedule. We grouped individual service codes into broad service categories that are clinically meaningful (e.g., E&M, major procedures). Each broad service category contains multiple subcategories of similar services (e.g., E&M includes office/outpatient services, hospital inpatient services, and other subcategories).

We also present changes in units of service per beneficiary. A difference between a change in allowed charges and a change in units of service means that a factor other than volume is affecting the amount of allowed charges. For example, if providers substitute higher-RVU computed tomography (CT) scans for lower-RVU X-rays, the allowed charges for imaging

services would increase at a higher rate than would units of service for imaging. However, physician fee schedule–allowed charges are also affected by shifts in the site of service: Decreases in allowed charges could be related to the movement of services from freestanding offices to hospitals, in addition to changes in the volume or intensity of services provided (see text box on shifts in billing, pp. 146–147).

From 2015 to 2019, the average annual growth in allowed charges per beneficiary was 2.0 percent. But between 2019 and 2020, allowed charges per FFS beneficiary fell by 10.6 percent, as beneficiaries put off care in the early months of the pandemic (Table 4-7, p. 144). As shown in Figure 4-4, allowed charges per beneficiary for all physician fee schedule services were about 3 percent higher in January and February 2020 compared with allowed charges during those two months in 2019. Starting in March, however, allowed charges began to fall sharply, and by April these charges were \$125 less per beneficiary than during the same month in 2019—almost a 50 percent drop. By

FIGURE
4-4

Monthly physician fee schedule allowed charges per fee-for-service beneficiary, 2019 and 2020



Source: MedPAC analysis of Medicare claims data for 100 percent of fee-for-service beneficiaries.

June, allowed charges had largely rebounded and were only \$4 per beneficiary less than in June 2019. For the rest of 2020, monthly physician fee schedule–allowed charges per beneficiary were between 1 percent and 9 percent less than during equivalent months in 2019. Spending trends for the privately insured in 2020 followed a similar pattern (FAIR Health 2021).

The Congress has provided tens of billions of dollars in relief funds to clinicians to offset their pandemic-related revenue losses from Medicare and other payers. This support accelerated the growth of national spending on clinician services, with spending on these services (by all sources, not just Medicare) growing by 5.4 percent in 2020 (up from 4.2 percent in 2019) (Hartman et al. 2022). We estimate that in 2020 and 2021, clinicians received at least \$17 billion through the Provider Relief Fund and up to \$18 billion in forgiven loans through the Paycheck Protection Program.

Among broad service categories, the changes in allowed charges per beneficiary between 2019 and 2020 were –9.4 percent for E&M services, –11.4 percent for imaging services, –9.9 percent for major procedures, –12.0 percent for other procedures, –14.1 percent for tests, and –14.1 percent for anesthesia services (Table 4-7, p. 144).

Monthly changes within these service categories largely reflect the overall pattern seen for all services, but the size of the changes varied among categories. For instance, allowed charges per beneficiary for tests and anesthesia in April 2020 were more than 60 percent lower than for the same month in 2019, allowed charges for major procedures and other procedures declined by roughly 55 percent, and charges for E&M services declined by around 40 percent (data not shown). This variation likely reflects differences in whether a service was considered elective and the

**TABLE
4-7****Allowed charges per FFS beneficiary for physician fee schedule services, 2015–2020**

Type of service	Change in units of service per beneficiary		Change in allowed charges per beneficiary		Share of 2020 allowed charges
	Average annual 2015–2019	2019–2020	Average annual 2015–2019	2019–2020	
All services	1.6%	-11.7%	2.0%	-10.6%	100.0%
Evaluation and management	0.6	-8.7	1.7	-9.4	50.7
Office/outpatient services	0.9	-9.4	1.9	-11.1	25.5
Hospital inpatient services	-1.1	-6.8	-0.3	-6.3	11.0
Nursing facility services	1.9	-3.3	2.8	-4.0	3.2
Emergency department services	-1.1	-20.1	-0.5	-18.3	2.6
Ophthalmological services	0.7	-23.4	2.0	-20.1	2.5
Behavioral health services	3.4	-4.9	4.3	-1.3	2.1
Critical care services	2.9	9.2	2.7	9.5	1.8
Care management/coordination	-1.1	15.7	24.8	6.0	1.1
Observation care services	4.1	-20.0	4.3	-19.9	0.6
Home services	0.0	-0.1	0.4	-1.5	0.4
Imaging	0.4	-13.3	2.1	-11.4	10.9
Standard X-ray	-1.3	-14.4	0.3	-13.2	3.0
Ultrasound	1.1	-14.0	1.7	-13.0	2.8
CT	4.3	-9.3	5.6	-8.2	2.1
Nuclear	-1.1	-15.0	2.0	-6.8	1.3
MR	2.4	-13.4	2.3	-13.5	1.2
Major procedures	1.0	-10.0	2.7	-9.9	7.7
Musculoskeletal	1.3	-9.2	2.4	-10.3	2.8
Vascular	0.8	-7.9	8.2	-5.0	1.6
Cardiovascular	2.2	-12.1	1.9	-13.8	0.9
Other organ systems	0.9	-11.3	0.8	-10.9	0.9
Digestive/gastrointestinal	-0.6	-11.2	-0.7	-12.0	0.7
Skin	0.9	-7.6	1.1	-8.9	0.5
Eye	0.3	-13.3	-1.0	-13.1	0.2
Other procedures	3.8	-13.9	2.6	-12.0	22.6
Skin	1.8	-14.3	3.4	-9.8	4.6
Physical, occupational, and speech therapy	8.2	-15.5	9.2	-15.1	4.1
Musculoskeletal	1.4	-14.7	2.9	-12.2	2.4
Radiation oncology	1.5	-6.0	0.1	-3.8	2.1
Eye	3.0	-12.2	1.6	-22.9	2.0
Other organ systems	2.4	-13.8	2.5	-11.1	1.7
Dialysis	-1.2	-4.0	0.6	0.0	1.2
Digestive/gastrointestinal	0.7	-17.7	-1.8	-18.7	1.1
Vascular	-5.4	-6.3	-3.3	-11.7	1.0
Chiropractic	-0.6	-14.4	0.4	-14.1	0.8
Chemotherapy administration	-1.5	-1.4	-0.3	-1.1	0.5
Injections and infusions: non-oncologic	-0.2	-12.3	-5.6	-15.9	0.3
Tests	1.6	-15.3	2.2	-14.1	4.9
Anatomic pathology	1.7	-11.4	1.5	-10.7	2.1
Cardiography	1.7	-12.9	5.8	-3.7	1.4
Neurologic	1.1	-20.1	1.3	-30.3	0.6
Pulmonary function	-0.2	-32.0	-0.6	-33.1	0.2
Anesthesia	1.9	-12.7	1.3	-14.1	2.8

Note: FFS (fee for service), CT (computed tomography), MR (magnetic resonance). Some low-spending categories are not shown but are included in the calculations. Allowed charges per beneficiary are calculated for FFS beneficiaries enrolled in Part B. Components may not sum to totals due to rounding.

Source: MedPAC analysis of Medicare claims data for 100 percent of fee-for-service Medicare beneficiaries.

willingness of Medicare beneficiaries to be treated in person during the initial months of the pandemic. The impact of the pandemic on E&M services probably would have been larger if not for the significant increase in 2020 in E&M telehealth visits (see text box on telehealth, pp. 128–130).

Within broad service categories, services for some subcategories experienced significant variation in allowed charges per beneficiary. Table 4-7 shows that from 2019 to 2020, within the E&M category, ophthalmological services fell by 20.1 percent while critical care services grew by 9.5 percent.

Services that had experienced high growth in allowed charges in previous years—specifically 2015 to 2019—were not immune to declines in 2020. Major vascular procedures, which had grown in previous years by an average of 8.2 percent per beneficiary per year, fell by 5.0 percent in 2020. Similarly, in previous years, physical, occupational, and speech therapy had experienced annual growth of 9.2 percent but fell by 15.1 percent in 2020 (Table 4-7).

A small number of service categories experienced notably small declines in allowed charges or even increased in 2020 compared with 2019. For example, spending per beneficiary on dialysis services did not change in 2020, and chemotherapy administration fell by just 1.1 percent. Only two categories experienced increases in per beneficiary spending: Critical care services rose by 9.5 percent and care management and coordination services increased by 6.0 percent. The increase in care management was likely attributable to the growth of relatively new codes for chronic care management services, and presumably much of the growth in critical care services was associated with care furnished to beneficiaries with COVID-19.²⁷

Private PPO payment rates remain higher than Medicare payment rates for clinician services

We compare rates paid by private insurance plans with Medicare rates for clinician services because extreme disparities in payment rates might create an incentive for clinicians to focus primarily on patients with private insurance. In 2020, payment rates paid by private PPO health plans for clinician services were 138 percent of Medicare's FFS payment rates, up from 136 percent in 2019.²⁸ The ratio in 2020 varied by type of service. For example, private insurance rates were 130 percent of

Medicare rates for E&M office visits for established patients but 172 percent of Medicare rates for coronary artery bypass graft surgery.

The gap between private insurance rates and Medicare rates has grown in recent years as private insurance rates have risen while Medicare rates have remained relatively stable. In 2011, private insurance rates were 122 percent of Medicare rates. Notwithstanding the growth in the ratio of private insurance rates to Medicare rates, the vast majority of clinicians continue to participate in the Medicare program. The number of clinicians who have opted out of Medicare as of October 2021 (27,000) is substantially outweighed by the number who continue to bill the physician fee schedule (almost 1.3 million in 2020).

The growth in private insurance prices is probably a result of greater consolidation of physician practices and hospitals' acquisition of physician practices, which give providers greater leverage to negotiate higher prices for clinician services with private plans. In recent years, the number of physicians joining larger groups, hospitals, and health systems has risen sharply. For example, between 2016 and 2018, the share of all physicians who were vertically affiliated with health systems climbed from 40 percent to 51 percent (Furukawa et al. 2020).²⁹

Studies show that private insurance prices for physician services are higher in markets with larger physician practices and in markets with greater physician-hospital consolidation (Baker et al. 2014, Capps et al. 2018, Clemens and Gottlieb 2017, Neprash et al. 2015). Our own research found that independent practices with larger market shares and hospital-owned practices received higher private insurance prices for E&M visits than other practices in their market (Medicare Payment Advisory Commission 2017). For example, independent practices with a large market share of E&M visits received an average private insurance price for an E&M visit that was 141 percent of the FFS Medicare rate. By contrast, the average private insurance price received by the smallest independent practices for an E&M visit was about equal to Medicare's rate.

Evidence also suggests that private insurance prices for physician services vary widely across markets. A study by the Congressional Budget Office (CBO)

Shifts in billing from freestanding offices to hospitals reduce physician fee schedule payments but raise overall Medicare spending

Medicare spending is sensitive to shifts in the site of care. Medicare makes both a physician fee schedule payment and a facility payment under the outpatient prospective payment system (OPPS) when a service is provided in a hospital outpatient department (HOPD) (the facility payment accounts for the cost of the service in an HOPD). However, the program makes only a fee schedule payment when a service is furnished in a freestanding office. In 2022, for example, a level 3 evaluation and management (E&M) office/outpatient visit for an established patient (Healthcare Common Procedure Coding System code 99213) has an average nonfacility (freestanding office) fee schedule payment rate of \$92. By contrast, the average fee schedule payment rate for the visit when provided in an HOPD is \$67, and the facility payment to the HOPD is \$121 (for a combined payment of \$189).³⁰ Thus, the shift of level 3 E&M office/outpatient visits

from freestanding offices to HOPDs reduces the fee schedule payment (from \$92 to \$67) but raises the total Medicare payment amount (from \$92 to \$189).

In recent years, the number of services billed in HOPDs has been increasing, while the number of services provided in freestanding offices has been declining. From 2013 to 2019, for example, the number of E&M office/outpatient visits performed in HOPDs grew by 25 percent, compared with a 5 percent decline in freestanding offices. Similarly, the number of chemotherapy administration services delivered in HOPDs rose by 45 percent, while the number provided in freestanding offices fell by 12 percent. This change in the billed setting increases overall Medicare program spending and beneficiary cost sharing because Medicare generally pays more for the same or similar services in HOPDs than in freestanding offices (Medicare Payment Advisory

(continued next page)

using data from 2014 found that the average ratio of private insurance prices to Medicare FFS prices for 20 common physician services was at least 70 percent higher in the most costly market than in the least costly market (Congressional Budget Office 2018). CBO found much less variation in the average ratio of Medicare Advantage (MA) prices to Medicare FFS prices across and within markets. MA plans paid much lower prices than private insurance plans for the 20 services examined in the study, and the median MA prices for these services were almost the same as the median Medicare FFS prices. Similarly, a study by Trish and colleagues found that, from 2007 through 2012, MA payment rates for physician services were similar to Medicare FFS rates, whereas commercial prices were higher than Medicare FFS prices (Trish et al. 2017).

Considering our other payment adequacy indicators, we do not believe that beneficiaries' access to clinician

services is at risk in the near term. However, in the long run, if private payers do not restrain the growth in clinicians' payment rates, eventually the difference between private insurance rates and Medicare rates could grow so large that some clinicians might choose to focus primarily on patients with private insurance instead of Medicare patients.

Median physician compensation grew more slowly in 2020 than between 2016 and 2019

To examine compensation clinicians received from all payers, we analyzed data from SullivanCotter's Physician Compensation and Productivity Survey; most of the clinician practices in this survey are affiliated with a large hospital or health system. From 2016 to 2019, median compensation across all physician specialties grew at an average annual rate of 2.5 percent, then grew by 1.0 percent during 2020, despite the pandemic. From 2019 to 2020, median

Shifts in billing from freestanding offices to hospitals reduce physician fee schedule payments but raise overall Medicare spending (cont.)

Commission 2014, Medicare Payment Advisory Commission 2013, Medicare Payment Advisory Commission 2012). For example, we estimate that in 2019, the Medicare program spent \$1.4 billion more than it would have if payment rates for E&M office/outpatient visits in HOPDs were the same as freestanding office rates. In the same year, beneficiaries' cost sharing was \$360 million more than it would have been had payment rates been the same in both settings.

To address the increased spending that results when services shift from freestanding offices to HOPDs, the Commission has recommended adjusting payment rates in the OPPS so that Medicare pays the same amount for E&M office/outpatient visits in freestanding offices and HOPDs (Medicare Payment Advisory Commission 2012). Medicare

currently pays a comparable amount for E&M office/outpatient visits in freestanding offices and off-campus HOPDs; however, Medicare continues to pay a higher amount for these visits when provided in on-campus HOPDs.³¹ The Commission also has recommended adjusting OPPS rates for services in ambulatory payment classification (APC) groups that meet certain criteria so that payment rates are equal or more closely aligned between HOPDs and freestanding offices (Medicare Payment Advisory Commission 2014).³² APCs that meet these criteria are those that are unlikely to have costs associated with operating an emergency department, do not have extra costs associated with higher patient complexity in HOPDs, and include services that are frequently performed in freestanding offices (which indicates that these services are likely safe and appropriate to provide in a freestanding office). ■

compensation for primary care physicians increased by 0.8 percent, faster than surgical specialties (-0.2 percent), radiology (0.0 percent), and nonsurgical, procedural specialties (0.6 percent) but slower than nonsurgical, nonprocedural specialties (1.1 percent).³³

Compensation is much higher for certain specialties than for primary care

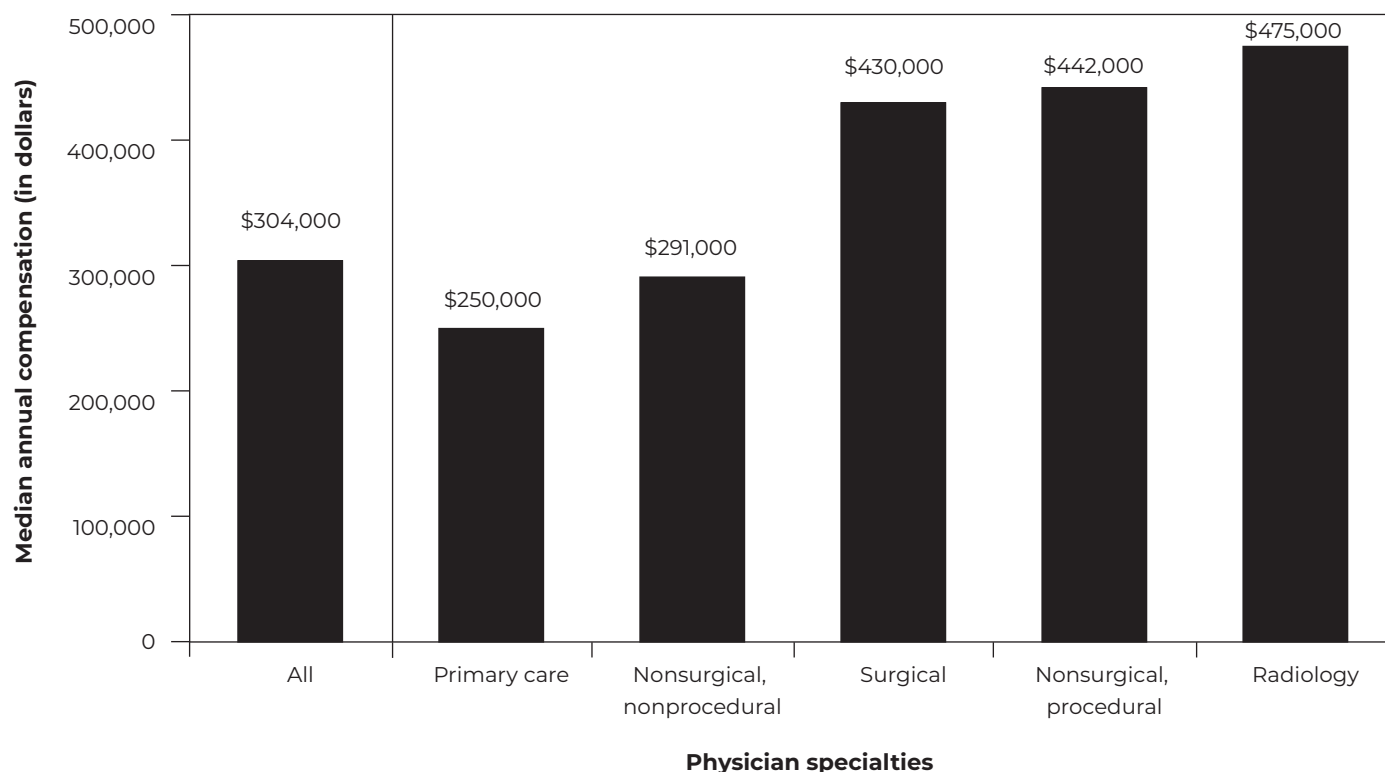
In 2020, median compensation across all physician specialties was \$304,000, but compensation was much higher for many specialists than for primary care physicians. Specialties with the highest median compensation were radiology (\$475,000); nonsurgical, procedural specialties (\$442,000); and surgical specialties (\$430,000) (Figure 4-5, p. 148).³⁴ Median compensation for radiology was 90 percent higher than median compensation for primary care (\$250,000), and median compensation for nonsurgical, procedural specialties was 77 percent higher than that of primary

care. Psychiatry—which is in the nonsurgical, nonprocedural group—had median compensation of \$259,000.³⁵ By comparison, nurse practitioners had median compensation of \$118,000 and physician assistants had median compensation of \$121,000.

Physician compensation from all payers reflects the structure of Medicare's physician fee schedule because many private insurers base their payment rates on the fee schedule's relative prices (Clemens and Gottlieb 2017, Congressional Budget Office 2018). Therefore, physician compensation from all payers likely reflects the fee schedule's historical underpricing of ambulatory E&M visits relative to other services, such as procedures (Medicare Payment Advisory Commission 2018a).³⁶ Ambulatory E&M visits make up a large share of the services provided by primary care clinicians and certain other specialties (e.g., psychiatry, endocrinology, and rheumatology). The fee schedule's underpricing of these services has contributed to an

**FIGURE
4-5**

Compensation for primary care physicians was much lower than for most specialists, 2020



Note: Figure includes all physicians who reported their annual compensation in the survey ($n = 96,434$). The primary care group includes family medicine, internal medicine, and general pediatrics. The nonsurgical, nonprocedural group includes psychiatry, emergency medicine, endocrinology, hospital medicine, nephrology, neurology, physical medicine, rheumatology, and other internal medicine/pediatrics. The nonsurgical, procedural group includes cardiology, dermatology, gastroenterology, pulmonology, and hematology/oncology.

Source: SullivanCotter's Physician Compensation and Productivity Survey, 2021.

income disparity between primary care physicians and certain specialists, which in turn has contributed to the decline in the number of primary care physicians in recent years.

In 2021, CMS substantially increased the RVUs for E&M office/outpatient visits—the most common type of ambulatory E&M visit (see text box on primary care, pp. 119–121). The Commission supported this action because it is an important first step in addressing the long-term devaluation of these services. Increasing the RVUs for E&M office/outpatient visits could also help to reduce the large gap in compensation between primary care physicians and certain specialists, which could increase the supply of primary care physicians.

Input costs for clinicians are projected to increase from 2022 to 2023

In 2020, the Medicare Economic Index (MEI), which measures the average annual price change in the market basket of inputs used by clinicians to furnish services and is adjusted for economy-wide productivity, increased by 1.9 percent. CMS's forecasted growth for the MEI (as of the third quarter of 2021) in 2021, 2022, and 2023 is 2.2 percent, 2.3 percent, and 1.8 percent, respectively (projections are subject to change).

The MEI consists of two main categories: (1) physicians' compensation and (2) physicians' practice expenses (e.g., compensation for nonphysician staff, rent, equipment, and professional liability insurance). The

index's cost categories (e.g., physician compensation, medical equipment) and cost weights (each category's share of total costs) are based on data on physicians' expenses from 2006, which raises questions about the continued accuracy of the MEI.³⁷ CMS lacks a reliable, ongoing source of data to update the MEI's cost categories and cost weights. In 2011, the Commission recommended that CMS regularly collect data from a cohort of efficient practices to establish more accurate work and practice expense RVUs. As part of this data collection, CMS could gather data on physicians' practice costs and use that information to update the MEI.

How should Medicare payments change in 2023?

The Commission's deliberations on payment adequacy for clinicians are informed by data assessing beneficiaries' access to clinicians' services, the quality of beneficiaries' care, and Medicare payments and providers' costs. We find that, on the basis of these indicators, aggregate payments appear adequate. Under current law, there will be no update to payment rates in 2023. Although clinicians experienced declines in their Medicare service volume and revenue in the early months of the pandemic, we expect service volume and revenue to return to prepandemic levels (or higher) by 2023. In addition, the Congress provided tens of billions of dollars in relief funds to clinicians in 2020 and 2021 to offset losses in revenue from Medicare and non-Medicare patients, leading to an acceleration in national spending on clinician services in 2020 compared to 2019 (Hartman et al. 2022).

RECOMMENDATION 4-1

For calendar year 2023, the Congress should update the 2022 Medicare base payment rate for physician and other health professional services by the amount determined under current law.

RATIONALE 4-1

Overall, access to clinician services for Medicare beneficiaries appears stable and comparable to that for privately insured individuals. Quality of care is difficult to assess due to the effects of the coronavirus pandemic on beneficiaries and providers. We expect

volume and revenue to return to prepandemic levels (or higher) by 2023. Therefore, the Commission does not see a reason to diverge from the current-law policy of no update for 2023. The payment update applies to all clinician services. If there are concerns about payment adequacy for primary care services, they should be addressed through a targeted approach instead of the payment update mechanism (see the text box on primary care, pp. 119–121). Consistent with the Commission's process for developing a payment update recommendation for 2023, we will continue to monitor our indicators of payment adequacy each year using the most current available data and will make recommendations accordingly in future years.

IMPLICATIONS 4-1

Spending

- No change relative to current law.

Beneficiary and provider

- The Commission's recommendation of the current-law update should not affect beneficiaries' access to care or providers' willingness and ability to furnish care.

Adding a claims modifier for audio-only telehealth services

Before the PHE, CMS paid for telehealth services under the physician fee schedule only if they were provided using an interactive telecommunications system that included two-way audio and video communication technology. During the PHE, however, CMS has waived this requirement for some services because not all beneficiaries have the capability to engage in a video telehealth visit from their home (Medicare Payment Advisory Commission 2021). During the PHE, CMS allows audio-only interactions to meet the telehealth requirements for 86 Healthcare Common Procedure Coding System (HCPCS) codes (Centers for Medicare & Medicaid Services 2020b, Centers for Medicare & Medicaid Services 2020c). For example, CMS pays for some E&M services and most behavioral health services that are provided through an audio-only interaction but does not pay for audio-only physical therapy or eye exams. Only 3 of the 86 HCPCS codes that CMS covers during the PHE if they were provided through an audio-only interaction indicate whether the service

was delivered by telephone in the code's description: 99441–99443 (telephone E&M service by a physician or other qualified health professional). The descriptions of the other 83 codes are the same whether the service was provided in person, through an audio–video interaction, or through an audio-only interaction.³⁸

In our March 2021 report, the Commission presented a policy option in which CMS would continue to cover some telehealth services (including audio-only services) temporarily after the PHE when the agency determines there is potential for clinical benefit (Medicare Payment Advisory Commission 2021). During this limited period (e.g., one to two years after the expiration of the PHE), policymakers would gather more evidence about the impact of telehealth services (including audio-only services) on access, quality, and cost and use this evidence to decide whether to pay for certain telehealth services permanently.

The Consolidated Appropriations Act, 2021, permanently covered telehealth services that are used to diagnose, evaluate, or treat a mental health disorder when they are provided to a beneficiary at home, whether the beneficiary lives in a rural or urban area; this provision takes effect after the PHE ends. When CMS implemented this provision, the agency also decided to permanently cover audio-only telehealth services used to diagnose, evaluate, or treat a mental health disorder or substance use disorder (SUD) when they are furnished to a beneficiary at home, as long as the clinician is capable of using an audio and video communications system but the patient is not capable of using, or does not consent to the use of, video technology (Centers for Medicare & Medicaid Services 2021c).³⁹ CMS also required clinicians who provide audio-only telehealth services for mental health disorders or SUDs to include a service-level claims modifier when they bill Medicare for these services.⁴⁰ The purpose of this modifier is to allow CMS to monitor use of these audio-only services and ensure compliance with the requirement that clinicians who provide audio-only services have audio and video technology capability but use audio-only technology due to beneficiary choice or limitations. This modifier is required for audio-only services for mental health disorders or SUDs but not for other audio-only services.

However, apart from telehealth services for mental health disorders and SUDs and telephone E&M services, there is no information on Medicare claims that indicates whether the telehealth service was delivered by an audio-only interaction or an audio–video interaction. Consequently, CMS and others are unable to use claims data to assess the impact of many audio-only telehealth services on access, quality, and cost or to evaluate whether audio-only and audio–video interactions have similar effects on quality and cost. Without this evidence, it might be difficult for policymakers to decide whether to pay permanently for additional audio-only telehealth services. Therefore, CMS should require clinicians to use a claims modifier to identify all audio-only telehealth services, as the agency has done for audio-only telehealth services for mental health conditions and SUDs. This recommendation applies whether Medicare is covering these services temporarily (as during the current PHE) or permanently.

RECOMMENDATION 4-2

The Secretary should require that clinicians use a claims modifier to identify audio-only telehealth services.

RATIONALE 4-2

Requiring clinicians to use a claims modifier for all audio-only telehealth services would enable CMS, the Commission, and researchers to assess the impact of such services on access, quality, and cost; to evaluate whether audio-only and audio–video interactions have similar effects on quality and cost; and to examine the characteristics of beneficiaries who use audio-only services. In addition, a claims modifier would allow CMS to monitor the use of these services and help protect Medicare and beneficiaries from unnecessary spending and potential fraud.

IMPLICATIONS 4-2

Spending

- No change relative to current law.

Beneficiary and provider

- This recommendation should not affect beneficiaries' access to care or providers' willingness and ability to furnish care. ■

4 A P P E N D I X A

Key findings from the Commission's 2021 access-to-care telephone survey

**TABLE
4A-1**

Medicare beneficiaries and the privately insured generally had comparable access to care, but slightly more Medicare beneficiaries experienced delays getting appointments during the pandemic, 2021

Survey question	Medicare beneficiaries (ages 65 and older)					Privately insured (ages 50–64)				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Unwanted delay in getting an appointment: Among those who needed an appointment in the past 12 months, “How often did you have to wait longer than you wanted to get a doctor’s appointment?”										
For routine care										
Never	73% ^{ab}	70% ^a	72% ^b	69% ^a	67% ^a	69% ^{ab}	64% ^{ab}	74% ^b	73% ^{ab}	78% ^a
Sometimes	20 ^{ab}	20 ^{ab}	20 ^b	22 ^a	23 ^a	22 ^{ab}	26 ^{ab}	19	20 ^{ab}	17 ^a
Usually	3 ^b	5	3 ^b	3 ^b	5 ^a	4 ^b	5 ^b	4 ^b	4 ^b	3 ^a
Always	3	3 ^a	3	3	3 ^a	3 ^b	4 ^{ab}	3 ^b	3 ^b	2 ^a
For illness or injury										
Never	80 ^a	79 ^a	80	79	78 ^a	76 ^{ab}	74 ^{ab}	81	80 ^b	83 ^a
Sometimes	15 ^a	15 ^a	14	15	16 ^a	18 ^{ab}	19 ^{ab}	15	15	13 ^a
Usually	2	2	2	2	2	2	3 ^b	2	3	2
Always	1 ^a	2	2	2	2	2 ^{ab}	2	1	2	1
Not accessing a doctor for medical problems: “During the past 12 months, did you have any health problem or condition about which you think you should have seen a doctor or other medical person, but did not?”										
Share answering “Yes”	11	11 ^a	9	10	10	12 ^b	14 ^{ab}	10	11 ^b	9
Looking for a new provider: “In the past 12 months, have you tried to get a new...?” (Share answering “Yes”)										
Primary care provider	9 ^a	10 ^b	8	8	8	11 ^{ab}	10 ^b	9 ^b	7	6
Specialist	17 ^{ab}	19 ^{ab}	17 ^b	15	14 ^a	20 ^{ab}	21 ^{ab}	15 ^b	13 ^b	11 ^a
Problems getting a new provider: Among those who tried to get an appointment with a new primary care provider or specialist in the past 12 months, “How much of a problem was it finding a primary care provider/specialist who would treat you? Was it...”										
Primary care provider										
No problem	69 ^{ab}	71 ^b	72 ^{ab}	60	57	59 ^a	67	62 ^a	57	59
Share of total insurance group	6 ^b	7 ^b	5	5	4	6 ^b	7 ^b	5 ^b	4	4
Small problem	13 ^b	13 ^b	13 ^{ab}	16 ^a	23	18	16 ^b	20 ^a	24 ^a	25
Share of total insurance group	1 ^{ab}	1	1 ^{ab}	1	2	2 ^a	2	2 ^a	2	2
Big problem	14	14	14	22	18	22 ^a	16	17	18	15
Share of total insurance group	1 ^a	1	1	2	1	2 ^{ab}	2 ^b	2	1	1
Specialist										
No problem	83 ^b	84 ^b	85 ^{ab}	79 ^b	73	81	80	79 ^a	77	76
Share of total insurance group	14 ^b	16 ^b	14 ^{ab}	12	10 ^a	16 ^b	17 ^b	12 ^{ab}	10 ^b	8 ^a
Small problem	11 ^b	7 ^b	6 ^{ab}	9 ^b	16	11 ^b	9 ^b	11 ^{ab}	11 ^b	17
Share of total insurance group	2	1 ^b	1 ^b	1 ^b	2	2	2	2	1	2
Big problem	5 ^{ab}	8	8	11	11	8 ^a	10	9	11	8
Share of total insurance group	1 ^{ab}	1	1	2	2 ^a	2 ^{ab}	2 ^b	1 ^b	2 ^b	1 ^a

Note: Totals may not sum to 100 because of rounding and because the table excludes the following responses: “Don’t know” and “Refused.” Sample sizes for each group (Medicare and private insurance) are approximately 4,000 each year. Sample sizes for individual questions varied. Survey includes beneficiaries enrolled in fee-for-service Medicare or Medicare Advantage and excludes beneficiaries under the age of 65.

^a Statistically significant difference between the Medicare and private insurance groups in the given year (at a 95 percent confidence level).

^b Statistically significant difference from 2021 within the same insurance category (at a 95 percent confidence level).

Source: MedPAC-sponsored telephone surveys conducted from 2017 to 2021.

**TABLE
4A-2**

More Black beneficiaries waited longer than they wanted for appointments and reported forgoing care compared with White beneficiaries, 2021

Survey question	Medicare beneficiaries (ages 65 and older)			Privately insured (ages 50–64)		
	White	Black	Hispanic	White	Black	Hispanic
Unwanted delay in getting an appointment: Among those who needed an appointment in the past 12 months, “How often did you have to wait longer than you wanted to get a doctor’s appointment?”						
For routine care						
Never	69% ^{ab}	57% ^b	60% ^{ab}	82% ^{ab}	66% ^b	72% ^{ab}
Sometimes	23 ^a	27	24	14 ^{ab}	27 ^b	22 ^b
Usually	4 ^a	6	5	2 ^a	3	4
Always	2 ^b	6 ^{ab}	7 ^{ab}	1	2 ^a	1 ^a
For illness or injury						
Never	80 ^{ab}	68 ^{ab}	77	85 ^{ab}	78 ^{ab}	80
Sometimes	16 ^{ab}	23 ^b	16	12 ^{ab}	18 ^b	14
Usually	2	3 ^b	0 ^{ab}	1 ^b	3	3 ^{ab}
Always	2 ^b	4 ^{ab}	4 ^b	1	1 ^a	1
Not accessing a doctor for medical problems: “During the past 12 months, did you have any health problem or condition about which you think you should have seen a doctor or other medical person, but did not?”						
Share answering “Yes”	9 ^b	13 ^b	12	8	10	9
Looking for a new provider: “In the past 12 months, have you tried to get a new...?” (Share answering “Yes”)						
Primary care provider	7	9	11	6	6	6
Specialist	14 ^a	12	16	10 ^a	9	11
Problems getting a new provider: Among those who tried to get an appointment with a new primary care provider or specialist in the past 12 months, “How much of a problem was it finding a primary care provider/specialist who would treat you? Was it...”						
Primary care provider						
No problem	56	71	56	58	73 ^b	37 ^b
Share of total insurance group, by race	4	6	6 ^a	4	4	2 ^a
Small problem	25	12	24	26	22	32
Share of total insurance group, by race	2	1	2	2	1	2
Big problem	17	17	20	16	5	30
Share of total insurance group, by race	1	2	2	1	0	2
Specialist						
No problem	73	70	79	74	87	76
Share of total insurance group, by race	10 ^a	9	13	8 ^a	8	8
Small problem	15	4	18	17	7	20
Share of total insurance group, by race	2	0 ^b	3 ^b	2	1	2
Big problem	11 ^b	26 ^{ab}	3 ^b	9	6 ^a	4
Share of total insurance group, by race	1 ^b	3 ^{ab}	0 ^b	1	1 ^a	0

Note: Totals may not sum to 100 percent because of rounding and because the table excludes the following responses: “Don’t know” and “Refused.” “White” refers to non-Hispanic White respondents. “Black” refers to non-Hispanic Black respondents. “Hispanic” refers to Hispanic respondents of any race. The small size of our survey prevents us from breaking out results for other races. Sample sizes for each insurance group (Medicare beneficiaries and the privately insured) were approximately 4,000 in 2021. Sample sizes for individual questions varied. Survey includes beneficiaries enrolled in fee-for-service Medicare or Medicare Advantage and excludes beneficiaries under the age of 65.

^a Statistically significant difference between the Medicare and private insurance groups in the given year (at a 95 percent confidence level).

^b Statistically significant difference by race within the same insurance category in the given year (at a 95 percent confidence level).

Source: MedPAC-sponsored telephone survey conducted in 2021.

**TABLE
4A-3**

Beneficiaries in urban and rural areas had comparable access to care, 2021

Survey question	Medicare beneficiaries (ages 65 and older)		Privately insured (ages 50–64)	
	Urban	Rural	Urban	Rural
Unwanted delay in getting an appointment: Among those who needed an appointment in the past 12 months, “How often did you have to wait longer than you wanted to get a doctor’s appointment?”				
For routine care				
Never	67% ^a	67% ^a	77% ^a	81% ^a
Sometimes	23 ^a	25 ^a	17 ^a	17 ^a
Usually	5 ^a	4 ^a	3 ^a	1 ^a
Always	3 ^a	2	2 ^a	0
For illness or injury				
Never	78 ^a	79	83 ^a	84
Sometimes	17 ^a	17	13 ^a	12
Usually	2	1	2	1
Always	2	1	2	1
Not accessing a doctor for medical problems: “During the past 12 months, did you have any health problem or condition about which you think you should have seen a doctor or other medical person, but did not?”				
Share answering “Yes”	10	10	9	10
Looking for a new provider: “In the past 12 months, have you tried to get a new...?” (Share answering “Yes”)				
Primary care provider	8	7	7	7
Specialist	14 ^a	13	11 ^a	10
Problems getting a new provider: Among those who tried to get an appointment with a new primary care provider or specialist in the past 12 months, “How much of a problem was it finding a primary care provider/specialist who would treat you? Was it...”				
Primary care provider				
No problem	57	55	60	45
Share of total insurance group, by area	4	4	4	3
Small problem	25	20	25	29
Share of total insurance group, by area	2	1	2	2
Big problem	16	21	15	26
Share of total insurance group, by area	1	1	1	2
Specialist				
No problem	73	69	76	84
Share of total insurance group, by area	10 ^a	9	8 ^a	9
Small problem	16	17	16	9
Share of total insurance group, by area	2	2	2	1
Big problem	11	12	8	7
Share of total insurance group, by area	2 ^a	2	1 ^a	1

Note: Totals may not sum to 100 percent because of rounding and because the table excludes the following responses: “Don’t know” and “Refused.” Sample sizes for each insurance group (Medicare beneficiaries and the privately insured) were approximately 4,000 in 2021. Sample sizes for individual questions varied. Survey includes beneficiaries enrolled in fee-for-service Medicare or Medicare Advantage and excludes beneficiaries under the age of 65. “Urban” respondents reside in an urban or suburban part of a metropolitan statistical area (MSA); the Census Bureau defines MSAs as having at least one urbanized area with a population of 50,000 or more and including adjacent territory that has a high degree of social and economic integration as measured by commuting ties. “Rural” respondents reside outside of an MSA.

^a Statistically significant difference between Medicare beneficiaries and the privately insured in the given year (at a 95 percent confidence level).

^b Statistically significant difference by area type within the same insurance category in the given year (at a 95 percent confidence level).

Source: MedPAC-sponsored telephone survey conducted in 2021.

Endnotes

- 1 Ambulatory E&M services include office visits, hospital outpatient department visits, nursing facility visits, and home visits.
- 2 Although most clinician services are paid under the physician fee schedule, some are paid under the payment systems for federally qualified health centers and rural health clinics.
- 3 For further information, see the Commission's *Payment Basics: Physician and Other Health Professional Payment System* at <https://www.medpac.gov/document-type/payment-basic/>.
- 4 The new add-on code is G2211 (visit complexity inherent to evaluation and management). The 3.75 percent increase to payment rates expired at the end of 2021.
- 5 Sequestration applies only to Medicare program payments and does not reduce the size of payments clinicians collect through beneficiaries' cost sharing.
- 6 In this chapter, when referring to the share of individuals who are satisfied with some aspect of their care, we now use a narrower denominator than in prior years. Previously, our denominators included all individuals asked a survey question about their satisfaction (including individuals who received no care in the past year and thus were not given the opportunity to rate their satisfaction). This year, our denominators are restricted to individuals who actually received care in the past year and were thus given the opportunity to rate their satisfaction with that care.
- 7 We used the Clinical Classifications Software Refined from the Agency for Healthcare Research and Quality, which aggregates diagnosis codes from claims into 21 body systems. The diagnosis codes are based on the International Classification of Diseases, Tenth Revision, Clinical Modification, which consists of more than 70,000 diagnosis codes.
- 8 The Consolidated Appropriations Act, 2021 (CAA), removed Medicare's geographic restrictions and added the patient's home as an originating site for telehealth services that are used to diagnose, evaluate, or treat a mental health disorder. The CAA requires that a non-telehealth service (i.e., an in-person visit) be provided by the clinician furnishing mental telehealth services within six months before the initial telehealth service. In the PFS final rule for 2022, CMS also required that the clinician provide a non-telehealth service at least once every 12 months while the beneficiary is receiving mental telehealth services, with limited exceptions (Centers for Medicare & Medicaid Services 2021c).
- 9 Among beneficiaries who had to wait longer than they wanted for an appointment for routine care, 69 percent took the appointment date offered to them, 12 percent went to a walk-in clinic instead, 7 percent went to a hospital emergency department (ED), and 5 percent opted not to schedule the appointment. When faced with long waits for appointments for an illness or injury, 59 percent took the appointment date offered, 17 percent went to a walk-in clinic, 14 percent went to a hospital ED, and 3 percent opted not to schedule the appointment.
- 10 This year, we begin breaking out results for specific racial and ethnic categories instead of grouping them together as "non-White" individuals since racial and ethnic groups sometimes have quite different care experiences.
- 11 "Urban" respondents reside in an urban or suburban part of a metropolitan statistical area (MSA); the Census Bureau defines MSAs as having at least one urbanized area with a population of 50,000 or more and including adjacent territory that has a high degree of social and economic integration as measured by commuting ties. "Rural" respondents reside outside an MSA.
- 12 A substantial number of clinicians billed for 15 or fewer beneficiaries in a given year, but they accounted for a small share of services and allowed charges. For example, in 2019, about 17 percent of clinicians who billed the fee schedule billed for 15 or fewer beneficiaries, but these clinicians billed for less than 1 percent of total allowed charges.
- 13 For this analysis, we used the total number of Part B beneficiaries, including those in FFS Medicare and Medicare Advantage, to calculate the ratio of physicians and other health professionals per 1,000 beneficiaries because we assume that clinicians generally furnish services to beneficiaries covered under both programs.
- 14 APRNs include clinical nurse specialists, nurse practitioners, certified registered nurse anesthetists, and certified nurse midwives.
- 15 This survey excluded anesthesiologists, radiologists, and pathologists.
- 16 In such scenarios, the beneficiary pays the provider the total amount billed by the provider (which is limited to 109.25 percent of the fee schedule amount for participating

- providers), but Medicare will reimburse the beneficiary for 80 percent of 95 percent of the fee schedule amount for participating providers.
- 17 The behavioral health clinicians referenced here are psychiatrists, clinical psychologists, and clinical social workers.
 - 18 The oral health professionals referenced here are dentists, oral surgeons, and maxillofacial surgeons.
 - 19 The primary care specialties referenced here are family medicine, internal medicine, and pediatric medicine.
 - 20 Specifically, we define “encounters” as unique combinations of beneficiary identification numbers, claim identification numbers (for paid claims), and national provider identifiers (NPIs) of the clinicians who billed for the service.
 - 21 This number is based on our count of beneficiaries who had at least one encounter recorded in claims data and the total number of FFS Medicare beneficiaries enrolled in Part B from the 2021 Medicare Trustees report.
 - 22 Under “incident to” billing, Medicare allows APRNs and PAs to bill under the NPI of a supervising physician if certain conditions are met. The Commission recommended in 2019 that the Congress require APRNs and PAs to bill Medicare directly, eliminating “incident to” billing for services they provide (Medicare Payment Advisory Commission 2019b).
 - 23 Primary care physicians billed for very few services classified as “major procedures” or “anesthesia,” so these categories of services were excluded from this analysis.
 - 24 CAHPS® is a registered trademark of the Agency for Healthcare Research and Quality.
 - 25 The roughly 3,400 Dartmouth-defined HSAs are a collection of ZIP codes whose residents receive most of their hospitalizations from that area’s hospitals.
 - 26 Although the 2020 ratios of HSAs at the 90th to 10th percentiles are about the same as in 2019, the risk-standardized rates per 1,000 FFS beneficiaries dropped substantially in 2020 because of the pandemic’s effects.
 - 27 Starting in 2015, Medicare began making a separate monthly payment under the physician fee schedule for chronic care management services furnished to beneficiaries with multiple chronic conditions.
 - 28 This analysis used data on paid claims for PPO enrollees of a large national insurer that covers a wide geographic area across the United States. The payments reflect the insurer’s allowed amount (including allowed cost sharing). The data exclude any remaining balance billing and payments made outside of the claims process, such as bonuses or risk-sharing payments. Only services paid under Medicare’s physician fee schedule were included, and anesthesia services were excluded.
 - 29 In this study, health systems are organizations with at least one acute care hospital and one physician group providing comprehensive care that were connected through common ownership or joint management (Furukawa et al. 2020).
 - 30 When this type of visit is provided in an HOPD, it is billed as Healthcare Common Procedure Coding System code G0463 under the OPSS. The fee schedule rate is lower when the visit is provided in an HOPD because the HOPD’s equipment, supplies, staff, and overhead costs are paid for under the OPSS. The component payments do not sum to the total Medicare payment amount due to rounding.
 - 31 Section 603 of the Bipartisan Budget Act of 2015 prohibits HOPDs that began billing under the OPSS on or after November 2, 2015, and are located off a hospital campus from billing under the OPSS after January 1, 2017. In 2022, the payment rate for services provided at these off-campus HOPDs is equal to 40 percent of the rate under the OPSS. On-campus HOPDs, off-campus HOPDs that began billing before November 2, 2015, and dedicated emergency departments are permitted to continue billing under the OPSS. However, as of 2022, Medicare pays all off-campus HOPDs (regardless of when they began billing under the OPSS) an amount equal to 40 percent of the OPSS rate for office/outpatient E&M visits.
 - 32 For the OPSS, CMS classifies services into APC groups on the basis of clinical and cost similarity; all services within an APC group have the same payment rate.
 - 33 To control for annual changes in survey respondents, we based the percentage change on a cohort analysis in which the sample was restricted to physicians who were present in the data in 2016, 2019, and 2020.
 - 34 The nonsurgical, procedural specialties in the analysis are cardiology, dermatology, gastroenterology, pulmonology, and hematology/oncology.
 - 35 In addition to psychiatry, the nonsurgical, nonprocedural group includes emergency medicine, endocrinology, hospital medicine, nephrology, neurology, physical medicine, rheumatology, and other internal medicine/pediatrics. The primary care specialties in the analysis are family medicine, internal medicine, and general pediatrics.

- 36 Ambulatory E&M services include office visits, hospital outpatient department visits, visits to patients in certain other settings such as nursing facilities, and home visits.
- 37 CMS uses price proxies (such as the consumer price index and employment cost index) to calculate annual changes in the MEI.
- 38 CMS created a claims modifier to indicate whether a service was provided by telehealth, but this modifier is the same whether the service was delivered using audio-video technology or audio-only technology.
- 39 Medicare began covering telehealth services to treat SUDs for beneficiaries in urban and rural areas and in patients' homes on July 1, 2019.
- 40 CMS also covers the use of audio-only technology by opioid treatment programs (OTPs) when they deliver certain counseling and therapy services to beneficiaries (Centers for Medicare & Medicaid Services 2021c). OTPs must use a service-level claims modifier when they bill for a counseling and therapy add-on code if that service is provided using an audio-only interaction.

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CHAPTER

5

Ambulatory surgical center services

R E C O M M E N D A T I O N S

- 5-1** For calendar year 2023, the Congress should eliminate the update to the 2022 Medicare conversion factor for ambulatory surgical centers.

COMMISSIONER VOTES: YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0

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- 5-2** The Secretary should require ambulatory surgical centers to report cost data.

COMMISSIONER VOTES: YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0

Ambulatory surgical center services

Chapter summary

Ambulatory surgical centers (ASCs) provide outpatient procedures to patients who do not require an overnight stay. In 2020, the 5,930 ASCs that were certified by Medicare treated 3.0 million fee-for-service (FFS) Medicare beneficiaries. Medicare program and beneficiary spending on ASC services was about \$4.9 billion.

In this chapter, we make a recommendation on a payment rate update for 2023. Because of standard data lags, the most recent complete data we have for most payment adequacy indicators are from 2020. We have considered the effects of the coronavirus public health emergency (PHE) and associated relief policies on our indicators and whether those effects are likely to be temporary or permanent. To the extent that the effects of the PHE are temporary changes—even across multiple years—or vary significantly across individual ASCs, they are best addressed through targeted temporary funding policies rather than a permanent change to all ASCs' payment rates in 2023 and future years. Based on information available at the time of publication, we do not anticipate any long-term PHE-related effects that would warrant inclusion in the annual update to ASC payments in 2023, other than increased wage rates, which will be

In this chapter

- Are Medicare payments adequate in 2022?
- How should Medicare payment rates change in 2023?

accounted for under current-law updates to the hospital market basket (CMS currently uses the hospital market basket to update ASC payment rates).

Assessment of payment adequacy

To examine the adequacy of Medicare's payments to ASCs, we analyze beneficiaries' access to care (including the supply of providers and volume of services), quality of care, and provider access to capital. Cost data are not available for ASCs. The available indicators of payment adequacy for ASC services are generally positive.

In 2020, some ASC payment adequacy indicators improved while others diminished. However, the decreasing measures very likely reflect the temporary effects of the PHE rather than the adequacy of Medicare payments to ASCs.

Beneficiaries' access to care—Our analysis of facility supply and volume of services indicates that beneficiaries' access to ASC services is adequate.

- **Capacity and supply of providers**—From 2015 to 2019, the number of ASCs increased by an average annual rate of 2.1 percent. In 2020, the number of ASCs increased 2.0 percent. Most new ASCs in 2020 (95 percent) were for-profit facilities.
- **Volume of services**—From 2015 through 2019, the volume of services per Part B FFS beneficiary grew by an average annual rate of 1.5 percent. In 2020, volume per beneficiary declined by 13.6 percent, largely due to a substantial drop in the spring of 2020 caused by the PHE. ASC volume rebounded strongly, and volume in December 2020 was 97 percent of the volume in December 2019.

Quality of care—From 2013 through 2017, ASC-reported quality data showed improvement in performance; improvement plateaued from 2017 to 2019. For 2020, CMS collected data on five quality measures; these measures were generally unchanged from 2019 to 2020. However, CMS did not require ASCs to submit quality data for the first six months of 2020. We continue to be concerned about the delayed use of Consumer Assessment of Healthcare Providers and Systems® measures, the lack of a value-based purchasing program for the ASC sector, and the lack of outcome measures that apply to all ASCs. For example, CMS could add measures targeting the frequency of ASC patients receiving hospital care after ASC discharge or rates of surgical site infection.

Providers' access to capital—Because the number of ASCs, especially for-profit ASCs, has continued to increase and consolidation in the ASC market has maintained a steady pace, access to capital appears to be adequate.

Medicare payments and providers' costs—From 2015 through 2019, Medicare payments for ASC services per FFS beneficiary grew by an average annual rate of 6.7 percent. However, in 2020, payments fell by 3.9 percent, reflecting the effects of the PHE. ASCs do not submit data on the cost of services they provide to Medicare beneficiaries. Therefore, we cannot calculate a Medicare margin as we do for other provider types to help assess payment adequacy.

The Commission contends that cost data would support more informed decisions about updating ASC payment rates and for identifying an appropriate input price index for ASCs. Therefore, the Commission continues to recommend that the Secretary of Health and Human Services collect cost data from ASCs without further delay. Considering the available evidence of payment adequacy, the Commission recommends that, for calendar year 2023, the Congress eliminate the update to the 2022 Medicare conversion factor for ambulatory surgical centers. ■

Background

An ambulatory surgical center (ASC) is a distinct entity that primarily provides outpatient surgical procedures to patients who do not require an overnight stay. In addition to ASCs, hospital outpatient departments (HOPDs) and, in some cases, physicians' offices are locations where providers perform outpatient surgical procedures.

Since 1982, Medicare has covered and paid for surgical procedures provided in ASCs. Medicare covers surgical procedures represented in about 3,800 Healthcare Common Procedure Coding System (HCPCS) codes under the ASC payment system. However, ASC volume for services covered under Medicare is concentrated in a relatively small number of HCPCS codes. For example, in 2020, 32 HCPCS codes accounted for 75 percent of the ASC volume for surgical services provided to Medicare beneficiaries. For procedures performed in an ASC, Medicare makes two payments: one to the facility through the ASC payment system and the other to the physician for his or her professional services through the payment system for physicians and other health professionals, known as the physician fee schedule (PFS). According to surveys, most ASCs have partial or complete physician ownership (Ambulatory Surgery Center Association 2017, Leapfrog 2019). Physicians who perform surgeries in ASCs they own receive a share of the ASC's facility payments in addition to payment for their professional services.

To receive payments from Medicare, ASCs must meet Medicare's conditions of coverage, which specify standards for administration of anesthesia, quality evaluation, operating and recovery rooms, medical staff, nursing services, and other aspects of care. Medicare pays ASCs for a bundle of facility services and items—such as nursing, recovery care, anesthetics, and supplies—through a system that is linked primarily to the outpatient prospective payment system (OPPS), which Medicare uses to set payment rates for most services provided in HOPDs. The ASC payment system is also partly linked to the PFS.¹

For most covered procedures, payment rates in the ASC payment system are the product of a relative weight and a conversion factor. The ASC relative weight for a procedure, which indicates the procedure's

resource intensity relative to other procedures, is based on its relative weight under the OPPS. Although CMS links the ASC payment system to the OPPS, payment rates for all services covered under both systems are lower in ASCs for two reasons. First, CMS makes proportional adjustments to the relative weights of the OPPS because budget-neutrality requirements do not allow changes in the relative weights to affect the level of Medicare spending from one year to the next. In 2022, this adjustment results in ASC relative weights that are 14.5 percent lower than the relative weights in the OPPS. Second, for most procedures covered under the ASC system, the payment rate is the product of its relative weight and an ASC conversion factor, set at \$49.92 for 2022, which is 41 percent lower than the OPPS conversion factor of \$84.18 for 2022.

The ASC conversion factor is lower than the OPPS conversion factor because it was set at a lower level in 2008 and was updated each year at a lower rate than the OPPS conversion factor until 2019. CMS set the initial ASC conversion factor in 2008 such that total payments to ASCs under the revised payment system would equal what they would have been under the pre-2008 ASC payment system. From 2010 through 2018, CMS updated the ASC conversion factor based on the consumer price index for all urban consumers (CPI-U), while it used the hospital market basket index to update the OPPS conversion factor. The CPI-U has generally increased at a lower rate than the hospital market basket index. Therefore, before 2019, the ASC conversion factor was updated by smaller percentages than the OPPS conversion factor.

In a change of regulatory policy, CMS has instituted a policy of updating the ASC conversion factor using the hospital market basket index from 2019 through 2023. Under this change, the updates to the ASC conversion factor will align with the updates to the OPPS conversion factor.

We are concerned that neither the CPI-U nor the hospital market basket index reflects ASCs' cost structure (see the text box on revising the ASC market basket index, p. 184). Beginning in 2010, the Commission has repeatedly recommended that CMS collect cost data from ASCs with the purpose of identifying a price index that would be an appropriate proxy for ASC costs (Medicare Payment Advisory

Commission 2010). However, the ASC industry opposes the collection of cost data for this purpose (Centers for Medicare & Medicaid Services 2017). CMS has shown some interest in collecting cost data and requested comments from stakeholders on whether the Secretary should collect cost data from ASCs to use in determining ASC payment rates. Representatives of individual ASCs provided comments that generally opposed a requirement for ASCs to submit formal cost reports but indicated a willingness to complete surveys on the condition that they not be administratively burdensome (Centers for Medicare & Medicaid Services 2017). The Commission asserts, however, that all other institutional providers submit at least abbreviated versions of cost reports to CMS, including small entities such as hospices and home health agencies. Moreover, ASCs in Pennsylvania submit revenue and cost data each year to the Pennsylvania Health Care Cost Containment Council, so it is clear that submission of cost data is feasible for ASCs. Nevertheless, CMS has not acted on this issue.

CMS uses a different method from the one described above to determine payment rates for “office-based” procedures, which are procedures that are predominantly performed in physicians’ offices and were first covered under the ASC payment system in 2008 or later. Payment for office-based procedures is the lesser of the amount derived from the standard ASC method or the practice expense portion of the PFS rate that applies when the service is provided in a physician’s office (the nonfacility practice expense, which covers the equipment, supplies, nonphysician staff, and overhead costs of a service).² CMS set this limit on the rate for office-based procedures to prevent migration of these services from physicians’ offices to ASCs for financial reasons. Physicians who provide office-based procedures in ASCs receive a separate payment under the PFS (the full facility payment rate, which includes the work, facility practice expense, and professional liability insurance payments).

The ASC payment system somewhat parallels the OPPS in terms of which ancillary items are paid separately and which are packaged into the payment of the associated surgical procedure. An important distinction between the ASC payment system and the OPPS is that

CMS uses comprehensive APCs (C-APCs) in the OPPS but not in the ASC system. C-APCs are an advanced version of APCs in which all Part B-covered hospital outpatient services reported on a claim are combined into a single payment. CMS has stated that the reason that C-APCs have not been used in the ASC system is that the system of processing ASC claims does not allow for the type of packaging of ancillary items necessary to create C-APCs. Therefore, the payment bundles for services in the C-APCs under the OPPS have greater packaging of ancillary items than the same services under the ASC payment system. Forty-four percent of ASC surgical volume in 2020 comprised procedures that are in C-APCs under the OPPS. The Commission supports the use of C-APCs in the OPPS and encourages CMS to implement them in the ASC payment system because the greater packaging of ancillary items that occurs with C-APCs gives providers an incentive to furnish care more efficiently.

Although we do not have recent ASC cost data that would allow us to quantify cost differences between settings, evidence suggests that ASCs are a lower-cost setting than HOPDs. Studies that used data from the National Survey of Ambulatory Surgery found that the average length of time for ambulatory surgical visits for Medicare patients was 25 percent to 39 percent shorter in ASCs than in HOPDs, which likely contributes to lower costs in ASCs (Hair et al. 2012, Munnich and Parente 2014). An additional study using data from a facility that has both an ASC and a hospital found that surgeries took 17 percent less time in the ASC (Trentman et al. 2010). Beneficiaries who are sicker may require more time to treat, and the studies that accounted for differences in health status between patients treated in ASCs and those in HOPDs generally estimated a somewhat smaller differential in average surgical time between ASCs and HOPDs.

ASCs have a small role in total Medicare fee-for-service (FFS) spending, which has likely contributed to the fact that little is known about the effect of the coronavirus public health emergency (PHE) on the ASC industry. To the extent that information is available, we include the effects of the coronavirus PHE on ASCs throughout our discussion of payment adequacy in the ASC sector (see text box on the Commission’s framework for assessing payment adequacy).

The coronavirus public health emergency and the Commission's payment adequacy framework

On January 31, 2020, the Secretary of Health and Human Services first declared the coronavirus public health emergency (PHE). In late March 2020, the nation's health care system began to experience major changes in service use, as elective procedures were postponed, preserving clinical staff's availability and equipment for COVID-19 patients. The PHE has had tragic and disproportionate effects on the health of Medicare beneficiaries. (For details on the effects of COVID-19 on beneficiaries' health and access to care, see Chapter 1.) It has also had damaging effects on the nation's health care workforce, with frontline health care workers facing burnout and risks to their health and safety. The tragedy is ongoing, with a substantial number of cases and mortalities.

The PHE has also had material effects on all of the Commission's payment adequacy indicators. Because of standard data lags, the most recent complete data we have are from 2020 for most indicators; however, we also include preliminary data from 2021 where possible. As described in more detail later in this chapter, the effects of the PHE on indicators of Medicare's payment adequacy to ambulatory surgical centers (ASCs) in 2020 included:

- dramatic drops in patient volume in spring 2020, largely rebounding by summer 2020, and
- PHE-related Medicare payment policy changes that increased payments to ASCs, including the suspension of the 2 percent sequestration on Medicare payments.

In this chapter, we use available data and changes in payment policy to recommend payment rate updates for ASCs for 2023. However, significant uncertainty remains about how long the pandemic will last as well as the extent to which certain changes to ASC volume and financial performance will persist after the PHE. Therefore, while analyzing 2020 data is important to understand what happened to beneficiaries' access to care, quality of care, provider's access to capital, and Medicare's payments, it will be more difficult to interpret these indicators than is typically the case.

As the Commission stated last year, to the extent that the effects of the coronavirus pandemic are temporary—even if lasting multiple years—they are best addressed through targeted temporary funding policies rather than a permanent change to all ASCs' payment rates in 2023 and future years. Only permanent effects of the pandemic will be factored into the Commission's recommended changes in Medicare base payment rates. ■

Are Medicare payments adequate in 2022?

To address whether payments for the current year (2022) are adequate to cover the costs of efficient providers and how much payments should change in the coming year (2023), we examine several measures of payment adequacy. We evaluate beneficiaries'

access to care by examining the supply of ASC facilities and changes over time in the volume of services provided, providers' access to capital, and changes in ASC revenue from the Medicare program. However, our assessment of quality of care (another measure of payment adequacy) is limited and does not fully represent quality in ASCs.

**TABLE
5-1****Number of ASCs and operating rooms grew, 2015–2020**

	2015	2019	2020	Average annual percent change	
				2015–2019	2019–2020
Total number of ASCs	5,352	5,811	5,930	2.1%	2.0%
New	170	240	174	N/A	N/A
Closed or merged	110	91	55	N/A	N/A
Total number of ORs	16,556	17,723	18,066	1.7	1.9
New	393	700	481	N/A	N/A
Closed or merged	300	267	138	N/A	N/A

Note: ASC (ambulatory surgical center), N/A (not applicable), OR (operating room). The average annual percentage change data for the “new” and “closed or merged” categories are shown as “N/A” because they are outside the purpose of this table, which is to show the growth in the total number of ASCs and ORs.

Source: MedPAC analysis of Provider of Services file from CMS, 2021.

In 2020, some ASC payment adequacy indicators improved while others declined. However, the aggregate changes reflect temporary changes during the PHE rather than the adequacy of Medicare payments to ASCs. Overall, our available indicators of payment adequacy are positive.

Beneficiaries’ access to care: Supply of ASCs and volume of services indicate adequate access

Beneficiaries have adequate access to care in ASCs. The number of ASC facilities has increased, and the volume of services provided to Medicare beneficiaries in ASCs had increased before the PHE. Access to ASCs may be beneficial to patients and physicians compared with HOPDs, the provider type most similar to ASCs. For patients, ASCs can offer more convenient locations, shorter waiting times, lower cost sharing, and easier scheduling relative to HOPDs. ASCs offer physicians more control over their work environment and specialized staff. However, these same qualities could lead to overuse of surgical procedures.

Capacity and supply of providers: Number of ASCs is increasing

From 2019 to 2020, the number of ASCs increased 2.0 percent to 5,930 ASCs (Table 5-1). This annual growth

rate was similar to the growth in the period from 2015 to 2019, when the number of ASCs increased, on average, 2.1 percent per year. In 2020, 174 new ASCs opened, while 55 ASCs closed or merged with other facilities, for a net increase of 119 facilities. Both the number of new facilities and the number of facilities that closed or merged in 2020 were slightly lower than in recent years. The number of ASCs that billed Medicare for at least one surgical service was 5,219 in 2020 versus 5,143 in 2019, a 1.5 percent increase (data not shown). Finally, the number of ASCs continued to increase in the first six months of 2021 as the number of new ASCs increased by 94, offset by 27 ASCs that closed or merged, for a net increase of 67 facilities.

Because the central purpose of ASCs is the provision of surgical procedures, the number of operating rooms (ORs) is another useful measure of supply in this sector. In 2020, there were 18,066 ORs in ASCs, or an average of 3.0 per facility. From 2015 to 2019, the total number of ASC ORs increased 1.7 percent per year, a slower rate than the growth in the number of ASCs over the same period (2.1 percent per year). From 2019 to 2020, the number of ORs in ASCs increased by 1.9 percent, slightly slower than the growth in the number of ASCs.

Consistent with previous years, the vast majority of ASCs in 2020 were for profit (95.2 percent) and located in urban areas (93.4 percent) (Table 5-2). Beneficiaries who do not live near an ASC can obtain ambulatory surgical services in HOPDs and, in some cases, physicians' offices. Beneficiaries who live in rural areas may travel to urban areas to receive care in ASCs.

Geographic distribution of ASCs is uneven, and a low share of ASC claims are for dual-eligible beneficiaries

In addition to ASCs being located more in urban than rural areas, the concentration of ASCs varies widely across states. In 2020, Maryland had the most ASCs per Medicare beneficiary (38 ASCs per 100,000 Part B beneficiaries), followed by Georgia, Alaska, and New Jersey (23 to 18 ASCs per 100,000 Part B beneficiaries) (Figure 5-1, p. 172). Kentucky, the District of Columbia, West Virginia, and Vermont had the fewest ASCs per beneficiary (fewer than 4 ASCs per 100,000 beneficiaries).

We found that rural beneficiaries—defined as those who live outside metropolitan statistical areas (MSAs)—are less likely to receive care in ASCs than are urban beneficiaries, defined as those living in an MSA. In 2020, 6.3 percent of rural beneficiaries received care in an ASC compared with 9.1 percent of urban beneficiaries. Also, rural beneficiaries' access to ASC services relative to the access of urban beneficiaries has likely declined as the number of ASCs located in rural areas has been stable while the number of ASCs in urban areas has increased.

The Commission is concerned about access to care among vulnerable populations, such as those with low incomes and Medicare beneficiaries who are also eligible for Medicaid (dual-eligible beneficiaries). In 2020, about 14 percent of FFS Medicare beneficiaries were fully dual eligible, and about 4 percent had partial dual eligibility. We calculated for each ASC the share of FFS Medicare claims for surgical procedures that were for Medicare dual-eligible beneficiaries (both fully and partially dual eligible). Relative to other settings, dual-eligible beneficiaries accounted for a smaller share of total Medicare FFS claims in ASCs. In 2020, 8.2 percent of ASC claims were for fully dual-eligible beneficiaries and 3.3 percent were for partially dual-eligible beneficiaries. Also, we found that for 56 percent of ASCs, less than 10 percent of their Medicare

TABLE 5-2 Most ASCs are for profit and urban

Type of ASC	ASCs that were:		
	Open in 2015	Open in 2020	New in 2020
For profit	95.1%	95.2%	94.8%
Nonprofit	3.5	3.6	4.0
Government	1.4	1.2	1.1
Urban	92.9	93.4	95.4
Rural	7.1	6.6	4.6

Note: ASC (ambulatory surgical center). Percentages may not sum to 100 due to rounding.

Source: MedPAC analysis of Provider of Services file from CMS, 2021.

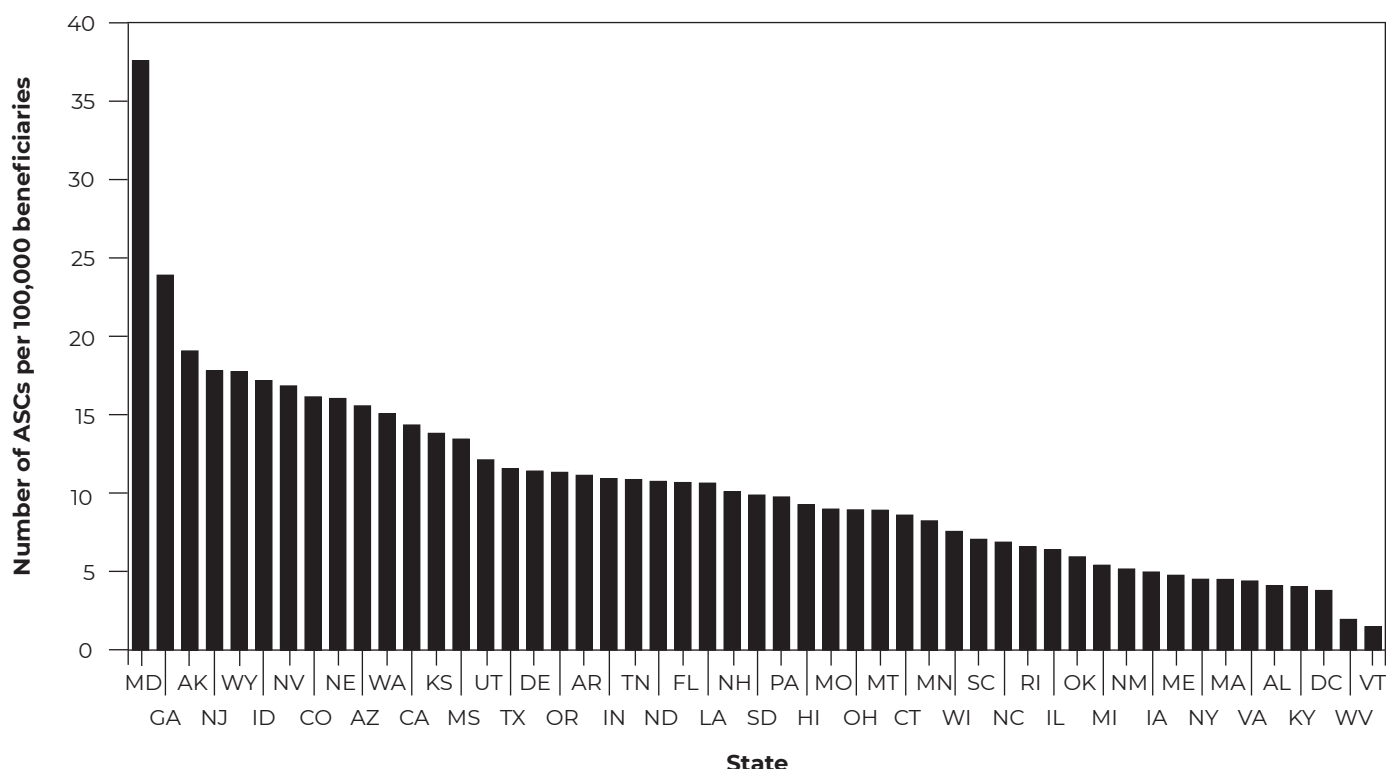
FFS claims were for dual-eligible beneficiaries (Figure 5-2, p. 173). Only 12 percent of ASCs had more than 30 percent of their Medicare FFS claims for dual-eligible beneficiaries. In 2020, dual-eligible beneficiaries were much more likely to receive care in HOPDs than in ASCs: 17.5 percent of HOPD claims were for fully dual-eligible beneficiaries (versus 8.2 percent for ASCs), and 4.8 percent of HOPD claims were for partially dual-eligible beneficiaries (versus 3.3 percent for ASCs) (data not shown).

Specialization of ASCs largely unchanged, some growth in pain management

In 2020, the majority of ASCs that billed Medicare specialized in a single clinical area, of which gastroenterology and ophthalmology were the most common, with each comprising 20 percent of all ASCs that provided services to FFS Medicare beneficiaries. Overall, 64 percent of ASCs were single-specialty facilities and 36 percent were multispecialty facilities, providing services in more than one clinical specialty (Table 5-3, p. 174).³ In 2020, multispecialty ASCs most commonly focused on two specialties: pain management and orthopedic services or gastroenterology and ophthalmology (combined, 8 percent of all ASCs). From 2015 to 2020, ASCs specializing in pain management services grew most rapidly.

**FIGURE
5-1**

Number of ASCs per beneficiary varies widely by state, 2020



Note: ASC (ambulatory surgical center).

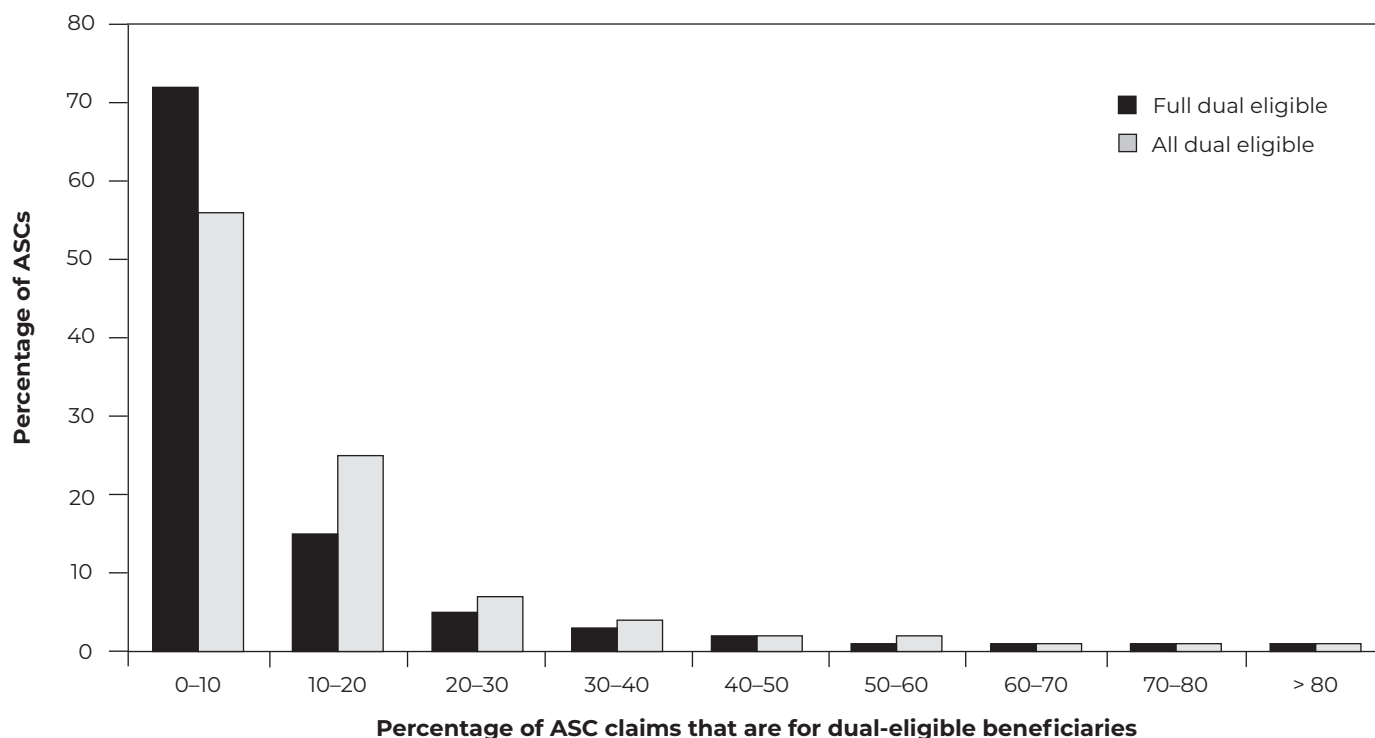
Source: MedPAC analysis of CMS Provider of Services file for 2021 and Common Medicare Environment file.

Continued growth in the number of ASCs suggests that Medicare's payment rates have been adequate. Other factors also have likely influenced the long-term growth in the number of ASCs:

- Changes in clinical practice and health care technology have expanded the provision of surgical procedures in ambulatory settings. This trend could continue as momentum grows for doing knee and hip arthroplasty (knee and hip replacement) in ambulatory settings.⁴
- ASCs can offer patients greater convenience than HOPDs, such as shorter waiting times for surgery (patients can face delays for surgery in HOPDs because emergencies often take precedence over scheduled procedures).
- For most procedures covered under the ASC payment system, beneficiaries' coinsurance is lower in ASCs than in HOPDs.⁵
- Physicians have greater autonomy in ASCs than in HOPDs, which enables them to design customized surgical environments and hire specialized staff. These features of ASCs allow physicians to perform more procedures in ASCs than in HOPDs in the same amount of time, earning more revenue from professional fees.
- Physicians who invest in ASCs and perform surgeries on their patients in those ASCs can increase their revenue, by receiving a share of the ASC facility payments.

**FIGURE
5-2**

Fifty-six percent of ASCs had less than 10 percent of claims billed for dual-eligible beneficiaries, 2020



Note: ASC (ambulatory surgical center).

Source: MedPAC analysis of Medicare carrier file claims, 2020.

- Increased interest across the health care industry in value-based care and the provision of care in lower-cost settings has increased the strategic investment interest of hospital systems, insurers, and private equity firms in ASCs (Barclays 2018, Japsen 2018).

Number of beneficiaries treated and volume of services per beneficiary decreased from 2019 to 2020, reflecting effects of the PHE

Although the number of ASCs grew from 2019 to 2020, the volume of ASC surgical procedures per FFS beneficiary fell substantially. Also, the number of FFS beneficiaries treated in ASCs declined. Because ASC services are covered under Part B, we limited our analysis to FFS beneficiaries who have Part B coverage.

The volume of services per FFS beneficiary rose by an average of 1.5 percent per year from 2015 through 2019 but fell by 13.6 percent in 2020 (Table 5-4, p. 175).

In addition, from 2015 through 2019, the number of FFS beneficiaries who received ASC services grew an average of 0.4 percent per year but dropped by 15 percent in 2020 (data not shown). Also, the number of services per beneficiary receiving care in ASCs from 2015 through 2019 grew at an average annual rate of 0.9 percent but dropped by 0.9 percent in 2020 (data not shown).

The PHE clearly affected the volume of ASC services in 2020. We investigated how the PHE affected ASC volume throughout 2020 by evaluating ASC volume

**TABLE
5-3****Specialization of ASCs billing Medicare in 2015 and 2020**

Type of ASC	2015		2020	
	Number of ASCs	Share of all ASCs	Number of ASCs	Share of all ASCs
Single specialty	2,878	61%	3,365	64%
Gastroenterology	1,027	22	1,072	20
Ophthalmology	1,020	22	1,061	20
Pain management	355	8	626	12
Dermatology	191	4	197	4
Urology	124	3	129	2
Cardiology	10	0	106	2
Podiatry	95	2	67	1
Orthopedics/musculoskeletal	23	0	40	1
Respiratory	16	0	33	1
OB/GYN	9	0	14	0
Neurology	5	0	5	0
Other	3	0	13	0
Multispecialty	1,802	39	1,854	36
More than 2 specialties	1,421	30	1,421	27
Pain management and orthopedics	146	3	238	4
Gastroenterology and ophthalmology	160	3	195	4
Other with 2 specialties	75	2	0	0
Total	4,680	100	5,219	100

Note: ASC (ambulatory surgical center), OB/GYN (obstetrics and gynecology). A "single-specialty ASC" is defined as one with more than 67 percent of its Medicare claims in one clinical specialty. A "multispecialty ASC" is defined as one with less than 67 percent of its Medicare claims in more than one clinical specialty. ASCs included in this analysis are limited to those in the 50 states and the District of Columbia with a paid Medicare claim in 2020. Columns containing the share of all ASCs do not sum to 100 percent due to rounding.

Source: MedPAC analysis of Medicare carrier file claims, 2015 and 2020.

in each month of 2019 and 2020 for the 30 most frequently provided ASC services in 2020, which constituted nearly 75 percent of ASC volume in both 2019 and 2020. The large decrease in ASC volume in 2020 was driven by a substantial drop in spring 2020, as the volume in April 2020 was 11 percent of the volume in April 2019 (Figure 5-3). ASC volume had rebounded by summer 2020, and the December 2020 volume was 97 percent of the December 2019 volume.

The rebound in volume appears to have been stronger among services that are more urgent relative to those that are more discretionary. For example, the December 2020 volume per beneficiary for HCPCS code G0105 (colon cancer screening for high-risk individuals) was the same as the December 2019 level, while the December 2020 volume per beneficiary for HCPCS code G0121 (colon cancer screening for low-risk individuals) was below the December 2019 level by 11 percent (data not shown).

**TABLE
5-4****Volume of ASC services per FFS beneficiary decreased in 2020**

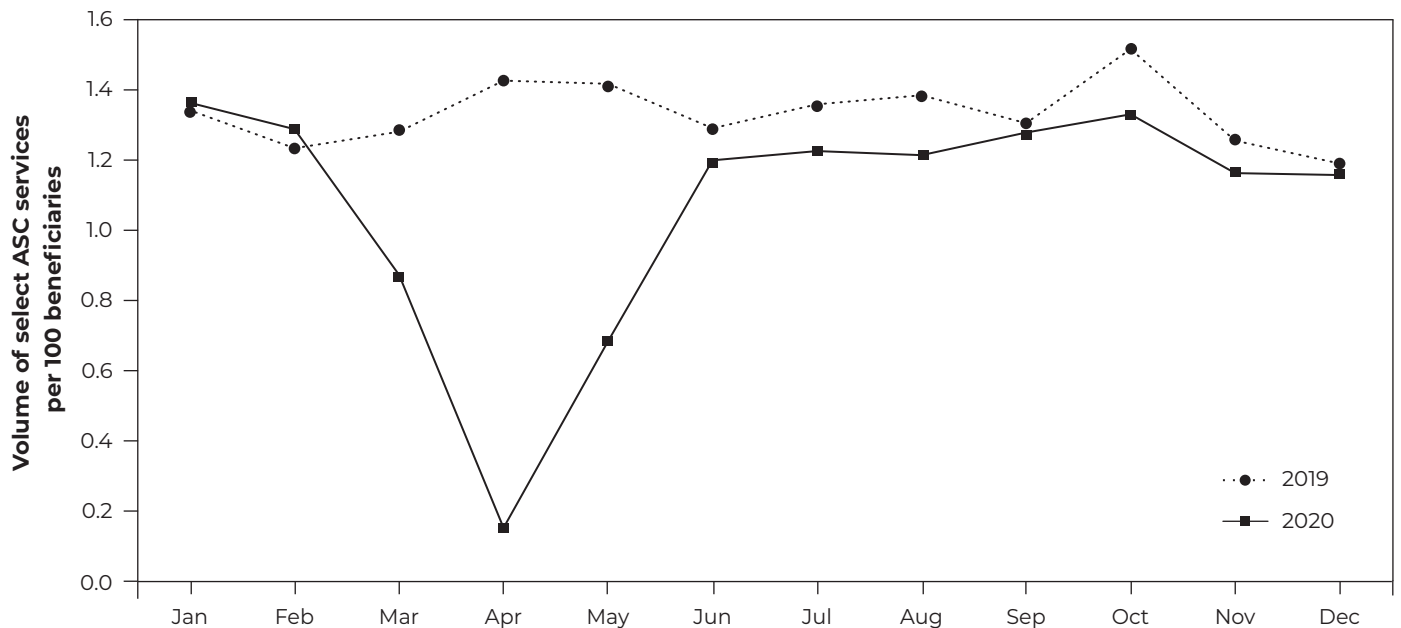
	2015	2019	2020	Average annual change	
				2015–2019	2019–2020
Volume of services (in millions)	6.3	6.7	5.6	1.3%	–15.8%
Volume per 1,000 FFS beneficiaries	190.9	202.3	174.8	1.5	–13.6

Note: ASC (ambulatory surgical center), FFS (fee-for-service). The volume of services for 2015 and 2019 has been modified to reflect the volume of services covered under the ASC payment system in 2020 that were provided in those years.

Source: MedPAC analysis of physician/supplier standard analytic files from CMS, 2015–2020.

Services that have historically contributed the most to overall ASC volume continued to be a large share of the total in 2020. For example, the HCPCS code for extracapsular cataract removal with intraocular lens insertion (HCPCS 66984) had the highest volume in both 2015 and 2020, accounting for 18.6 percent of

the total in 2015 and 17.7 percent in 2020 (Table 5-5, p. 176). Moreover, 19 of the 20 most frequently provided HCPCS codes in 2015 were among the 20 most frequently provided in 2020. These services made up about 71 percent of ASC Medicare volume in 2015 and 68 percent in 2020.

**FIGURE
5-3****Volume of ASC services substantially declined in spring 2020 but rebounded by the end of 2020**

Note: ASC (ambulatory surgical center). This graph includes the 30 most frequently provided ASC services in 2020. These services constituted 75 percent of the ASC volume in 2019 and 2020.

Source: MedPAC analysis of physician/supplier standard analytic claims files, 2019 and 2020.

**TABLE
5-5**

The 20 most frequently provided ASC services in 2020 were similar to those provided in 2015

Surgical procedure	2015		2020	
	Percent of volume	Rank	Percent of volume	Rank
Extracapsular cataract removal w/IOL insert	18.6%	1	17.7%	1
Upper GI endoscopy, with biopsy: single or multiple	8.2	2	7.7	2
Colonoscopy and biopsy	6.8	3	6.6	3
Colonoscopy with lesion removal, snare technique	5.6	4	6.4	4
Inject transforaminal epidural: lumbar or sacral	4.8	5	4.7	5
After cataract laser surgery	4.4	6	3.9	6
Injection interlaminar epidural: lumbar or sacral	3.3	7	2.4	8
Injection paravertebral facet joint: lumbar or sacral, single level	3.1	8	3.4	7
Diagnostic colonoscopy	2.3	9	1.6	11
Colorectal cancer screening, high-risk individual	2.0	10	2.0	9
Colorectal cancer screening, not high-risk individual	1.9	11	1.2	15
Extracapsular cataract removal complex without ECP	1.6	12	1.3	13
Destroy lumbar/sacral facet joint, single	1.3	13	1.8	10
Injection procedure for sacroiliac joint, anesthetic	1.3	14	1.5	12
Cystourethroscopy	1.2	15	1.3	14
Injection interlaminar epidural: cervical or thoracic	1.0	16	1.0	17
Upper GI endoscopy diagnostic brush wash	1.0	17	0.8	19
Inject paravertebral facet joint: cervical or thoracic, single level	1.0	18	1.1	16
Blepharoplasty upper eyelid	0.9	19	0.8	18
Upper GI endoscopy, guide wire insertion	0.8	20	0.7	22
Total	71.1		68.1	
Total volume for all ASC services	6,349,005		5,631,959	

Note: ASC (ambulatory surgical center), IOL (intraocular lens), ECP (endoscopic cyclophotocoagulation). In both percentage columns, the numbers do not add to the listed total because of rounding.

Source: MedPAC analysis of physician/supplier standard analytic files from 2015 and 2020.

A potential concern about the services most frequently provided in ASCs is the extent to which they are unnecessary or of low value, such as spinal injections and other pain management services (Pinto et al. 2012). Seven of the 20 procedures listed in Table 5-5 were pain management services. Moreover, the second-highest revenue procedure for ASCs

in 2020 was for insertion or replacement of spinal neurostimulators. Volume for this procedure rose sharply from about 4,000 in 2015 to 12,000 in 2020, much faster than in HOPDs, where volume for the procedure increased from 12,000 in 2015 to 14,000 in 2020 (data not shown).

Maintaining or expanding access to ASCs can be beneficial for patients and Medicare

Maintaining beneficiaries' access to ASCs is beneficial because services provided in this setting are less costly to Medicare and beneficiaries than services delivered in HOPDs.⁶ Medicare payment rates for surgical services performed in HOPDs are almost twice as high as in ASCs.

For example, the base payment rate in 2021 for cataract surgery with intraocular lens insertion (the service most frequently provided in ASCs) is \$2,121 in HOPDs compared with \$1,062 in ASCs. The lower payment rate in ASCs for this service has been financially beneficial to Medicare and beneficiaries. Other studies similarly find that ASCs are less costly than HOPDs in the Medicare and non-Medicare context and that price growth at ASCs has been slower than at HOPDs (Carey 2015, Robinson et al. 2015).

The higher payment rates for HOPDs relative to ASCs coupled with the increased employment of physicians by hospitals could lead to ambulatory surgical services shifting from ASCs to HOPDs. However, data on the most frequently provided services in ASCs suggest that such a shift has not occurred. We evaluated the growth in the 30 most frequently provided surgical services in ASCs, which constitute almost 75 percent of ASC volume, from 2015 through 2019. We found that the average annual growth in volume per FFS beneficiary for these surgical services was 0.9 percent in ASCs, compared with a decrease of 1.2 percent in HOPDs. The PHE reduced the provision of these services in both settings in 2020, with volume per FFS beneficiary for these surgical procedures decreasing by 15.6 percent in ASCs and by 10.5 percent in HOPDs. It is not clear how volume would have compared in the absence of the PHE.

The lower cost of ASCs relative to HOPDs may encourage health care management companies to enter into relationships with corporate entities that own many ASCs. In 2017, Optum Health (a subsidiary of United Health Group) acquired Surgical Care Affiliates, which operates about 230 ASCs, and in 2019 Humana and SurgCenter Development agreed to add more than 100 ASCs operated by SurgCenter Development to Humana's national provider network. These relationships can make it easier for the health plan operators to encourage use of lower-cost ASCs instead of higher-cost HOPDs. (If enrollees of Medicare Advantage plans use ASCs for ambulatory surgical procedures more frequently than do FFS beneficiaries,

MA plans would have a persistent source of savings because the plans' benchmarks would reflect the use of ASCs among FFS beneficiaries, while MA enrollees would be using the lower-cost ASCs at a higher rate.)

Medicare program spending and overall beneficiary cost sharing could be reduced if medical professionals provided more surgical services in ASCs than HOPDs or if Medicare reduced HOPD payment rates to the level of ASC payment rates. This issue is pertinent to the ASC sector because among even the most frequently provided services in ASCs, a substantial volume is provided in HOPDs. For example, in 2020, HOPDs provided 329,000 Medicare-covered cataract surgeries with intraocular lens insertion, which was 25 percent of the total volume for this service.

However, most ASCs have some degree of physician ownership, and as owners of a business, these physicians have an incentive to perform more surgical services than if they provided outpatient surgery only in facilities they do not own. It is not clear whether the physician owners of ASCs act on this incentive. The most recent studies on the effect of ASC physician ownership are somewhat dated, but these studies offer some evidence that physicians who have an ownership stake in an ASC perform a higher volume of certain procedures than physicians who do not (Hollingsworth et al. 2010, Mitchell 2010, Strobe et al. 2009). At the same time, hospital acquisition of physician practices could also result in increased surgical volume in HOPDs if hospitals encourage their physician employees to change their methods of practice to improve the hospitals' financial position.

Other studies suggest that the presence of an ASC in a market is associated with a higher volume of outpatient surgical procedures (Hollenbeck et al. 2015, Hollenbeck et al. 2014, Hollingsworth et al. 2011, Koenig and Gu 2013). Although none of these studies assessed the appropriateness of the additional procedures, they suggest that the presence of ASCs might increase overall surgical volume. It is plausible, based on the results of these studies, that reductions in Medicare spending due to lower payment rates for ASCs relative to HOPDs could be partially offset by a higher number of surgical procedures provided overall.

Another setting that has a substantial overlap of services with ASCs is physician offices. In general, Medicare payment rates are higher in ASCs than in

**TABLE
5-6**

Quality measures used in the Medicare ASC Quality Reporting Program

Description of quality measure	Required in:	
	2021	2024
ASC-9: Endoscopy/polyp surveillance: Appropriate follow-up interval for normal colonoscopy in average-risk patients	Yes	Yes
ASC-11: Cataracts: Improvement in patient's visual function within 90 days following cataract surgery	Voluntary	Voluntary
ASC-12: Facility seven-day risk standardized hospital visit rate after outpatient colonoscopy	Yes	Yes
ASC-13: Normothermia outcome: Percentage of patients under anesthesia who are normothermic within 15 minutes of arrival in the post-anesthesia care unit	Yes	Yes
ASC-14: Unplanned anterior vitrectomy: Percentage of cataract surgery patients who have an unplanned removal of the vitreous	Yes	Yes
ASC-15: Five patient experience measures from the Outpatient and Ambulatory Surgery Survey Consumer Assessment of Healthcare Providers and Systems (CAHPS®):		
ASC-15a: About facilities and staff		
ASC-15b: Communication about procedure		
ASC-15c: Preparation for discharge and recovery		
ASC-15d: Overall rating of facility		
ASC-15e: Recommendation of facility	No ^a	No
ASC-17: Hospital visits after orthopedic ASC procedures	No ^b	Yes
ASC-18: Hospital visits after urology ASC procedures	No ^b	Yes
ASC-19: Hospital visits after general surgery ASC procedures	No ^c	Yes

Note: ASC (ambulatory surgical center).

^aCMS has made this measure voluntary in 2025 and mandatory in 2027.

^bCMS activates this measure in 2022.

^cCMS will activate this measure in 2024.

Source: Final rule for outpatient prospective payment system and ambulatory surgical center payment system, 2021.

physician offices for the same procedure. Services that are frequently provided in both ASCs and physician offices include cystoscopy, pain management, and, to a lesser extent, cataract procedures. Cystoscopy is performed much more frequently in offices than in ASCs, pain management is about equally common in these two settings, and cataract procedures are done more frequently in ASCs than in offices. The procedures that are more frequently provided in physician offices than ASCs have their ASC payment rate set equal to the lesser of the standard ASC

payment rate or the nonfacility practice expense component from the PFS.

Quality of care: Changing quality measures limits cross-year comparison

ASC-reported quality data demonstrated modest improvement from 2013 to 2017 and largely plateaued from 2017 to 2019. Quality data from 2020 reflect about the same level of quality as in 2019. CMS established the ASC Quality Reporting (ASCQR) Program in 2012 (Centers for Medicare & Medicaid Services 2011). Under

this system, ASCs that do not successfully submit quality measurement data have their payment update for that year reduced by 2 percentage points. Actual performance on these quality measures does not affect an ASC's payments; CMS requires ASCs only to submit the data to receive a full update. The Commission has recommended a value-based purchasing program for ASCs that would reward high-performing providers and penalize low-performing providers (Medicare Payment Advisory Commission 2012).

CMS has made substantial changes to the quality measures in the ASCQR, which resulted in CMS measuring ASC quality based on four measures (plus one voluntary measure) for 2021 and seven measures (plus one voluntary measure) for 2024 (Table 5-6). In recent years, CMS discontinued or delayed several measures that were considered “topped out” (meaning full or nearly full compliance with these measures has been reached), demonstrated less utility, or were not ready for use, including the discontinuation of the adverse event measures (ASC-1 through ASC-4) and the delay of measures of patient experience.⁷ For 2022 and subsequent years, CMS will implement two new claims-based measures of beneficiaries' visits to a hospital subsequent to an ASC orthopedic or urology procedure (ASC-17 and ASC-18, respectively). For 2024 and subsequent years, CMS will implement a new claims-based measure of beneficiaries' visits to a hospital subsequent to general surgery procedures (ASC-19).

Results from reported ASC quality data

CMS has made available quality data from 2020, but we caution that CMS did not require ASCs to submit quality data for the first six months of 2020.

Data reported by ASCs for 2015 to 2019 suggest improvement in ASC quality of care from 2015 to 2017, but there was little change in the data from 2017 to 2019. From 2019 to 2020, there again was not much change in the quality data. Performance on the four adverse event measures (ASC-1 through ASC-4) generally improved from 2015 through 2018, and CMS did not collect data on these measures for 2019 or 2020.⁸ The data show consistently low levels of these adverse events in each of the four years. Also, the share of ASCs reporting zero adverse events increased for three of these measures and stayed at the same level for one of these measures. For example, from 2015

to 2018, the share of ASCs without any patient burns increased from 92 percent to 93 percent, and the share of ASCs without any patient falls increased from 93 percent to 94 percent (data not shown).

In addition to the adverse events measures, other ASCQR measures have shown little change from 2015 to 2020 (Table 5-7, p. 180). For example, the measure for endoscopy for polyp surveillance and follow-up for average-risk patients (ASC-9) improved slightly from 2015 to 2019 and was unchanged from 2019 to 2020. Two relatively new measures—unplanned vitrectomy after cataract surgery (ASC-13) and normothermia (normal body temperature) after anesthesia (ASC-14)—did not change from 2019 to 2020. Room for improvement exists for measures ASC-9, ASC-12, ASC-13, and ASC-14.

We also compared the performance of ASCs with the performance of HOPDs in 2020 on the two measures from the ASCQR (ASC-9 and ASC-12) that match measures in the Hospital Outpatient Quality Reporting (OQR) Program (OP-29 and OP-32) (the data from the OQR are not shown). The data indicate that ASCs performed better, on average, on 7-day risk-standardized hospital visit rate after outpatient colonoscopy (1.2 percent in ASCs and 1.6 percent in HOPDs). Conversely, HOPDs performed better than ASCs on share of average-risk patient with appropriate endoscopy/polyp surveillance (90 percent in HOPDs versus 84 percent in ASCs).

CMS should continue to refine ASC quality measures

The Commission asserts that CMS should continue to improve the ASCQR by moving toward more outcome measures that apply to all ASCs. In addition, CMS should synchronize ASCQR measures with measures included in the Hospital OQR Program to facilitate comparisons between ASCs and HOPDs. The Commission commends CMS on its decisions to discontinue a measure in 2021 (ASC-10: Endoscopy/polyp surveillance, colonoscopy interval for patients with a history of adenomatous polyps) because cost of collection exceeds the benefit and to add the three claims-based unplanned hospitalization measures by 2024. The Commission also commends CMS on its decision to begin using the Consumer Assessment of Healthcare Providers and Systems[®] patient experience survey quality data in 2025.⁹ Among the Commission's

**TABLE
5-7****Results for required ASC quality variables, 2015–2020**

ASC quality measure	Mean percent among ASCs					
	2015	2016	2017	2018	2019	2020
ASC-9: Share of average-risk patients with appropriate endoscopy/polyp surveillance	80%	81%	83%	83%	84%	84%
ASC-10: Share of patients with polyp history with appropriate endoscopy/polyp surveillance	79	80	81	80	N/A	N/A
ASC-12: 7-day risk standardized hospital visit rate after outpatient colonoscopy*	N/A	1.3	1.2	1.2	1.2	1.2
ASC-13: Normothermia outcome	N/A	N/A	N/A	N/A	96	96
ASC-14: Unplanned anterior vitrectomy	N/A	N/A	N/A	N/A	0.7	0.7

Note: ASC (ambulatory surgical center), N/A (not applicable). Items are marked N/A when CMS did not collect data for the measure in that year.

*CMS reports this measure as the rate per 1,000 colonoscopies, but we report this measure as a percentage (the rate per 100 colonoscopies).

Source: Medicare Hospital Compare data for ASCs, 2015–2020.

quality measurement principles is that quality programs should include patient experience (Medicare Payment Advisory Commission 2018b). However, the Commission maintains concern about three issues related to the ASCQR:

- The four ASCQR measures that are claims based and measure clinical outcomes (ASC-12, ASC-17, ASC-18, and ASC-19) exclude many services provided at ASCs, such as eye procedures and pain management. Therefore, CMS could improve the ASCQR Program by including more claims-based measures that assess clinical outcomes for the various specialties practiced at ASCs. CMS made one such improvement by adding a measure for payment determination in 2024, ASC-19: facility-level 7-day hospital visits after general surgery procedures performed at ASCs. The general surgery procedures included in this measure are abdominal, alimentary tract, skin/soft tissue, wound, and varicose vein stripping. We applaud CMS's decision to add this measure to the ASCQR.
- However, the procedures included in this measure accounted for just 3.4 percent of ASC surgical procedures provided to FFS Medicare patients in 2020, underscoring the need for CMS to add more claims-based measures that assess clinical outcomes.
- ASCQR measures should be further synchronized with OQR measures to facilitate comparison across ASCs and HOPDs. For 2021, the ASCQR and the OQR possess four common quality measures that pertain to cataract procedures, colonoscopy procedures, and patient assessments. CMS should consider further expanding the overlap of the ASCQR and OQR, relying on either measures of general surgical procedures or measures of specific surgical procedures common to both settings. For example, CMS could consider including OQR measure OP-36 (the number of hospital visits after any outpatient surgery) in the ASCQR or including ASCQR measures ASC-17 and ASC-18 (the number of hospital visits following orthopedic and urology procedures, respectively) in the OQR.

CMS should develop other quality measures

Because of the concerns cited above and the potential value of clinical outcome measures that apply to all ASCs, we believe CMS could consider developing new ASC quality measures covering any or all of the three following areas:

- ***The share of Medicare beneficiaries discharged from ASCs who have subsequent unplanned hospital visits.*** CMS has already begun to implement these measures for certain specialties through ASC-12, ASC-17, ASC-18, and ASC-19, but has not developed these measures for some specialty areas or individual procedures that are common to ASCs, such as pain management. Ideally, CMS will develop measures that reflect the performance of all ASC specialties.
- ***Surgical site infections (SSIs) occurring at ASCs.*** In the past, researchers have found that lapses in infection control were common among a sample of ASCs in three states (Schaefer et al. 2010). Although CMS has considered an SSI measure for ASCs in the past (Centers for Medicare & Medicaid Services 2011), it is not currently working to develop one (Centers for Medicare & Medicaid Services 2016). In general, an SSI measure could be used to track infection rates for ASCs and identify quality improvement opportunities for ambulatory surgeries conducted in HOPDs and ASCs. In addition, measuring SSI rates could encourage providers to collaborate and better coordinate care for ambulatory surgery patients.
- ***Specialty-specific clinical guidelines to assess the appropriateness of services provided in ASCs.*** While the ASCQR currently includes an ASC-reported colonoscopy measure that assesses appropriate follow-up care, CMS could consider claims-based measures that assess appropriateness. For example, current American Cancer Society guidelines state that patients over the age of 85 should no longer receive colorectal cancer screening (American Cancer Society 2018). Using these guidelines, a new measure could identify ASCs' share of colonoscopy cases for beneficiaries over age 85. CMS could consider similar appropriateness measures for certain procedures that have become more common in ASCs in recent years, or for

which concerns about appropriate use have been suggested, such as spinal injections or certain orthopedic procedures.

ASCs' access to capital: Growth in number of ASCs suggests adequate access

Owners of ASCs require capital to establish new facilities and upgrade existing ones. The change in the number of ASCs is the best available indicator of ASCs' ability to obtain capital. The number of ASCs increased in 2020 by 2.0 percent (Table 5-1, p. 170). However, Medicare accounts for a small share—perhaps 20 percent—of ASCs' overall revenue, so factors other than Medicare payments could have a larger effect on access to capital for this sector (Medical Group Management Association 2009).

Large health care management companies continued to acquire ASCs in 2020. The six largest of these organizations (United Surgical Partners International, AmSurg, Surgical Care Affiliates, SurgCenter Development, HCA, and Surgery Partners Holding) increased the number of ASCs they held from 1,152 to 1,245—an 8.1 percent increase (Park 2021). In 2020, a large acquisition of ASCs was made by Tenet Health, which owns United Surgical Partners International. On December 10, 2020, Tenet Health acquired 45 ASCs from SurgCenter Development for \$1.1 billion in cash. In addition, according to one recent report, conversations with 25 ASC leaders revealed ASCs' interest in selling and larger entities' interest in buying: “As the value of ASCs increases along with operational costs, more surgery center owners are tempted to sell. Hospitals, private equity firms, and insurers are all hunting for ASC deals and willing to pay top dollar” (Dyrda 2021).

Data from the annual analysis of Pennsylvania's ASCs, conducted by the Pennsylvania Health Care Cost Containment Council (PHC4), indicate that ASCs are very profitable. PHC4 found that ASCs in Pennsylvania had an average total margin (an all-payer margin that includes Medicare) of 23 percent in 2020 (Pennsylvania Health Care Cost Containment Council 2021).¹⁰

Although the various entities noted above appear to have adequate access to capital, we caution that these companies have ownership in 20 percent of the more than 5,900 ASCs. Consequently, the experience of

**TABLE
5-8****Medicare payments to ASCs grew from 2015 through 2019 but fell in 2020**

	2015	2019	2020	Average annual change	
				2015–2019	2019–2020
Medicare payments (billions of dollars)	\$4.1	\$5.2	\$4.9	6.5%	–6.4%
Medicare payments per FFS beneficiary	\$122	\$158	\$152	6.7	–3.9
Number of beneficiaries receiving services (millions)	3.4	3.5	3.0	0.4	–15.0
Spending per beneficiary served	\$1,177	\$1,489	\$1,640	6.1	10.2

Note: ASC (ambulatory surgical center), FFS (fee-for-service). "Medicare payments" includes program spending and beneficiary cost sharing for ASC facility services. Payments include spending for new-technology intraocular lenses. We calculated the percent change columns using unrounded numbers.

Source: MedPAC analysis of data from the Office of the Actuary at CMS and data from physician/supplier standard analytic files.

these entities collectively may not reflect that of the entire ASC sector.

Medicare payments: Aggregate payments decreased in 2020, but by less than declines in volume

In 2020, ASCs received \$4.9 billion in Medicare payments and beneficiaries' cost sharing (Table 5-8). We estimate that spending by the Medicare program was \$3.9 billion and beneficiary cost sharing was \$1.0 billion (data not shown).

Spending per FFS beneficiary rose by an average annual rate of 6.7 percent from 2015 through 2019 and fell by 3.9 percent in 2020 (Table 5-8). The drop in per beneficiary spending in 2020 reflects a 2.6 percent increase through the ASC conversion factor, a 13.4 percent decrease through a change in volume per beneficiary, a 6.3 percent increase through the average relative weight of ASC services, a 0.7 percent rise due to increased spending from 2019 to 2020 on separately paid drugs and devices provided to Medicare beneficiaries treated in ASCs, and a 1.0 percent increase due to the relaxation of the Medicare sequester adjustments in 2020.¹¹

The decrease in ASC spending per FFS beneficiary from 2019 to 2020 resulted from fewer beneficiaries receiving ASC services rather than a decrease in spending per beneficiary using services. From 2019 to 2020, the number of FFS beneficiaries who received ASC services declined by 15 percent, but the spending per beneficiary who received a service increased by 10.2 percent (Table 5-8).

In 2020, the coronavirus PHE reduced ASC volume and ASC revenue. However, ASCs also received Provider Relief Fund (PRF) payments in 2020. Because ASCs do not submit cost reports, we cannot determine the magnitude of the PRF amounts received. We were able to determine the PRF amounts received by some of the health care management companies. Tenet and Surgery Partners each received \$59 million in PRF payments for their ambulatory care providers.

How should Medicare payments change in 2023?

Our analysis indicates that the number of ASCs has increased, beneficiaries' use of ASCs had been increasing before the PHE, and access to capital

has been at least adequate. Measures of ASC quality through 2020 indicate that quality had been improving but that improvement appears to have plateaued. Also, CMS will implement some quality measures that address the need for outcome measurements. Our information for assessing payment adequacy, however, is limited because Medicare does not require ASCs to submit cost data, unlike other types of facilities. Since 2010, the Commission has recommended that the Congress require ASCs to submit cost data (Medicare Payment Advisory Commission 2010).

Cost data would enable the Commission to examine the growth of ASCs' costs over time and analyze Medicare payments relative to the costs of efficient providers, which would help inform our decisions about the ASC update. Cost data also are needed to determine whether an alternative input price index would be an appropriate proxy for ASC costs. As discussed in the text box on revising the ASC market basket index (p. 184), the Commission has previously expressed concern that the price index CMS used to update the ASC conversion factor from 2010 through 2018 (the CPI-U) likely does not reflect ASCs' cost structure (Medicare Payment Advisory Commission 2010). Similarly, the price index that CMS is using to update the ASC conversion factor from 2019 through 2023—the hospital market basket—does not reflect ASCs' cost structure.

CMS has concluded that it needs data on ASC input costs (Centers for Medicare & Medicaid Services 2012), but to date has not required ASCs to submit cost data. CMS has requested public comment on whether the agency should collect cost data from ASCs for use in determining ASC payment rates. CMS reports that ASC representatives commented that they oppose a requirement for ASCs to submit formal cost reports but expressed willingness to complete surveys if doing so is not administratively burdensome (Centers for Medicare & Medicaid Services 2017). In 2021, CMS solicited public comment on methods that would mitigate the burden of reporting costs on ASCs while collecting data sufficient to reliably determine ASC costs and stated that cost data would be beneficial in establishing an ASC-specific market basket index for updating payment rates under the ASC payment system (Centers for Medicare & Medicaid Services 2021).

We contend that it is feasible for ASCs to provide cost information. All other facility providers submit cost

data to CMS. Indeed, ASCs in Pennsylvania submit cost and revenue data annually to a state agency that uses the data to estimate margins for those ASCs (Pennsylvania Health Care Cost Containment Council 2021). We recognize that ASCs are generally small facilities that may have limited resources for collecting cost data. However, such businesses typically keep records of their costs for filing taxes and other purposes, and other facility providers that are typically small, such as home health agencies and hospices, furnish cost data to CMS.

If the reporting burden on ASCs is of legitimate concern, CMS could create a streamlined process for ASCs to track and submit a limited amount of cost data. CMS has conducted surveys of random samples of ASCs (in 1986 and 1994), and we believe CMS could do these surveys annually, with mandatory response. CMS could also streamline ASC cost reporting by annually collecting a set of cost variables from all ASCs that is more limited than what is collected through formal cost reports, which would require less time for ASCs to complete. Alternatively, CMS could require ASCs to submit cost data from their existing cost accounting systems, provided the definitions of their reported cost variables are consistent with CMS's definitions. The Commission does not believe that a streamlined process for collecting cost data would place a large burden on ASCs. After all, individual taxpayers complete and submit lengthy income tax forms. Therefore, the Commission sees no reason why ASCs cannot submit at least minimal cost data.

For the Commission to determine the relationship between Medicare payments and the costs of efficient ASCs, ASCs would optimally submit the following information:

- total costs for the facility;
- Medicare unallowable costs, such as entertainment, promotion, and bad debt;
- the costs of clinical staff who bill Medicare separately, such as anesthesiologists and clinical nurse anesthetists (these costs would be excluded from the facility's costs because these clinicians are paid separately under Medicare);
- total charges across all payers and charges for Medicare patients (CMS could allocate total facility

Revisiting the ASC market basket index

From 2010 through 2018, CMS used the consumer price index for all urban consumers (CPI-U) as the market basket to update the payment rates in the ambulatory surgical center (ASC) payment system. Because of our concern that the CPI-U likely does not reflect ASCs' cost structure, the Commission examined in 2010 whether an alternative market basket index would better measure changes in ASCs' input costs (Medicare Payment Advisory Commission 2010). Using data from a Government Accountability Office (GAO) survey of ASC costs in 2004, we compared the distribution of ASC costs with the distribution of hospital and physician practice costs. We found that ASCs' cost structure is different from that of hospitals and physician offices. ASCs have a much higher share of expenses for medical supplies and drugs than the other two settings, a much smaller share of employee compensation costs than hospitals, and a smaller share of all other costs (such as rent and capital costs) than physician offices. For more detail about our methods and findings, see Chapter 2C of our March 2010 report to the Congress (Medicare Payment Advisory Commission 2010).

Since our 2010 analysis, CMS has considered whether the hospital market basket or the practice expense component of the Medicare Economic Index (MEI) is a better proxy for ASC costs than the CPI-U (Centers for Medicare & Medicaid Services 2012). The hospital market basket and the MEI reflect different mixes of inputs and, therefore,

a different mix of costs from what is typical in ASCs. Most recently, CMS has decided to use the hospital market basket as the basis for updating ASC payment rates from 2019 through 2023 (Centers for Medicare & Medicaid Services 2018). However, because of differences between the ASC and hospital cost structures, we find that the hospital market basket is not an appropriate market basket for ASCs.

The ASC cost data from GAO used in our comparative analysis are 18 years old and do not contain information on several types of costs. Therefore, the Commission has recommended several times that the Congress require ASCs to submit new cost data to CMS (Medicare Payment Advisory Commission 2021, Medicare Payment Advisory Commission 2020, Medicare Payment Advisory Commission 2019, Medicare Payment Advisory Commission 2018c, Medicare Payment Advisory Commission 2015, Medicare Payment Advisory Commission 2014, Medicare Payment Advisory Commission 2013, Medicare Payment Advisory Commission 2012, Medicare Payment Advisory Commission 2011, Medicare Payment Advisory Commission 2010). CMS should use cost data to examine whether an existing Medicare price index is an appropriate proxy for ASC costs or an ASC-specific market basket should be developed. A new ASC market basket could include the same types of costs that appear in the hospital market basket or MEI but with different cost weights that reflect ASCs' unique cost structure. ■

costs to Medicare based on Medicare's proportion of total charges); and

- total Medicare payments.

In addition, CMS would need to collect data on specific cost categories to determine an appropriate input price index for ASCs. For example, CMS would need data on the share of ASCs' costs related to employee

compensation, medical supplies, medical equipment, building expenses, and other professional expenses (such as legal, accounting, and billing services). CMS could use this information to examine ASCs' cost structure and determine whether an existing Medicare price index is an appropriate proxy for ASC costs or whether an ASC-specific market basket should be developed.

CMS used the CPI-U to update the ASC conversion factor from 2010 through 2018. However, CMS has indicated that the CPI-U does not reflect ASCs' input costs. CMS made a significant regulatory change and decided to use the hospital market basket as the basis for updating the ASC conversion factor for a five-year period—2019 through 2023. CMS used the hospital market basket to increase the ASC conversion factor by 2.6 percent in 2020, 2.4 percent in 2021, and 2.0 percent in 2022. CMS based its decision to use the hospital market basket in place of the CPI-U on concerns that the differences in payment rates between the ASC payment system and the OPps had caused a shift of care from ASCs to HOPDs. CMS believes that using the same update mechanism for both ASCs and HOPDs could “encourage the migration of services from the hospital setting to the ASC setting and increase the presence of ASCs in health care markets or geographic areas where previously there were none or few, thus promoting better beneficiary access to care” (Centers for Medicare & Medicaid Services 2018). However, our analysis of growth in the surgical services provided in ASCs and HOPDs suggests that surgical services were already shifting from HOPDs to ASCs before CMS began using the hospital market basket to update the ASC payment rates. We evaluated the growth in HOPDs and ASCs for the 30 surgical procedures most frequently provided in ASCs from 2015 through 2019. We found that the volume for these procedures increased in ASCs and decreased in HOPDs.

During the five-year period of using the hospital market basket, CMS states that it will:

- assess whether there is a migration of services from hospitals to ASCs and
- assess the possibility of working with stakeholders to collect cost data from ASCs in a minimally burdensome manner and possibly propose a plan to collect cost data (Centers for Medicare & Medicaid Services 2018).

Beginning with the Commission's March 2010 report to the Congress, the Commission has stated in comment letters and in published reports that the CPI-U likely does not reflect the current input costs of ASCs. However, the Commission does not support using the hospital market basket index as an interim method for updating the ASC conversion factor because this index also does not accurately reflect ASCs' costs

(Medicare Payment Advisory Commission 2018a). CMS acknowledges that the ASC and hospital cost structures are not identical because ASCs tend to be single specialty and for profit and are not required to comply with the Emergency Medical Treatment and Labor Act. The Commission concurs with these observations and adds that, relative to hospitals, ASCs are more urban, serve a different mix of patients, have a much higher share of expenses related to medical supplies and drugs, and have a smaller share of employee compensation costs.

The Commission asserts that use of the hospital market basket to encourage migration of services to the less expensive ASC setting is unnecessary because surgical procedure volume covered under the ASC payment system is already increasing at a faster rate in ASCs than in HOPDs. Moreover, ASCs are profitable organizations, and the number of ASCs and the volume of services continue to grow (Medicare Payment Advisory Commission 2010). Therefore, we believe it is unnecessary for CMS to spend five years assessing the feasibility of collecting cost data from ASCs.

Recommendation

In evaluating a need for an update to the ASC conversion factor for 2023, the Commission balanced the following objectives:

- maintain beneficiaries' access to ASC services;
- pay providers adequately;
- maintain the sustainability of the Medicare program by appropriately restraining spending on ASC services;
- keep providers under financial pressure to constrain costs; and
- require ASCs to submit cost data.

In balancing these goals, the Commission concludes that the ASC update for 2023 should be eliminated and that the Secretary should collect cost data from ASCs.

RECOMMENDATION 5-1

For calendar year 2023, the Congress should eliminate the update to the 2022 Medicare conversion factor for ambulatory surgical centers.

RECOMMENDATION 5-2

The Secretary should require ambulatory surgical centers to report cost data.

RATIONALES 5-1 AND 5-2

On the basis of our payment adequacy indicators, combined with the importance of maintaining financial pressure on providers to constrain costs, we believe that the ASC conversion factor should not be increased for 2023. That is, the 2023 conversion factor in the ASC payment system should be the same as the conversion factor in 2022. Though we do not have cost data, and we have reservations about the measures used within the ASCQR, the indicators of payment adequacy for which we have information are positive: The volume of ASC services per beneficiary increased in 2019 and rebounded strongly by December 2020 following a pandemic-related drop in the spring of 2020; the complexity of ASC services provided increased; and the number of ASCs increased in 2020 in spite of the pandemic. Given the return to near-normal volume levels by the end of 2020, we believe the effects of the PHE are temporary and we do not expect any long-term effects on ASC volume and revenue. Also, ASCs appear to have adequate access to capital, and Medicare payments to ASCs had strong growth through 2019.

The Commission has persistently recommended that the Secretary collect cost data from ASCs. Cost data would enable CMS and the Commission to examine the growth of ASCs' costs over time and evaluate Medicare payments relative to the costs of an efficient provider, which would help inform decisions about the ASC payment update. Cost data are also needed to evaluate whether an alternative input price index would be an appropriate proxy for ASC costs.

We see no reason why ASCs should not be able to submit cost data. CMS collects cost data from all other institutional providers participating in the Medicare program. To date, the ASC industry has asserted that ASCs are small operations that lack the capacity and accounting expertise to enable them to complete cost reports. However, some of the sectors from which CMS collects cost data also are predominantly made up of small providers. Therefore, any ASC should be

able to compile and submit a minimum set of cost data. Also, while the most ASCs are freestanding facilities, hospital corporations and other large health care entities have acquired more ASCs. These entities have the capacity and expertise to complete cost reports. CMS could limit the scope of the cost reporting system to minimize administrative burden on ASCs and the program. To implement this change, CMS should make cost reporting a condition of ASC participation in the Medicare program.

IMPLICATIONS 5-1 AND 5-2

Spending

- The Secretary has the authority to update the ASC conversion factor and has decided to use the hospital market basket index as the basis for updating the conversion factor from 2019 through 2023 (Centers for Medicare & Medicaid Services 2018). The Affordable Care Act of 2010 (ACA) requires that the update factor be reduced by a multifactor productivity measure. The currently projected hospital market basket index increase for 2023 is 2.6 percent, and the forecast of productivity growth for 2023 is 0.6 percent, resulting in a projected update of 2.0 percent to the conversion factor for 2023. Relative to current Medicare law, our recommendation would decrease federal spending by between \$50 million to \$250 million in the first year and by less than \$1 billion over five years.

Beneficiary and provider

- Because of the growth in the number of ASCs and the increase in ASCs' revenue from Medicare, we do not anticipate that these recommendations will diminish beneficiaries' access to ASC services or providers' willingness or ability to provide those services.
- ASCs may incur some minimal administrative costs to track and submit cost data, but we believe cost accounting is standard practice in the ASC industry, and ASCs should be able to draw cost data from that source. ■

Endnotes

- 1 A more detailed description of the ASC payment system can be found online at https://www.medpac.gov/wp-content/uploads/2021/11/medpac_payment_basics_21_asc_final_sec.pdf.
- 2 CMS determines the payment rates in the ASC system independently from the payment rates in the PFS. Therefore, it is possible for an office-based procedure to have its payment rate based on the standard method in one year and on the PFS nonfacility rate the next year, or vice versa.
- 3 We define single-specialty ASCs as those with more than 67 percent of their Medicare claims in one clinical specialty. We define multispecialty ASCs as those with less than 67 percent of their Medicare claims in one clinical specialty.
- 4 The first year that total knee arthroplasty was covered under the ASC payment system was 2020. About 10,800 of these procedures were provided to FFS Medicare beneficiaries in ASCs in 2020.
- 5 By statute, coinsurance for a service paid under the OPPI cannot exceed the hospital inpatient deductible (\$1,556 in 2022). The ASC payment system does not have the same limitation on coinsurance; for a small percentage of HCPCS codes covered under the ASC payment system, the ASC coinsurance exceeds the inpatient deductible. In these instances, the ASC coinsurance exceeds the OPPI coinsurance.
- 6 Cost sharing is lower under the ASC payment system for 96 percent of HCPCS codes that are covered under the ASC payment system.
- 7 Rather than enact a full discontinuation of measures ASC-1 through ASC-4, CMS decided to suspend these four measures. Suspension means that ASCs are no longer required to report data on these measures, but CMS will retain them in the ASCQR Program for possible future use. CMS later decided to end the suspension of these measures and will use them for ASC payment determination in 2025. In addition, CMS will begin voluntary submission for payment determination in 2025 of the patient experience measures based on the Consumer Assessment of Healthcare Providers and Systems® (CAHPS®) survey measures. CMS will make mandatory the submission of these measures for payment determination in 2027.
- 8 For measures ASC-1, ASC-2, ASC-3, and ASC-4, we removed from this analysis ASCs that reported that more than 30 percent of patients had one of these events.
- 9 CAHPS is a registered trademark of the Agency for Healthcare Research and Quality, a U.S. government agency.
- 10 The margins for ASCs have important differences from the margins in other sectors such as hospitals. In particular, the cost data used to determine margins for most ASCs do not include compensation for physician owners or the taxes paid on that compensation.
- 11 We estimate that the volume per beneficiary had a 13.4 percent impact on spending per beneficiary, while we estimate that the change in volume per beneficiary from 2019 to 2020 was 13.6 percent (p. 173). This discrepancy is due to the fact that the volume per beneficiary indicates volume of surgical procedures, and these procedures constitute 98.5 percent of all ASC Medicare spending. Therefore, the drop in surgical volume per beneficiary affected spending per beneficiary by 98.5 percent of 13.6 percent, which is 13.4 percent.

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C H A P T E R

6

Outpatient dialysis services

R E C O M M E N D A T I O N

- 6** For calendar year 2023, the Congress should update the 2022 Medicare end-stage renal disease prospective payment system base rate by the amount determined under current law.

COMMISSIONER VOTES: YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0

Outpatient dialysis services

Chapter summary

Outpatient dialysis services are used to treat the majority of individuals with end-stage renal disease (ESRD). In 2020, nearly 384,000 beneficiaries with ESRD on dialysis were covered under fee-for-service (FFS) Medicare and received dialysis from nearly 7,800 dialysis facilities. Since 2011, Medicare has paid for outpatient dialysis services based on a prospective payment system (PPS) bundle that includes certain dialysis drugs and ESRD-related clinical laboratory tests that were previously paid separately. In 2020, Medicare expenditures for outpatient dialysis services totaled \$12.3 billion. Six percent of the total consisted of payments for two calcimimetics paid under the ESRD PPS's transitional drug add-on payment adjustment (TDAPA); this policy pays providers according to the number of units of a drug and the drug's average sales price.

In this chapter, we recommend a payment rate update for 2023. Because of standard data lags, the most recent complete data we have for most payment adequacy indicators is from 2020. Where relevant, we have considered the effects of the 2020 coronavirus public health emergency (PHE) on our indicators and whether those effects are likely to be temporary or permanent. To the extent that the effects of the PHE are temporary or vary significantly across outpatient dialysis facilities, they are best addressed through targeted temporary funding policies rather

In this chapter

- Are Medicare payments adequate in 2022?
- How should Medicare payments change in 2023?

than a permanent change to all dialysis facilities' payment rates in 2023 and future years.

Assessment of payment adequacy

Our payment adequacy indicators for outpatient dialysis services are generally positive.

Beneficiaries' access to care—Measures of the capacity and supply of providers, beneficiaries' ability to obtain care, and changes in the volume of services suggest that payments are adequate.

- **Capacity and supply of providers**—Dialysis facilities appear to have the capacity to meet demand. Between 2015 and 2019, the number of in-center treatment stations grew faster than the number of FFS dialysis beneficiaries (but kept pace with demand from all dialysis patients across all types of health coverage). Between 2019 and 2020, capacity continued to grow but at a slower rate than between 2015 and 2019.
- **Volume of services**—Tragically, patients with ESRD are at increased risk for COVID-19–associated morbidity and mortality. Between 2019 and 2020, the number of FFS dialysis beneficiaries and the total number of treatments each declined by 3 percent. This decline is largely attributable to the coronavirus pandemic, which resulted in slowing the initiation of dialysis by new patients and in excess mortality. At the same time, use of ESRD drugs in the payment bundle (including erythropoiesis-stimulating agents (ESAs), which are used in anemia management) continued to decline, but at a slower rate than during the initial years of the ESRD PPS (2011 and 2012). The ESRD PPS created an incentive for providers to be more judicious about their provision of ESRD drugs that are included in the payment bundle.
- **The marginal profit**—An estimated 20 percent marginal profit in 2020 suggests that dialysis providers have a financial incentive to continue to serve Medicare beneficiaries.

Quality of care—The growing trend under the ESRD PPS toward home dialysis, which is associated with better patient satisfaction, continued in 2020. Between 2019 and 2020, all-cause hospitalizations, emergency department use, and kidney transplantation declined while mortality increased. Each of these changes are likely linked to the pandemic. By contrast, between 2018 and 2019, kidney transplantation increased while the other quality metrics held steady.

Providers' access to capital—Information from investment analysts suggests that access to capital for dialysis providers continues to be strong. The number of facilities, particularly for-profit facilities, continues to increase. Under the ESRD PPS, the two largest dialysis organizations have grown through acquisitions of and mergers with midsize dialysis organizations.

Medicare payments and providers' costs—Our analysis of Medicare payments and costs is based on 2019 and 2020 claims and cost report data submitted to CMS by freestanding dialysis facilities, which provided 96 percent of FFS dialysis treatments in both years. During this period, cost per treatment rose by 4 percent, while Medicare payment per treatment declined by 2 percent, and the aggregate Medicare margin fell from 8.4 percent to 2.7 percent. The decrease in the aggregate Medicare margin is linked to (1) a rise in the cost per treatment for all cost categories with the exception of ESAs and labs and (2) a drop in the TDAPA payment from average sales price (ASP) + 6 percent to ASP + 0 percent in 2020. Including provider-relief pandemic revenues, the aggregate Medicare margin was 3.7 percent.

While the PHE has made 2020 and 2021 anomalous years in many respects and it is impossible to predict with certainty the extent to which these effects will continue into 2022 and beyond, we project that the 2022 aggregate Medicare margin will drop to 1.8 percent, in part due to cost changes that will exceed payment updates. The projection reflects full sequester relief through March 2022 and 1 percent relief beginning April 2022 through June 2022.

How should Medicare payment rates change in 2023?

Under current law, the Medicare FFS base payment rate for dialysis services is projected to increase by 1.2 percent. Given that most of our indicators of payment adequacy are positive, the update recommendation is that for 2023, the Congress should update the calendar year 2023 ESRD PPS base rate by the amount determined under current law. ■

Dialysis treatment choices

Dialysis replaces the filtering function of the kidneys when they fail. The two types of dialysis—hemodialysis and peritoneal dialysis (PD)—remove waste products from the bloodstream differently. For each of these two dialysis types, patients may select various protocols.

Most dialysis patients travel to a treatment facility to undergo hemodialysis three times per week, although patients can also undergo hemodialysis at home. Hemodialysis uses an artificial membrane encased in a dialyzer to filter the patient's blood. Because of recent clinical findings, there is increased interest in more frequent hemodialysis, administered five or more times per week while the patient sleeps, and short (two to three hours per treatment) daily dialysis administered during the day. Research has also increased interest in the use of “every-other-day” hemodialysis; reducing the two-day gap in thrice-weekly hemodialysis could be linked to improved outcomes.

PD, the most common form of home dialysis, uses the lining of the abdomen (peritoneum) as a filter to clear wastes and extra fluid and is usually performed

independently in the patient's home or workplace five to seven days a week. During treatments, a cleansing fluid (dialysate) is infused into the patient's abdomen through a catheter. This infusion process (an exchange) is done either manually (continuous ambulatory peritoneal dialysis) or using a machine (automated peritoneal dialysis).

Each dialysis method has advantages and drawbacks; no one method is best for everyone. People choose a particular dialysis method for many reasons, including quality of life, patients' awareness of different treatment methods and personal preferences, and physician training and recommendations. The use of home dialysis has grown since 2009, a trend that has continued under the dialysis PPS. Some patients switch methods when their conditions or needs change. Although most patients still undergo in-center dialysis, home dialysis remains a viable option for many patients because of such advantages as increased patient satisfaction, better health-related quality of life, and fewer transportation challenges compared with in-center dialysis. ■

Background

End-stage renal disease (ESRD) is the last stage of chronic kidney disease (CKD) and is characterized by permanent, irreversible kidney failure. Patients with ESRD include those who are treated with dialysis—a process that removes wastes and fluid from the body—and those who have a functioning kidney transplant. Because of the limited number of kidneys available for transplantation and the variation in patients' suitability for transplantation, about 70 percent of ESRD patients undergo maintenance dialysis (see text box on dialysis treatment choices). Patients receive additional items and services related to their dialysis treatments,

including dialysis drugs and biologics to treat conditions such as anemia and bone disease resulting from the loss of kidney function.¹

The 1972 amendments to the Social Security Act extended Medicare benefits to people with ESRD, including those under age 65. For individuals with ESRD to qualify for Medicare, they must be fully or currently insured under the Social Security or Railroad Retirement program or be the spouse or dependent child of an eligible beneficiary.

In 2020, nearly 384,000 ESRD beneficiaries on dialysis were covered under fee-for-service (FFS) Medicare and received dialysis from roughly 7,800 dialysis facilities.^{2,3}

Since 2011, Medicare has been paying facilities using a prospective payment system (PPS) bundle that includes dialysis drugs (for which facilities previously received separate payments) and services for which other Medicare providers (such as clinical laboratories) previously received separate payments.⁴ In 2020, Part B spending for Medicare-covered outpatient dialysis services was \$12.3 billion. This total includes payments of nearly \$712 million paid for the two ESRD drugs classified as calcimimetics—Sensipar (oral cinacalcet) and Parsabiv (injectable etelcalcetide)—that qualified, beginning in 2018, for a transitional drug add-on payment adjustment (TDAPA) under the ESRD PPS. Beginning in 2021, calcimimetics are included in the PPS bundle. Additionally, in 2019 (the most recent data available), Part D payments for ESRD oral-only drugs that were not yet included in the PPS—multiple phosphate binders—totaled nearly \$0.9 billion.⁵ A home dialysis machine qualifies, beginning in January 2022, for a transitional add-on payment adjustment for new and innovative equipment and supplies (TPNIES) under the ESRD PPS for two calendar years and, beginning in April 2022, a drug (Korsuva) qualifies for a TDAPA.

In 2020, a majority of Medicare’s dialysis beneficiaries had FFS coverage. Historically, beneficiaries with ESRD were prohibited from enrolling in Medicare Advantage (MA) plans. However, beneficiaries enrolled in a managed care plan before receiving an ESRD diagnosis can remain in the plan after they are diagnosed (Medicare Payment Advisory Commission 2000). The 21st Century Cures Act allows ESRD beneficiaries to enroll in MA as of 2021. In addition, dialysis beneficiaries residing in selected geographic areas have access to ESRD special needs plans (SNPs) (specifically, in C-SNPs, a type of SNP for individuals with chronic conditions). As of October 2021, few dialysis beneficiaries—about 4,600—were enrolled in 10 ESRD SNPs operated by 6 managed care organizations in 5 states (Arizona, California, Connecticut, New Jersey, and Texas). Over time, the share of all Medicare ESRD beneficiaries on dialysis under FFS has gradually declined, while the share of beneficiaries enrolled in MA plans has increased. For example, between 2015 and 2020, the share of dialysis beneficiaries in MA rose from about 17 percent to 27 percent, while the share of dialysis beneficiaries in FFS fell from about 83 percent to 73 percent.

Dialysis patients are logical candidates for coordinated care programs, such as specialty-oriented accountable care organizations (ACOs) and the ESRD C-SNPs. Patients are medically complex because they often have multiple chronic conditions in addition to renal failure, including heart failure, diabetes, and hypertension. Moreover, patients either receive in-center treatment thrice weekly or have a regular evaluation at the dialysis facility if being treated at home. Shared savings and coordinated care arrangements have shown promise to improve the care of dialysis beneficiaries. For example, results from the first four performance years of the Center for Medicare & Medicaid Innovation’s (CMMI’s) Comprehensive ESRD Care (CEC) Model, Medicare’s first ACO model (a shared savings program that ended in 2021) targeted a particular clinical population, found that key quality metrics improved, such as fewer hospitalizations due to ESRD complications, fewer hospital readmissions, lower catheter use, and improved adherence to dialysis. Although the CEC Model resulted in lower total Part A and Part B spending, Medicare experienced aggregate net losses after taking into account shared savings payments made to participants (Marrufo et al. 2021). A plan-sponsored data analysis from one ESRD C-SNP found lower hospital admissions and a decreased likelihood of mortality compared with patients treated in the same facilities or facilities located in similar counties (Becker et al. 2020).

Characteristics of fee-for-service dialysis beneficiaries, 2020

Compared with all other Medicare FFS beneficiaries, FFS dialysis beneficiaries are disproportionately younger, male, and Black (Table 6-1). In 2020, 76 percent of FFS dialysis beneficiaries were less than 75 years old, 57 percent were male, and 35 percent were Black. By comparison, among all other FFS Medicare beneficiaries, 63 percent were less than 75 years old, 47 percent were male, and 11 percent were Black. A greater share of dialysis beneficiaries resided in urban areas compared with all other FFS beneficiaries (83 percent vs. 80 percent).

FFS dialysis beneficiaries are more likely to be dually eligible for Medicare and Medicaid than all other FFS beneficiaries (51 percent vs. 16 percent). In addition, in 2019 (the most recent data available), FFS dialysis beneficiaries were less likely to have coverage from

**TABLE
6-1****FFS dialysis beneficiaries are disproportionately young, male, and Black compared with all other Medicare FFS beneficiaries, 2020****Share of FFS beneficiaries:**

	Dialysis beneficiaries	All other beneficiaries
Age		
Under 45 years	10%	3%
45–64 years	37	10
65–74 years	29	51
75–84 years	18	26
85+ years	6	10
Sex		
Male	57	47
Female	43	53
Race		
White	46	81
Black	35	9
Hispanic	8	3
Asian	4	2
All others	7	5
Residence, by type of county		
Urban	83	80
Micropolitan	10	11
Rural, adjacent to urban	5	5
Rural, not adjacent to urban	2	4
Frontier	1	1

Note: FFS (fee-for-service). “All others” excludes beneficiaries on dialysis and those who have received a kidney transplant. Beneficiary location reflects the beneficiary’s county of residence in one of four categories (urban, micropolitan, rural adjacent to urban, and rural not adjacent to urban) based on an aggregation of the Urban Influence Codes. Frontier counties have six or fewer people per square mile. Totals may not sum to 100 percent due to rounding.

Source: Data compiled by MedPAC from enrollment data and claims submitted by dialysis facilities to CMS.

other sources, such as Medigap and employer-sponsored health plans (30 percent vs. 58 percent) and as likely to have no supplemental coverage (about 24 percent for each group in 2019). Since 1997, the American Kidney Fund has maintained a Health Insurance Premium Program that helps pay dialysis patients’ health insurance premiums, including Medicare Part B premiums.⁶

Over the last decade, the adjusted rate of new ESRD cases, or incidence rate (which includes patients of all types of health coverage who initiate dialysis or receive a kidney transplant), has declined. Between 2009 and 2019 (the most recent year of data available), the adjusted incidence rate decreased by 1 percent per year, from 421 per million people to 386 per million

Kidney Care Choices Model aims to delay the progression of kidney disease and promote kidney transplants

CMMI's Kidney Care Choices Model aims to delay the initiation of dialysis and incentivize kidney transplantation for FFS beneficiaries with chronic kidney disease (CKD) stages 4 and 5 (not on dialysis), ESRD FFS beneficiaries on dialysis, and beneficiaries who were aligned to a participating provider due to CKD and ESRD who received a transplant. The model, which began in 2022 and spans five performance years, is based on benchmark and payment methodologies used in the Comprehensive ESRD Care Model, the Direct Contracting Model, and the Primary Care First Model. The Kidney Care Choices Model tests whether these design elements will reduce Medicare spending and improve the quality and coordination of care for beneficiaries with late-stage CKD, ESRD, and kidney transplants.

The Kidney Care First (KCF) Option is open only to nephrologists and nephrology practices. Participants receive capitated monthly and quarterly payments for managing the care of aligned beneficiaries, adjusted upward or downward on the basis of health outcomes and utilization compared with both the participants' own experience and national standards, and performance on quality measures. In addition, KCF practices receive a bonus payment for every aligned beneficiary who receives a kidney transplant.

In contrast to the KCF Option, under the three Comprehensive Kidney Care Contracting (CKCC) Options, nephrologists and nephrology practices must partner with transplant providers and may also partner with dialysis facilities (and other providers and suppliers) to form Kidney Care Entities (KCEs). Participants receive monthly and quarterly capitated

(continued next page)

people, an increase of 1 percent compared with 2018 (United States Renal Data System 2021a).

In 2020, we estimate that the number FFS beneficiaries beginning dialysis declined by roughly 10,000 compared with 2018 and 2019. Specifically, in 2018 and 2019, about 83,000 beneficiaries were new to dialysis in each year, while in 2020, nearly 73,000 FFS beneficiaries were new to dialysis, with about half (45 percent) under age 65 and thus entitled to Medicare based on ESRD benefit rules (with or without disability).⁷ This decline is largely attributable to the coronavirus pandemic, which resulted in slowing the initiation of dialysis by new patients across all insurance types:

- According to the two largest dialysis providers, in 2020, the number of new dialysis starts declined.
- Data from the United States Renal Data System (USRDS) show that during the first six months

of 2020, the number of incident ESRD (dialysis and transplant) patients declined by 10 percent compared with the same period in 2019 (United States Renal Data System 2021b).

- Findings from researchers show that the number of patients with incident kidney failure initiating treatment in the first four months of 2020 substantially declined (particularly for Black patients and people living in counties with high COVID-19 mortality rates) compared with 2018 through 2019 (Nguyen et al. 2021).

The timing of starting dialysis is a matter of clinical judgment, guided by residual kidney function values and the symptoms and comorbidities of affected patients. From the mid-1990s through 2010, the Commission's analysis of data (from CMS's ESRD Medical Evidence Report) suggests a trend toward initiating dialysis earlier in the course of CKD. The proportion of new dialysis patients (of all types of

Kidney Care Choices Model aims to delay the progression of kidney disease and promote kidney transplants (cont.)

care management payments as well as the kidney transplant bonus payment. In addition, each of the three CKCC Options has its own accountability framework for the total cost and quality of care for its aligned beneficiaries:

- CKCC Graduated Option: KCEs can elect either one-sided risk in the first payment year (referred to as Level 1 of the Graduated Option) or two-sided risk with subsequent downside risk (referred to as Level 2 of the Graduated Option).⁸ KCEs selecting Level 1 for their first performance year automatically graduate to Level 2 for their second performance year. In addition, KCEs automatically transition into the CKCC Professional Option for each subsequent performance year after participation in Level 2 of the Graduated Option.

- CKCC Professional Option: Participants have an opportunity to earn 50 percent of shared savings or be liable for 50 percent of shared losses based on the total cost of care for Part A and Part B services.

- CKCC Global Option: Participants are at risk for 100 percent of the total cost of care for all Part A and Part B services for aligned beneficiaries.

KCEs are able to move from a lower-risk option to a higher-risk option at the start of each performance year but are not able to move to a lower-risk option from a higher-risk option. According to CMS, 30 KCF practices and 55 KCEs are participating in performance year 2022 of the KCC Model. ■

health coverage) with higher levels of residual kidney function steadily increased between 1996 and 2010, from 13 percent to nearly 44 percent. (An estimated glomerular filtration rate (eGFR)—a measure of residual kidney function—above 10 mL/min/1.73 m² is considered a higher level of residual kidney function. Lower values of this measure suggest comparatively less residual kidney function.)

While the share of patients initiating dialysis earlier in the course of CKD decreased modestly between 2011 and 2019 (from 43 percent to 40 percent), the share remains three times higher than in 1996. Researchers have questioned this early initiation of dialysis in those with late-stage CKD, concluding that it is not associated with improved survival or clinical outcomes (Cooper et al. 2010, Evans et al. 2011, Kazmi et al. 2005, Stel et al. 2009, Traynor et al. 2002). Of the few randomized controlled trials (RCTs) on this topic, the most influential RCT found that survival is similar between patients for whom dialysis is initiated

early (with an eGFR equal to 10.0 mL/min/1.73 m² to 14.0 mL/min/1.73 m²) and those for whom dialysis is electively delayed (with an eGFR equal to 5.0 mL/min/1.73 m² to 7.0 mL/min/1.73 m²) and concluded that dialysis can be delayed for some patients until the eGFR drops below 7.0 mL/min/1.73 m² or until more traditional clinical indicators for the initiation of dialysis are present (Cooper et al. 2010). Since publication of this RCT in 2010, the share of early dialysis initiation has begun to level off, but it has not yet returned to its earlier levels.

The goals of CMMI's Kidney Care Choices Model include delaying the initiation of dialysis and incentivizing kidney transplantation both for ESRD FFS beneficiaries on dialysis and for FFS beneficiaries with chronic kidney disease (CKD) stages 4 and 5 (not on dialysis). The text box describes the four payment options that this voluntary model offers participants beginning in 2022.

Better primary care management of the risk factors for CKD—particularly hypertension and diabetes, which together are the primary causes of roughly 7 of 10 new ESRD cases—can help prevent or delay the illness’s onset. Payers and dialysis providers are testing interventions among CKD patients to improve their clinical outcomes (e.g., reduced hospitalizations), prevent or slow kidney disease progression, and increase their preparedness for ESRD (e.g., by educating patients about treatment alternatives, including transplantation and home dialysis). Increasing the preparedness of CKD patients for ESRD may reduce the substantial morbidity, mortality, and costs associated with ESRD. For example, according to USRDS, receipt of pre-ESRD nephrology care was associated with greater use of the recommended type of vascular access—an arteriovenous fistula (United States Renal Data System 2020). In addition to the CMMI kidney models, some dialysis providers have entered into agreements with commercial payers to provide care coordination to individuals with CKD and ESRD. The Commission has long argued that primary care services are undervalued in Medicare’s fee schedule and has made recommendations to support primary care, which in turn could support better management of kidney disease risk factors.

Since 2011, Medicare has paid for dialysis services under the ESRD PPS

To treat ESRD, dialysis beneficiaries receive care from two principal providers: (1) the clinicians (typically nephrologists) who prescribe and manage the provision of dialysis and establish the beneficiary’s plan of care and (2) facilities that provide dialysis treatments in a dialysis center or support and supervise the care of beneficiaries on home dialysis. Medicare uses different methods to pay for ESRD clinician and facility services. Clinicians receive a monthly capitated payment (MCP) established in the Part B physician fee schedule for outpatient dialysis-related management services (which includes managing the dialysis prescription and prescribing dialysis drugs); payment varies based on the number of visits per month, the beneficiary’s age (adult vs. pediatric beneficiaries under 20 years of age), and whether the beneficiary receives dialysis in a facility or at home.⁹ While our work in this report focuses on

Medicare’s payments to facilities, it is important to recognize that facilities and clinicians collaborate to care for dialysis beneficiaries.

CMMI’s model—the ESRD Treatment Choices (ETC) Model (a mandatory model that aims to promote home dialysis and kidney transplantation and began in 2021)—acknowledges the need for collaboration. The ETC Model applies to dialysis facilities and managing clinicians who furnish MCP services. CMS selected participants according to their location in randomly selected geographic areas (hospital referral regions), stratified by region, to account for approximately 30 percent of adult dialysis beneficiaries. CMS adjusts participants’ payment through two adjustments upward or downward based on their home dialysis and kidney transplant rates. Specifically, the first adjustment—the home dialysis payment adjustment—is applied during the initial three years of the model and increases a participating facility’s adjusted PPS base payment rate for home dialysis treatments. The second adjustment—the performance payment adjustment—is applied beginning in year two and through the end of the model and can either increase or decrease a participating facility’s adjusted PPS base payment rate for home and in-center dialysis treatments. CMS estimated that the Medicare program would, on net, reduce Medicare spending by \$28 million over the ETC Model’s six-year duration through decreased payments to dialysis facilities (Centers for Medicare & Medicaid Services 2021).¹⁰

To improve provider efficiency, in 2011 Medicare began a PPS for outpatient dialysis services that expanded the prospective payment bundle to add (1) Part B dialysis drugs, laboratory tests, and other ESRD items and services that were previously billable separately and (2) Part D dialysis oral-only drugs—calcimimetics and phosphate binders. Clinicians use drugs in these two therapeutic classes to manage mineral bone disorders, a complication of advanced CKD.

Under the outpatient ESRD PPS, the unit of payment is a single dialysis treatment. For adult dialysis beneficiaries (18 years or older), the base payment rate does not differ by type of dialysis—in-center dialysis versus home dialysis—but rather by patient-level characteristics (age, body measurement characteristics, onset of dialysis, and selected acute and chronic

comorbidities) and facility-level factors (low treatment volume, rural location, and local input prices).¹¹ Medicare pays facilities furnishing dialysis treatments in the facility or in a patient's home for up to three treatments per week, unless the additional dialysis treatments are reasonable and necessary and there is documented medical justification for more than three weekly treatments.¹²

Since it was implemented in 2011, the outpatient ESRD PPS has undergone several significant changes. In 2014, CMS rebased the base payment rate, as mandated by the American Taxpayer Relief Act of 2012, to account for the decline in dialysis drug use under the ESRD PPS.¹³ In 2016, the agency recalibrated and redefined the patient-level and facility-level payment adjusters that are used to calculate each patient's adjusted payment per treatment.¹⁴ In addition, in 2018, 2019, and 2020, transitional add-on payments were used to pay for certain drugs (calcimimetics) and are available for qualifying equipment and supplies.

Transitional add-on payments for new drugs, devices, and equipment

CMS uses transitional add-on payment policies for:

- **ESRD oral-only drugs that were intended to be in the bundle in 2011 but were delayed due to actions by regulatory and statutory provisions.** With the availability of an injectable calcimimetic in 2017, CMS no longer considered these drugs oral only and, between 2018 and 2020, the ESRD PPS paid for them using a transitional drug add-on payment adjustment (TDAPA).^{15,16} Since 2021, CMS has paid for calcimimetics under the PPS bundled payment rate.
- **New ESRD drugs in a new ESRD functional category.** To comply with the statute's mandate for including new ESRD-related injectable and intravenous drugs in the prospective payment bundle, the agency finalized a policy in 2016 that pays a TDAPA for new ESRD-related injectable drugs not in 1 of 11 ESRD-related functional categories of drugs included in the PPS payment bundle.¹⁷ (Functional categories are similar to therapeutic classes of drugs. Functional categories are based on physiologic end-point action, including products used for anemia,

bone and mineral metabolism, and antipruritic management). For these new drugs that do not fall within an existing functional category, in order to be considered a renal dialysis service, CMS will propose a new functional category through notice-and-comment rulemaking. Once the agency finalizes the new category, the drug is eligible for receipt of TDAPA that is paid based on its average sales price (ASP) for two years, and if appropriate changes may be made to the ESRD PPS base rate.

- **Certain new ESRD drugs in an existing ESRD functional category.** CMS expanded the TDAPA policy in 2020 to apply to new ESRD drugs in an existing functional category (based on the agency's statutory authority). CMS pays a TDAPA using the product's ASP for a two-year period; thereafter, it is included in the PPS bundle without any change to the ESRD PPS base rate. CMS does not apply a substantial clinical improvement criterion to determine a new drug's eligibility. Drugs that do not qualify for this TDAPA include generic equivalents and new dosage forms of an active ingredient that the Food and Drug Administration (FDA) has already approved, among others.¹⁸ As of April 2022, CMS will pay a TDAPA for Korsuva (in the anti-pruritic functional category) for a two-year period.¹⁹
- **New ESRD equipment and supplies that are not capital assets and home dialysis machines (a capital asset) when used in the home for a single patient.** Based on its regulatory authority, CMS pays a transitional add-on payment adjustment for new and innovative equipment and supplies (TPNIES) for a two-year period; thereafter, it is included in the PPS payment bundle without any change to the ESRD PPS base rate. Unlike ESRD drugs, a substantial clinical improvement standard is used to determine eligibility under this transitional payment policy.²⁰ CMS sets the new item's payment rate at 65 percent of the price that the Medicare administrative contractors (MACs) establish.²¹

Linking payments to quality of care

Since 2012, outpatient dialysis payments are linked to the quality of care that facilities provide under the ESRD Quality Incentive Program (QIP). Under statutory provisions, the maximum payment reduction that CMS

can apply to any facility is 2 percent. In 2021, the QIP assessed facility-level quality using:

- clinical measures that assess dialysis adequacy, vascular access among hemodialysis beneficiaries, hospitalization rates, hospital readmission rates, blood transfusion rates, presence of hypercalcemia, bloodstream infections among hemodialysis beneficiaries, the number of dialysis patients on the transplant waiting list, and the quality of care that in-center hemodialysis beneficiaries report that they receive from their nephrologist and dialysis facility; and
- process measures that assess whether dialysis facilities report on clinical depression screening, ultrafiltration rates, medication reconciliation, and infection events (reported to the Centers for Disease Control and Prevention's National Healthcare Safety Network).

In 2021, of the roughly 7,300 facilities with a QIP performance score, 60 percent had no payment reduction, 22 percent had their Medicare outpatient dialysis payments reduced by 0.5 percent, 13 percent had payments reduced by 1.0 percent, 4 percent of facilities had payments reduced by 1.5 percent, and 2 percent of facilities had payments reduced by the maximum, 2.0 percent (total number of facilities does not sum to 100 percent due to rounding).

Are Medicare payments adequate in 2022?

To address whether payments for 2022 are adequate to cover the costs that efficient providers incur and how much providers' costs are likely to change in the update year (2023), we examine several indicators of payment adequacy. We assess beneficiaries' access to care by examining the capacity of dialysis facilities and changes over time in the volume of services provided. We also examine quality of care, providers' access to capital, and the relationship between Medicare's payments and facilities' costs.

While it is impossible to predict the future with any certainty, given the evolving coronavirus pandemic, we anticipate that most dialysis payment adequacy

indicators will remain positive in 2021. (For a description of how the coronavirus pandemic has been incorporated into our payment adequacy framework, see text box, pp. 206–207).

Beneficiaries' access to care: Indicators continue to be positive

Our analysis of access indicators—including the capacity of providers to meet beneficiary demand, changes in the volume of services, and the marginal profitability of Medicare dialysis beneficiaries under the PPS—shows that beneficiaries' access to care remains favorable.

Capacity has kept pace with dialysis patient demand across all insurance types

Growth in the number of dialysis facilities and in-center treatment stations alongside growth in dialysis beneficiaries suggests that, between 2015 and 2019, provider capacity has exceeded FFS beneficiaries' demand for care. During that period, the number of facilities and their capacity to provide care—as measured by dialysis treatment stations—each grew by 4 percent annually (Table 6-2), compared with 0.4 percent annual growth in the number of FFS dialysis beneficiaries (data not shown). However, in-center capacity is growing to keep pace with demand from all dialysis patients, across all insurance types, not just FFS beneficiaries. During the most recent five-year period for which data are available (2014 to 2019), the number of dialysis patients of all types of health coverage grew 3 percent per year (data not shown) (United States Renal Data System 2021a).

The number of facilities' in-center treatment stations grew more slowly annually between 2019 and 2020 compared with growth from 2015 through 2019 (1 percent per year vs. 4 percent per year). The recent decline in the growth of in-center capacity may be partly attributable to a number of factors, including (1) coronavirus pandemic-related restrictions that may have affected the development of new facilities by dialysis organizations in 2020 and (2) CMMI's ETC Model, which CMS proposed in 2019 and implemented January 1, 2021. The model's financial incentives—rewards for increasing home dialysis use and kidney transplantation among adult ESRD beneficiaries and penalties for not increasing these outcomes—might have spurred providers and clinicians to recommend

**TABLE
6-2****Increasing number and capacity of freestanding, for-profit, and largest dialysis organizations**

	2020				Average annual percent change			
	Total number of FFS treatments (in millions)	Total number of facilities	Total number of stations	Mean number of stations	Number of facilities		Number of stations	
					2015–2019	2019–2020	2015–2019	2019–2020
All	44.3	7,800	135,900	18	4%	1%	4%	1%
Share of total								
Freestanding	96%	95%	96%	18	4	2	4	1
Hospital based	4	5	4	14	–3	–2	–3	–2
Urban	86	84	86	18	5	2	4	2
Micropolitan	10	10	9	16	2	–1	2	–1
Rural, adjacent to urban	3	4	3	14	2	–3	2	–2
Rural, not adjacent to urban	1	2	1	12	0.4	–2	1	–0.5
Frontier	0.2	0.4	0.2	10	1	–3	1	–2
For profit	89	89	89	18	4	2	4	1
Nonprofit	11	11	11	17	2	–1	2	–1
Two largest dialysis organizations	76	75	76	18	5	2	5	2
All others	24	25	24	17	1	–1	1	–1

Note: FFS (fee-for-service). Provider location reflects the county in which the provider is located, by county type (urban, micropolitan, rural adjacent to urban, and rural not adjacent to urban), based on an aggregation of the Urban Influence Codes. Frontier counties have six or fewer people per square mile. Totals may not sum to 100 percent due to rounding. The number of treatment stations is imputed for nearly 200 facilities.

Source: Compiled by MedPAC from the Dialysis Compare database from CMS and claims submitted by dialysis facilities to CMS.

home dialysis more often. In addition, researchers have shown that the ESRD PPS was associated with an increase in home dialysis use among patients starting dialysis (Lin et al. 2017).

Between 2019 and 2020, capacity at both freestanding and for-profit facilities each grew by 1 percent per year, while capacity at hospital-based facilities decreased by 2 percent, and capacity at nonprofit facilities decreased by 1 percent per year. During this period, capacity at urban facilities grew 2 percent per year, while capacity

at all rural facilities declined by 1 percent per year (data for rural facilities are not aggregated). In June 2020, the Commission recommended that the Secretary replace the current low-volume payment adjustment and rural adjustment with a single payment adjustment—a low-volume and isolated (LVI) adjustment—to better protect isolated, low-volume dialysis facilities that are critical to ensure beneficiary access. The Commission found that the facilities that would receive the LVI adjustment would be more appropriately targeted compared

The coronavirus public health emergency and the Commission's assessment of payment adequacy for outpatient dialysis services

The coronavirus pandemic and associated public health emergency (PHE) had tragic effects on beneficiaries' health in 2020.²²

According to the Centers for Disease Control and Prevention (CDC), dialysis patients are at high risk for serious illness and death related to infection with COVID-19. According to CMS, between January 2020 and August 2020, beneficiaries eligible for Medicare due to end-stage renal disease (ESRD) had greater rates of COVID-19 cases and COVID-19 hospitalizations compared with beneficiaries who were eligible for Medicare due to age or disability. In-center capacity and the number of dialysis treatments furnished have increased but more slowly than in 2019. Treatment growth has been affected by increased mortality during the PHE and new patients delaying the start of dialysis, offset by a decline in patients undergoing kidney transplantation and dialysis beneficiaries enrolled in Medicare Advantage. The impact of the pandemic has varied considerably both geographically and over time, and it is not clear when or if the pandemic's full effects will end.

As discussed further in this chapter, the effects of the PHE on indicators of Medicare's payment adequacy to ESRD dialysis facilities include the following:

- Between 2019 and 2020, fee-for-service (FFS) treatment volume declined by 3 percent, owing to the 3 percent decline in number of FFS dialysis beneficiaries. Our analyses show that in 2020 there were fewer new FFS dialysis beneficiaries and higher mortality compared with 2019.
- In public statements, the large dialysis organizations (LDOs) (Fresenius Medical Care and DaVita) have said that mortality has increased among their patients, particularly the elderly. According to the CDC, over a 7-month period during the early months of the COVID-19 pandemic (February 2020 through August 2020), an estimated 6,953 to 10,316 excess deaths occurred among ESRD (dialysis and transplant) patients (Ziemba et al. 2021). The estimated number of excess deaths per 1,000 patients and total excess deaths were two to three times higher among dialysis patients than among kidney transplant patients. According to the United States Renal Data System, compared with the same period in 2017 through 2019, all-cause mortality among dialysis patients across all insurance types in 2020 was 37 percent higher during epidemiologic weeks 14 through 17 (April 2020) and 16 percent higher during weeks 18 through 27 (May 2020 through the beginning of July 2020). Among patients with a functioning transplant, corresponding estimates of excess mortality for 2020 versus 2017 through 2019 were 61 percent and 26 percent, respectively (United States Renal Data System 2021c).
- The growing trend toward home dialysis under the ESRD PPS continued in 2020 and is likely linked to the pandemic as well as to other factors, including the Center for Medicare & Medicaid Innovation's new model that aims to encourage greater use of home dialysis. According to the LDOs, interest in home dialysis has increased among their patients. One LDO (Fresenius Medical Care) reported a rise in home dialysis trainings in 2020 compared with 2019 (Charnow 2020).
- Between 2019 and 2020, the number of kidney transplants declined by 2 percent. The number of live donor procedures declined by 24 percent, while the number of deceased donor procedures grew by 6 percent. Fewer kidney transplants in 2020 is linked to elective case restrictions imposed by some centers as well as suspension of living donor kidney programs out of concern for donor and recipient safety.
- CMS suspended the collection of certain quality data.

(continued next page)

The coronavirus public health emergency and the Commission's assessment of payment adequacy for outpatient dialysis services (cont.)

- A Medicare payment policy change increased payments to all health care providers by suspending the 2 percent sequestration beginning May 2020 through December 2021. In 2022, the sequestration is suspended until March 31 and is set at 1 percent from April 1 until June 30.
- Although both LDOs have incurred increased costs (e.g., personal protective equipment (PPE), testing, and establishing isolation centers for infected patients) due to the PHE, in general the PHE has had a lesser impact on their operations during the third quarter of 2020 compared with the second quarter. In addition, higher pandemic-related expenses were partly offset by savings associated with the pandemic in the form of reduced travel and other items. During the PHE, LDOs' commercial-payer mix of patients (which is linked to each company's financial performance) has remained relatively steady or improved.

Some dialysis providers benefited from federal grants and loans and other temporary policy changes (such as granting exceptions for the collection of quality data used in the Quality Incentive Program) that eased the PHE's impact of lower volume (and its associated revenue) and higher costs for staffing, PPE, and testing. (See Chapter 2 for a description of the COVID-19 relief laws that provided relief funds to health care providers.) For example, Fresenius Medical Care accepted funds under the Coronavirus Aid, Relief, and Economic Security, or CARES, Act of 2020, while DaVita returned such funds. As applicable, more information about the impact of the pandemic on dialysis providers can be found throughout this chapter.

While the PHE has not changed the nature of dialysis care (multiple treatments per week), providers have coordinated with each other to ensure that capacity is sufficient to treat all patients. For example, multiple dialysis providers—including DaVita, Fresenius Medical Care, U.S. Renal Care, American Renal Associates, Satellite Healthcare, and others—formed the Dialysis Community Response Network to coordinate care for patients when certain units are overwhelmed with either staff-related or patient-related COVID-19 illness (Kosman and Williamson 2020).

In this chapter, we recommend payment rate updates for 2023. Because of standard data lags, the most recent complete data we have are from 2020 for most payment adequacy indicators. The coronavirus PHE has created additional data lags, most notably for cost reports, due to extensions of reporting deadlines. We use available data as well as changes in payment policy to project margins for 2022 and make payment recommendations for 2023. To the extent that the effects of the coronavirus PHE are temporary changes or vary significantly across individual dialysis facilities, they are best addressed through targeted temporary funding policies rather than a permanent change to all providers' payment rates in 2023 and future years. For each payment adequacy indicator in this chapter, we discuss whether the effects of the PHE on those indicators will most likely be temporary or permanent. Only permanent effects of the pandemic will be factored into recommended permanent changes in Medicare base payment rates. (For an overview of how our payment adequacy framework takes account of the PHE, see Chapter 2.) ■

to current policy (Medicare Payment Advisory Commission 2020).

Based on data from Medicare claims, freestanding dialysis cost reports, and CMS's Dialysis Facility Compare database, roughly half of facilities offered

home dialysis between 2014 and 2020. Among facilities that furnished home dialysis, the share of total treatments that were furnished in the home rose from an average of 24 percent to 29 percent. (At the 75th percentile of facilities, the share increased from 28 percent to 32 percent, consistent with a rise in the

share of FFS dialysis beneficiaries receiving home dialysis.)

Providers of outpatient dialysis services In 2020, there were roughly 7,800 dialysis facilities in the United States that furnished about 44.3 million Medicare-paid treatments to FFS dialysis beneficiaries. In 2020, FFS Medicare accounted for 57 percent of all treatments furnished.²³ According to CMS facility survey data, since the late 1980s, for-profit, freestanding facilities have provided the majority of dialysis treatments. In 2020, freestanding facilities furnished 96 percent of FFS treatments, and for-profit facilities furnished 89 percent (Table 6-2, p. 205). In 2020, the capacity of facilities in urban and rural areas was generally consistent with where FFS dialysis beneficiaries lived.

The dialysis sector is highly consolidated, with two large dialysis organizations (LDOs)—Fresenius Medical Care and DaVita—dominating the industry. In 2020, these LDOs accounted for three-quarters of facilities and Medicare treatments. In addition, many dialysis facilities are operated as joint ventures between dialysis organizations and physicians. Joint ventures allow participating partners to share in the management of dialysis facilities and in their profits and losses. Both the LDOs as well as midsize provider groups, including American Renal Associates and U.S. Renal Care, have established joint ventures with physicians.

There is concern that joint ventures between dialysis organizations and physicians create financial incentives for participating physicians that could inappropriately influence decisions about patient care (Berns et al. 2018). Under federal disclosure requirements, a dialysis facility must report certain ownership information to CMS and its state survey agency but is not required to disclose such information to its patients, researchers, or members of the public. In 2009, the Commission recommended that the Congress require all hospitals and other entities that bill Medicare to annually report the ownership share of each physician who directly or indirectly owns an interest in the entity (excluding owners of publicly traded stock) and that the Secretary should post this information on a searchable public website (Medicare Payment Advisory Commission 2009).

Types of facilities that closed and their effect on

beneficiaries' access to care Each year, we examine the types of facilities that closed and whether certain groups of Medicare dialysis beneficiaries are disproportionately affected by facility closures. Using facilities' claims submitted to CMS and CMS's Dialysis Compare database and Provider of Services file, we compare the characteristics of beneficiaries treated by facilities that closed in 2019 with beneficiaries treated at facilities that provided dialysis in 2019 and 2020.

Between 2019 and 2020, the number of dialysis treatment stations—a measure of providers' capacity—rose by 1 percent (Table 6-2, p. 205). During this time, there was a net increase in the number of freestanding facilities and in the number located in urban areas. Compared with facilities that treated beneficiaries in both years, facilities that closed in 2019 (about 90 facilities) were more likely to be hospital based and small (as measured by the number of dialysis treatment stations), which is consistent with long-term trends in the supply of dialysis providers.

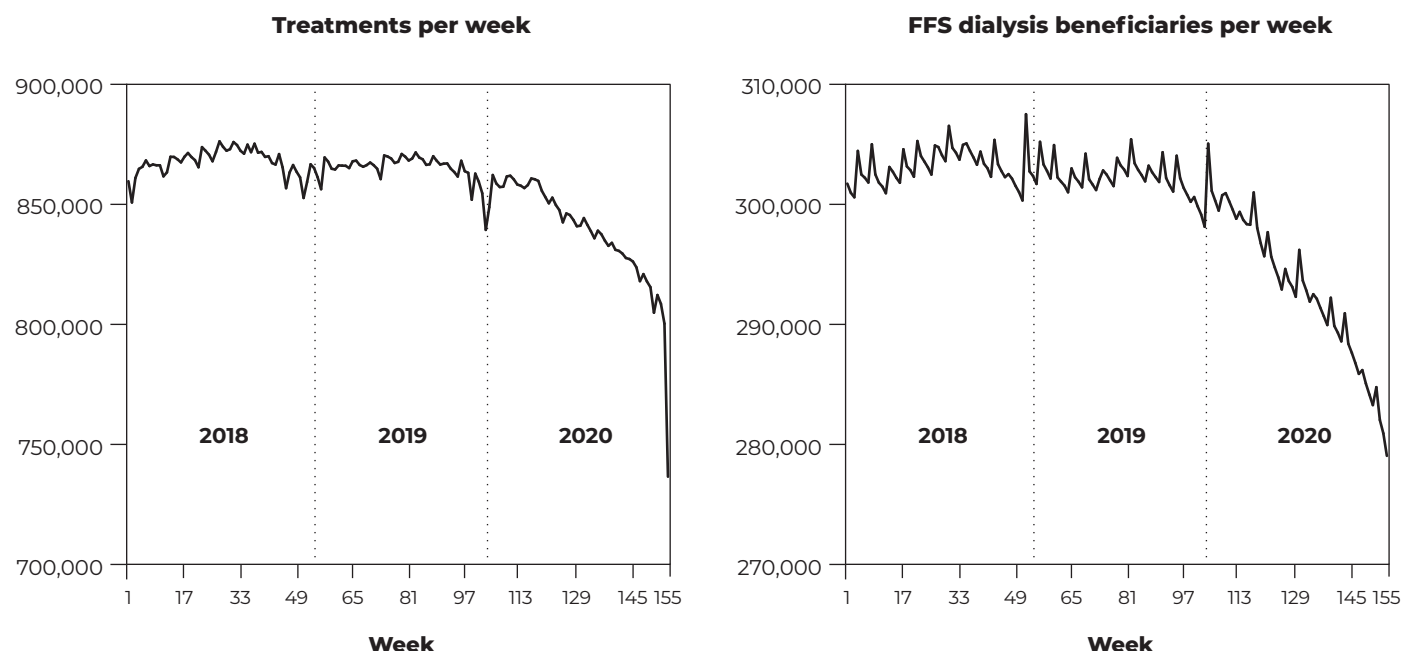
According to our analysis, few dialysis FFS beneficiaries (roughly 2,400 individuals) were affected by facility closures in 2019. Our analysis found that beneficiary groups who were disproportionately affected included White beneficiaries and beneficiaries residing in rural areas. However, less than 1 percent of FFS beneficiaries residing in rural areas were affected by facility closures. Our analysis of claims data suggests that beneficiaries affected by these closures obtained care elsewhere.

Volume of services

To assess changes in the volume of dialysis services, we examined recent trends in the number of dialysis treatments provided to beneficiaries and in the use of injectable drugs administered during dialysis.

Trends in number of dialysis treatments provided

Between 2018 and 2020, there was a decline in both the number of FFS dialysis beneficiaries (roughly 395,000 beneficiaries in 2018 and 2019 compared with 384,000 beneficiaries in 2020) and the total Medicare-covered dialysis treatments (45.5 million treatments in 2018, 45.4 million treatments in 2019, and 44.3 million treatments in 2020). Figure 6-1 shows the decline in the number of beneficiaries and treatments per week in 2019 and 2020. This decline is largely attributable to the coronavirus pandemic, which resulted in slowing

**FIGURE
6-1****In 2020, weekly number of FFS dialysis beneficiaries and treatments declined**

Note: The decline between 2019 and 2020 in the weekly number of FFS beneficiaries and treatments is largely attributable to the coronavirus pandemic, which resulted in slowing the initiation of dialysis by new patients and in excess mortality. The variation in the weekly number of beneficiaries and treatments may also be linked to seasonal factors.

Source: MedPAC analysis of claims submitted by dialysis facilities to CMS.

the initiation of dialysis by new patients and in excess mortality. The variation in the weekly number of beneficiaries and treatments may also be linked to seasonal factors. The number of dialysis treatments per beneficiary remained steady at 115 (data not shown).²⁴ Over the most recent five-year period for which we have data (2015 to 2020), the number of FFS dialysis beneficiaries and total dialysis treatments declined slightly (by 0.2 percent per year and 0.1 percent per year). The five-year trend in the relatively low annual growth in FFS dialysis beneficiaries is likely attributable to the increase in dialysis beneficiaries enrolled in MA plans during this period.

Use of most ESRD-related drugs in the PPS bundle has declined, with no sustained negative changes in beneficiaries' outcomes Under the ESRD payment method used before 2011, ESRD-related drugs were paid according to the number of units of the drug

administered: In other words, the more units of a drug provided, the higher the Medicare payment. The ESRD PPS increased the incentive for providers to be more judicious in providing dialysis drugs included in the payment bundle. When CMS broadened the payment bundle in 2011 to include ESRD-related drugs that previously were billed separately, the agency set the PPS payment rate based on a per treatment basis using claims data from 2007. In 2014, to account for the decline in dialysis drug use under the ESRD PPS, the statute required that CMS rebase the PPS base rate by comparing drug use in 2007 with such use in 2012. Consequently, we examined changes between 2007 and 2020 (the most current year for which complete data are available) in the use per treatment for the leading dialysis drugs and aggregated them into four therapeutic classes—erythropoiesis-stimulating agents (ESAs), iron agents, vitamin D agents, and antibiotics.²⁵

**TABLE
6-3****Under the ESRD PPS, use per treatment of dialysis drugs has declined, shifting to less costly clinically similar products**

Dialysis drug	Mean units per treatment*			Aggregate percent change	
	2010	2019	2020	2010-2020	2019-2020
ESAs					
Epoetin alfa (reference)	5,214	1,206	1,105	-79%	-8%
Darbepoetin alfa	1.26	0.9	0.8	-33	-6
Epoetin beta	N/A	4.5	4.3	N/A	-6
Epoetin alfa (biosimilar)	N/A	33.4	77.1	N/A	128
Iron agents					
Sodium ferric gluconate	0.15	0.1	0.1	-61	-27
Iron sucrose	16.0	13.2	12.5	-22	-5
Ferumoxytol	0.8	0.004	0.004	-100	-11
Ferric carboxymaltose	N/A	0.0001	0.0002	N/A	16
Ferric pyrophosphate citrate (solution)	N/A	0.03	0.03	N/A	-11
Ferric pyrophosphate citrate (powder)	N/A	N/A	0.4	N/A	N/A
Vitamin D agents					
Paricalcitol	2.3	0.3	0.2	-90	-6
Doxercalciferol	0.9	1.3	1.3	49	-1
Calcitriol	0.13	0.01	0.02	-87	71
Antibiotics					
Daptomycin	0.22	0.1	0.05	-79	-42
Vancomycin	0.02	0.01	0.01	-70	-30
Other drugs					
Levocarnitine	0.010	0.001	0.001	-94	-10
Alteplase	0.020	0.002	0.002	-90	1

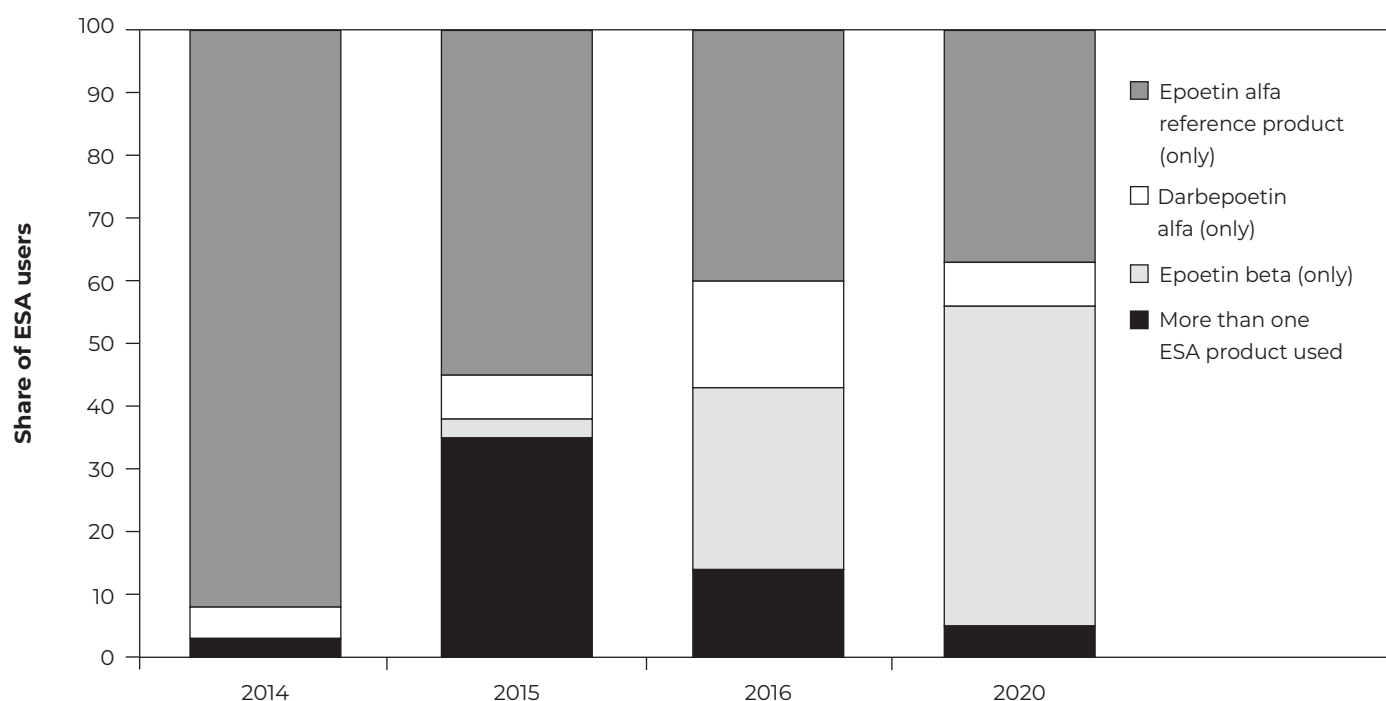
Note: ESRD (end-stage renal disease), PPS (prospective payment system), ESA (erythropoiesis-stimulating agent), N/A (not applicable because drug not available in the U.S.). Individual units per treatment are rounded; the aggregate percent change is calculated using unrounded units per treatment.

*Each drug is reported using its own drug units.

Source: MedPAC analysis of claims submitted by dialysis facilities to CMS.

As shown in Table 6-3, use of all ESRD-related drugs available between 2019 and 2020 declined except for biosimilar epoetin alfa (which was launched in late 2018), ferric carboxymaltose, calcitriol, and alteplase. The shift over time in the use of products within the ESA and vitamin D therapeutic classes is linked to price competition among the products within each class. For example, Figure 6-2 shows the shift in ESA use from epoetin alfa and darbepoetin alfa to the less

costly epoetin beta. In at least one situation, switching was an explicit goal: One of the LDOs announced its intent to have more than 70 percent of the company's ESA patients (110,000 patients) switched to epoetin beta (from epoetin alfa) by the end of the first quarter of 2016 (Reuters 2016).²⁶ According to several sources, the LDO reduced its total ESA costs by switching beneficiaries to epoetin beta (Reuters 2016, Seeking Alpha 2016). A midsize chain announced that between

FIGURE 6-2**Under the ESRD PPS, use of ESAs shifted due to price competition**

Note: ESRD (end-stage renal disease), PPS (prospective payment system), ESA (erythropoiesis-stimulating agent). Epoetin beta became available in 2015. The share of beneficiaries using only epoetin alfa biosimilar is less than 5 percent of all ESA users (and not included in the above figure).

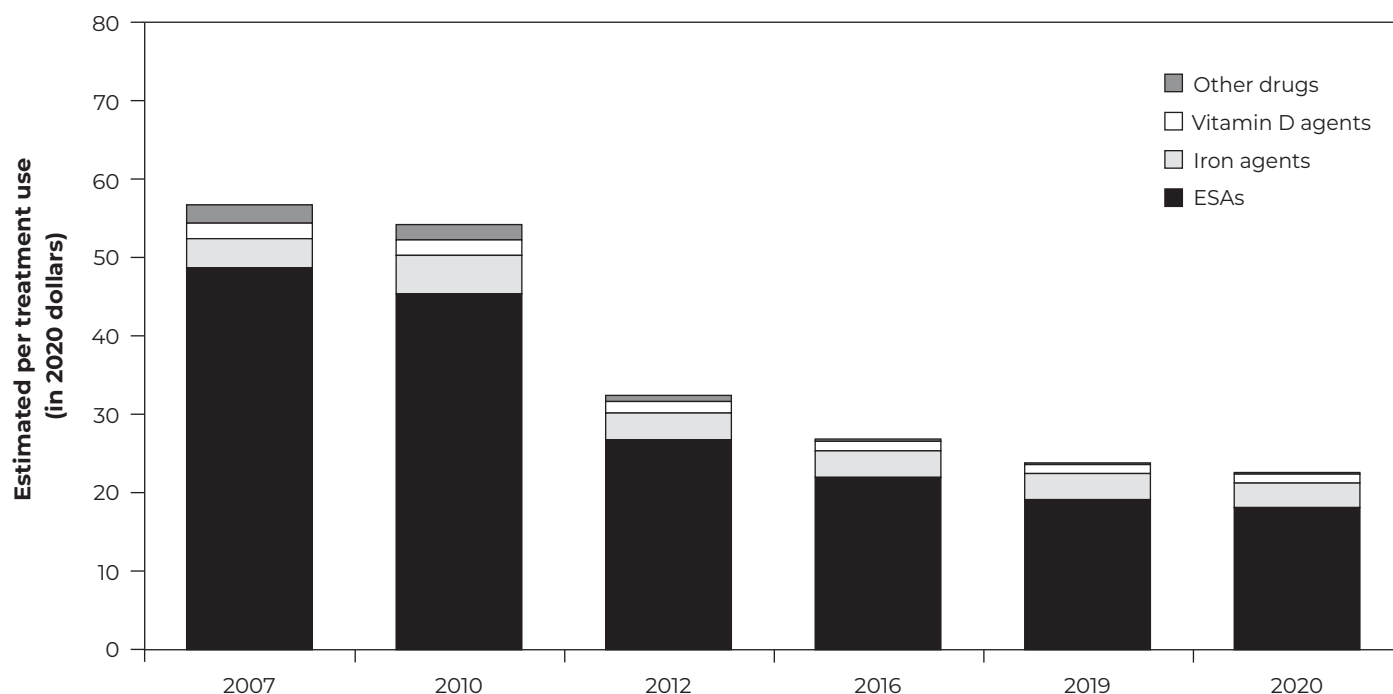
Source: MedPAC analysis of claims submitted by dialysis facilities to CMS.

85 percent and 90 percent of its facilities switched to epoetin beta by the end of 2018 (Seeking Alpha 2018).

As shown in Figure 6-3 (p. 212), most of the decline in the per treatment use of ESRD drugs occurred in the early years of the PPS.²⁷ (We estimated per treatment use by multiplying drug units per treatment reported on CMS claims by each drug's 2021 ASP + 0 percent—i.e., holding price constant.) For example, between 2010 and 2012, use per treatment across all therapeutic classes declined by 23 percent per year. Most of this decline was due to declining ESA use, which also fell by 23 percent per year during the same period. For ESAs, some of this decline may have stemmed from clinical evidence showing that higher doses of these drugs led to increased risk of morbidity and mortality, which resulted in the FDA changing the ESA label in 2011. Between 2019 and 2020, holding price constant, the

use of all dialysis drugs in the four classes declined by 5 percent. Although the ESRD PPS affected use of certain ESRD-related services, particularly the provision of drugs paid under the bundle, CMS has concluded that the agency's claims-based monitoring program has revealed no sustained negative changes in beneficiary health status (Centers for Medicare & Medicaid Services 2019).

Use of ESRD drugs paid under the TDAPA remained relatively steady in 2020 Our analysis of dialysis drug use also examines beneficiaries' use of the calcimimetics paid for under the TDAPA policy—Sensipar (cinacalcet), the oral product, and Parsabiv (etelcalcetide), the injectable product. Before 2018, Medicare covered the oral calcimimetic under Part D. After the FDA approved the injectable calcimimetic Parsabiv in 2017, Medicare began to pay for both

**FIGURE
6-3****Use of ESRD-related drugs in the payment bundle
has declined under the outpatient ESRD PPS**

Note: ESRD (end-stage renal disease), PPS (prospective payment system), ESA (erythropoiesis-stimulating agent). To estimate drug use by therapeutic class, we hold the price of each drug constant and multiply drug units reported on claims in a given year by 2021 average sales price (ASP) + 0 percent (or CMS's outlier limit if ASP data are not available). The ESRD drugs in this analysis are included under the outpatient ESRD PPS bundle and paid under the base payment rate. That is, included drugs are those for which Medicare paid dialysis facilities separately before the ESRD PPS or are in 1 of the 11 functional categories of drugs included in the ESRD PPS bundle. Drugs included are epoetin alfa, epoetin beta, and darbepoetin (ESAs); iron sucrose, sodium ferric gluconate, ferumoxytol, and ferric carboxymaltose (iron agents); calcitriol, doxercalciferol, and paricalcitol (vitamin D agents); daptomycin, vancomycin, alteplase, and levocarnitine (all other drugs).

Source: MedPAC analysis of 100 percent claims submitted by dialysis facilities to CMS.

products under the ESRD PPS (Medicare Part B) in 2018. In 2021, both products are included and paid for under the PPS bundle.

Between 2019 and 2020, TDAPA spending for both calcimimetics declined by 44 percent, from nearly \$1.3 billion to \$712 million. This spending decline is linked to the following:

- In 2020, CMS lowered the TDAPA payment to 100 percent of each drug's ASP.²⁸ In 2018 and 2019, CMS paid facilities 106 percent of each drug's ASP.
- Generic versions of the oral product (Sensipar) were launched. Typically, when generic versions of a drug enter the market, their sales prices are substantially lower than those of the drug's brand equivalent. Brand and generic versions of a multiple-source drug are assigned to the same billing code and paid the same rate, equal to the volume-weighted average ASP. Between 2019 and 2020, Sensipar's (and its generics') payment rate (ASP + 0 percent) decreased by 70 percent, from an average \$0.75 per unit to an average \$0.23 per unit.

Use patterns of the calcimimetics in 2020 were generally similar to those seen during the first two years of the TDAPA (2018 and 2019). In each year, about one-third of dialysis beneficiaries were prescribed a calcimimetic. The share of beneficiaries receiving Parsabiv increased from 7 percent in 2018 to 10 percent in 2019 and 2020, while the share of beneficiaries receiving Sensipar (and its generics) ranged from 28 percent in 2018 to 24 percent in 2020.

Dialysis marginal profitability suggests incentive to serve Medicare beneficiaries Another measure of access is whether providers have a financial incentive to expand the number of Medicare beneficiaries they serve. In considering whether to treat a patient, a provider with excess capacity compares the marginal revenue it will receive (i.e., the Medicare payment) with its marginal costs—that is, the costs that vary with volume. If Medicare payments are larger than the marginal costs of treating an additional beneficiary, a provider has a financial incentive to increase its volume of Medicare beneficiaries if it has the capacity to do so. In contrast, if payments do not cover the marginal costs, the provider could have a disincentive to care for Medicare beneficiaries.²⁹

For dialysis facilities in 2020, Medicare payments exceeded dialysis facilities' marginal costs by 20 percent, a positive indicator of patient access in that facilities with available capacity have an incentive to treat Medicare beneficiaries.

Quality of care is difficult to assess

Quality of care is challenging to interpret due to effects of the PHE on many of our measures. While we report 2020 quality results, we do not use them to assess any trends in the quality of care, especially those that may reflect the adequacy of Medicare payments in 2020. Many factors related to the coronavirus pandemic, including hospital capacity constraints and patient avoidance of health care settings, affected rates of hospitalizations. Mortality rates increased during 2020 due to COVID-19 and possibly due to patient avoidance of health care for other illnesses, such as stroke. Also, current measures use risk-adjustment models that examine performance from previous years to predict beneficiary risk, so they may not adequately represent the acuity and mix of patients receiving care in 2020.

Our analysis focuses on changes in quality indicators—including mortality and morbidity, process measures that assess dialysis adequacy and anemia management, and treatment utilization (including home dialysis and kidney transplantation rates). The findings, except where indicated, are based on the Commission's analysis of Medicare FFS enrollment and claims data.

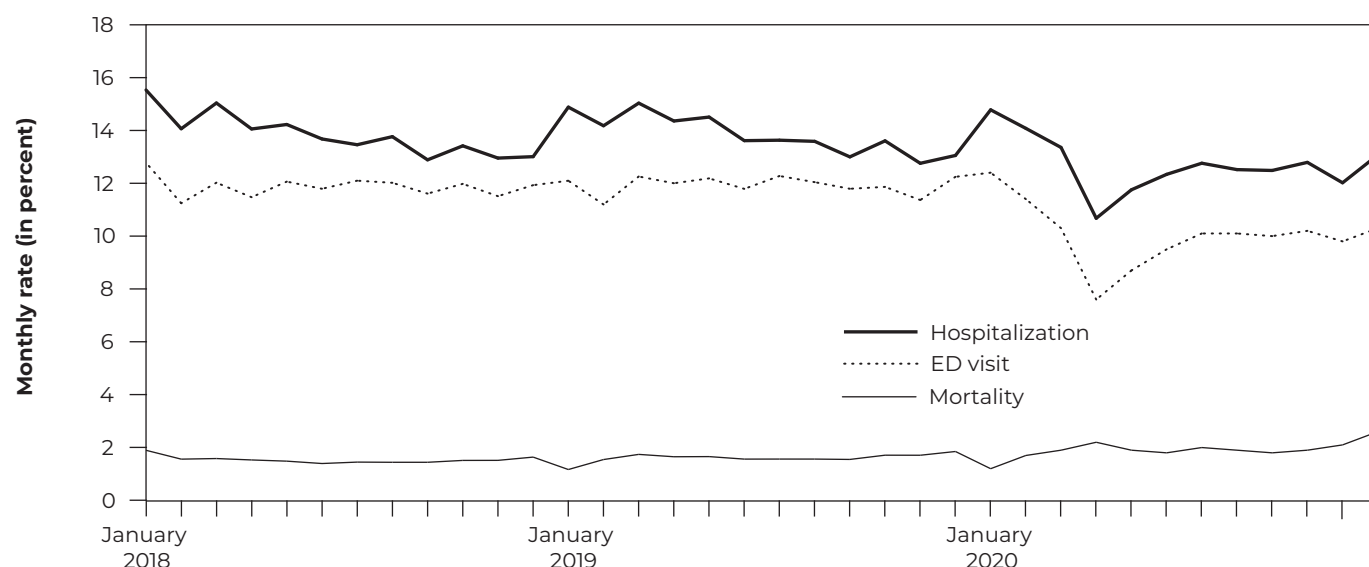
In assessing quality, we also examine the multiple factors that affect access to kidney transplantation. This procedure is widely regarded as a better ESRD treatment option than dialysis in terms of patients' clinical outcomes, quality of life, and Medicare spending, but demand far outstrips supply.

Quality under the ESRD PPS

Our analysis of claims and enrollment data for FFS dialysis beneficiaries suggests that all-cause hospitalization and emergency department (ED) use declined in 2020 compared with prior years, while mortality increased (Figure 6-4, p. 214).

- In 2018 and 2019, the share of FFS dialysis beneficiaries admitted to a short-stay hospital (beneficiaries with at least one admission in a given month) was 14 percent per month. In 2020, the hospitalization rate averaged 13 percent per month. Between 2018 and 2020, 30-day readmission rates on an annual basis remained relatively steady at 22 percent of admissions (data not shown).
- In 2018 and 2019, the share of FFS dialysis beneficiaries who used the ED on an outpatient basis (beneficiaries with at least one ED visit in a given month) averaged 12 percent per month. In 2020, the ED use averaged 10 percent per month.
- Between 2018 and 2019, mortality remained relatively unchanged, at 1.6 percent per month. In 2020, the rate of mortality per month increased to 1.9 percent.

Beneficiaries' fluid management is related to factors such as the adequacy of the dialysis procedure, defined as having enough waste removed from their blood. According to the Commission's analysis, between 2015 and 2019, from 97 percent to 98 percent of hemodialysis beneficiaries and from 91 percent to 93 percent of PD beneficiaries received adequate dialysis.

**FIGURE
6-4****Morbidity and mortality among FFS dialysis beneficiaries, 2018–2020**

Note: FFS (fee-for-service), ED (emergency department). All-cause hospitalization and outpatient ED rates are measured by at least one encounter for the service in a given month.

Source: MedPAC analysis of claims submitted by dialysis facilities to CMS and CMS's enrollment file.

In 2020, 98 percent of hemodialysis beneficiaries and 93 percent of PD beneficiaries received adequate dialysis.

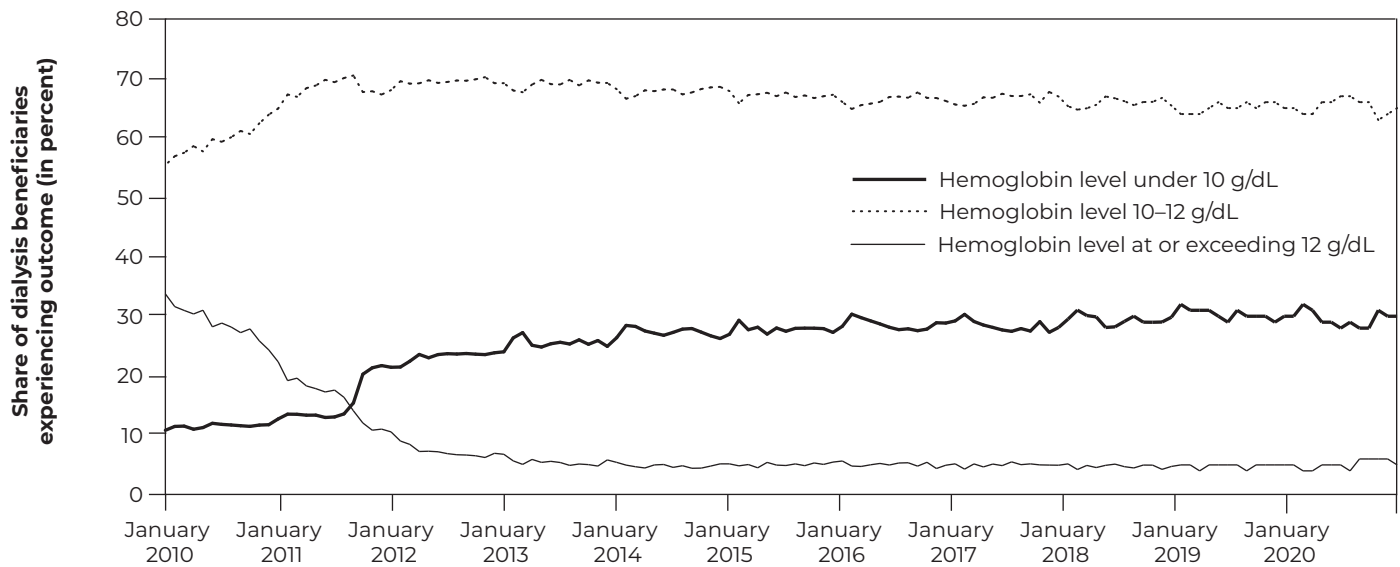
We assess anemia management by examining trends over time in (1) beneficiaries' hemoglobin level, a blood test that measures the level of hemoglobin, the protein that carries oxygen in red blood, and (2) frequency of red blood cell transfusions.³⁰ Lower hemoglobin levels (which may suggest underuse of ESAs and iron agents) may increase the frequency of red blood cell transfusions, while higher hemoglobin levels (greater than 11 g/dL) among patients maintained on higher doses of ESAs may increase their risk of death and cardiovascular events (congestive heart failure, myocardial infarction, and stroke).

Median hemoglobin levels fell during the initial years of the ESRD PPS, then stabilized; between 2015 and 2019, median levels ranged between 10.4 g/dL and 10.5 g/dL. In 2020, the median level was 10.5 g/dL. Figure 6-5

shows that the proportion of dialysis beneficiaries with higher hemoglobin levels declined (exceeding 12 g/dL) while the proportion with lower hemoglobin levels increased (which is generally associated with lower ESA use). According to CMS, during the initial years of the ESRD PPS (2010 and 2012), blood transfusion rates increased (from 2.7 percent per month to 3.4 percent per month). Between 2013 and 2020, however, the proportion of beneficiaries receiving a blood transfusion declined (from 3.3 percent per month to 2.4 percent per month), according to data from the Commission and CMS (Centers for Medicare & Medicaid Services 2019). These findings—the decline in hemoglobin levels and increase in transfusion rates during the early years of the ESRD PPS—are consistent with the incentives under the prior and current ESRD payment methods. The pre-2011 payment method (which paid providers according to the number of units of each drug administered) gave some providers the incentive to overutilize dialysis drugs, while the current payment method

**FIGURE
6-5**

**Changes in hemoglobin levels
under the ESRD PPS, 2010–2020**



Note: ESRD (end-stage renal disease), PPS (prospective payment system), g/dL (grams per deciliter). Data are compiled on a monthly basis by CMS.

Source: MedPAC analysis of Medicare claims submitted by dialysis facilities to CMS.

gives providers the incentive to be more judicious in providing drugs included in the payment bundle.

Access to home dialysis

Researchers have shown that the ESRD PPS is associated with an overall increase in the use of home dialysis (Lin et al. 2017). Between 2015 and 2019, the share of beneficiaries dialyzing at home increased from 10.6 percent per month to 12.3 percent per month. In 2020, the share of beneficiaries on home dialysis increased to an average of 13.3 percent per month. While we are encouraged by this increase, differences by race persist: Black beneficiaries are less likely to use home methods. According to the Commission's analysis, about 35 percent of Medicare beneficiaries with ESRD are Black, but only 26 percent of beneficiaries who dialyze at home are Black. Between 2015 and 2020, the proportion of beneficiaries undergoing home dialysis training was relatively small but increased slightly, ranging from a monthly average of 0.7 percent to 0.8 percent of dialysis beneficiaries.

Researchers have identified many factors that affect the use of home dialysis, both clinical (patients' other health problems and prior nephrology care) and nonclinical (e.g., patients' social circumstances and knowledge about treatment options and physicians' training and preference). For example, nephrology trainees reported low and moderate levels of preparedness for managing patients on home hemodialysis and PD, respectively (Gupta et al. 2021). Some beneficiaries report that they were never informed about their options. Facility factors, such as unused in-center capacity or additional in-center shifts and dialysis facility staff experience, can also affect use of home dialysis (Walker et al. 2010). During the PHE, however, both LDOs and midsize providers reported that their patients showed increased awareness of and interest in home dialysis.³¹

Some clinical and nonclinical factors affecting home dialysis use are amenable to intervention. For example, between 2008 and 2018, under an integrated

**TABLE
6-4****In 2020, decline in the number of kidney transplants
was due to the coronavirus pandemic**

	2015	2019	2020
Total transplants	17,878	23,401	22,817
Share of transplants from live donors	31%	29%	23%
Share receiving a transplant			
White	50	46	45
Black	25	28	27
Hispanic	16	17	18
Asian	6	6	7
Other	2	2	2

Note: Totals may not sum to 100 percent due to rounding.

Source: Organ Procurement and Transplantation Network.

care delivery system (Kaiser Permanente Northern California), PD use among new dialysis patients more than doubled, from 15 percent to 34 percent. To augment the use of home dialysis, the health care system implemented a multidisciplinary, system-wide approach that increased patient and family education, educated health care professionals about the importance of PD, adopted operational improvements, monitored outcomes, and shared best practices with staff (Pravoverov et al. 2019).

Access to kidney transplantation

Kidney transplantation is widely regarded as a better ESRD treatment option than dialysis in terms of patients' clinical outcomes and quality of life. In addition, transplantation results in lower Medicare spending. In 2018, average Medicare spending for patients who had a functioning kidney transplant was less than half of the spending for dialysis patients (\$38,800 vs. \$93,300) (United States Renal Data System 2021a). However, demand for kidney transplantation exceeds supply of available kidneys. Besides donation rates, factors that affect access to kidney transplantation include the clinical allocation process; patients' health literacy, clinical characteristics, and

preferences; the availability of education for patients; clinician referral for transplant evaluation at a transplant center; communication between the dialysis facility and the transplant center; and transplant center policies.

Between 2015 and 2019, according to the Organ Procurement and Transplantation Network, the number of kidney transplants increased by 7 percent per year, to 23,401 (Table 6-4). In 2020, the 2 percent decline (to 22,817 transplants) in the number of kidney transplants was mostly attributable to the decline in live donors due to the coronavirus pandemic. In spring 2020, 81 percent of transplant centers in regions of the country with a high cumulative COVID-19 prevalence (greater than 500 cases per 100,000 people) chose to internally suspend their living donor kidney programs out of concerns for donor and recipient safety, and there were elective case restrictions (UNOS 2021). In addition, some transplant centers slowed transplants of kidneys (as well as other organs) to protect bed capacity and staff safety (Greene 2020). As a result, between 2019 and 2020, the number of transplants from live donors declined by 24 percent to 5,234 transplants, while the number from deceased donors

rose by 6 percent to 17,583 transplants; in contrast, between 2015 and 2019, live and deceased donors rose by 5 percent and 8 percent, respectively, per year on average (data not shown).

The distribution of transplants by race and ethnicity in 2020 is similar to the distribution between 2015 and 2019 (Table 6-4). Between 2015 and 2019, Blacks were less likely than Whites to receive kidney transplants despite their three-times greater likelihood of developing ESRD. In 2020, the number of Blacks and Asians receiving a transplant each declined by 1 percent, while the number of Whites and Hispanics receiving a transplant each declined by 4 percent (data not shown). According to Ephraim and colleagues, the lower rates of kidney transplantation for Blacks have been associated with multiple factors, including immunological incompatibility with deceased donor kidneys, lower rates of referral for transplantation, lower rates of cadaver kidney donation, and lack of knowledge and suboptimal discussions about kidney transplantation among recipients, their families, and health care providers (Ephraim et al. 2012).

Education efforts directed at patients can be effective in encouraging them to make an informed decision about their treatment, including home dialysis, in-center dialysis, kidney transplantation, and conservative care. For example, a recent review of educational interventions found a strong association between patient-targeted dialysis modality education and choosing and receiving PD (Devoe et al. 2016). An augmented nurse care management program that targeted persons with late-stage CKD resulted in a statistically significant reduction in the number of hospitalizations during the intervention period and, for those who required renal replacement therapy, higher use of PD or a preemptive kidney transplant (Fishbane et al. 2017).

In 2010, to help inform beneficiaries diagnosed with Stage 4 CKD (the disease stage before ESRD) about their treatment options and managing the disease and related comorbidities, the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) established Medicare payment for up to six sessions of kidney disease education (KDE) per beneficiary. Since its implementation, relatively few beneficiaries have been provided KDE services. Between 2015 and 2019,

spending declined by 5 percent per year to nearly \$420,000.³² In 2020, KDE spending declined by an additional 21 percent to \$330,000.

According to the Government Accountability Office, payment restrictions on the type of providers who can furnish KDE services and the beneficiaries who are eligible might constrain the service's use (Government Accountability Office 2015). MIPPA specified the categories of providers who can furnish KDE services—physicians, physician assistants, nurse practitioners, clinical nurse specialists, and certain providers of services in rural areas.³³ MIPPA also specified that beneficiaries with Stage 4 CKD are eligible for the benefit. Some stakeholders contend that other categories of beneficiaries, including those with Stage 5 CKD (i.e., ESRD) who have not started dialysis, as well as individuals who have already initiated hemodialysis, might also benefit from Medicare KDE coverage.

Providers' access to capital: Growth trends indicate access is adequate

Providers need access to capital to improve their equipment and open new facilities so they can accommodate the growing number of patients across all types of health coverage requiring dialysis. The two LDOs as well as other renal companies appear to have had adequate access to capital. For example:

- In 2021, Fresenius Medical Care invested an additional \$25 million in Humacyte Inc. after an initial investment of \$150 million in 2018. Humacyte Inc. is developing bioengineered human tissue, including a product for use as vascular access for hemodialysis patients. In addition, in 2021, Fresenius opened a new technology center for developing dialysis machines in Germany.
- In 2021, DaVita sought to acquire a hospital-based dialysis organization in Utah. The company has noted investments in technologies (e.g., artificial intelligence to identify home dialysis patients at risk for hospitalization) used to expand its integrated care and value-based care initiatives in 2021.

Another indicator of the relatively good access to capital is that, during the past decade, several companies—both small and large—have entered

the renal care field aiming to improve treatment of individuals with CKD and ESRD, including Outset Medical (in 2010), Cricket Health (in 2015), Somatus (in 2016), and CVS (in 2018). Most recently, in 2021, Diality Inc., a medical device company that is developing a versatile hemodialysis system, announced the close of a \$12.5 million Series B investment round.

In addition to private sector investment in renal care, in 2018, a public-private partnership between the Department of Health and Human Services and the American Society of Nephrology was initiated to accelerate innovation in the prevention, diagnosis, and treatment of kidney disease. This initiative—referred to as the Kidney Innovation Accelerator (KidneyX)—sponsors cash-prize competitions. For example, there is currently a competition to accelerate artificial kidney development toward human clinical trials.

In public financial filings, the two LDOs reported generally positive financial performance related to their dialysis business for 2020, including improvements in productivity and revenue growth—that is, growth achieved apart from mergers and acquisitions. Since 2010, the two LDOs have also grown through large acquisitions of and mergers with other dialysis facilities and other health care organizations. For example, during this period, both of the largest dialysis organizations acquired midsize for-profit organizations: DaVita acquired Purity and Renal Ventures and Fresenius Medical Care acquired Liberty Dialysis.

The two LDOs, in addition to operating three-quarters of all dialysis facilities, are each vertically integrated. Both organizations operate an ESRD-related laboratory, a pharmacy, and one or more centers that provide vascular access services; they provide ESRD-related care coordination and disease management services to government and nongovernment payers (including MA plans); and they operate dialysis facilities internationally. One LDO manufactures, acquires, in-licenses, and distributes ESRD-related pharmaceutical products (e.g., phosphate binders and iron replacement products) and manufactures dialysis products (hemodialysis machines, peritoneal cyclers, dialyzers, peritoneal solutions, hemodialysis concentrates, bloodlines, and systems for water treatment) and nondialysis products, including acute cardiopulmonary and apheresis products. This LDO supplies dialysis

facilities that it owns, operates, or manages with dialysis products, and it sells dialysis products to other dialysis service providers.

Another positive indicator of the dialysis sector's strong access to capital is its all-payer margin. Using cost report data submitted by freestanding dialysis facilities to CMS, the 2020 all-payer margin was roughly 16 percent. Including PHE provider-relief revenues increases the 2020 all-payer margin to roughly 17 percent. In general, current growth trends among dialysis providers indicate that the dialysis industry is attractive to for-profit facilities and investors.

Medicare payments and providers' costs

Each year, we examine the relationship between Medicare's payments and providers' costs as part of our assessment of payment adequacy. To make this assessment, we reviewed Medicare expenditures for outpatient dialysis services in 2020 and examined trends in spending under the PPS. We also reviewed evidence regarding providers' costs under the PPS.

Medicare payments for outpatient dialysis services

In 2020, Medicare spending for outpatient dialysis services was \$12.3 billion, a decrease of 4 percent compared with 2019; per capita spending declined by 1 percent to roughly \$32,200. Between 2019 and 2020, dialysis spending for services in the bundle (which accounts for 90 percent of total spending) grew by 0.1 percent, while TDAPA spending (which accounts for 6 percent of total spending) declined by 44 percent. As mentioned earlier, in 2020, CMS changed the TDAPA payment from ASP + 6 percent to ASP with no percentage add-on. Other factors affecting spending growth include (1) a statutory update (of 1.7 percent) to the base dialysis payment rate in 2020, (2) a 3 percent decline in the total number of dialysis treatments furnished between 2019 and 2020, and (3) the number of dialysis treatments per beneficiary holding steady in both years (averaging 115 treatments per beneficiary).

Since 2017, dialysis facilities are able to furnish dialysis to beneficiaries with acute kidney injury (AKI), as mandated by the Trade Preferences Extension Act of 2015. AKI is the sudden loss of kidney function typically caused by an event that leads to kidney malfunction, such as dehydration, blood loss from major surgery

or injury, or the use of medicines. By contrast, CKD is usually caused by a long-term disease, such as hypertension or diabetes, that slowly damages the kidneys and reduces their function over time. AKI is more commonly reversible than late-stage CKD.

In 2020, Medicare spending for outpatient dialysis services for beneficiaries with AKI was \$77 million, an increase from nearly \$71 million in 2019. Medicare pays facilities the ESRD PPS base rate adjusted by the PPS wage index for the treatment of beneficiaries with AKI.³⁴ Researchers have found that AKI is a serious complication of COVID-19. Medicare spending for treatment of AKI by dialysis facilities is not included in the Commission's analysis of Medicare's payments and costs for dialysis facilities.

Between 2018 and 2019, Part D spending for ESRD oral-only phosphate binders declined

As of 2019, phosphate binders are the only ESRD oral-only drug class that is paid for under the Part D program, and roughly 70 percent of dialysis beneficiaries with Part D coverage were prescribed such drugs in 2019.³⁵ Between 2018 and 2019 (the most recent year data are available), spending for phosphate binders furnished to dialysis FFS beneficiaries declined by 19 percent to \$0.9 billion. This decline is linked to the FDA's approval of generic versions of several types of phosphate binders (including lanthanum, sevelamer carbonate, and sevelamer hydrochloride) between 2017 and 2019. In 2019, Part D spending for phosphate binders accounted for 36 percent of Part D spending for dialysis beneficiaries. Medicare spending for dialysis drugs under Part D is not included in the Commission's analysis of dialysis facilities' financial performance under the ESRD PPS.

As of January 1, 2025, phosphate binders covered under Part D will be included in the ESRD PPS bundled payment. Their inclusion is intended to lead to better management of drug therapy and improve beneficiaries' access to these medications, since some beneficiaries lack Part D coverage or have coverage less generous than the Part D standard benefit. Including phosphate binders in the ESRD PPS bundle might also improve provider efficiency. For example, between 2018 and 2019:

- Medicare total spending increased for the phosphate binders that did not have generic competitors.

- Despite inconclusive evidence about whether calcium-free phosphate binders reduced cardiovascular events compared with calcium-based agents, Part D spending for calcium-free agents has increased (Ogata et al. 2021). The appropriate use of calcium-based phosphate binders has the potential to reduce health care expenditures because of its low cost and high tolerability (Jovanovich 2020).

Providers' costs for outpatient dialysis services under the ESRD PPS

To assess the appropriateness of costs for dialysis services paid for under the ESRD PPS, we examine whether aggregate dialysis facility costs reflect costs that efficient providers would incur in furnishing high-quality care. For this analysis, we used 2019 and 2020 cost reports and claims submitted to CMS by freestanding dialysis facilities. For those years, we looked at the growth in the cost per treatment and how total treatment volume affected that cost.

Cost growth under the PPS Between 2019 and 2020, total cost per treatment rose by 4 percent, from \$255 per treatment to roughly \$266 per treatment. The increase was driven by higher cost per treatment for:

- supplies and labor, which rose by 8 percent and 6 percent. Together, these cost categories accounted for 45 percent of providers' cost per treatment.
- non-ESA drugs (e.g., vitamin D agents, iron agents, calcimimetics, and so-called composite rate drugs (i.e., drugs that Medicare paid for under the prior PPS)), which increased by 8 percent and together accounted for 5 percent of cost per treatment. Cost growth for non-ESA drugs may have been affected by facilities associated with one dialysis organization misreporting its costs for this category in 2019.
- administrative and general expenses, which rose by 7 percent and accounted for 25 percent of cost per treatment.
- capital costs, which rose by 3 percent and accounted for 18 percent of cost per treatment.

By contrast, between 2019 and 2020, ESA cost per treatment declined (by 11 percent), while lab cost per treatment showed little change; together, these

cost categories accounted for 7 percent of cost per treatment.

In 2019, facilities associated with one dialysis organization reported a large amount of non-ESRD-related drug costs that was anomalous compared with prior years. In 2020, our analysis finds that these facilities (1) reported an amount of non-ESRD-related drug costs that was consistent with pre-2019 levels (i.e., was not anomalous) and (2) reported a substantial increase in the cost per treatment for non-ESA drugs compared with 2019, which is not consistent with the decline in cost per treatment for this category on average across all other dialysis organizations. Consistent with our longstanding approach, non-ESRD-related drug costs are not included in the Commission's analysis of ESRD PPS costs incurred by freestanding dialysis facilities or in our calculation of the ESRD PPS margin.

Variation in cost growth across freestanding dialysis facilities shows that some facilities were able to hold their cost growth well below that of others. For example, between 2019 and 2020, per treatment costs fell by 5 percent for facilities in the 25th percentile of cost growth, compared with a rise of 5 percent for facilities in the 75th percentile.³⁶

The extent to which some of the variation in costs among facilities results from differences in the accuracy of facilities' reported data is unknown. Under the ESRD PPS, we have found substantial variation in the level of selected cost categories reported by the five largest dialysis organizations. For example, between 2019 and 2020, the cost per treatment among these organizations for capital and labor each varied by nearly \$40 per treatment.

Consistent with our 2014 recommendation, the Protecting Access to Medicare Act of 2014 (PAMA) funded CMS to audit a representative sample of ESRD facility cost reports. It is basic fiscal management to ensure that facilities' cost reports are accurate. The agency published the results of their audit in the ESRD proposed rule for calendar year 2022. CMS's Office of the Actuary (OACT) selected a sample of 1,479 freestanding ESRD facilities from 5 large dialysis organizations (as defined by OACT) for the cost audit. A contractor performed cost audits of these ESRD facilities in September of 2015. All audits were completed by September of 2018.

According to the agency, of the 1,395 ESRD freestanding facilities analyzed, \$147.5 million of unallowable costs were removed from total costs, including the removal of \$136.5 million of unallowable costs initially reported in the administrative and general cost center. Unallowable items included advertising, legal fees, interest expense and financing fees, corporate travel/lodging/relocation, various consulting fees, business development expenses, insurance settlement payments, and insurance expenses. CMS concluded that, based on this audit, cost report data were corrected.

In our comment letter to CMS, we said that the agency should provide the total reported costs and total unallowable costs, which would enable us to compare the results of this audit with prior audits that found that providers' allowable costs were about 90 percent to 96 percent of reported costs (Medicare Payment Advisory Commission 2021). We also said that CMS should publish the same statistics by cost report category (i.e., for capital, labor, supply, laboratory, general and administrative, composite rate drugs, ESAs, and other drug costs) as well as background information about the number, types, and size of facilities included in the audit.

Because CMS did not publish total reported costs for the 1,395 facilities or the share of total reported costs that were unallowable, we roughly estimated these values using 2018 cost reports submitted by freestanding facilities to CMS. Based on our analysis, we estimate that \$147.5 million in unallowable costs represents about 4 percent of reported costs in 2018.³⁷ Our estimate assumes audited facilities in the aggregate had average costs (i.e., audited facilities were assumed to be of average size as measured by total treatments furnished); if the aggregate costs of audited facilities were lower or greater than the average, then the estimated share of unallowable costs would be larger or smaller. If 4 percent of reported costs are unallowable, the estimated aggregate Medicare margin would be understated by nearly 4 percentage points.

Cost per treatment is correlated with facility service volume Cost per treatment is correlated with the total number of treatments a facility provides. To examine this relationship, we adjusted the cost per treatment to remove differences in the cost of labor across areas and included all treatments regardless of payer.

Our analysis showed, in each year from 2011 through 2020, a statistically significant relationship between total treatments and cost per treatment (correlation coefficient equaled -0.5) (Figure 6-6). That is, the greater the facility's service volume, the lower its costs per treatment. In each year, facilities that qualified for increased Medicare payment due to low volume had substantially higher cost per treatment for capital as well as administrative and general services compared with all other facilities.

The trend in the aggregate Medicare margin for freestanding dialysis facilities

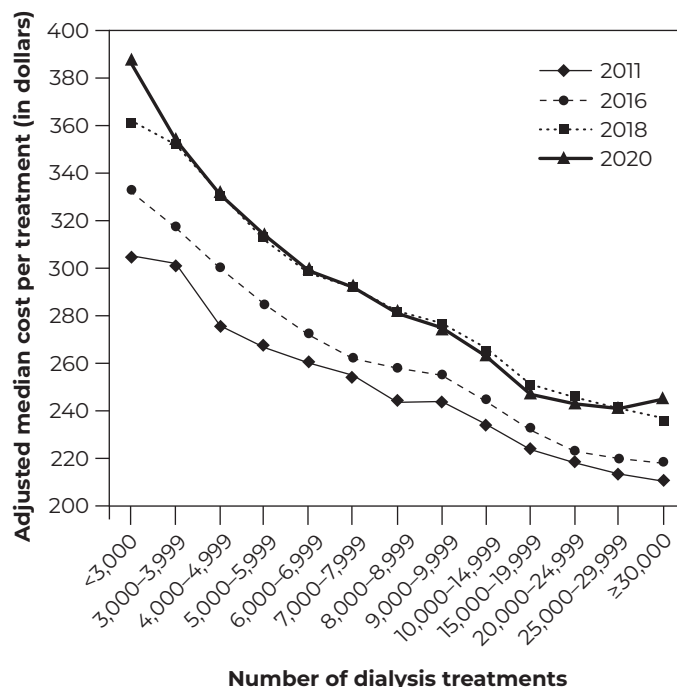
The Commission assesses current payments and costs for dialysis services for freestanding dialysis facilities by comparing Medicare's payments with facilities' Medicare-allowable costs. The latest and most complete data available on payments and costs are from 2020.

Under the ESRD PPS, dialysis facilities' financial performance under Medicare has varied due to statutory and regulatory changes and the use and profitability of certain ESRD-related drugs (Figure 6-7, p. 222). During the initial years of the ESRD PPS, the aggregate Medicare margin increased, particularly because of declining use of ESRD drugs between 2010 and 2012 (Table 6-3, p. 210). Between 2014 and 2017, facilities' financial performance under Medicare reversed, with the aggregate Medicare margin declining from 2.1 percent to -1.1 percent, which was not unexpected, given the payment adjustments required by statute. To reflect more current use of dialysis drugs, the American Taxpayer Relief Act of 2012 required that CMS rebase the base payment rate effective 2014, and PAMA set the statutory update at (1) 0 percent in 2015, (2) market basket minus 1.25 percent in 2016 and 2017, and (3) market basket minus 1.0 percent in 2018.³⁸

In 2018 and 2019, the aggregate Medicare margin increased due to the profitability of the calcimimetics paid under the TDAPA policy. The aggregate Medicare margin was 2.1 percent in 2018 and 8.4 percent in 2019 (Figure 6-7, p. 222).³⁹ The increase in the aggregate Medicare margin between 2018 and 2019 is associated with the availability of generic versions of the oral calcimimetic in 2019. There is a two-quarter lag in the data used to set ASP-based payment rates under the

FIGURE 6-6

Higher-volume dialysis facilities have lower cost per treatment, 2011–2020

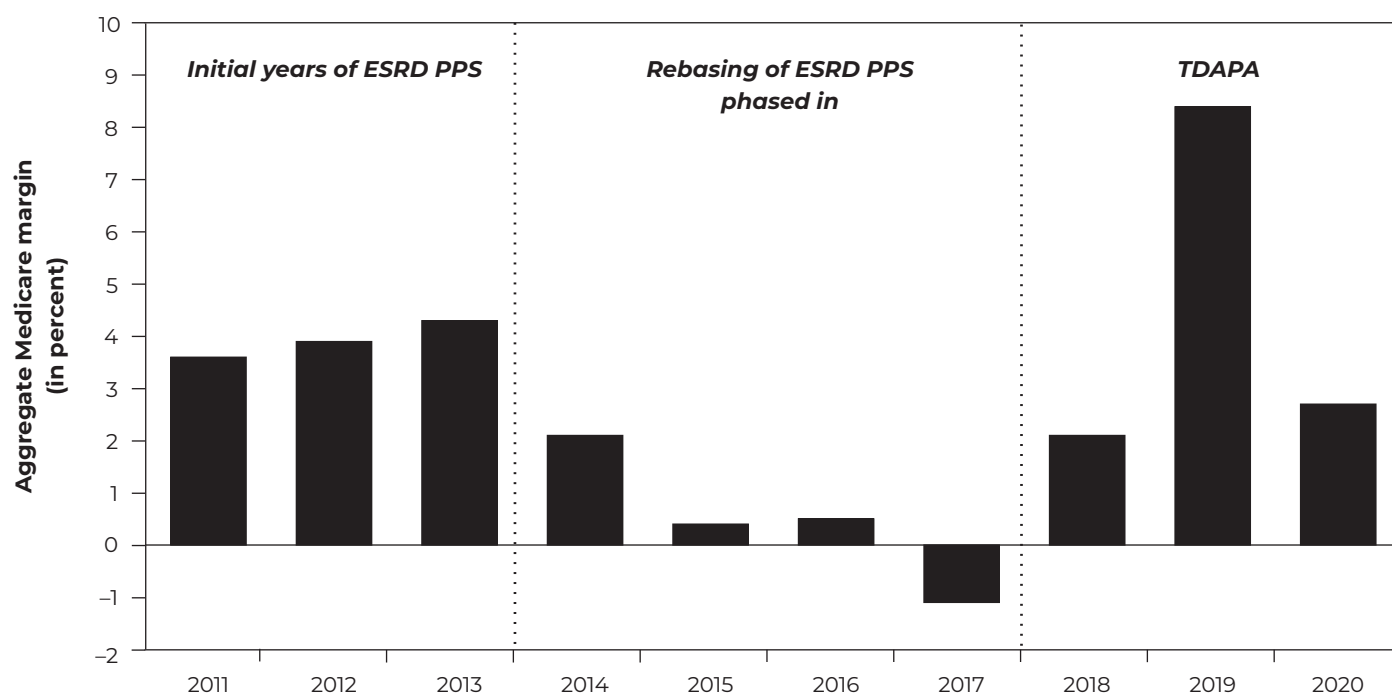


Note: Cost per treatment is adjusted to remove differences in the cost of labor. "Dialysis facilities" includes those paid by all insurance sources.

Source: MedPAC analysis of cost reports submitted by freestanding dialysis facilities to CMS and the end-stage renal disease wage index files.

TDAPA policy, which can result in a difference between the average provider acquisition cost for a drug and the ASP used to set the Medicare payment amount for a quarter. When prices increase or decrease, it takes two quarters before that change is reflected in the ASP data used by Medicare to pay providers. When newly available generic drugs enter the market, their ASPs are often substantially lower than their brand counterparts, but payment amounts remain at the higher brand level for typically two quarters (or more).

In 2020, the aggregate Medicare margin decreased to 2.7 percent (Figure 6-7, p. 222). This decline is linked to increasing cost per treatment for all cost

**FIGURE
6-7****Aggregate Medicare margin changed in response to payment policies**

Note: ESRD (end-stage renal disease), PPS (prospective payment system), TDAPA (transitional drug add-on payment adjustment). Pandemic-related federal relief funds are not accounted for in the data presented in this figure.

Source: Compiled by MedPAC from cost reports and claims submitted by facilities to CMS.

categories with the exception of ESAs and labs and to the TDAPA payment declining from ASP + 6 to ASP + 0. As discussed earlier, we include a portion of the congressional pandemic relief funds (based on FFS Medicare's share of 2019 all-payer operating revenue) in our aggregate Medicare margins because these funds were intended to help cover lost revenue and payroll costs—including lost revenue from Medicare patients and the cost of staff that help treat these patients. Including these funds raises the 2020 aggregate Medicare margin to 3.7 percent (data not shown).

The aggregate Medicare margin varies by treatment volume

Aggregate Medicare margins in 2020 decidedly varied by treatment volume: Facilities in the lowest volume quintile had margins below -20 percent, while facilities in the top volume quintile had margins of

over 10 percent (Table 6-5). Urban facilities averaged higher margins than rural facilities (3.0 percent vs. -1.5 percent). Total treatment volume accounted for much of the difference in margins between urban and rural facilities. Urban dialysis facilities are larger on average than rural facilities in the number of treatment stations and total treatments provided. For example, in 2020, urban facilities averaged about 11,400 treatments, while rural facilities averaged about 7,800 treatments (data not shown). And, as shown in Figure 6-6 (p. 221), higher-volume facilities had lower cost per treatment.

Although some rural facilities have benefited from the ESRD PPS's 23.9 percent low-volume adjustment and 0.8 percent rural adjustment, the Commission has stated that neither adjustment targets low-volume, geographically isolated facilities that are critical to beneficiary access (Medicare Payment Advisory

**TABLE
6-5****In 2020, the aggregate Medicare margin of freestanding dialysis facilities varied by treatment volume**

Provider type	Aggregate Medicare margin	Share of freestanding dialysis facilities	Share of freestanding dialysis facility treatments
All	2.7%	100%	100%
Urban	3.5	84	88
Rural	-1.5	16	12
Treatment volume (quintile)			
Lowest	-20.2	20	7
Second	-8.2	20	13
Third	0.3	20	18
Fourth	4.8	20	24
Highest	10.1	20	39

Note: Pandemic-related federal relief funds are not accounted for in the data presented in this table. Components may not sum to 100 percent due to rounding.

Source: Compiled by MedPAC from cost reports and claims submitted by freestanding dialysis facilities to CMS and the Dialysis Compare database.

Commission 2016, Medicare Payment Advisory Commission 2015, Medicare Payment Advisory Commission 2014). The Commission's recommendation to replace the current low-volume payment adjustment and rural adjustment with a single low-volume and isolated adjustment, where low-volume criteria are empirically derived, would better protect isolated low-volume rural facilities that are necessary for beneficiary access (Medicare Payment Advisory Commission 2020).

Projecting the aggregate Medicare margin for 2022

We project the aggregate Medicare margin for 2022 to be 1.8 percent, less than the 2020 Medicare margin (2.7 percent). This projection considers providers' historical cost growth and the policy changes that went into effect between 2020 (the year of our most recent margin estimates) and 2022, which include the following:

- In 2021 and 2022, the statutory dialysis base payment rate (based on the ESRD market basket

offset by a productivity adjustment) increased by 1.6 percent and 1.9 percent, respectively.

- For 2022, a statutory change eliminates the 2 percent Medicare sequester through March 2022 and reduces the sequester to 1 percent beginning April 1, 2022, through June 30, 2022.
- For 2021, CMS estimates that payments will be reduced by 0.38 percent due to the ESRD Quality Incentive Program (QIP). No facility will receive a QIP-related payment reduction in 2022 due to the coronavirus pandemic's impact on the quality measures.
- For 2021, CMS estimates that payments will be reduced by 0.1 percent by including calcimimetics in the ESRD PPS bundle.
- For 2021 and 2022, the ESRD Treatment Choices (ETC) Model will increase providers' payments (net of reductions) by \$14 million and \$7 million, respectively.

Not included in the projection is the potential effect of:

- The new transitional add-on payment adjustment for new and innovative equipment and supplies (TPNIES) that CMS will apply for a home dialysis machine beginning in January 2022. The technology will receive the TPNIES for two calendar years. CMS estimates that the TPNIES amount will equal an estimated \$24 per treatment (which is net of an offset amount to account for the cost of home dialysis machines already in the PPS bundle).
- The new transitional add-on payment adjustment for a new drug (Korsuva) beginning in April 2022 for a two-year period.

How should Medicare payments change in 2023?

The evidence suggests that outpatient dialysis payments are adequate. It appears that facilities have become more efficient under the PPS, as measured by declining use of most injectable dialysis drugs.

We note that, since 2020, in addition to the base payment rate, Medicare includes a TDAPA payment adjustment under the ESRD PPS that pays dialysis facilities for certain new drugs and biologics based on the product's ASP + 0 percent for a two-year period. If a drug becomes eligible for a TDAPA payment, this policy will likely increase Medicare payments relative to facilities' costs; CMS will not reconcile the cost and utilization of the new drug within an existing functional category with the cost and utilization of the drugs already included in the functional categories prior to the inclusion of the new drug.

Also since 2020, Medicare includes a payment adjustment under the ESRD PPS that pays dialysis facilities for new and innovative equipment and supplies based on the product's invoice price for a two-year period. For non-capital-related technologies, this policy could raise Medicare payments relative to facilities' costs because CMS will not offset the ESRD PPS base rate. (The payment adjustment for new and innovative home dialysis machines (a capital asset) includes an offset applied to the ESRD PPS base rate.)

Under current law, Medicare's base payment rate for dialysis services is increased annually based on the projected increase in the market basket less a projected increase in productivity. Although the final update for 2023 will not be set until later in 2022, CMS's current projections of the market basket and productivity would result in the base payment rate increasing by 1.2 percent. In 2023, CMS estimates that the ETC Model will decrease payments to facilities by \$3 million (Centers for Medicare & Medicaid Services 2021).

RECOMMENDATION 6

For calendar year 2023, the Congress should update the 2022 Medicare end-stage renal disease prospective payment system base rate by the amount determined under current law.

RATIONALE 6

Most of our indicators of payment adequacy are positive, including beneficiaries' access to care, the supply and capacity of providers, volume of services, and access to capital. Providers have become more efficient in the use of dialysis drugs under the PPS. Indicators of quality of care have generally remained stable; the use of home dialysis has increased, and hospital admissions and mortality have held steady, though emergency department use slightly increased. The aggregate Medicare margin was 2.7 percent in 2020 and is projected to be 1.8 percent in 2022. The 20 percent marginal profit is a positive indicator of beneficiary access.

Margins tend to be lower in low-volume and in rural dialysis facilities, in spite of the payment system's 23.9 percent low-volume adjustment and 0.8 percent rural adjustment. Previous Commission analyses have found that neither adjustment appropriately targets low-volume, geographically isolated facilities. The Commission has stated that payments to rural providers should target facilities that are critical for beneficiary access (meaning those that are both low-volume and isolated). Further, the magnitude of rural payment adjustments should be empirically derived, and the adjustments should encourage provider efficiency. In June 2020, the Commission recommended that the Secretary replace the current low-volume and rural payment adjusters with a single payment adjustment that considers both a facility's distance to the nearest facility and its treatment

volume, thereby directing extra payments to the low-volume and isolated facilities that are most necessary for beneficiary access to care (Medicare Payment Advisory Commission 2020).

IMPLICATIONS 6

Spending

- In 2023, the statute sets the payment update at the market basket, net of the productivity adjustment. The Commission's recommendation would have no effect on federal program spending relative to the statutory update.

Beneficiary and provider

- We expect beneficiaries to continue to have good access to outpatient dialysis care. We do not anticipate any negative effects on beneficiary access to care. This recommendation is expected to have a minimal effect on providers' willingness and ability to care for Medicare beneficiaries. ■

Endnotes

- 1 In this chapter, the term *biologics* refers to biological products.
- 2 In this chapter, the term *beneficiaries* refers to individuals covered by Medicare, and *patients* refers to all individuals (across all types of health coverage) who have ESRD.
- 3 Throughout this chapter, we use the term “FFS Medicare” to mean the CMS term “Original Medicare.” Collectively, we distinguish the payment model represented by these terms from other models such as Medicare Advantage or advanced alternative payment models that may use FFS mechanisms but are designed to create different financial incentives.
- 4 In this chapter, the term *drugs* refers to both drugs and biologics.
- 5 According to the statute, dialysis oral-only drugs cannot be paid under the ESRD PPS bundle before January 1, 2025.
- 6 In 2020, the American Kidney Fund reported that it provided direct financial assistance to nearly 95,000 low-income dialysis and transplant patients (American Kidney Fund 2020).
- 7 For individuals entitled to Medicare based on ESRD benefit rules, Medicare coverage does not begin until the fourth month after the start of dialysis, unless the individual had a kidney transplant or began training for self-care, including dialyzing at home.
- 8 Under Level 1 of the CKCC Graduated Option, participants take one-sided risk (40 percent shared savings only; no shared loss rate); under Level 2, participants take two-sided risk (50 percent shared savings and 30 percent shared losses).
- 9 Under the Bipartisan Budget Act of 2018, beginning January 2019, clinicians who manage home-dialysis beneficiaries can furnish their visits through telehealth (rather than in person). Beneficiaries are required to receive a face-to-face visit in each of the first three months of home dialysis and once every three months thereafter.
- 10 CMS estimated that facilities’ payments would be reduced by \$35 million, while managing clinicians’ payments would be reduced by \$8 million. There would also be additional spending of \$15 million for kidney disease education and home training.
- 11 For pediatric dialysis beneficiaries (17 years of age and under), the base rate is adjusted for age and type of dialysis.
- 12 The Commission’s Payment Basics provides more information about Medicare’s method of paying for outpatient dialysis services (available at https://www.medpac.gov/wp-content/uploads/2021/11/medpac_payment_basics_21_dialysis_final_sec.pdf).
- 13 The Commission’s March 2014 report to the Congress provides more information about the rebasing of the dialysis base payment rate (available at https://www.medpac.gov/wp-content/uploads/import_data/scrape_files/docs/default-source/reports/mar14_ch06.pdf).
- 14 More information about these payment changes can be found in the Commission’s March 2016 report to the Congress (available at https://www.medpac.gov/wp-content/uploads/import_data/scrape_files/docs/default-source/reports/chapter-6-outpatient-dialysis-services-march-2016-report-.pdf). The Commission’s methodological concerns about these patient-level and facility-level refinements can be found in our comment letter to CMS (available at https://www.medpac.gov/wp-content/uploads/import_data/scrape_files/docs/default-source/comment-letters/medpac-comment-on-cms-s-proposed-rule-on-the-end-stage-renal-disease-prospective-payment-system-and-.pdf).
- 15 In 2011, CMS delayed including ESRD oral-only drugs (calcimimetics and phosphate binders paid for under Part D) in the Part B ESRD prospective payment bundle to give facilities additional time to make operational changes and logistical arrangements to furnish these products to their beneficiaries. Section 204 of the Stephen Beck, Jr., Achieving a Better Life Experience Act of 2014 delayed including oral-only renal dialysis services in the ESRD PPS bundled payment until January 1, 2025. According to CMS, these products were paid under a TDAPA because the base dialysis payment rate has not yet accounted for their costs.
- 16 In 2016, CMS established a drug designation process (as mandated by the Protecting Access to Medicare Act of 2014) for determining when ESRD oral-only drugs are no longer oral only and therefore must be paid under the ESRD PPS. Under the process, once the Food and Drug Administration approves an equivalent injectable product (or other non-oral forms), the agency pays facilities for both the oral and non-oral products under a TDAPA until sufficient claims data (at least two years’ worth) for rate-setting analysis are available; thereafter, these drugs will be included in the PPS bundle.
- 17 Currently, drugs and biologics reported on dialysis facility claims are categorized into 1 of the following 11 functional categories: access management, anemia management,

- bone and mineral metabolism, cellular management, antiemetic, anti-infective, antipruritic, anxiolytic, excess fluid management, fluid and electrolyte management, and pain management.
- 18 New drugs ineligible for a TDAPA include generic drugs, which the FDA approves under Section 505(j) of the Federal Food, Drug, and Cosmetic Act, and drugs approved for a new dosage form (e.g., pill size, time-release forms, chewable or effervescent pills); new drugs approved for a new formulation (e.g., new inactive ingredient); new drugs approved that were previously marketed without a new drug application (NDA); and new drugs approved that changed from prescription to over-the-counter availability. CMS will identify these drugs using the NDA classification code that the FDA assigns to an NDA.
 - 19 The Commission recommended that the Congress direct the Secretary to eliminate the TDAPA for new drugs that are in an existing ESRD functional category that is already included in the payment bundle (Medicare Payment Advisory Commission 2020). Doing so would maintain the structure of the ESRD PPS and avoid the introduction of incentives to unbundle services covered under the PPS. Eliminating the TDAPA for these drugs would create pressure for drug manufacturers to constrain the growth of prices for new and existing ESRD drugs. Note also that although one large dialysis organization manufactures ESRD drugs (included in the PPS bundle), the company currently does not manufacture a drug that is eligible for a TDAPA.
 - 20 CMS defines a capital-related asset as an asset that a provider has an economic interest in through ownership (as set forth in the Provider Reimbursement Manual, Chapter 1, Section 104.1). The agency includes the following items as examples of capital-related assets: dialysis machines, water purification systems, and systems designed to clean dialysis filters for reuse.
 - 21 Because home dialysis machines are capital-related depreciable assets, CMS (1) applies a five-year straight-line depreciation method to determine an annual allowance, by dividing the MAC-determined price by its useful life of five years; (2) divides the annual allowance by the number of treatments expected to be furnished in a year; and (3) reduces the payment by an offset (of \$9.32) that is intended to represent the portion of payment attributable to home dialysis machines from the base rate.
 - 22 Under Section 319 of the Public Health Services Act, the Secretary of Health and Human Services may determine that a disease or disorder presents a PHE or that a PHE, including significant outbreaks of infectious disease or bioterrorist attacks, otherwise exists. The Secretary first determined the existence of a coronavirus PHE, based on confirmed cases of COVID-19 in the United States, on January 31, 2020. At the time of publication, the coronavirus PHE had been renewed multiple times, most recently in January 2022.
 - 23 Based on the Commission's analysis of Medicare and total treatments reported by freestanding facilities on cost reports submitted to CMS.
 - 24 Treatments are non-annualized, meaning that the calculation does not account for each beneficiary's length of dialysis in a given year.
 - 25 These drug classes accounted for nearly all dialysis drug spending (about 97 percent) in 2010, the year before the start of the new payment method.
 - 26 The FDA approved epoetin beta under the biologics license application process, not under the biosimilar process.
 - 27 To measure changes in the use of drugs in the payment bundle, we combine drugs within and across therapeutic classes by multiplying the number drug units reported on claims in a given year by each drug's 2021 ASP. By holding the price constant, we account for the different billing units assigned to a given drug.
 - 28 According to CMS, the agency decreased the TDAPA payment for calcimimetics from ASP + 6 percent to ASP because (1) facilities have had sufficient opportunity to address any administrative complexities and overhead costs associated with the provision of calcimimetics and (2) the agency needs to take into account the financial burden that increased payments place on beneficiaries and Medicare.
 - 29 If we approximate marginal cost as total Medicare costs minus fixed building and equipment costs, then marginal profit can be calculated as follows: Marginal profit = (payments for Medicare services – (total Medicare costs – fixed building and equipment costs)) / Medicare payments. This comparison is a lower bound on the marginal profit because we do not consider any potential labor costs that are fixed.
 - 30 Blood transfusions are of concern to patients because they (1) carry a small risk of transmitting blood-borne infections to the patient, (2) may cause some patients to develop a reaction, and (3) are costly and inconvenient for patients. Blood transfusions are of particular concern for patients seeking kidney transplantation because they increase a patient's alloantigen sensitization, which can require a patient to wait to receive a transplant.
 - 31 See our March 2020 report to the Congress for more information on the factors that affect use of home dialysis and the factors associated with some patients'

- discontinuation of home dialysis (available at https://www.medpac.gov/wp-content/uploads/import_data/scrape_files/docs/default-source/reports/mar20_medpac_ch6_sec.pdf).
- 32 This analysis used 100 percent of 2015 through 2020 carrier and outpatient claims submitted for KDE services.
- 33 MIPPA does not permit other providers (such as registered nurses, social workers, and dietitians) or dialysis facilities to bill for KDE services.
- 34 In addition, for beneficiaries with AKI, Medicare pays dialysis facilities separately for drugs, biologics, and laboratory services that are not renal dialysis services.
- 35 In 2018, about 90 percent of FFS dialysis beneficiaries were enrolled in Part D or had other sources of creditable drug coverage. About 10 percent of FFS dialysis beneficiaries in 2018 had either no Part D coverage or coverage less generous than Part D's standard benefit.
- 36 This analysis does not include facilities associated with the dialysis organization that reported an anomalous increase in non-ESRD-related drug costs in 2019 compared with prior years.
- 37 To determine total reported costs for audited facilities (which CMS did not publish in regulation), we multiplied 2018 average total cost per facility (derived from the 2018 freestanding cost reports) by 1,395 (the number of facilities that CMS audited). The share of reported costs that is unallowable is calculated by dividing \$147.5 million (CMS's finding of total costs that were unallowable) by our estimate of 2018 total costs for the 1,395 facilities that the agency audited.
- 38 As a result of rebasing, in 2014, CMS reduced the base payment rate by \$8.16 to \$239.02.
- 39 In 2019, there was an anomalous increase in non-ESRD-related drug costs for facilities associated with a dialysis organization compared with prior years.

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C H A P T E R

7

Skilled nursing facility services

R E C O M M E N D A T I O N

- 7** For fiscal year 2023, the Congress should reduce the 2022 Medicare base payment rates for skilled nursing facilities by 5 percent.

COMMISSIONER VOTES: YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0

Skilled nursing facility services

Chapter summary

In skilled nursing facilities (SNFs), Medicare covers short-term skilled nursing and rehabilitation services to beneficiaries after an inpatient hospital stay. In 2020, about 15,000 SNFs furnished 1.7 million Medicare-covered stays to 1.2 million fee-for-service (FFS) beneficiaries (3.3 percent of Medicare's FFS beneficiaries). In that year, Medicare FFS spending on SNF services was \$28.1 billion. Most SNFs are also certified as nursing homes that furnish long-term care services that the program does not cover.

The effects of the coronavirus pandemic on beneficiaries and nursing home staff have been devastating. However, the combination of federal policies and the implementation of Medicare's new case-mix system resulted in considerably improved financial performance for SNFs in 2020. Some of the changes in our indicators likely reflect the unusual circumstances of 2020 rather than the adequacy of Medicare's payments. In presenting our analyses, we caution against drawing conclusions from certain findings.

Assessment of payment adequacy

To examine the adequacy of Medicare's FFS payments, we analyze beneficiaries' access to care (including the supply of providers and volume

In this chapter

- Are Medicare payments adequate in 2022?
- How should Medicare payments change in 2023?
- Medicaid trends

of services), quality of care, provider access to capital, and Medicare payments in relation to providers' costs to treat Medicare FFS beneficiaries.

Beneficiaries' access to care—Changes in the indicators of access in 2020 were mixed and reflect the impact of the pandemic, not the adequacy of Medicare's payments.

- **Capacity and supply of providers**—The number of SNFs participating in the Medicare program has been fairly stable at about 15,000 for many years. In 2020, the vast majority (88 percent) of beneficiaries lived in a county with three or more SNFs or swing bed facilities (rural hospitals with beds that can serve as either SNF beds or acute care beds). The median occupancy rate declined from 85 percent before the start of the pandemic to 74 percent in September 2021. This decline reflects the impact of the pandemic and is unrelated to the adequacy of Medicare's payments.
- **Volume of services**—Between 2019 and 2020, Medicare-covered admissions per 1,000 FFS beneficiaries dropped 7.9 percent, consistent with the lower number in the early days of the pandemic of admissions for hospital stays lasting at least three days, which is normally required for Medicare coverage. This requirement has been waived during the public health emergency (PHE). Covered days per 1,000 FFS beneficiaries also declined, though not as much (–1.5 percent), since lengths of stay increased. Temporary changes in coverage rules during the coronavirus PHE tempered the reductions in Medicare volume beginning in March 2020. The decline in volume was due to the impact of the coronavirus pandemic, not the adequacy of Medicare payments.
- **Medicare marginal profit**—Medicare marginal profit (an indicator of whether SNFs have an incentive to treat more Medicare beneficiaries) averaged 25 percent for freestanding facilities in 2020. This high level is a strong positive indicator of beneficiary access to SNF care, though factors other than the level of reimbursement (such as the availability of a bed) could challenge access.

Quality of care—Between 2019 and 2020, rates of successful discharge to the community fell and the rates of hospitalization rose. Given the effects of the pandemic, we do not draw conclusions about whether the changes reflect the adequacy of Medicare's payments.

Providers' access to capital—Because most SNFs are part of nursing homes, we examine nursing homes' access to capital. Though lending activity stalled in 2020, transactions picked up in 2021, indicating investor interest in this sector.

In 2020, the all-payer total margin—reflecting all payers (including managed care, Medicaid, Medicare, and private insurers) and all lines of business (such as skilled and long-term care, hospice, ancillary services, home health care, and investment income)—was 3.0 percent, an increase from 2019. This improvement is due to the general and targeted funding nursing homes received during the PHE, changes in Medicare payments, and the temporary increases in Medicaid rates made by many states.

Medicare payments and providers' costs—Despite the decline in volume, Medicare's aggregate FFS spending between 2019 and 2020 rose 2.7 percent to \$28.1 billion, reflecting the effects of the new case-mix system and PHE-related policies. On a per day basis, payments increased over 8 percent, while costs grew 2.1 percent. The aggregate Medicare margin for freestanding SNFs was 16.5 percent. If we allocate a portion of the reported federal relief funds to Medicare payments, we estimate that the aggregate Medicare margin was 19.2 percent. Margins varied greatly across facilities, reflecting differences in costs per day, economies of scale, and cost growth.

The level of Medicare's FFS payments remains well above the cost of Medicare-covered stays. Since 2000, the aggregate Medicare margin has been above 10 percent. The 2020 Medicare margin for efficient SNFs was very high (22.8 percent), though we are reluctant to place much weight on this indicator, given the impact of the pandemic on costs and quality measures. Medicare Advantage plans' payment rates, considered attractive by many SNFs, are much lower than the program's FFS payments, which is unlikely to be explained by the differences in patient characteristics.

How should Medicare payment rates change in 2023?

Considering these factors, the Commission recommends that, for fiscal year 2023, the Congress should reduce the 2022 Medicare base payment rates for skilled nursing facilities by 5 percent. While the effects of the pandemic on beneficiaries and nursing home staff have been devastating, the combination of federal policies and the implementation of the new case-mix system resulted in improved financial performance for SNFs. The high level of Medicare's payments indicates that a reduction to payments is needed to more closely align aggregate payments to aggregate costs.

Medicaid trends

As required by the Affordable Care Act of 2010, we report on Medicaid use and spending and non-Medicare (private-payer and Medicaid) margins. Medicaid

finances the majority of long-term care services provided in nursing homes, and some state programs also cover the copayments on SNF care for low-income Medicare beneficiaries (known as dual-eligible beneficiaries) who stay more than 20 days in a SNF. Between 2020 and 2021, the number of Medicaid-certified facilities declined less than 1 percent, to 14,720. Spending was \$39.8 billion in 2020, 3.8 percent less than in 2019. The average non-Medicare margin (which includes all payers and all lines of business except FFS Medicare SNF services) was -0.3 percent, an improvement from 2019. ■

Background

Skilled nursing facilities (SNFs) provide short-term skilled nursing care and rehabilitation services such as physical and occupational therapy and speech-language pathology services. The five most common conditions of beneficiaries referred to SNFs for post-acute care from hospital—septicemia, heart failure and shock, joint replacement, respiratory infections, and hip and femur procedures (except major joint replacement)—accounted for 24 percent of cases.¹ In 2020, 1.2 million Medicare fee-for-service (FFS) beneficiaries (3.3 percent of Medicare Part A FFS beneficiaries) used SNF services at least once; program spending on SNF services was \$28.1 billion (about 14 percent of FFS Part A spending) (Boards of Trustees 2021, Office of the Actuary 2021b).² Medicare's median payment per day was \$539, and its median payment per stay was \$23,494.

Medicare coverage

Medicare covers up to 100 days of SNF care per spell of illness after a medically necessary inpatient hospital stay of at least 3 days.³ For beneficiaries who qualify for a covered stay, Medicare pays 100 percent of the payment for the first 20 days. Beginning with day 21, beneficiaries are responsible for copayments through day 100 of the covered stay. In 2022, the copayment is \$194.50 per day.

To qualify for Medicare coverage, a beneficiary must require daily skilled nursing or rehabilitation services and have had a preceding hospital stay of at least three days.⁴ On January 31, 2020, the Secretary of Health and Human Services declared a public health emergency (PHE) to help reserve hospital capacity for treating COVID-19 patients. During the PHE, CMS has temporarily waived the three-day prior hospital-stay requirement beginning on March 1, 2020.⁵ This waiver has allowed facilities to treat long-stay residents who required skilled care without a preceding hospitalization, referred to as “skilling in place,” and allowed admissions directly from the community as long as beneficiaries met the other coverage requirements. CMS is also allowing for a one-time extension of the benefit period (for an additional 100 days) for certain beneficiaries.⁶ In fiscal year 2020, about 16 percent of stays were admitted with a PHE-related waiver, the majority of which were the result of

the prior hospital-stay waiver (Centers for Medicare & Medicaid Services 2021b). The temporary policies are scheduled to end when the coronavirus PHE expires (currently slated for mid-April 2022).

Composition of the industry

The term *skilled nursing facility* refers to a provider that meets Medicare requirements for Part A coverage.⁷ Almost all SNFs (more than 94 percent) are dually certified as SNFs and nursing homes (which typically provide less intensive, long-term care services). Thus, a facility that provides skilled care often also provides long-term care services that Medicare does not cover. The less intensive long-term care services typically make up the bulk of a facility's business, and Medicaid pays for the majority of this care.

The SNF industry is fragmented and characterized by independent providers and local and regional chains. In 2021, the largest nursing home company (Genesis) operated 357 facilities (2.4 percent of all facilities), and the largest 10 companies operated 1,708 facilities (11 percent of all facilities) (Connoles 2021). One study of chains found that new entrants tended to locate in the same state but not in the same markets in which the chains already have holdings (Hirth et al. 2019).

Most SNFs are freestanding and the majority are for profit (Table 7-1, p. 238). In 2020, 96 percent of facilities were freestanding, and they accounted for a slightly larger share of Medicare stays and spending (97 percent). For-profit facilities accounted for 71 percent of providers, 74 percent of Medicare-covered stays, and 78 percent of Medicare spending. About 11 percent of nursing facilities nationwide are owned by private equity firms (Harrington et al. 2021). Rural facilities make up the minority of providers, stays, and spending.

Freestanding SNFs vary by size. In 2020, the median SNF had 100 beds, but 10 percent of facilities had 176 or more beds and 10 percent of facilities had 50 beds or fewer. Nonprofit facilities and rural facilities are generally smaller than for-profit and urban facilities. Small facilities (under 50 beds) are not limited to rural locations. The majority are located in metropolitan areas, and less than 10 percent are located in the most rural counties or in frontier areas (counties with six or fewer persons per square mile) (Medicare Payment Advisory Commission 2020).⁸

**TABLE
7-1****Freestanding SNFs and for-profit SNFs accounted for the majority of facilities, Medicare stays, and Medicare spending, 2020**

Type of SNF	Facilities	Medicare-covered stays	Medicare spending
Total number	13,884	1,722,212	\$24.7 billion
Freestanding	96%	97%	97%
Hospital based	4	3	3
Urban	73	83	84
Rural	27	17	16
For profit	71	74	78
Nonprofit	24	23	20
Government	5	3	3

Note: SNF (skilled nursing facility). Totals may not sum to 100 percent due to rounding and missing values. The spending amount included here is lower than that reported by the Office of the Actuary, and the count of SNFs is slightly lower than what is reported in CMS's Survey and Certification Providing Data Quickly system.

Source: MedPAC analysis of the Provider of Services and Medicare Provider Analysis and Review files for 2020.

FFS Medicare-covered SNF days typically account for a small share of a facility's total patient days (Figure 7-1). In freestanding facilities in 2020, Medicare made up 10 percent of facility days compared with 63 percent for Medicaid. Given Medicare's relatively high payment rates, the program made up a larger share of facility revenue (17 percent). Medicare's shares of days and revenues increased from 2019, in part due to the temporary PHE policies that increased Medicare coverage for stays that otherwise would have been paid by other payers (or out of pocket) and in part due to increases in Medicare's payments.

Effects of the new case-mix system

By statute, Medicare uses a prospective payment system (PPS) to pay SNFs for each day of service.⁹ By controlling length of stay, providers can influence how much Medicare will pay them for their services. Information gathered from a standardized patient assessment instrument—the Minimum Data Set—is used to classify patients into case-mix categories. How complete and accurate the patient assessment information is can also influence payments. Before October 1, 2019, the PPS had two fundamental shortcomings: It encouraged the provision of excessive

rehabilitation therapy services and did not accurately target payments for nontherapy ancillary (NTA) items such as drugs. As a result, providers preferred to admit patients requiring rehabilitation care and avoided medically complex patients.

Beginning on October 1, 2019, CMS implemented a new case-mix system, the Patient-Driven Payment Model (PDPM), which shifted providers' incentives. Six components—nursing, physical therapy, occupational therapy, speech-language pathology, NTA, and room and board—are summed to establish a daily payment.¹⁰ The following patient information is used to adjust payments: the primary reason for treatment, prior surgery, comorbidities, functional status, cognitive status, swallowing and nutritional status, depression, and whether the patient received special treatments (such as ventilator care). By considering more comorbidities and other measures of medical complexity than its predecessor did, the new case-mix system is better able to recognize the higher costs associated with treating patients with COVID-19. To ensure that individual therapy remains the dominant modality, group and concurrent therapies together are limited to 25 percent of total therapy minutes per discipline.

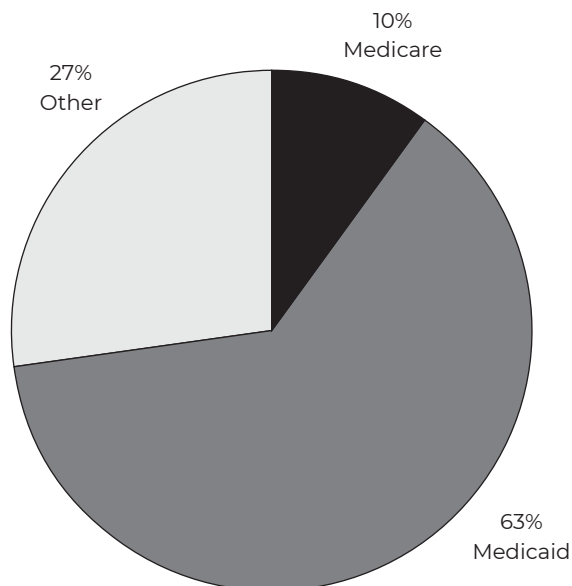
Though intended to be budget neutral, the new case-mix system increased payments in 2020 by 5.3 percent compared with what would have been paid under the old case-mix system (Centers for Medicare & Medicaid Services 2021b). The case-mix indexes (CMIs) for the nursing, speech–language pathology services, and NTA components were higher in 2020 than what CMS had estimated (Centers for Medicare & Medicaid Services 2021b). After comparing the changes in the CMIs with and without the PHE/COVID-19 cases, CMS stated that it believed that the increases in CMIs and payments were largely unrelated to the PHE waivers and COVID-19 diagnoses.

Responding to the incentives of the new case-mix system, providers changed the amounts of therapy furnished and the modalities used. Compared with 2019, therapy minutes per day declined 32 percent prior to the declaration of the PHE in 2020, and the mix of therapy shifted away from individual therapy to the lower-cost group and concurrent modalities (Centers for Medicare & Medicaid Services 2021b). CMS also found that following the implementation of the new case-mix system but before the PHE, there were no changes in the share of stays reporting falls, the share of stays with serious pressure ulcers, or hospital readmissions during the 30 days after discharge from the SNF. After the PHE was declared in January 2020 and facilities limited patient interactions, the use of group and concurrent therapy decreased and individual therapy increased. Other analysis found that the reduction in the provision of therapy was not associated with changes in hospitalizations, lengths of stays, or functional scores at discharge (Rahman et al. 2022).

In the proposed rule updating payments for fiscal year 2022, CMS sought stakeholder input on an approach that, if adopted, would lower payments by 5 percent and on options to ease the transition (delaying or phasing in the reduction). In the final rule, CMS did not lower the level of payments for fiscal year 2022 but instead stated that it would consider the input gathered from stakeholders to develop the best approach to establish budget neutrality, which the agency plans to publish in the fiscal year 2023 proposed rule. CMS also stated that it would continue to monitor all available data and take that into account in its proposed rule.

FIGURE 7-1

FFS Medicare made up a minority of nursing facility days, 2020



Note: FFS (fee-for-service). Data shown are medians. "Other" includes managed care, commercial insurance, and private pay.

Source: Medicare skilled nursing facility cost reports 2020.

Are Medicare payments adequate in 2022?

To examine the adequacy of Medicare's FFS payments, we analyze beneficiaries' access to care (including the supply of providers and volume of services), quality of care, providers' access to capital, Medicare FFS payments in relation to costs to treat Medicare beneficiaries, and changes in payments and costs. We also compare the characteristics of relatively efficient SNFs with other SNFs. Throughout the section, we note the effects of the pandemic, starting with the text box on the impact on nursing homes (pp. 240–241).

The impact of the coronavirus pandemic on nursing homes

The coronavirus pandemic and associated public health emergency (PHE) have had tragic effects on beneficiaries' health. (For details on the effects of COVID-19 on beneficiaries' health and access to care, see Chapter 1.) They have had material effects on providers' patient volume, revenues, and costs. The effects of the pandemic have varied considerably both geographically and over time, and it is not clear when or if the full effects will end.

Nursing home residents and staff were hit especially hard by the PHE. Between late May 2020 (when facilities began reporting COVID-19-related information to CMS) and early November 2021, facilities reported almost 1.4 million confirmed cases among residents and staff and 139,729 COVID-19 deaths among residents (Centers for Medicare & Medicaid Services 2021a). The counts for 2020 do not include cases or deaths prior to May 2020, when reporting began, so the totals are actually higher (Shen et al. 2021). After declining in the spring and early summer of 2021, cases and deaths started to increase again due to the Delta variant (Kaiser Family Foundation 2021). Case rates and deaths per 1,000 residents varied widely and were related to the

prevalence of COVID-19 in the community, staffing levels, and facility size—not to quality star ratings or type of ownership (Abrams et al. 2020, Gorges and Konetzka 2021, Gorges and Konetzka 2020). Early in the pandemic, nursing homes with low shares of White residents had higher death rates compared with homes with high shares of White residents, but by April 2021, the two groups had comparable rates (Gilman and Bassett 2021).

Frontline nursing home staff treating COVID-19 cases have faced burnout and risks to their health and safety. Data from the Bureau of Labor statistics indicate a 15 percent drop in employees between February 2020 and September 2021 (Bureau of Labor Statistics 2021). However, the Commission's analysis of Payroll Based Journal data for 2019 and 2020 found that after adjusting for changes in the number of patient days, nursing hours per resident actually increased, thus confirming another study's findings (Werner and Coe 2021). The increases were larger for licensed practical nurses and registered nurses (RNs) compared with certified nursing assistants and aides in training, perhaps because Medicare has staffing requirements that would maintain RN staffing.¹¹ In an analysis of CMS's nursing home

(continued next page)

Beneficiaries' access to care: Decline in volume was due to the impact of the pandemic, not the adequacy of Medicare payments

Although we do not have direct measures of access, we typically examine the supply of providers, changes in service use, and whether providers have a financial incentive to expand the number of Medicare beneficiaries they serve. Complicating the assessment is the lack of clear guidelines about when beneficiaries need SNF care as opposed to a different post-acute care (PAC) service or the use of outpatient services (and no PAC). During the PHE, beneficiary access has been especially affected by the local markets' COVID-19

conditions, hospital referral patterns, staffing shortages, and SNF admitting policies.

SNF supply is stable

The number of SNFs participating in the Medicare program in 2021 was fairly stable at 15,064. A majority of the 39 new facilities entering the program in 2021 were for profit. Of the 102 terminations as of October 2021 (less than 1 percent of all SNFs), all but 3 terminated at their own initiative (i.e., they were not terminated by the program).¹² The number of terminations increased from 2020 to 2021, but in both years, there were fewer terminations than at the same point in 2019. Thus, while the PHE may have accelerated terminations

The impact of the coronavirus pandemic on nursing homes (cont.)

COVID-19 data, the National Investment Center for Senior Housing and Care reported that nursing home staff shortages in the wake of the coronavirus pandemic reached a peak in late September 2021, when 23 percent of skilled nursing facilities (SNFs) reported shortages of aides and 20 percent reported shortages of nursing staff (Zahraoui and Kaufman 2021). The study found that nursing homes reporting staff shortages had lower occupancy rates and higher rates of COVID-19 infections.

Nursing homes have benefited from federal grants and loans and temporary policy changes that eased the effect of the decline in volume (and associated revenue) due to the pandemic, as well as COVID-19-related increased costs for staffing, personal protective equipment, infection control, and testing. Our calculations of 2020 Medicare margins do not include the impact of federal relief funds because of the way they are reported on cost reports, though they are included in our calculations of total facility margins. However, these funds were intended to help cover lost revenue and additional costs to treat patients—including Medicare beneficiaries. Therefore, we allocated a portion of these funds to Medicare to estimate their impact on Medicare margins (see discussion, p. 251).

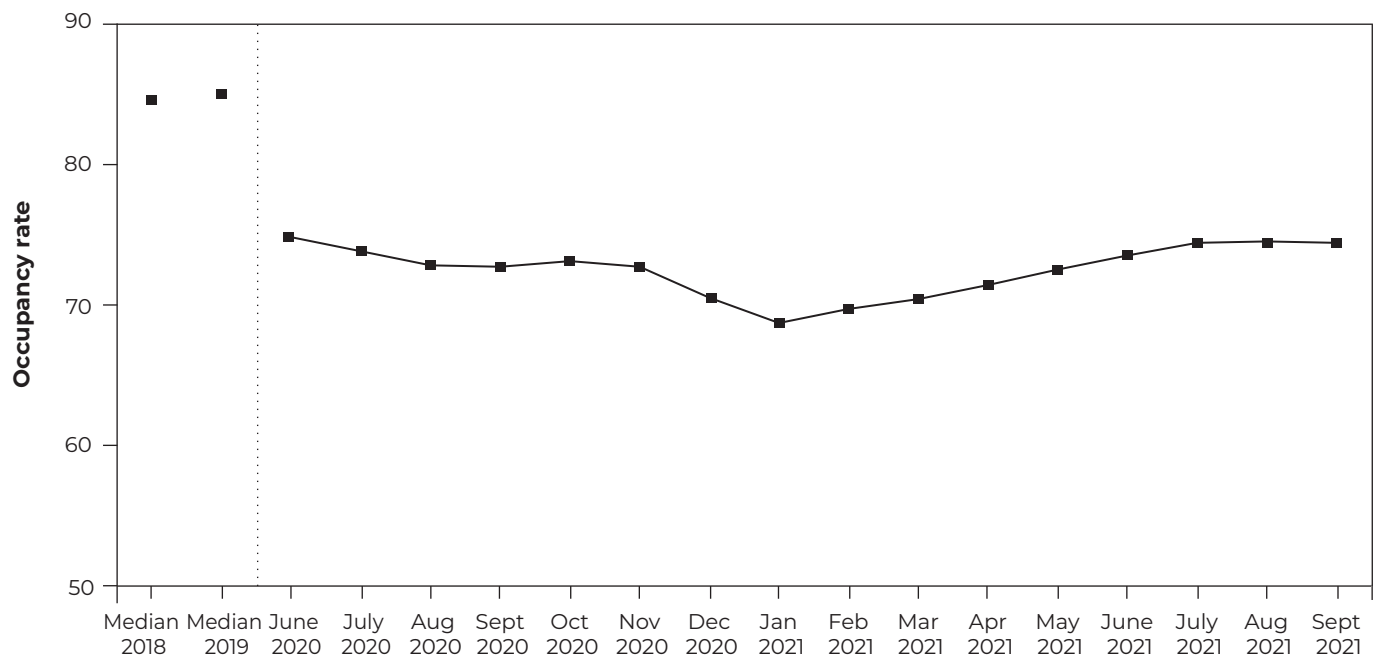
In this chapter, we use available data and changes in payment policy to project SNF margins for 2022 and recommend payment rate updates for 2023. However, significant uncertainty remains about how long the pandemic will last and whether the changes in volume and providers' costs will persist after the PHE. Therefore, while analyzing 2020 data is important, our "usual" indicators of payment adequacy (beneficiary access, quality of care, providers' access to capital, and Medicare costs and payments) are more difficult to interpret this year.

To the extent that the pandemic's effects are temporary—even if over multiple years—or vary significantly across individual providers, they are best addressed through targeted temporary funding policies rather than a permanent change to all providers' payment rates in 2023, which also affects payments in future years. For each payment adequacy indicator in this chapter, we discuss whether the effects of the pandemic on those indicators will most likely be temporary or permanent. Only permanent effects of the pandemic are factored into recommended permanent changes in Medicare payment rates. (For an overview of how our payment adequacy analysis takes account of the PHE, see Chapter 2.) ■

for some facilities, there are other factors in play, such as relatively low Medicaid payment rates, lower payment rates paid by Medicare Advantage (MA) plans, the lower use of SNFs by MA plans and alternative payment models (APMs), and the overexpansion of the SNF supply (in states that do not have certificate-of-need laws). We found that in 2020 and 2021, the rates of termination were comparable between for-profit and nonprofit facilities, consistent with a recent study of nursing home closures since 2015 (Flinn 2020). Terminations may create opportunities for increased industry consolidation. In the SNF industry, consolidations are more likely to occur at the regional or state level because information about potential

referring hospitals, state regulations, and Medicaid policies are essential elements to successful nursing home operations.

In 2020, 88 percent of beneficiaries lived in counties with three or more SNFs or swing bed facilities (rural hospitals with beds that can serve as either SNF beds or acute care beds). However, 5 percent of beneficiaries lived in counties with no or only one SNF or swing bed facility, up from 3.3 percent of beneficiaries in 2019. If a closure occurs in these counties, beneficiaries who live there might have more difficulty obtaining SNF care. In any county, SNF conversions from multiple-occupancy

**FIGURE
7-2****SNF occupancy has slowly recovered from low in January 2021
but remains well below pre-COVID-19 levels**

Note: SNF (skilled nursing facility). The values for 2018 and 2019 are medians for a consistent sample of 10,979 SNFs.

Source: MedPAC analysis of COVID-19 nursing home database (2020 and 2021 data); Medicare Provider Analysis and Review data for 2018 and 2019.

to single-occupancy rooms for infection control can also reduce capacity (Stulick 2021).

Lower occupancy rates indicate bed availability for most beneficiaries, but staffing shortages may limit access

Pre-PHE, median occupancy rates for freestanding SNFs were high, though declining over time (from 88 percent in 2010 to 85 percent in 2019). Early in the coronavirus pandemic, hospital admissions were restricted and, as a result, referrals to SNFs waned (Figure 7-2). By June 2020, occupancy rates had fallen 10 percentage points, averaging 75 percent. Even after hospital inpatient volume started to rebound, beneficiaries avoided SNFs when they could be safely discharged home; as a result, admissions remained low, and occupancy rates continued to decline, reaching 69 percent in January 2021.¹³ Since then, occupancy rates

have slowly improved (though they declined slightly in September) but remained 10 points (74 percent) below their prepandemic levels.

Occupancy rates vary widely across facilities. In September 2021, one-quarter of freestanding facilities had occupancy rates at or below 63 percent, while another quarter had rates 85 percent or higher. Given the relatively high occupancy rates in many facilities, a bed may not be available when a beneficiary is seeking placement, particularly if they require special services or are seeking admission to a specific facility.¹⁴

Staffing shortages reported by SNFs also affect access (see text box on the impact of the pandemic, pp. 240–241). The American Health Care Association reported that of the 1,038 nursing facilities surveyed, 58 percent reported having limited new admissions due to staffing shortages (American Health Care Association/National

**TABLE
7-2****SNF admissions and days continued to decline in 2020**

Volume measure	Prepandemic						Average annual change	
	2012	2014	2016	2018	2019	2020	2012–2019	2019–2020
Covered admissions per 1,000 FFS beneficiaries	69.0	68.3	65.9	62.5	59.5	54.8	–2.1%	–7.9%
Covered days per 1,000 FFS beneficiaries	1,893	1,843	1,693	1,559	1,475	1,453	–3.5	–1.5
Covered days per admission	27.4	27.0	25.7	25.0	24.8	26.5	–1.4	6.9

Note: SNF (skilled nursing facility), FFS (fee-for-service). "FFS beneficiaries" includes users and non-users of SNF services. Data include 50 states and the District of Columbia.

Source: Centers for Medicare & Medicaid Services 2021c.

Center for Assisted Living 2021). Though perhaps more acute this year, staffing shortages are not new to this sector and reflect the low pay, high turnover, and limited benefits common to the industry (Lee 2021).

Between 2019 and 2020, SNF admissions and days decreased

SNF use for all Medicare beneficiaries has been declining for years. The expanded enrollment in MA has lowered SNF use because MA enrollees tend to have shorter SNF stays or avoid the setting altogether. Similarly, more FFS beneficiaries are in entities participating in APMs, such as accountable care organizations and bundled payment demonstrations. APMs create financial incentives for entities to lower their spending and use of services by avoiding PAC altogether (for example, by referring beneficiaries to outpatient therapy instead), shortening SNF stays, and using lower-cost home health care when possible. The declining use is not a symptom of inadequate Medicare payment rates for SNF care. Rather, Medicare's payment rates are high relative to those for other patients, and Medicare is a preferred payer, though some providers may have avoided beneficiaries who were likely to require long stays and exhaust their Medicare benefits. In such cases, a facility's daily payments could decline if the patient became eligible for Medicaid or the stay resulted in bad debt.

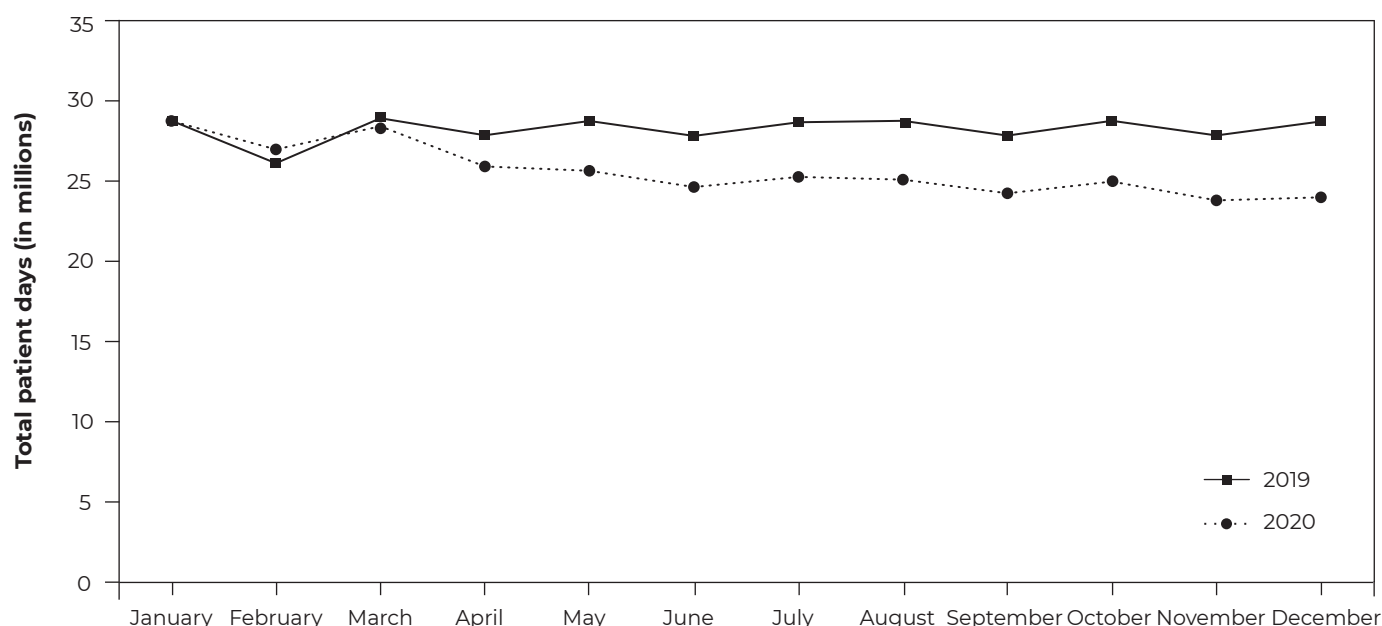
The PHE compounded these secular trends, as hospital referrals shrank in spring 2020 and many beneficiaries who required PAC avoided SNFs if possible. Between January 2020 and December 2020, the share of beneficiaries discharged from a hospital to a SNF declined from 18.9 percent to 13.6 percent. Conversely, during the stay period, the share of beneficiaries going to home health agencies (HHAs) increased from 16 percent to 21 percent. Some observers contend that at least some of the substitution will be permanent (Brown 2021).

Between 2019 and 2020, total FFS discharges and days (i.e., not adjusted for the number of FFS enrollees) decreased 13 percent and 5 percent, respectively. To control for the steady expansion of enrollment in MA, we examine service use per 1,000 FFS enrollees. Between 2019 and 2020, SNF admissions per 1,000 FFS beneficiaries decreased 7.9 percent (Table 7-2) (Centers for Medicare & Medicaid Services 2021c). Because stays were longer, covered days declined at a slower 1.5 percent. Since 2012, admissions per 1,000 FFS beneficiaries have declined over 20 percent and days have decreased over 23 percent.

The decline in SNF use paralleled the large decline (–11.4 percent) between 2019 and 2020 in per capita FFS inpatient hospital stays that were three days or longer.¹⁵ However, even after hospital admissions began to rebound in May 2020, SNF use did not recover

**FIGURE
7-3**

Fewer SNF patient days in 2020 than 2019



Note: SNF (skilled nursing facility).

Source: MedPAC analysis of Payroll Based Journal data, 2019 and 2020.

(Figure 7-3). CMS's waiver of the required three-day hospital stay tempered what might have otherwise been even larger volume declines as beneficiaries continued to avoid SNF care.

Among SNF patients, the mix of the top diagnosis-related groups (DRGs), which are assigned to the preceding hospital stay, shifted slightly between 2019 and 2020. The share of respiratory and sepsis DRGs increased, while the share of hip and knee procedures decreased. The changes are consistent with the impact of COVID-19: Many COVID-19 cases are assigned to respiratory DRGs (there is not a specific COVID-19 DRG), while the hospital referrals for PAC care after orthopedic procedures shrank in 2020.

Compared with their shares of all FFS enrollees, Black beneficiaries were more likely to use SNF services, while Hispanic and Asian beneficiaries were less likely to use SNF services. Compared with other users, Black, Hispanic, and dual-eligible beneficiaries are more likely to use lower-quality facilities (Zuckerman et al. 2019).

Medicare marginal profit: A measure of the attractiveness of Medicare patients

Another measure of access is whether providers have a financial incentive to expand the number of Medicare beneficiaries they serve. In considering whether to treat a patient, a provider with excess capacity compares the marginal revenue it will receive (i.e., the Medicare payment) with its marginal costs—that is, the costs that vary with volume. If Medicare payments are larger than the marginal costs of treating an additional beneficiary, a provider has a financial incentive to increase its volume of Medicare patients. In contrast, if payments do not cover the marginal costs, the provider may have a disincentive to care for Medicare beneficiaries.¹⁶

The Medicare marginal profit in 2020 was 25 percent, indicating that facilities with available beds would have had a strong incentive to admit Medicare patients. This high marginal profit is a very positive indicator

of beneficiary access to SNF care. However, even though providers may have an incentive to treat Medicare beneficiaries, beneficiaries may continue to be reluctant to use SNF services if alternative sources of care are an option (e.g., if they qualify for care at an inpatient rehabilitation facility (IRF) or long-term care hospital (LTCH), or if they are able to receive home health care or outpatient services at home).

Quality of care is difficult to assess

Maintaining high-quality care in the midst of a pandemic challenged many providers (see a discussion of COVID-19 cases and deaths in nursing homes in the text box, pp. 240–241). While we report 2020 results for quality measures we track, these data reflect conditions unique to the PHE that confound our measurement and assessment of trends in 2020. For example, increased mortality due to COVID-19 infection and capacity constraints of acute care hospitals could affect the measures. In addition, the Commission's quality metrics rely on risk-adjustment models that use performance from previous years to predict beneficiary risk; COVID-19, a new diagnosis, is not included in the current models. As a result, our models may not adequately represent the acuity and mix of patients receiving care in 2020. Therefore, we report the changes we have observed in the quality measures but do not draw conclusions about whether quality improved, worsened, or stayed the same in 2020.

We evaluate quality of SNF care using two measures: average risk-adjusted rates of successful discharge to the community and all-condition hospitalizations within a stay. Successful discharge to the community includes beneficiaries discharged to the community (including those discharged to the same nursing home where the beneficiary was before the hospitalization) who did not have an unplanned hospitalization and did not die in the next 30 days. The hospitalization measure captures all unplanned hospitalizations (admissions and readmissions) and outpatient observation stays that occur during the stay (beneficiaries who died during the SNF stay are excluded from the measure). Discharges to hospice and beneficiaries with the hospice benefit are excluded from the calculation of both measures. Both measures are uniformly defined and risk adjusted across HHAs, SNFs, IRFs, and LTCHs—thus taking another step

toward achieving a unified payment system and evaluation of patient outcomes across PAC settings.¹⁷

Compared with 2019, the 2020 risk-adjusted rate of successful discharge to the community was lower and the rate of hospitalization was higher (Table 7-3, p. 246); a smaller share of beneficiaries was successfully discharged home (38.6 percent vs. 44.8 percent). Compared with 2019, the 2020 rate of hospitalizations rose from 13.7 percent to 14.2 percent. The differences by ownership and facility type have been consistent for years. We expect quality trends to return to prepandemic levels once the PHE is over.

We no longer include measures of patient functional improvement in our assessment of quality. While the Commission contends that maintaining and improving functional status is a key PAC goal, the Commission has raised serious questions about the integrity of this information (Medicare Payment Advisory Commission 2019). Because functional assessments are used in the case-mix system to establish payments, it is unlikely that this information can be divorced from payment incentives. Yet, because functional outcomes are critically important to patients, improving the reporting of assessment data such that these outcomes can be adequately assessed is desirable. In its June 2019 report to the Congress, the Commission discussed possible strategies to improve the assessment data, the importance of monitoring the reporting of these data, and alternative measures of function (such as patient-reported surveys) that do not rely on provider-completed assessments (Medicare Payment Advisory Commission 2019).

With a few exceptions, SNFs must participate in a value-based purchasing program (summarized in the text box, p. 247).¹⁸ This program was put on hold during the PHE. Payments to providers continue to be lowered by the requisite 2 percent withhold, and the program retains 40 percent of the withheld amount. However, performance does not influence the amount that is returned to each provider (each receives 60 percent of the 2 percent withheld).

Providers' access to capital remains adequate

Access to capital allows SNFs to maintain, modernize, and expand their facilities. The vast majority of SNFs

**TABLE
7-3****Changes in SNFs' mean risk-adjusted rates of successful discharge to the community and all-cause hospitalizations between 2015 and 2020**

Measure/subgroup	Prepandemic				Average annual change	
	2015	2017	2019	2020	2015–2019	2019–2020
Rate of successful discharge to the community						
All SNFs	43.9%	44.4%	44.8%	38.6%	0.5%	–13.8%
For profit	43.0	43.6	43.7	42.5	0.4	–2.7
Nonprofit	47.2	47.6	48.0	37.6	0.4	–21.7
Freestanding	43.4	44.0	44.4	38.2	0.6	–14.0
Hospital based	52.9	53.8	53.6	48.2	0.3	–10.1
Rate of hospitalization						
All SNFs	15.1	14.4	13.7	14.2	–2.4	3.6
For profit	15.7	14.9	14.2	14.7	–2.5	3.5
Nonprofit	13.3	12.9	12.3	12.6	–1.9	2.4
Freestanding	15.3	14.6	13.8	14.3	–2.5	3.6
Hospital based	10.6	10.2	10.0	10.4	–1.4	4.0

Note: SNF (skilled nursing facility). "Successful discharge to the community" includes beneficiaries discharged to the community (including those discharged to the same nursing home they were in before) who did not have an unplanned hospitalization or die in the 30 days after discharge. The hospitalization measure captures all unplanned hospital admissions, readmissions, and outpatient observation stays that occur during the SNF stay. Both measures are risk adjusted. Providers with at least 60 stays in the year (the minimum count to meet a reliability of 0.7) were included in calculating the average facility rate. The "All SNFs" category includes the performance of government-owned SNFs, which are not reported separately in the table.

Source: MedPAC analysis of SNF claims and linked inpatient hospital stays from 2015 through 2020 for fee-for-service beneficiaries.

are part of a nursing facility. Therefore, in assessing SNFs' access to capital, we look at the availability of capital for nursing homes. Because Medicare makes up a minority share of most nursing homes' revenues, access to capital generally reflects factors other than the adequacy of Medicare's payments.

In nursing homes, capital is less likely to finance new construction than to update facilities or finance purchases of existing facilities due to state certificate-of-need (CON) laws that limit bed supply. The majority of states (35 states plus the District of Columbia) have

CON laws, though 22 states suspended these laws during the PHE.

In 2020, there were fewer mergers and acquisitions (151) compared with 2019 (186) (Irving Levin Associates Inc. 2021). The low level of activity reflected several factors, including the scaling back of real estate investment trusts (REITs) in this setting, uncertainty about the impacts of the pandemic on operations, and questions of how to consider the PHE-related federal funds and policies in assessing an operator's assets. Medicare is a preferred payer, and a high Medicare

Skilled nursing facility value-based purchasing program

As part of the Protecting Access to Medicare Act of 2014 (PAMA), the Congress enacted a skilled nursing facility (SNF) value-based purchasing (VBP) policy that began adjusting payments to providers in October 2018.¹⁹ The VBP program withholds 2 percent of payments from providers meeting the minimum case count to participate in the program. Of the withheld amount, 60 percent is returned to providers as incentive payments and 40 percent is retained as program savings. In each of the first three years of the program, the majority of providers earned back some portion of the 2 percent of payments withheld, but, on net, their payments remained below what they would have been without the program. During the public health emergency (PHE), payments are lowered by 1.2 percent (the 2 percent withhold minus the 40 percent retained by the program) for all providers meeting the minimum stay count.

PAMA required the Commission to report on the status of the VBP program and make recommendations as appropriate. In June 2021, the Commission identified five shortcomings of the design that warrant correction: (1) performance is measured with a single measure; (2) the minimum

stay counts do not ensure that the results capture actual performance rather than random variation; (3) the performance scoring includes “cliffs,” or perfunctory cut points, that do not provide enough encouragement for improvement; (4) the design does not address the variation across SNFs in the social risks of their patient populations; and (5) the VBP program does not distribute the entire pool of incentive payments but instead retains a portion as program savings (Medicare Payment Advisory Commission 2021). Although the Consolidated Appropriations Act, 2021, made changes that could improve the program (depending on how they are implemented), the Commission concluded that fundamental flaws remain.

Based on its analysis of an alternative design that would correct the program’s current shortcomings, the Commission recommended that the Congress eliminate the current VBP program and replace it with an alternative design. Because there is not a measure of patient experience, the Commission also recommended that the Secretary finalize development of and begin to report patient experience measures (Medicare Payment Advisory Commission 2021). ■

volume continues to enhance the attractiveness of a potential transaction.

In keeping with previous trends, there is an increasing bifurcation between SNFs that are highly valued (e.g., younger facilities with high shares of Medicare and private-pay patients and high occupancy rates) and those that are not (e.g., older facilities with high shares of Medicaid patients and lower occupancy rates). At the high end, compared with 2019, a larger share of the industry’s transactions in 2020 had average sales prices per bed of \$125,000 or more (17 percent of transactions in 2020 compared with 10 percent in 2019)

(Irving Levin Associates Inc. 2021). SNFs at the low end (under \$50,000 per bed) made up a growing share of transactions (38 percent in 2020, up from 19 percent in 2019) and may represent turnaround opportunities.

In 2021, despite the low occupancy rates and uncertainty about continued federal funding, the industry is reportedly “on fire” with increased mergers and acquisitions (Zorn 2021a). Compared with the first quarter of 2020, the average price per bed in the first quarter of 2021 increased 22 percent (JLL 2021). Historically, buyers tend to be regional, given the premium on knowing the market, potential hospital

and health system partners, and a state's regulatory environment. SNFs that offer specialized care and focus on value will be particularly attractive (Zorn 2021b). Poor-performing SNFs are expected to sell to investors looking for turnaround opportunities. Some nursing homes may have increased demand for capital if they opt to create single-occupancy rooms and negative-pressure rooms and to improve their ventilation and infection control systems.

The Department of Housing and Urban Development (HUD) remains an important lending source for this sector. Section 232 loans help finance nursing homes by providing lenders with protection against losses if borrowers default on their mortgage loans. Activity was high in 2021. HUD financed 328 projects, with the aggregate insured amount totaling \$3.9 billion (Department of Housing and Urban Development 2021). The dollar amount was about 10 percent lower than the previous year's, but the number of projects was about the same.

Although the total margins are slim (as discussed below) and occupancy rates may never fully rebound, the SNF sector remains attractive for investors. The aging of the population will maintain demand for SNF and nursing facility services, and the setting has relatively lower costs compared with other institutional PAC. Further, investors consider the setting a relatively "safe bet," given its reliance on government funds (Spanko 2020). Any reluctance to invest in this setting does not reflect the adequacy of Medicare's FFS SNF payments: Medicare remains a preferred payer.

Access to federal and other coronavirus PHE-related funding helped maintain operations in 2020

During 2020, federal funds and programs greatly assisted this sector in maintaining its operations. General distribution of Provider Relief Fund payments, amounting to 2 percent of total revenues, aimed to help prevent, prepare for, and respond to the coronavirus outbreak and reimburse providers for lost revenues and health care-related expenses attributable to COVID-19. Nursing homes received these general distribution funds and an additional \$10 billion in targeted funds. About half of the targeted funds were earmarked for infection control and creating and maintaining a safe environment, and

\$2.25 billion was slated for quality incentive payments (apart from the VBP program). The incentive funds were disbursed in multiple phases, not all of which are fully captured in the 2020 cost reports. The temporary suspension of the sequestration began on May 1, 2020, and increased Medicare payments by about 1.8 percent.²⁰ Other policies and programs offered additional financial support to providers, including the Medicare accelerated and advance payments program, employer payroll tax deferral, and the Paycheck Protection Program.²¹

The industry trade press and earnings reports for the publicly traded companies confirm that the federal funds were essential to offset the increased costs and decreased revenue that has accompanied the PHE. The Commission estimated that these funds would have underwritten the reductions to net revenues and providers' higher costs for 11 to 14 months from the beginning of the PHE, though the impact would vary considerably across individual facilities. The experiences of two large nursing home companies illustrate the widely differing effects of COVID-19 on nursing home providers' finances. Facing dire financial circumstances, Genesis Healthcare undertook a strategic restructuring and opted to delist itself from the New York Stock Exchange. Conversely, the Ensign Group has recorded record profits throughout the PHE and returned all federal funds.

In addition to federal assistance, 37 states plus the District of Columbia increased their Medicaid nursing home payment rates in fiscal year 2020, 8 did not, and 5 states did not respond to the survey conducted by the Kaiser Family Fund (Gifford et al. 2020). The survey also reported that in 2021, 30 states planned to increase their rates.

All-payer total margins increased in 2020

The estimated all-payer total margin for nursing homes (reflecting all lines of business and all payers) in 2020 was 3 percent, a considerable improvement from 2019 (when it was 0.6 percent). Between 2019 and 2020, the share of nursing homes with negative margins declined substantially, from 45 percent to 34 percent. These improvements were largely due to the general and targeted funding nursing homes received during the PHE, the changes in Medicare policies, and the temporary increases in Medicaid rates made by many

Medicare's skilled nursing facility payments should not subsidize payments from Medicaid or other payers

Medicare payments (which are financed by taxpayer contributions to the Part A Trust Fund) to skilled nursing facilities (SNFs) effectively subsidize payments from other payers, most notably Medicaid. High Medicare payments also likely subsidize payments from private payers. Industry representatives contend that this subsidization should continue, but the Commission believes such cross-subsidization is poor policy for several reasons.

First, it results in poorly targeted subsidies. Facilities with high shares of Medicare beneficiary days receive the most in “subsidies” from higher Medicare payments, while facilities with low shares of Medicare beneficiary days—presumably the facilities with the greatest financial need—receive the least.

In addition, Medicare's subsidization does not differentiate among states with relatively high

and low Medicaid payments. If Medicare raises or maintains its high payment levels, states could be encouraged to further reduce their Medicaid payments and, in turn, create pressure to raise Medicare rates even more. These higher Medicare payments could also further encourage providers to select patients based on payer source or to rehospitalize dual-eligible patients (those who have both Medicare and Medicaid coverage) to qualify them for a Medicare-covered, higher-payment stay.

Finally, Medicare's high payments represent a subsidy from Part A Trust Fund dollars (and taxpayer support) of the low payments made by states and private payers. Moreover, maintaining or raising Medicare's payments would exert additional fiscal pressure on the already fiscally challenged program. If the Congress wishes to financially support certain nursing facilities efficiently, it could do so through a separate, targeted policy. ■

states. The improvement in financial performance is consistent with a recent study of 8 publicly traded REITs and 3 nursing home chains: It found that 9 of the 11 companies reported higher net income in 2020 compared with 2019 (Kingsley and Harrington 2021).²²

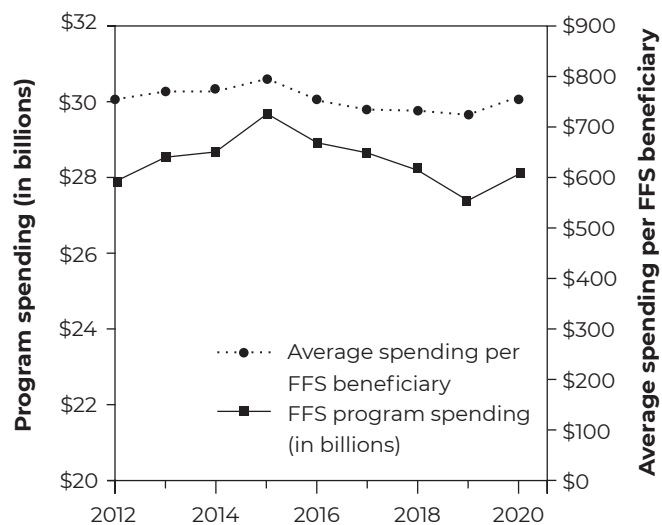
Facilities are required to report the COVID-19 PHE funds in their 2020 Medicare cost reports, and these funds are included in the 2020 total margin.²³ However, the reporting of these funds appears to be incomplete and likely understates total margins. That said, we can use the reported funds to estimate a lower bound on the impact of these funds on total margins. In aggregate, without these additional funds, total margins would have been about -1.8 percent. Clearly, these funds helped compensate providers for the added costs associated with the pandemic. So, while the pandemic has been a tragedy for beneficiaries and

nursing home staff, in aggregate it has not had negative financial impacts on providers. Indeed, the federal funds improved providers' bottom lines and may have averted the closing of some financially distressed providers.

Because the all-payer total margin includes Medicaid-funded long-term care (the nursing home portion of the business), the overall financial performance of this setting is heavily influenced by state policies regarding the level of Medicaid payments and the ease of entry into a market (e.g., whether a certificate of need is required). The industry has long argued that high Medicare margins are needed to subsidize the low payments from Medicaid. The Commission contends that this cross-subsidization is poor policy (see text box on subsidizing payments from other payers).

**FIGURE
7-4**

After steadily declining since 2015, total FFS program spending on SNF services increased between 2019 and 2020



Note: FFS (fee-for-service), SNF (skilled nursing facility). Fiscal year-incurred spending (that excludes cost sharing) is shown.

Source: Office of the Actuary 2021b.

SNFs are expected to continue to pursue multiple strategies to enhance their financial performance. These include expanded relationships with accountable care organizations, investments in specialty care (such as dialysis and ventilator care), growth of ancillary businesses (home health care, hospice, pharmacy), and the development of special needs plans (Spanko 2021).

Medicare payments and providers' costs: Medicare margins remained high in 2020

In 2020, Medicare FFS spending on SNF services increased 2.7 percent despite the large decline in volume. Higher payments resulted from the new case-mix system and pandemic-related policy changes. Facilities kept the growth in their costs per day below the update made to payment rates. As a result, between 2019 and 2020, the aggregate Medicare margin for freestanding SNFs rose almost 5 percentage points, climbing from 11.9 percent to 16.5 percent. Medicare margins for individual facilities varied considerably

across providers. Large SNFs, SNFs with lower average daily costs, and for-profit facilities had much higher margins compared with other facilities. Some MA plans' payment rates were considerably lower than Medicare's FFS rates, suggesting that many SNFs are willing to accept these rates to treat beneficiaries.

Trends in FFS spending and cost growth

For fiscal year 2020, CMS estimates that Medicare FFS spending for SNF services was \$28.1 billion, a 2.7 percent increase from 2019 (Figure 7-4) (Office of the Actuary 2021b). Aggregate spending increased despite large volume declines during the PHE and the secular downward trends that reflect expanded enrollment in MA (whose spending on SNF care is not included in FFS spending data) and participation in APMs, which create incentives for entities to lower SNF use. Lower hospitalization rates are also a contributing factor.

Several factors contributed to the increase in program spending. First, the new case-mix system raised payments by over 5 percent compared with what payments would have been under the old case-mix system. Second, the Congress temporarily suspended the sequester that otherwise would have lowered payment rates. Third, the PHE-related policies (the "skilling in place" and the effective extension of the benefit period) shifted spending onto Medicare for beneficiaries whose care would normally not have been covered by the program. Finally, the complexity of patients admitted may have increased because some lower-complexity beneficiaries avoided the setting and SNFs received fewer referrals for care after elective surgery during the spring of 2020. A higher average case mix would increase the average payment per day.

On a per day basis, between 2019 and 2020, the average payment increased 8.6 percent. Per day costs increased 2.1 percent over the same period, considerably higher than the 1.4 percent increase between 2018 and 2019. The relatively high cost growth reflects fewer days over which to spread fixed costs and higher unit costs for labor and PHE-related expenses (e.g., cleaning and personal protective equipment). Between February and December 2020, data from the Bureau of Labor Statistics (BLS) show an 8.2 percent rise in weekly wages, capturing the higher use of more-costly contract labor, overtime, and pandemic premium pay. Countering this relatively high cost growth was

the decline in employment in nursing homes. During the same time period, BLS data show a 9.6 percent decline in the number of employees. One factor was the new case-mix system, which decreased the need for therapy staff. A study found that therapy staffing minutes per day declined 5.5 percent in the week immediately following the PDPM implementation and continued to decline for the next six months (Prusynski et al. 2021). Between 2019 and 2020, ancillary costs per day decreased almost 14 percent.

Consistent with past years, there were differences in cost growth and level of costs by ownership. Nonprofit providers reported larger increases in cost per day compared with for-profit providers (3.8 percent compared with 1.1 percent). Nonprofit providers had 13 percent higher costs per day than for-profit providers, in part because they are smaller and have lower average daily census, so they cannot achieve the same economies of scale as larger for-profit facilities.

SNF aggregate Medicare margins remain high

The aggregate Medicare margin is a key measure of the adequacy of the program's payments because it compares Medicare's FFS payments with providers' costs to treat FFS beneficiaries. This year, it is especially hard to assess how much "weight" to give this indicator of payment adequacy, given the unusual circumstances of 2020—the effects of the pandemic on costs, volume, and revenues; the varying impacts of the pandemic over time and by geography; differences in the mix of patients admitted to SNFs during the PHE; and the changes in policies made in response to the PHE. Adding to the mix was the implementation of the new case-mix system in October 2019. Some of the pandemic-related changes will be temporary (such as the policy changes tied to the PHE), while others are expected to be permanent.

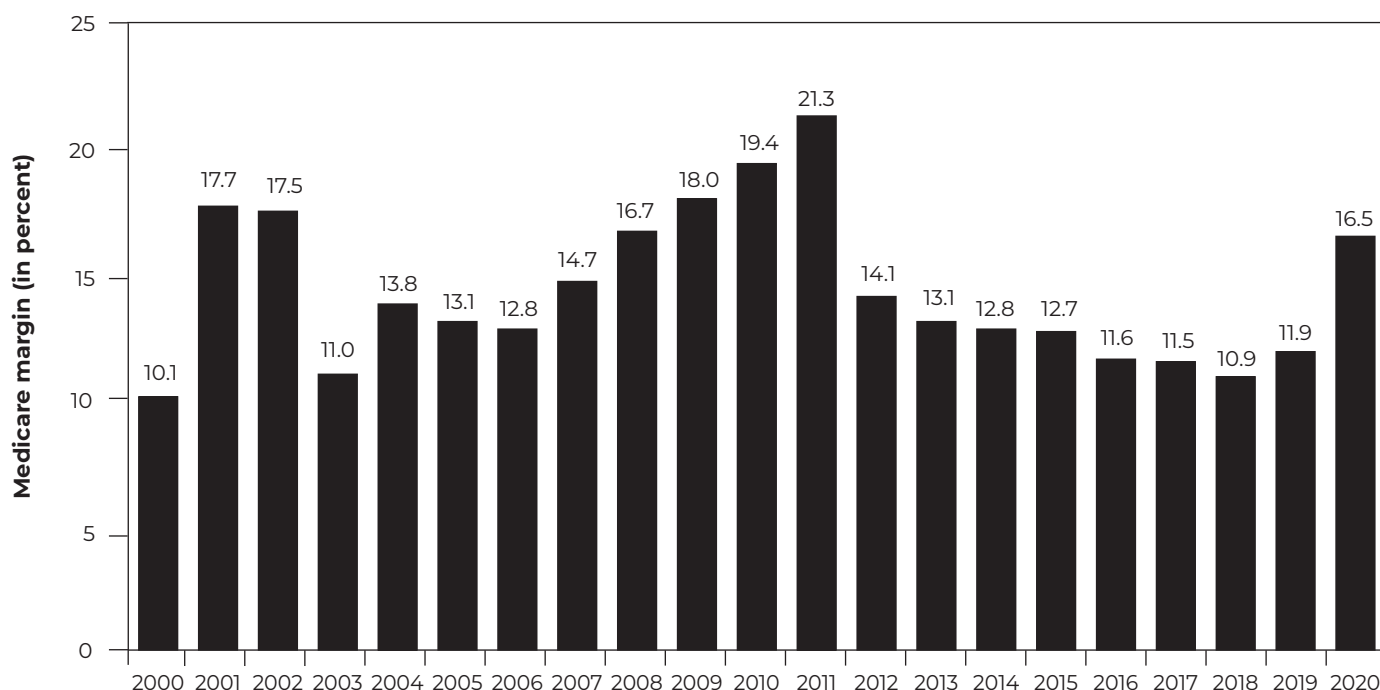
Further complicating the picture are differences in the cost reporting periods across providers. The cost reporting periods for SNFs vary, with the midpoint of their reporting period falling in fiscal year 2020. While always true, the differences are more relevant in 2020 because the cost reports include varying numbers of months after the declaration of the PHE, the elimination of the sequester, and the new PDPM case-mix system. About three-quarters of freestanding SNFs are on a calendar reporting year, so their cost reports

include 8 months of relief from the sequester and 12 months of the PDPM. Most of the remaining facilities have July 1 or October 1 reporting period start dates, so their cost reports will reflect pandemic circumstances for different lengths of time. Given the duration of the PHE and related policies and the timing of cost reports, we expect to see effects of these policies on payments and costs in future years' analyses.

With these caveats in mind, we report the aggregate Medicare margin for all providers and for various subgroups of providers to give a sense of the variation in performance. In 2020, the aggregate Medicare margin for freestanding SNFs was 16.5 percent, a sizable increase from 2019 (Figure 7-5, p. 252). For the 21st consecutive year, the aggregate Medicare margin was above 10 percent. The aggregate Medicare margin increased in 2020 because SNFs kept their cost growth below the payment rate increase and, on the payment side, providers received augmented payments from the new case-mix system and the elimination of the sequester.

The aggregate Medicare margin does not consider the additional federal relief funds providers received. These funds were intended to help cover lost revenue and additional costs to treat patients—including Medicare beneficiaries. Therefore, we allocated a portion of the relief funds based on Medicare's share of total facility days.²⁴ With these additional funds, we estimate that the aggregate Medicare margin was 19.2 percent, assuming these funds did not affect providers' costs. The reporting of these funds appears to be incomplete, in part because some of the funds were disbursed in 2021.²⁵ As a result, the margin that considers these funds may be understated.

Hospital-based facilities (3 percent of program spending on SNFs) continued to have very low negative Medicare margins (the aggregate Medicare margin was -50 percent in 2020 compared with -68 percent in 2019), in part because of the higher costs per day reported by hospitals. However, hospital administrators consider their SNF units in the context of the hospital's overall financial performance and mission. Hospitals with SNFs can lower their inpatient lengths of stay by transferring patients to their SNF beds, thus making inpatient beds available to treat additional inpatients.

**FIGURE
7-5****Aggregate freestanding SNF Medicare margins have been above 10 percent since 2000**

Note: SNF (skilled nursing facility). Medicare margin is calculated as the sum of Medicare payments minus the sum of Medicare costs, divided by Medicare payments. The margin for 2020 excludes the federal relief funds.

Source: MedPAC analysis of freestanding SNF cost reports, 2000–2020.

Aggregate Medicare margins varied widely in 2020

Aggregate Medicare margins (excluding the federal relief funds) varied widely across freestanding SNFs (Table 7-4). One-quarter of SNFs had Medicare margins that were 28.7 percent or higher; one-quarter had margins that were 4 percent or lower. Twenty percent of providers had negative Medicare margins, a decrease from 2019 (when the share was 24 percent) (data not shown). Compared with urban SNFs, rural SNFs and SNFs located in frontier counties had higher aggregate Medicare margins.

The differences in Medicare margins between for-profit and nonprofit facilities have steadily increased, reaching over 19 percentage points in 2020. The disparity reflects differences in costs per day and, to

a lesser extent, payments. Compared with for-profit facilities, nonprofit facilities are smaller (fewer beds and lower volume), have higher costs per day, and had much higher growth in costs per day between 2019 and 2020. Nonprofit SNFs also had lower payments per day (1.8 percent lower; data not shown).

Differences in aggregate Medicare margins partly reflect the economies of scale that larger SNFs are able to achieve. Small (20 to 50 beds) and low-volume facilities (bottom quintile of total facility days) had low average Medicare margins (–0.5 percent and 2.1 percent, respectively) compared with large (100 to 199 beds) and high-volume (top quintile of days) facilities (18.2 percent and 19.9 percent, respectively). SNFs with the lowest cost per day (the bottom 25th percentile of the distribution of cost per day) had Medicare margins

that were more than 30 percentage points higher than SNFs with the highest (in the top 25th percentile) cost per day.

Relatively efficient SNFs further illustrate that Medicare's payments are too high

The Commission is required by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 to consider the costs associated with efficient providers. The Commission follows two principles when selecting a set of relatively efficient providers. First, the providers must do relatively well on both cost and quality metrics and their performances must be consistent (see text box for details on identifying relatively efficient SNFs, p. 255). The Commission's approach is to examine those providers that meet a preestablished set of criteria. It does not establish a set share (for example, 10 percent) of providers to be considered relatively efficient and then define criteria to meet that pool size. Then the Commission reports performance of SNFs during the year of performance (this year, 2020), comparing efficient providers with other providers.

In a typical year, the Commission informs its update discussion by examining the adequacy of payments for those providers that perform relatively well on cost and quality measures. However, this year the cost and quality measures are sufficiently affected by the pandemic (and its variations over time and by geography) that it may be hard to draw meaningful conclusions from the analysis. We report our findings with the broad caveat that performance in 2020 may have little to do with relative efficiency.

Our analysis included 4,256 SNFs that had quality and cost report information for the 2017 to 2020 period and at least 60 stays each year. Nine percent of the SNFs met the criteria we use to define relatively efficient providers.

Compared with other SNFs in 2020, relatively efficient SNFs had community discharge rates that were 15 percent higher and hospitalization rates that were 21 percent lower (Table 7-5, p. 254). The median standardized cost per day for efficient SNFs was 7 percent lower than the median for other SNFs. The aggregate Medicare margin (excluding the federal relief funds) for these SNFs was high (22.8 percent),

**TABLE
7-4**

Variation in freestanding SNF aggregate Medicare margins reflects differences in economies of scale, 2020

Provider group	Medicare margin
All providers	16.5%
For profit	20.0
Nonprofit	0.6
Rural	18.4
Urban	16.1
Frontier	19.1
25th percentile of Medicare margins	4.0
75th percentile of Medicare margins	28.7
Cost per day: High	0.2
Cost per day: Low	31.7
Small (20–50 beds)	–0.5
Large (100–199 beds)	18.2
High facility volume (highest 20%)	19.9
Low facility volume (lowest 20%)	2.1

Note: SNF (skilled nursing facility). Except for the margins at the 25th and 75th percentiles, the margins in the table are aggregates for the facilities included in the group. All margins exclude the federal relief funds. "Frontier" refers to SNFs located in counties with six or fewer people per square mile. "Facility volume" includes all facility days.

Source: MedPAC analysis of 2020 freestanding SNF Medicare cost reports.

indicating that although these providers were relatively efficient, the Medicare program could get better value for its purchases if its payments were lower. The high margin for these providers underscores the need for the program to lower its payments to more closely align with the costs of care.

Measures of economies of scale (average daily census and occupancy) were similar for the relatively efficient

**TABLE
7-5****Financial performance of relatively efficient SNFs was a combination of lower cost per day and higher revenues per day, 2020**

Performance measure / subgroup	Type of SNF		Ratio of relatively efficient to other SNFs
	Relatively efficient	Other SNFs	
Rate of successful discharge to the community	46%	40%	1.15
Hospitalization rate	11%	14%	0.79
Standardized cost per day	\$445	\$479	0.93
Medicare revenue per day	\$578	\$557	1.04
Medicare margin	22.8%	15.5%	N/A
All-payer total margin	4.6%	3.2%	N/A
Facility case-mix index	1.64	1.67	0.98
Medicare average length of stay	30 days	35 days	0.86
Occupancy rate	79%	79%	1.00
Average daily census	92	90	1.02
Medicaid share of facility days	59%	58%	1.02
Share urban	87%	85%	N/A
Share for profit	82%	72%	N/A
Share nonprofit	15%	24%	N/A

Note: SNF (skilled nursing facility), N/A (not applicable). To be included in the analysis, the SNF had to have quality and cost report information for 2017 to 2020 and a minimum of 60 stays a year. The number of freestanding facilities included in the analysis was 4,256, of which 383 (or 9 percent) were identified as “relatively efficient” based on their cost per day and two quality measures (community discharge and readmission rates) between 2017 and 2019. Relatively efficient SNFs were those in the best third of the distribution for one measure and not in the worst third for any measure in each of three years and were not a facility under “special focus” by CMS. Costs per day and per discharge were standardized for differences in case mix (using the nursing component relative weights) and wages. Quality measures were rates of risk-adjusted successful discharge to the community (higher rates are better) and hospitalization during the SNF stay (lower rates are better). Table shows the medians for the measure. The federal relief funds are included in the all-payer total margin but excluded from the aggregate Medicare margin.

Source: MedPAC analysis of quality measures and Medicare cost report data for 2017–2020.

and other SNFs, most likely because the higher minimum-stay requirements for the quality measures exclude small providers from the analysis. Relatively efficient SNFs were more likely to be for profit and were geographically dispersed (located in 41 states). Of the 383 SNFs that were relatively efficient in this year’s analysis, 211 (55 percent) were also relatively efficient last year.

Although these results are consistent with findings from prior years when the pandemic was not a factor, we are reluctant to place much weight on this analysis. The cost and quality measures are both heavily

influenced by the impact of the pandemic and thus may distort the performances in 2020.

FFS payments for SNF care are considerably higher than MA payments

The comparison of Medicare FFS and MA payments also indicates that Medicare’s payments under the SNF PPS are too high. (We use “MA” as shorthand for all managed care payments since MA makes up the majority of rates reported as “managed care payments.”) We compared Medicare FFS and MA payments for two companies (Diversicare and the Ensign Group) with

Identifying relatively efficient skilled nursing facilities

We defined relatively efficient skilled nursing facilities (SNFs) as those with relatively low costs per day and relatively good quality of care for three years in a row, from 2017 through 2019, for this report. The cost per day was calculated using cost report data and was adjusted for differences in case mix (using the nursing component relative weights) and area wages. To assess quality, we examined risk-adjusted rates of successful discharge to the community and hospitalizations during the SNF stay (for definitions of the measures, see p. 245). To meet a reliability standard of 0.7, only facilities with at least 60 stays were included in the quality measures. To be included in the relatively efficient group, a SNF had to be in the best third of the distribution of at least one measure and not in the bottom third of any measure for three consecutive years. Another criterion was that SNFs not be part of CMS's Special

Focus Facility Initiative for any portion of time covered by the definition (2017 through 2019).²⁶

The method we use to assess performance attempts to limit incorrect conclusions about performance based on poor data. Using three years of data to categorize SNFs as efficient (rather than just one year) avoids categorizing providers based on random variation or on one “unusual” year. In addition, by first assigning a SNF to the “relatively efficient” group or the “other” group and then examining the group’s performance in the next year, we avoid having a facility’s poor data affect both its own categorization and the assessment of the group’s performance. Thus, a SNF’s erroneous data could result in its inaccurate assignment to a group, but because the group’s performance is assessed with data from later years, these “bad” data would not directly affect the assessment of the group’s performance. ■

publicly available information on their revenues per day. We also included the average payments per day reported by the National Investment Center for Senior Housing and Care for 1,289 SNFs. For the admittedly limited snapshot, Medicare’s FFS per day payments were more than 27 percent higher than MA rates (Table 7-6, p. 256).

We do not know whether the lower average daily payment by MA plans reflects differences in service intensity, lower payments for the same service, or some combination. It is possible that companies with SNF holdings differ in their ability to negotiate high payment rates from MA plans. We also do not know how these rates compare with rates paid to other SNF chains and independent facilities.

We compared broad patient characteristics (average age and risk scores) of beneficiaries enrolled in FFS and MA plans and conclude that those differences are unlikely to explain the magnitude of the differences between FFS payments and payments typically made by MA plans. Compared with FFS beneficiaries, MA enrollees were, on average, the same age and had slightly lower risk scores (3 percent lower, indicating fewer comorbidities). (The risk scores for MA enrollees may be lower because some SNFs might encourage enrollees whose health is in decline to switch to FFS.²⁷ Also, some MA plans waive the three-day prior hospital-stay requirement, so their SNF users could be less medically complex.) The considerably lower MA payments indicate that some facilities accept much lower payments to treat MA enrollees who are not that different from FFS beneficiaries. Some publicly

**TABLE
7-6****Comparison of SNFs' Medicare fee-for-service and managed care daily payments, 2021**

Company	Medicare payment		Ratio of FFS to MA payment
	FFS	Managed care (MA)	
Diversicare	\$489	\$416	1.18
Ensign Group	688	504	1.37
National Investment Center for Seniors Housing & Care	560	447	1.25

Note: SNF (skilled nursing facility), FFS (fee-for-service), MA (Medicare Advantage). MA makes up the majority of managed care payments. In 2021, Diversicare had 62 facilities; the Ensign Group had 219 facilities. The information for the National Investment Center for Seniors Housing & Care shows the average rates for a survey of 1,289 SNFs.

Source: Diversicare and Ensign Group 10-Q 2021 reports available at each company's website; National Investment Center for Seniors Housing & Care 2021.

traded post-acute care firms with SNF holdings report seeking managed care patients as a business strategy, indicating that the MA rates are attractive.

Payments and costs for 2022

To project the aggregate fiscal year 2022 Medicare margin for freestanding SNFs, the Commission considered the relationship between SNF costs and Medicare payments in 2020 as a starting point. We made assumptions about how costs and payments will change and noted how better and worse circumstances would affect the projection. The extent to which the pandemic will continue to affect providers' volume, costs, and revenues makes this year's projection especially uncertain.

Our projections include assumptions about pandemic-related costs that we expect to remain for the foreseeable future and therefore should be incorporated into the update. The cost reports for 2020 capture some of the incurred additional expenses associated with personal protective equipment, cleaning, testing, labor (due to overtime, premium pandemic pay, and the expanded use of contract labor), and higher patient complexity. However, due to timing differences in the cost reporting periods, some providers' cost reports will miss some portion of PHE-

related costs in fiscal year 2020, and these costs will be captured in future years' cost reports.

To estimate costs, we used CMS's Office of the Actuary's (OACT's) estimates of the market baskets for 2021 and 2022 (based on a June 2021 forecast). These market baskets indicate how SNFs' costs will change in those years, including the costs of labor. OACT estimates that the market basket increase will be 3.3 percent in fiscal year 2021 and 3.2 percent in fiscal year 2022. The market basket estimates are much higher than the estimate for 2020 (2 percent) and reflect the lingering higher costs associated with paying higher wages to attract workers to this setting, the higher costs of personal protective equipment and cleaning, and higher economy-wide inflation. The estimates of cost growth could be low or high depending on how actual costs differ from the projections. For example, nursing homes' labor costs could be higher than projected if facilities have to offer even higher wages than what was assumed.

To estimate payments in 2021 and 2022, we assumed that payment rates each year would increase by the updates specified in the final rules for those years, 2.2 percent and 1.2 percent, respectively.²⁸ The update for 2022 is relatively low because CMS made a forecast

error correction (–0.8 percent) to the 2020 market basket (its estimate was 2.8 percent, but the actual update was 2.0 percent).²⁹ We also factored in the suspension of the sequester from May 1, 2020, through March 31, 2022, the reintroduction of a small reduction (1 percent) between April 1, 2022, and June 30, 2022, and the full reinstatement of the sequester (2 percent reduction to payments) beginning on July 1, 2022.

We did not consider additional changes in payments due to potential changes in patient acuity or the recording of patient characteristics that would raise payments. Patient acuity might have increased if, for example, COVID-19 diagnoses were not fully reported in 2020. Cases may have been undercounted in 2020 because, early in the pandemic, the code in the International Classification of Diseases, 10th Revision, Clinical Modification was not yet available for documentation and testing was not yet widely available to confirm cases. Even if patient acuity increased, we do not know if the case-mix system fully accounts for the higher costs.³⁰ Payments might also have increased if providers changed their coding of patient characteristics (e.g., depression, difficulty swallowing, and comorbidities), which may more accurately reflect patient characteristics or raise payments with no commensurate change in costs.

The projected aggregate Medicare margin for 2022 for freestanding SNFs is 14 percent. We expect the margin to drop in 2022 because cost growth is likely to exceed the payment updates and the sequester will begin to be reapplied on April 1, 2022. Different assumptions about costs, case-mix, and revenues will raise or lower the projection.

How should Medicare payments change in 2023?

In considering how payments should change for 2023, we note that current law is expected to increase payment rates by 1.8 percent in 2023 (an estimated market basket increase of 2.4 percent minus a productivity adjustment of 0.6 percent). CMS will revise its estimates before the publication of the final rule, expected before August 1, 2022. The Medicare margin will depend on many factors. On the payment side, the

update to the payment rate may or may not accurately capture any changes in patient acuity or the recording of patient characteristics to raise payments (with no effect on costs). Costs may increase more or less than the market basket estimates, in part depending on the extent to which providers adjust their costs based on changes in volume.

Further complicating the context for 2023 are potential adjustments CMS may make to fiscal year 2023 payment rates to reestablish budget neutrality in the case-mix system. As discussed earlier, the PDPM raised payments in 2020 by 5.3 percent; in this year's final rule, CMS noted that it intends to adjust the case-mix indexes in future years to remove the unintended increases in payments. CMS will consider the stakeholder suggestions the agency received for the methodology it will use to estimate the recalibration needed to maintain budget neutrality and the time line for implementing any changes. Its final decision about the payment rates for fiscal year 2023 will not be known until the final rule is published later in 2022.

While the pandemic has had devastating effects on beneficiaries and nursing home staff, the combination of the new case-mix system, the provider relief funds, and the temporary federal policies resulted in improved financial performance for SNFs in 2020. Medicare and total margins increased, and there were fewer SNFs with negative Medicare margins and all-payer total margins. The high FFS payments relative to rates paid by at least some MA plans suggest that many facilities are willing to accept much lower rates to treat Medicare beneficiaries. The Medicare margin indicates that the SNF PPS exerts too little pressure on providers. The other indicators—access to care and quality—may not signal anything about the adequacy of Medicare payments in 2020 but instead reflect the broad impact of the pandemic on service use and our measures of quality. Furthermore, transaction activity in the industry suggests that buyers think there will continue to be financial opportunities in this setting.

RECOMMENDATION 7

For fiscal year 2023, the Congress should reduce the 2022 Medicare base payment rates for skilled nursing facilities by 5 percent.

RATIONALE 7

Despite the severe effects of the pandemic on beneficiaries and nursing home staff, the financial performance of SNFs did not deteriorate. Quite the opposite: Due to a new case-mix system that inadvertently raised payments and the suspension of the sequester, the aggregate Medicare margin climbed to a nine-year high (16.5 percent). With a projected aggregate Medicare margin in 2022 of 14 percent, payments will remain more than adequate to ensure beneficiary access to SNF care even if payments are lowered.

The level of Medicare's payments indicates that a reduction (i.e., not simply maintaining payment rates at current levels) is needed to better align aggregate payments to aggregate costs. Last year, the Commission recommended a zero update, opting to proceed cautiously as the effects of the pandemic and the case-mix system played out. We now know that the financial performance of SNFs is the most robust it has been since 2011. And while CMS may opt to apply a downward adjustment to payment rates for fiscal year 2023 to restore budget neutrality following implementation of the new case-mix system, we cannot base our recommendation on actions that have not yet been determined. Those actions could include a smaller reduction and an approach that phases in the reduction over multiple years.

Although the overall financial performance of SNFs is good and projected to remain so, the share of providers that operated at a loss in 2020, as well as the large difference in performances between nonprofit and for-profit SNFs, indicates that not all providers do well financially. However, poor performances reflect, in part, an inability to control cost growth or achieve economies of scale, or both. In the interest of responsible fiscal stewardship of the program, it is not sound policy to raise payments for all providers to address the poor performance of some. Nor does the Commission support differential updates for providers based on ownership status or geographic location. Instead, the Congress could consider two approaches that would redistribute Medicare's payments. First, the Congress could direct Medicare to redistribute payments to support select facilities that are necessary for beneficiaries' access to care. Over the coming year,

the Commission plans to analyze the characteristics of providers with consistently poor financial performance. Second, the Congress should revamp the value-based purchasing program (including larger incentive payments) that would direct funds to facilities that perform well on quality and resource use measures, as the Commission recommended in June 2021 (Medicare Payment Advisory Commission 2021).

IMPLICATIONS 7

Spending

- Current law is expected to increase payment rates by 1.8 percent in 2023. This recommendation would lower program spending relative to current law by over \$2 billion in one year and over \$10 billion over five years.

Beneficiary and provider

- We do not expect this recommendation to have adverse effects on beneficiaries' access to care. Given the current level of payments, we do not expect the recommendation to affect providers' willingness or ability to care for Medicare beneficiaries.

Medicaid trends

Section 2801 of the Affordable Care Act of 2010 requires the Commission to examine spending, use, and financial performance trends in the Medicaid program for providers with a significant portion of revenues or services associated with Medicaid. We report on nursing home spending trends for Medicaid and financial performance for non-Medicare payers. (Medicaid revenues and costs are not reported in the Medicare cost reports.) In a joint publication with the Medicaid and CHIP Payment Access Commission, we reported on characteristics, service use, and spending for dual-eligible beneficiaries (Medicare Payment Advisory Commission and the Medicaid and CHIP Payment and Access Commission 2018).

Medicaid covers nursing home (long-term) care (which Medicare does not cover) and a portion of the skilled nursing care furnished to beneficiaries who are dually eligible for Medicaid and Medicare. Some Medicaid programs pay dual-eligible beneficiaries' Medicare

**TABLE
7-7****The number of nursing homes treating Medicaid enrollees declined slightly from 2020 to 2021**

	2017	2019	2020	2021	Average annual percent change	
					2017–2020	2020–2021
Number of facilities	15,069	14,954	14,827	14,720	–0.6%	–0.7%

Note: The 2021 number is through October of that year; it does not include data from the full calendar year. Counts include dually certified skilled nursing facilities/nursing facilities, distinct-part skilled nursing facilities/nursing facilities, and nursing facilities.

Source: Certification and Survey Provider Enhanced Reporting on CMS's Survey and Certification Providing Data Quickly system, 2017–2021.

copayments that begin on day 21 of a SNF stay and for any skilled care for beneficiaries who exhaust their Part A coverage (that is, if their Part A stay exceeds 100 days).

Count of Medicaid-certified nursing homes

Between 2020 and 2021, the number of nursing facilities certified as Medicaid providers declined approximately 0.7 percent to 14,720 (Table 7-7), similar to the small decline of Medicare providers. We do not know whether the providers that terminated participation in the Medicaid program remained open but no longer accepted Medicaid patients, closed, or were purchased by another entity and remained open.

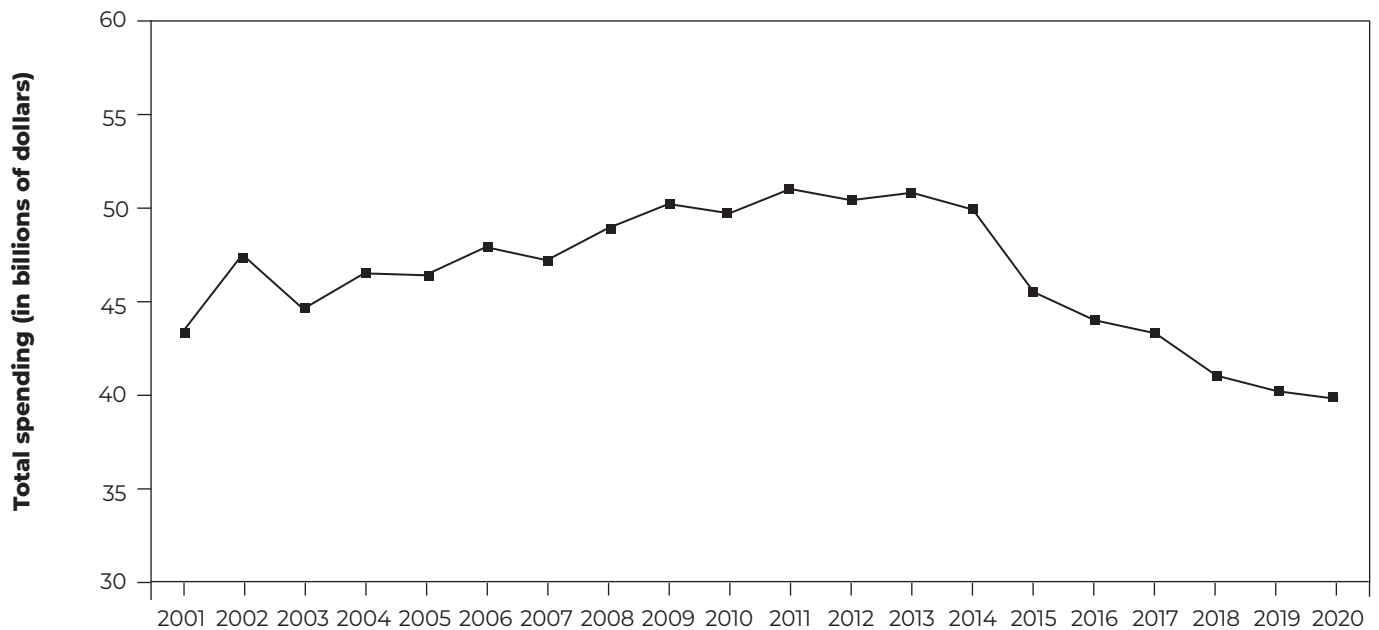
In 2021, of the 14,685 Medicaid nursing homes active in January, approximately 0.3 percent of providers had terminated as of October, while 41 providers opened during the same period (data not shown). The share of facilities that terminated varied by state. States with the highest termination rates during this period included the District of Columbia (11 percent); Idaho and Rhode Island (3 percent each); and Washington and Delaware (1 percent each). Historically, the lower payment rates paid by Medicaid, the lower use of these facilities by MA plans and alternative payment models, and the overexpansion of supply in states with no certificate-of-need laws (such as Texas) contributed to these facilities' fiscal pressures.

Spending

FFS spending on Medicaid-funded (combined state and federal funds) nursing home services totaled \$39.8 billion in 2020 (Figure 7-6, p. 260) (Office of the Actuary 2021a). This spending dropped an average 2.3 percent per year between 2017 and 2019 and 3.8 percent between 2019 and 2020. The trend of lower spending is in part due to increased enrollment in managed care organizations, whose spending is not included in these data. As of November 2020, 25 states operated Medicaid managed care for long-term services and supports (Medicaid and CHIP Payment and Access Commission 2021). Year-to-year changes in spending have been variable, rising in some years and falling in others, with overall spending in 2020 below what it was in 2001.

Analysis of Medicaid rate-setting trends in fiscal year 2020 found that 6 states restricted (froze or reduced) rates paid to nursing homes, while 37 states increased nursing facility rates and 7 states did not report data (Gifford et al. 2020). The study also noted that 30 states planned to increase their rates in 2021.

States continue to use provider taxes to raise federal matching funds. In fiscal year 2021, 41 states and the District of Columbia levied provider taxes on nursing homes to increase federal matching funds (Gifford et al. 2020).³¹ The augmented federal funding may be split with the nursing homes.

**FIGURE
7-6****Total Medicaid fee-for-service spending on nursing home services, 2001-2020**

Note: Spending does not include managed care spending on nursing homes.

Source: Office of the Actuary 2021a.

All-payer total and non-Medicare margins in nursing homes in 2020

All-payer total margins reflect all payers (including all FFS and managed care funds from Medicare, Medicaid, and private insurers across all lines of business—for example, nursing home care, hospice care, ancillary

services, home health care, and investment income).

In 2020, the all-payer total margin for freestanding providers was 3.0 percent (Table 7-8). The improvement in overall performance reflects the infusion of general distribution and targeted relief funds, the PHE-related policy changes, the temporary pandemic-related

**TABLE
7-8****All-payer total and non-Medicare SNF margins improved in 2020**

Type of margin	2016	2017	2018	2019	2020
All-payer total margin	0.7%	0.6%	-0.3%	0.6%	3.0%
Non-Medicare margin	-2.4	-2.4	-3.2	-2.2	-0.3

Note: SNF (skilled nursing facility). "All-payer total margin" includes the revenues and costs associated with all payers and all lines of business and includes the federal relief funds disbursed in 2020. "Non-Medicare margin" includes the revenues and costs associated with Medicaid and private payers for all lines of business.

Source: MedPAC analysis of Medicare freestanding skilled nursing facility cost reports for 2016 to 2020.

increases in Medicaid payment rates in many states, and the higher payments under Medicare's new case-mix system. Since 2000, except for 2018 (when the total margin was slightly negative), the all-payer total margin has been positive and ranged from 0.4 percent to 3.8 percent (not all data shown).

The all-payer total margins in 2020 varied considerably. The median was 3.7 percent; 25 percent of nursing homes had total margins of -2.6 percent or lower and 25 percent of homes had total margins of 10 percent or

higher (data not shown). In 2020, 34 percent of SNFs had negative margins. While sizable, the share is an improvement from 2019, when 45 percent of SNFs had negative margins.

Non-Medicare margins reflect the profitability of all services except FFS Medicare-covered SNF services. The aggregate non-Medicare margin in 2020 was -0.3 percent, an improvement from 2019, when it was -2.2 percent. ■

Endnotes

- 1 Throughout this chapter, *beneficiary* refers to an individual whose SNF stay is paid for by Medicare (Part A). Some beneficiaries who no longer qualify for SNF Medicare coverage remain in the facility to receive long-term care services, which are not covered by Medicare. During long-term care stays, beneficiaries may receive care, such as physician services, outpatient therapy services, and prescription drugs, that is paid for separately under the Part B and Part D benefits. Services furnished outside the Part A-covered stay are not paid under the SNF prospective payment system and are not considered in this chapter. Except where specifically noted, this chapter examines fee-for-service Medicare spending and service use and excludes services and spending for SNF services furnished to beneficiaries enrolled in Medicare Advantage plans. Some beneficiaries also qualify for Medicaid and are referred to as *dual-eligible beneficiaries*.
- 2 Throughout this chapter, we use the term “FFS Medicare” as equivalent to the CMS term “Original Medicare.”
- 3 A spell of illness ends when there has been a period of 60 consecutive days during which the beneficiary was an inpatient of neither a hospital nor a SNF. Coverage for another 100 days does not begin until a beneficiary has not had hospital care or skilled care in a SNF for 60 consecutive days. Observation days and emergency room stays do not count toward the three-day hospital stay requirement. In 2015, the Commission recommended that the time spent in observation care count toward the three-day requirement as long as the patient was formally admitted and had at least one day as an inpatient (Medicare Payment Advisory Commission 2015). The requisite prior three-day hospital stay has been temporarily waived during the COVID-19 public health emergency.
- 4 Skilled services are defined as ordered by a physician, requiring the skills of technical or professional personnel, and furnished directly by or under supervision of such personnel.
- 5 Under Section 319 of the Public Health Services Act, the Secretary of Health and Human Services may determine that a disease or disorder presents a PHE or that a PHE—including significant outbreaks of infectious disease or bioterrorist attacks—otherwise exists. The Secretary first determined the existence of a coronavirus PHE, based on confirmed cases of COVID-19 in the United States, on January 31, 2020. At the time of publication, the coronavirus PHE had been renewed multiple times, most recently on January 14, 2022.
- 6 The extended benefit applies only to beneficiaries who were delayed or prevented by the PHE from starting or completing the end of the current benefit period—i.e., renewing the SNF benefit would have occurred under normal circumstances. Beneficiaries with continued need for skilled care unrelated to the PHE cannot renew their benefit.
- 7 For services to be covered, the SNF must meet Medicare’s requirements of participation and agree to accept Medicare’s payment rates. Medicare’s requirements relate to many aspects of staffing and care delivery, such as requiring a registered nurse in the facility for 8 consecutive hours per day and licensed nurse coverage 24 hours a day, providing physical and occupational therapy services and speech-language pathology services as delineated in each patient’s plan of care, and providing or arranging for physician services 24 hours a day in case of an emergency.
- 8 Rural counties are those not in or adjacent to metropolitan or micropolitan areas and are defined using Urban Influence Codes 11 and 12.
- 9 The program pays separately for some services, including certain chemotherapy drugs, certain customized prosthetics, certain ambulance services, and radioisotope services. All physician services are paid separately under Part B.
- 10 There are separate base rates for urban and rural facilities. Rural base rates are higher for the physical therapy, occupational therapy, speech language-pathology, and the non-case-mix (room and board) components; the urban base rates are higher for the nursing and nontherapy ancillary components. A description of the SNF PPS is found in *SNF Payment Basics*, available at <http://medpac.gov/-documents-/payment-basics>.
- 11 Medicare’s staffing requirement that SNFs have a registered nurse on duty for at least eight consecutive hours a day, seven days a week, may have been a factor in the increase in the nursing hours per resident day.
- 12 We do not know whether providers that terminated from the program actually closed, were purchased by another entity and remained open (but under a new provider number), or remained open but stopped participating in the Medicare program.
- 13 The occupancy rates are based on the Commission’s analysis of the COVID-19 data for a cohort of 10,979 SNFs that reported valid data for 66 weeks (during the period from June 2020 to September 2021).

- 14 Of the 7 states plus the District of Columbia with median occupancy rates at or above 85 percent, 6 have certificate-of-need laws limiting industry expansion (though one state suspended these laws during the PHE).
- 15 Although the required prior hospital stay was suspended during the PHE, the majority of SNF use in 2020 was preceded by one.
- 16 If we approximate marginal cost as total Medicare costs minus fixed building and equipment costs, then marginal profit can be calculated as follows:

$$\text{Marginal profit} = (\text{payments for Medicare services} - (\text{total Medicare costs} - \text{fixed building and equipment costs})) / \text{Medicare payments}$$

This comparison is a lower bound on the marginal profit because we do not consider any potential labor costs that are fixed.
- 17 The risk adjustment for the successful discharge to the community measure includes age and sex of the beneficiary, end-stage renal disease (ESRD) and disability status for entitlement, principal diagnosis, comorbidities, the length of stay of the preceding hospital stay (if there was one), and a count of the hospitalizations during the preceding year. Risk adjusters for the hospitalization measure include primary diagnosis, comorbidities and severity of illness, special conditions (severe wounds, difficulty swallowing, and bowel incontinence), age and sex, disability and ESRD status, hospitalization in the previous month, days in the intensive care unit during a preceding hospitalization (if there was one), a count of the hospitalizations during the preceding year, and the provision of ventilator care during the PAC stay. Providers with at least 60 stays in the year, the minimum count to meet a reliability of 0.7, were included in calculating the average facility rate.
- 18 Rural critical access hospitals with swing beds are excluded from the program. Providers with fewer than 25 stays per year are effectively held harmless under the program.
- 19 In the Consolidated Appropriations Act, 2021, the Congress made three changes to the SNF VBP that could affect payments beginning in fiscal year 2024. First, it gave the Secretary of Health and Human Services the authority to expand the measure set. Second, the program cannot apply to providers that do not have a minimum number of cases for each measure. Third, the measures and data submitted to calculate the measures must be validated.
- 20 Because the sequestration is not applied to beneficiary copayments, the reduction to SNF payments is slightly lower than 2 percent.
- 21 SNFs varied in whether they participated in the optional Paycheck Protection Program (PPP). Data from the Health Resources and Services Administration show that “nursing home” businesses received about \$6.8 billion in PPP loans, about half of which was forgiven. However, a cursory examination of the recipients revealed that the category includes many health care entities that do not appear to be nursing homes.
- 22 Two other companies, Genesis Healthcare and Five Star Senior Living, had different experiences that suggest underlying financial weaknesses predating the pandemic. Genesis Healthcare left the New York Stock Exchange to restructure its financial arrangements, and Five Star continued its shift away from SNFs and toward senior living.
- 23 The reporting of the public health emergency funds should include the Provider Relief Fund payments and Paycheck Protection Program loans that were booked as revenue and not returned.
- 24 Had we allocated PHE funds based on Medicare’s share of revenues, a larger share of the PHE would have been allocated to Medicare because Medicare’s payments are substantially higher than payments from other payers. In this case, the estimate of the Medicare margin would be higher.
- 25 Of targeted funds, \$2.25 billion in nursing home quality incentive payments (apart from the VBP) were disbursed in four waves between October 2020 and February 2021.
- 26 The Special Focus Facility Initiative is a program to stimulate improvements in the quality of care at nursing homes with a history of serious quality problems. The initiative targets homes with a pattern over three years of more frequent and more serious problems (including harm or injury to residents) detected in their annual facility surveys. Facilities that improve and maintain those improvements can “graduate” from the program. Providers that do not improve face civil monetary penalties (fines) and eventual termination from Medicare and Medicaid.
- 27 One study of switching between MA and FFS after the onset of functional disability found that, compared with beneficiaries with lower levels of disability, beneficiaries with greater levels of disability were more likely to switch from MA to FFS (Ankuda 2020).
- 28 The market basket estimate used to establish the 2021 update to payment rates was based on a June 2020 forecast. Since then, the estimate has been revised multiple times, most recently using a June 2022 forecast. The more recent estimate of the 2021 market basket is 3.1 percent, compared with the earlier estimate of 2.2 percent.

- 29 CMS makes forecast error corrections when its estimate of the market basket differs from the actual market basket by at least 0.5 percentage points (either too high or too low).
- 30 For example, while the case-mix system does not use the COVID-19 diagnosis in assigning cases to case-mix groups, it considers ventilator care, pulmonary diagnoses, and patient isolation in its assignments.
- 31 A provider tax works as follows: A state taxes all nursing homes and uses the collected amount to help finance the state's share of Medicaid funds. The provider tax increases the state's contribution, which in turn raises the federal matching funds. The augmented federal funds more than cover the cost of the provider tax revenue, which is returned to providers. The provider tax is limited to 6 percent of net patient revenues.

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C H A P T E R

8

Home health care services

R E C O M M E N D A T I O N S

- 8-1** For calendar year 2023, the Congress should reduce the 2022 Medicare base payment rate for home health agencies by 5 percent.

COMMISSIONER VOTES: YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0

-
- 8-2** The Secretary should require that home health agencies report telehealth services provided during a 30-day period.

COMMISSIONER VOTES: YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0

Home health care services

Chapter summary

Home health agencies (HHAs) provide services to beneficiaries who are homebound and need skilled nursing care or therapy. In 2020, about 3.1 million Medicare fee-for-service beneficiaries received care, and the program spent \$17.1 billion on home health care services. In that year, 11,456 HHAs participated in Medicare.

In this chapter, we assess indicators of payment adequacy in order to recommend a payment update for 2023. Because of standard data lags, the most recent complete data we have for most payment adequacy indicators are from 2020. Where relevant, we have considered the effects of the coronavirus public health emergency (PHE) on our indicators and whether those effects are likely to be temporary or permanent. To the extent that the effects of the PHE are temporary or vary significantly across HHAs, they are best addressed through targeted temporary funding policies rather than a permanent change to all HHAs' payment rates in 2023 and future years.

This chapter also responds to a mandate in the Bipartisan Budget Act (BBA) of 2018 that requires the Commission to provide an interim report on the Act's mandated changes to the home health prospective payment system by March 15, 2022.

In this chapter

- Mandated report on Bipartisan Budget Act of 2018 changes to the home health payment system
Are Medicare payments adequate in 2022?
- Are Medicare payments adequate in 2022?
- How should Medicare payments change in 2023?
- Requiring HHAs to report the telehealth services they provide to Medicare beneficiaries under the home health benefit

Assessment of payment adequacy

The indicators of Medicare payment adequacy for home health care are generally positive.

Beneficiaries' access to care—Access to home health care is adequate: Over 99 percent of Medicare beneficiaries lived in a county served by at least one HHA, and 87.9 percent lived in a county served by five or more HHAs.

- **Capacity and supply of providers**—Between 2019 and 2020, the number of HHAs fell by 1.0 percent, continuing a slow decline since 2013 but at a lower rate than in prior years; in fact, some areas have experienced growth in HHAs. The slower decline in supply of HHAs suggests that neither the coronavirus PHE nor the Patient-Driven Groupings Model (PDGM) has had a significant impact on HHA supply.
- **Volume of services**—In 2020, the number of beneficiaries receiving home health care fell by 4.7 percent, though a review of market trends and the monthly volume of home health services indicates that the decline was concentrated in April and May, and volume recovered later in the year to levels near or above those of 2019. This monthly pattern, with the largest drop in volume coinciding with the onset of the PHE, indicates that the decline in services was not attributable to the implementation of the PDGM. The average number of in-person visits per 30-day period also declined (9.4 percent), but some of the decline could have been offset by greater use of virtual visits through telehealth.
- **Marginal profit**—In 2020, freestanding HHAs' marginal profit—that is, the rate at which Medicare payments exceed providers' marginal costs—was 22.9 percent, suggesting a significant financial incentive for HHAs with excess capacity to serve additional Medicare patients.

Quality of care—Quality of care was difficult to assess in 2020. Our outcome measures were mixed, likely reflecting the impact of the PHE. The number of home health patients who were hospitalized during their spell of home health services fell slightly, meaning HHAs improved performance on this measure. However, the share of beneficiaries who were successfully discharged to the community (i.e., did not experience an unplanned hospitalization within 30 days of the end of their home health care spell) also fell, which indicates a decline in performance on this measure. Given the various disruptions to the health care delivery system in 2020, these results should be interpreted cautiously.

The 2020 outcome measure results could reflect shifts in the delivery system, such as the impact of pandemic-related mortality or other disruptions. The Commission's quality metrics rely on risk-adjustment models that use performance from previous years to predict beneficiary risk. COVID-19 is a new diagnosis and is not included in the current risk-adjustment models. Because of these potential confounding factors, it is difficult to determine whether the performance observed in 2020 reflects actual changes in quality of care or other factors.

Providers' access to capital—Access to capital is a less important indicator of Medicare payment adequacy for home health care because this sector is less capital intensive than other health care sectors. The major publicly traded for-profit home health companies had sufficient access to capital markets for their credit needs.

Medicare payments and providers' costs—In 2020, Medicare spending for home health care declined by 4.7 percent to \$17.1 billion. Medicare margins for freestanding agencies averaged 20.2 percent, even though the cost per 30-day period increased by 3.1 percent in this year. These high margins indicate that increases in payments exceeded the increase in costs. Medicare's payments have always been in excess of cost under prospective payment, with the Medicare margin for HHAs averaging 16.2 percent from 2001 to 2019. The projected margin for 2022 is 17.0 percent.

How should Medicare payments change in 2023?

Our review of payment adequacy for Medicare home health services indicates that access is more than adequate in most areas and that Medicare payments are substantially in excess of costs. Home health care can be a high-value benefit when it is appropriately and efficiently delivered. Medicare beneficiaries often prefer to receive care at home instead of in institutional settings, and home health care can be provided at lower costs than institutional care. However, Medicare's payments for home health services are too high, and these excess payments diminish the service's value as a substitute for more costly services. On the basis of these findings, the Commission's recommendation for 2023 is to reduce the Medicare home health prospective payment system (PPS) base payment rate by 5 percent.

Tracking the use of telehealth in the home health care benefit

The lack of detailed information on the use of telehealth in 2020 impairs our ability to assess the changes to the benefit in this year, including our ability

to assess the impact of the PDGM and the PHE. As the use of telehealth in home health care grows, the lack of information about telehealth visits could also compromise CMS's ability to accurately set payments under the home health PPS. Payment accuracy would be improved by requiring HHAs to report the use of telehealth services on home health claims. For these reasons, the Commission recommends that the Secretary require HHAs to report the provision of telehealth during home health care on Medicare claims, similar to the requirements that already exist for in-person visits and other home health care services.

Mandated report: Assessing impact of the Patient-Driven Groupings Model on home health care in 2020

The BBA of 2018 requires the Commission to provide an interim report on the Act's mandated changes to the home health PPS by March 15, 2022. The mandated changes include shortening the unit of payment under the PPS from 60 days to 30 days and eliminating the number of in-person therapy visits provided in a home health episode as a factor in the payment system. CMS implemented these changes on January 1, 2020, under a new case-mix system, the PDGM. The Commission is required to assess the impact of the changes on costs, quality, and other behavioral responses by HHAs.

Assessing the initial impact of the PDGM on home health care in 2020 is confounded by the disruptions associated with the coronavirus PHE. Particularly in the early months of the PHE, HHAs saw significant decline in demand, similar to that experienced in other health care sectors. In addition, there were several policy changes in response to the PHE that likely affected HHA operations, including expanding HHAs' use of telehealth and suspending the sequester required by the Budgetary Control Act of 2011. While these changes were intended to ensure access to home health care, they likely affected the mix and amount of home health care provided, complicating efforts to assess the effects of the PDGM.

The payment adequacy indicators for 2020 point to relative stability for Medicare home health care in the first year of the PDGM. Though the number of 30-day periods and the number of beneficiaries served in 2020 were lower than in 2019, the monthly pattern in home health care volume for 2020 signals that the declines were mostly attributable to the PHE and not the PDGM. The clinical severity of home health patients did not change significantly as a result of the emergency. The total number of in-home visits to beneficiaries fell in 2020, but much of this decline was due to fewer beneficiaries receiving home

health care services. The decline in in-person visits per 30-day period under the PDGM may reflect several factors, including greater use of telehealth and HHAs adjusting their provision of therapy services due to the revised payment incentives.

In 2020, the cost of a 30-day period grew by 3.1 percent, likely reflecting HHAs' higher service costs due to the PHE and loss of economies of scale due to unexpected volume decline. As volume recovers, HHA cost pressure could recede. Payments on an in-person per visit basis are higher under the PDGM than they were under the previous payment system. These high payments, with the modest cost pressures noted above, account for the high Medicare margin the Commission reports for 2020.

Assessing the impact of the PDGM on quality is challenging due to the disruption caused by the PHE. Performance on our quality measures in 2020 was mixed, with the rate of hospitalization during home health care declining modestly and a decline in the share of beneficiaries successfully discharged to the community (indicating worse performance relative to 2019). The Commission's quality metrics rely on risk-adjustment models based on data that predate the PHE. Because patterns of care under the PHE and the risks associated with a new diagnosis (COVID-19) are not included in these models, it is difficult to determine whether the performance observed in 2020 reflects changes in HHAs' quality of care or other factors. However, the high payment levels under the PDGM in 2020 suggest that HHAs had adequate reimbursement to provide quality care. ■

Background

Medicare home health care consists of skilled nursing, physical therapy, occupational therapy, speech therapy, aide services, and medical social work provided to beneficiaries in their homes. To be eligible for Medicare's home health benefit, beneficiaries must need part-time (fewer than eight hours per day) or intermittent skilled care to treat their illnesses or injuries and must be unable to leave their homes without considerable effort. In contrast to coverage for skilled nursing facility services, Medicare does not require a preceding hospital stay to qualify for home health care. Also, unlike for most services, Medicare does not require copayments or a deductible for home health services. In 2020, about 3.1 million Medicare beneficiaries received home care, and the program spent \$17.1 billion on home health services.

Medicare requires that a physician, nurse practitioner, clinical nurse specialist, or physician assistant certify a patient's eligibility for home health care.¹ Medicare also requires that a beneficiary have a face-to-face encounter with the practitioner ordering home health care. The encounter must take place in the 90 days preceding or 30 days following the initiation of home health care. An encounter through telehealth services may be used to satisfy the requirement.

Major changes to the home health prospective payment system in 2020

In 2020, CMS implemented major changes required by the Bipartisan Budget Act (BBA) of 2018: a new 30-day unit of payment (replacing the 60-day unit) and elimination of the number of in-person therapy visits as a factor in the payment system. These changes follow several years of analysis by the Commission and CMS to identify reforms to the home health prospective payment system (PPS).

CMS implemented the BBA of 2018 policies through a new case-mix system, the Patient-Driven Groupings Model (PDGM). Payments for a 30-day period are adjusted by the case-mix system to account for differences in patient severity. If beneficiaries need additional home health services at the end of the initial 30-day period, another period commences and Medicare makes an additional payment. Coverage for additional periods generally has the same requirements

as the initial period (i.e., the beneficiary must be homebound and need skilled care). The PDGM applied to home health care services as of January 1, 2020.

The implementation of the PDGM case-mix system addressed a long-standing recommendation by the Commission: to eliminate the number of in-person therapy visits provided during home health service as a payment factor in the PPS. Under the home health PPS in effect from 2000 to 2019, the number of in-person therapy visits provided during an episode was a major element in determining payments. From 2000 to 2007, episodes with 10 or more in-person therapy visits qualified for a payment boost of \$2,000 per episode or more. The volume of episodes that qualified for this boost increased during this period at a significantly faster rate than all other episodes, and the share of episodes clustered at 10 to 13 in-person therapy visits (equal to or slightly above the 10-visit threshold at which a higher payment was made) increased from 11 percent to 15 percent. In 2008, CMS replaced the single payment threshold with a series of six thresholds that increased payment more gradually, but the share of claims qualifying for higher payments due to additional in-person therapy visits continued to grow.

Concerned about these trends, since 2011 the Commission has recommended eliminating the number of in-person therapy visits provided in an episode as a payment factor (Medicare Payment Advisory Commission 2017, Medicare Payment Advisory Commission 2016, Medicare Payment Advisory Commission 2011). The Commission's intent was to ensure that care reflected patient needs and was not influenced by the financial incentives in the PPS.

The concerns of the Commission and other stakeholders led CMS to consider major revisions to the home health PPS, and in 2016 it released a report that described a new case-mix system that excluded the provision of therapy as a basis for payment and used a 30-day unit of payment (the latter now referred to as a "period" of home health care) (Plotzke et al. 2016). Following enactment of the BBA of 2018, in 2020 CMS implemented a revised version of this model—the PDGM—concurrent with the new policies required by the Act. The PDGM categorizes a 30-day home health period into 1 of 432 home health resource groups based on five elements:

- **Period timing**—A newly initiated home health period (with no home health services in the preceding 60 days) is classified as “early,” while periods that are immediately preceded by a 30-day period are classified as “late.”
- **Referral source**—Early periods that in the 14 days before the start of home health care had a stay at an acute care hospital, long-term care hospital, inpatient rehabilitation facility, or skilled nursing facility are classified as posthospital or post-acute care (PAC) institutional periods. Early periods that do not have these services in the 14 days before the start of home health care are classified as community-admitted periods. Late periods are classified as posthospital if they are preceded by a hospital stay (these also must occur within the 14 days preceding home health care); otherwise, they are classified as community-admitted periods. Payments for periods after hospital care or inpatient PAC are generally higher, reflecting the higher average number of in-person visits for these cases relative to community-admitted periods.
- **Clinical category**—Patients are assigned to 1 of 12 clinical categories based on their reported conditions: need for musculoskeletal rehabilitation; neuro/stroke rehabilitation; wound care; behavioral health care; complex nursing interventions; and seven clinical subcategories for medication management, teaching, and assessment (MMTA).²
- **Functional impairment**—Patients are assigned to one of three functional impairment levels based on reported cognitive and physical functioning information. The functional impairment groups were established so that periods were distributed uniformly across the groups; approximately one-third of periods were classified into each of the three groups.
- **Presence of comorbidities**—The case-mix system also includes a three-tiered adjustment for selected comorbidities: none, low comorbidity, or high comorbidity.

Periods with relatively few in-person visits, classified as low-use payment adjustment (LUPA) periods, are paid on a per visit basis. The threshold for a period to qualify as a LUPA varies from two to six in-person visits,

depending on the payment group to which a period has been assigned. Under the PDGM, periods above the threshold receive the full case mix-adjusted 30-day payment.

Mandated report on Bipartisan Budget Act of 2018 changes to the home health payment system

The BBA of 2018 requires the Commission to assess the impact of the change to a 30-day unit of payment on payments, cost, quality, and home health agency (HHA) “behaviors”—that is, their delivery of care and billing practices (see text box on the mandate). Many of these areas overlap with the analysis we conduct during our annual review of payment adequacy. Therefore, our findings are discussed below in the section entitled “Are Medicare payments adequate in 2022?”

Analyzing the initial effects of the 2020 changes to the home health PPS is complicated by the coronavirus public health emergency’s (PHE’s) disruptions to the health care system. The PDGM was implemented on January 1, 2020, and the coronavirus PHE was declared later that month, with service disruptions beginning in March 2020. Like other sectors, HHAs saw significant decline in the demand for services due in part to beneficiaries’ reluctance to allow HHA staff into their homes. In addition, hospital procedures, a common precursor service for many home health beneficiaries, declined significantly in the PHE’s early months. HHAs faced higher costs due to personal protective equipment, staffing, and other pandemic-related expenses. Conversely, some beneficiaries reportedly sought home health care as an alternative to a hospital or skilled nursing facility (SNF) stay. Many HHAs provided visits via telehealth, but these are not recorded on Medicare claims. The Commission’s analysis needs to account for these non-PDGM factors that likely affected the mix and amount of home health services that beneficiaries received in 2020. The BBA of 2018 also requires the Commission to produce an evaluation of the impact of the PDGM in our March 2026 report, which will permit a more complete examination of the new payment model’s impact.

In addition, CMS and the Congress made several policy changes in response to the PHE that were intended to

Mandate for the Commission to assess the impact of the Patient-Driven Groupings Model for home health care in 2020

Section 51001. HOME HEALTH PAYMENT REFORM.

© REPORTS.— (1) INTERIM REPORT.—Not later than March 15, 2022, the Medicare Payment Advisory Commission shall submit to Congress an interim report on the application of a 30-day unit of service as the unit of service applied under section 1895(b)(2) of the Social Security Act (42 U.S.C. 1395fff(b)(2)), as amended by subsection (a), including an analysis of the level of payments provided to home health

agencies as compared to the cost of delivering home health services, and any unintended consequences, including with respect to behavioral changes and quality.

(2) FINAL REPORT.—Not later than March 15, 2026, such Commission shall submit to Congress a final report on such application and any such consequences. ■

support or expand access to home health care (Centers for Medicare & Medicaid Services 2020). These new policies included expanding HHAs' use of telehealth, allowing nurse practitioners and physician assistants to order home health services, and suspending the 2 percent sequester on Medicare payments required by the Budgetary Control Act of 2011. In addition, HHAs, like other providers, were eligible for relief funds such as the Paycheck Protection Program (PPP). These policy changes could also have affected the mix and amount of home health care services provided in 2020.

The BBA of 2018 did not address Medicare's high payment levels for home health care

While the changes to home health care payment in 2020 were substantial, they were not designed to reduce Medicare's payments for home health care services. The BBA of 2018 required CMS to set the base rate for the PDGM at a level that was budget neutral to 2019, a year when the Commission reported high Medicare margins (15.8 percent) for freestanding agencies. (Medicare margins show the extent to which an agency's revenue from Medicare patients covers, exceeds, or falls below the cost of providing care for these patients.) Before 2020, payments for home health care substantially exceeded costs. In 2001, the first full year of the PPS, average Medicare margins for freestanding HHAs equaled 23 percent. Between 2001 and 2019, the number of in-person visits per 60-

day episode declined, falling 17.3 percent, though the average payment per 60-day episode generally grew during this period. Consequently, HHAs were able to garner extremely high average payments relative to the cost of services provided. Between 2001 and 2019, freestanding HHA margins averaged 16.2 percent.

The BBA of 2018 requires that payments under the PDGM be budget neutral (neither raise nor lower aggregate home health care spending) relative to spending that would have occurred without the new model's implementation. For 2020 through 2026, CMS is required to determine how actual aggregate home health spending under the PDGM differs from spending that would have occurred in the absence of the payment system changes and to adjust the PPS base rate as needed to achieve budget neutrality.³

However, it is not clear how CMS will enforce the BBA of 2018's budget-neutrality requirement. In the 2022 proposed rule for the home health PPS, CMS included an initial analysis that determined that the PDGM base rate for 2020 was 6 percent higher than the level needed to achieve the Act's budget-neutrality target.⁴ CMS requested comment on its methodology for calculating budget neutrality. The 2022 final rule for the home health PPS does not provide any information on how CMS will measure budget neutrality or when it will adjust Medicare payments to achieve the BBA of 2018's budget-neutrality targets.

The coronavirus public health emergency and the Commission's payment adequacy assessment for home health care services

On January 31, 2020, the Secretary of Health and Human Services first declared the coronavirus public health emergency (PHE). In late March 2020, the nation's health care system began to experience major changes in service utilization, which resulted in lower volume for home health care and other health care services. The PHE has had tragic effects on beneficiaries' health, including a disproportionate effect on Medicare beneficiaries. (For details on the pandemic's effects on beneficiaries' health and access to care, see Chapter 1.) It has also had damaging effects on the nation's health care workforce, with frontline health care workers facing burnout and risks to their health and safety while treating COVID-19 cases.

The PHE has also had material effects on all the indicators the Commission uses to determine payment adequacy. Because of standard data lags, the most recent complete data we have are from 2020 for most of these indicators; however, we also include preliminary data from 2021 where possible. The effects of the PHE on indicators of Medicare's payment adequacy to home health agencies include:

- a significant decline in patient volume in spring 2020, largely rebounding by the end of 2020;
- substantial federal relief funding provided to home health agencies during the PHE; and

- Medicare payment policy changes that increased payments to providers, including through the suspension of the 2 percent sequestration on Medicare payments.

In this chapter, we use available data and payment policy changes to project home health agency margins for 2022 and recommend payment rate updates for 2023; however, significant uncertainty remains about the extent to which the pandemic will last and whether the changes observed during the pandemic will persist past the end of the PHE. Therefore, while it is important to analyze 2020 data to understand what happened to beneficiaries' access to care, quality of care, providers' access to capital, and Medicare's payments and providers' costs, it will be more difficult to interpret these indicators than is typically the case.

As the Commission stated last year, to the extent that the effects of the coronavirus pandemic are temporary—even if over multiple years—or vary significantly across individual providers, they are best addressed through targeted temporary funding policies rather than a permanent change to all providers' payment rates in 2023 and future years. Only permanent effects of the pandemic will be factored into the Commission's recommended changes in Medicare base payment rates. ■

Are Medicare payments adequate in 2022?

The Commission reviews several indicators to determine the level at which payments will be adequate to cover the costs of an efficient provider in 2022 (see text box for a discussion of the impact of the PHE on our payment adequacy analysis). Specifically, we assess

beneficiary access to care (by examining the supply of home health providers, annual changes in the volume of services, and marginal profit); quality of care; access to capital; and the relationship between Medicare's payments and providers' costs. We also discuss the impact of the PDGM for each indicator. In general, the payment adequacy indicators for home health care are positive.

**TABLE
8-1****Annual rate of decline for home health agencies participating in Medicare slowed in 2020**

	Prepandemic				Average annual change	
	2013	2018	2019	2020	2013–2019	2019–2020
Active home health agencies	12,788	11,701	11,571	11,456	–1.7%	–1.0%
Number of home health agencies per 10,000 FFS beneficiaries	3.4	3.0	3.0	3.1	–2.1	1.8

Note: FFS (fee-for-service). “Active home health agencies” includes all agencies operating during a year, including agencies that closed or opened at some point during the year. Percent changes were calculated on unrounded data.

Source: MedPAC analysis of CMS’s Quality, Certification and Oversight file and 2021 annual report of the Boards of Trustees of the Medicare trust funds.

Beneficiaries’ access to care: Almost all beneficiaries live in an area served by HHAs

Supply and volume indicators show that almost all beneficiaries have access to home health services. In 2020, over 99 percent of fee-for-service (FFS) beneficiaries lived in a county served by at least one HHA, 98.6 percent lived in a county served by two or more HHAs, and 87.9 percent lived in a county served by five or more agencies. These findings are consistent with our prior reviews of access.⁵

Supply of providers: Agency supply declined slightly in 2020

In 2020, the supply of agencies declined by only 1.0 percent. This decline is less than the trend in recent years; between 2013 and 2019, the number of agencies fell an average 1.7 percent per year (Table 8-1). In 2020, the contraction in HHA supply was much smaller than the drop in home health care volume. The small drop in HHA supply in 2020, a year in which the industry experienced the PHE and the implementation of a new payment model, suggests that neither event had a significant negative effect on HHA supply. Some HHAs may have utilized PPP funds or other programs to mitigate the impact of the PHE, though information on the amount of these funds received by Medicare HHAs is limited.⁶ These additional funds could also have helped agencies weather any payment disruptions related to the implementation of PDGM.

The supply of HHAs varies significantly among states. In 2020, Texas averaged 8.4 HHAs per 10,000 FFS beneficiaries, while New Jersey averaged less than 1.0 HHA per 10,000 FFS beneficiaries. The extreme variation demonstrates that the number of providers is a limited measure of capacity in part because HHAs can vary in size. Also, because home health care is not provided in a medical facility, HHAs can adjust their service areas as local conditions change. Even the number of employees may not be an effective metric because HHAs can use contract staff to meet their patients’ needs.

The Commission’s June 2021 report to the Congress found that, in 2018, urban and rural areas generally had similar levels of home health care utilization (Medicare Payment Advisory Commission 2021). The report noted that use varied substantially within urban and rural areas, with rates varying sixfold among urban areas and eightfold among rural areas. Moreover, high-use and low-use areas were found among both rural and urban counties. In 16 states, per capita home health care use in rural areas exceeded use in urban areas. Though beneficiaries residing in frontier rural areas had lower use than other beneficiaries, frontier areas are concentrated in relatively low-use states such as Montana, North Dakota, and South Dakota. It should also be noted that past efforts to combat fraud, waste, and abuse in home health care have focused on high-use urban areas, so the gap between some urban and

**TABLE
8-2****In 2020, Medicare expenditures and number of beneficiaries receiving home health care declined**

	Prepandemic					Annual percent change	
	2011	2017	2018	2019	2020	2011–2019	2019–2020
Home health users (in millions)	3.4	3.4	3.4	3.3	3.1	–0.6%	–7.3%
Share of FFS beneficiaries using home health care	9.4%	8.8%	8.7%	8.5%	8.1%	–1.2	–4.7
Total payments (in billions)	\$18.4	\$17.9	\$18.0	\$17.9	\$17.1	–0.3	–4.7
Average payment per home health user	\$5,348	\$5,255	\$5,333	\$5,437	\$5,591	0.2	2.8
Average payment per FFS beneficiary	\$505	\$461	\$466	\$465	\$455	–1.0	–2.0

Note: FFS (fee-for-service). Percentage change was calculated on unrounded data.

Source: MedPAC analysis of home health standard analytical file from CMS.

rural areas may in part reflect fraudulent or low-value provision of home health care services in urban areas.

Home health spending and use declined slightly in 2020

In 2020, the number of Medicare FFS beneficiaries using home health declined by 7.3 percent and the share of beneficiaries using the service declined 4.7 percent from 2019 levels (Table 8-2). Total Medicare spending also fell by 4.7 percent in the same period. However, average spending per beneficiary who used the service actually rose by 2.8 percent. While the disruptions to home health care due to the PHE are important to recognize, home health utilization was declining in the years before 2020. From 2011 to 2019, the number of 60-day episodes fell from 6.8 million to 6.1 million, a drop of 1.3 percent per year on average (data not shown). The level of utilization in 2019 provides a benchmark for comparison, but the trend in recent years suggests that utilization in 2020 would have been lower absent the PHE or any possible effects from the PDGM.

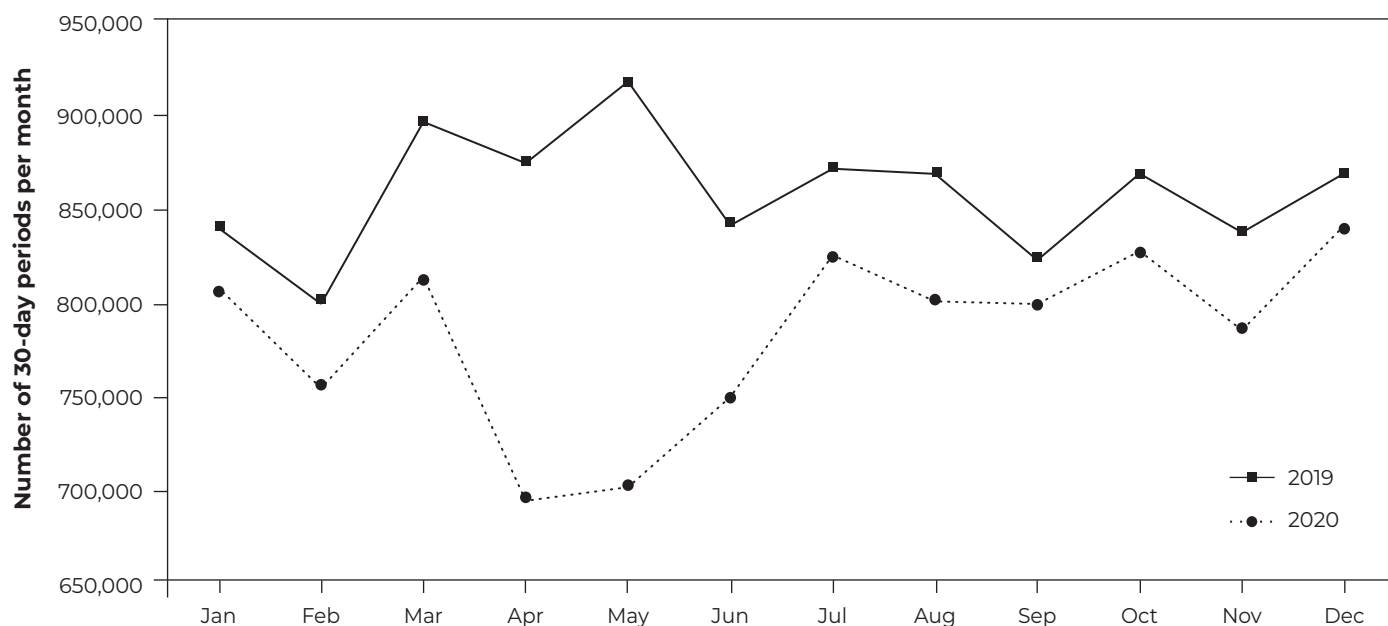
However, the PHE, not Medicare's payment levels, likely explains much of the decline observed in 2020. In March and April 2020, HHAs reported substantial reductions in the demand for home health care services due to the PHE (Amedisys 2020a, Encompass Health 2020a, LHC Group 2020, Motley Fool 2020). HHAs attributed the decline to several factors, including the drop in inpatient hospital discharges during the PHE, assisted living facilities' limits on HHA staff access to residents, and beneficiaries electing not to use home health care services. However, industry reports indicate that, in aggregate, the demand for home health care services recovered in the remainder of 2020 (Amedisys 2020a, Amedisys 2020b, Encompass Health 2020b). In addition, some HHAs have reported that the PHE has increased demand, as beneficiaries seek to substitute home health care for a skilled nursing facility stay. This shift in preference for home health care could result in higher demand in future years.

Marginal profits

Another factor we consider when evaluating access to care is whether providers have a financial incentive

**FIGURE
8-1**

Comparison of monthly volume of 30-day home health periods in 2019 and 2020



Note: Home health services initiated in 2019 were paid under 60-day episodes. For this figure, home health care services initiated in 2019 were recalculated as 30-day periods to provide comparable units of service in the two years. Thirty-day periods are included in the month and year that the period ended.

Source: MedPAC analysis of 2019 home health Limited Data Set file and home health standard analytic file for 2020.

to expand the number of Medicare beneficiaries they serve. In considering whether to treat a patient, a provider with excess capacity compares the marginal revenue it will receive (i.e., the Medicare payment) with its marginal costs—that is, the costs that vary with volume. If Medicare payments exceed the marginal costs of treating an additional beneficiary, a provider has a financial incentive to increase its volume of Medicare patients. In contrast, if payments do not cover the marginal costs, the provider may have a disincentive to care for Medicare beneficiaries.⁷ In 2020, the marginal profit, on average, for freestanding HHAs was 22.9 percent. This substantial marginal profit indicates that these HHAs have a strong incentive to serve Medicare beneficiaries.

Monthly utilization trends indicate that the PHE, not the PDGM, accounted for most of the volume decline in 2020

Consistent with the mandate of the BBA of 2018, the Commission has assessed how home health utilization

changed in the first year of the PDGM by comparing the number and characteristics of 30-day periods for 2019 and 2020. Because home health services initiated in 2019 were paid under 60-day episodes, 2019 utilization was recalculated as 30-day periods to provide comparable units of service in the two years. Specifically, we assess changes in volume of services, measures of patient severity, and changes in the type and amount of in-person visits provided during 30-day periods.

Though the decline in volume and payments in 2020 coincides with the implementation of the PDGM, a review comparing same-month trends for 2020 with the prior year indicates that the decline in services was concentrated in April and May (Figure 8-1). In the months after the onset of the PHE, home health volume recovered and stabilized at a level slightly lower than 2019. On a month-to-month basis, volume changes in 2020 appear to have occurred in four phases:

**TABLE
8-3****Timing and source of referral to home health care were similar in 2019 and 2020**

	Share of 30-day periods	
	2019	2020
By source of referral:		
Posthospital or institutional PAC	25.3%	25.7%
Community admitted	74.7	74.3
By timing of 30-day period:		
Early	35.0	31.1
Late	65.0	68.9
Payment category:		
Low-use payment adjustment	7.4	8.7
Full 30-day payment	92.6	91.3

Note: PAC (post-acute care). Home health services initiated in 2019 were paid under 60-day episodes. For this table, home health care services initiated in 2019 were recalculated as 30-day periods to provide comparable units of service in the two years. Thirty-day periods are included in the month and year that the period ended.

Source: MedPAC analysis of 2019 home health Limited Data Set file and home health standard analytic file for 2020.

January through March 2020. For the first two months of 2020, the number of home health periods provided by HHAs was slightly less than the volume delivered during the same time frame in 2019. The year-over-year volume gap widened in March, likely reflecting the start of PHE-related disruptions (home health agencies bill for services based on the last day of the 30-day period of service, so the claims reported for March mostly reflect services initiated in February).

April and May 2020. In April and May of 2020, volume dropped to about 80 percent of the level observed in the same period of 2019, reflecting the widespread disruptions to the health care system and the economy that began in March 2020. Though these months reflect significant disruption relative to prior years, the decline in home health services was less than the decline experienced in other sectors. For example, in April 2020, Medicare inpatient hospital services per beneficiary fell by 40 percent.

June 2020 and July 2020. In these months, home health volume rebounded. By July 2020, volume had recovered to about 96 percent of the home health periods that were provided in July 2019. This recovery suggests that HHAs were able to establish procedures to mitigate PHE risks for agency employees and Medicare beneficiaries.

August through December 2020. Volume did not change substantially from the July 2020 level and continued to average about 830,000 periods per month, a level equal to 95 percent of utilization in 2019 for the same time frame. By the end of 2020, monthly volume was not significantly lower than in the prior year. Because the volume of home health services had been declining before 2020, the lower level of volume in the later months of 2020 is consistent with the pre-PHE trend of declining utilization.

**TABLE
8-4****Distribution of 30-day periods by clinical category in 2019 and 2020**

	Share of 30-day periods		Percentage point difference
	2019	2020	
Categories other than MMTA:			
Musculoskeletal rehabilitation	19.4%	19.5%	0.1
Wounds	12.3	14.2	1.9
Neurological rehabilitation	10.3	10.6	0.3
Complex nursing interventions	4.5	3.1	−1.4
Behavioral health	2.7	2.3	−0.4
MMTA categories:			
Cardiac and circulatory	21.6	19.3	−2.3
Respiratory	7.9	7.8	−0.1
Endocrine	6.8	7.3	0.5
Gastroenterology/genitourinary	4.3	4.6	0.3
Infectious disease	3.8	4.7	0.9
Surgical aftercare	3.4	3.5	0.1
Other	2.9	3.2	0.3

Note: MMTA (medication management, teaching, and assessment). Home health services initiated in 2019 were paid under 60-day episodes. For this table, home health care services initiated in 2019 were recalculated as 30-day periods to provide comparable units of service in the two years. Thirty-day periods are included in the month and year that the period ended. Components may not sum to totals due to rounding.

Source: MedPAC analysis of 2019 home health Limited Data Set file and 2020 home health standard analytic file.

The characteristics of home health users under the PDGM in 2020

The PDGM classifies 30-day periods into 432 payment groups based on 5 dimensions of care: source of referral, period timing, clinical conditions, functional status, and comorbidities. Comparing the shares of periods for 2019 and 2020 provides some context for understanding the characteristics of patients in the first year of the PDGM system. By most PDGM-based measures, the characteristics of beneficiaries did not change significantly.

Source of referral and period timing did not change significantly under the PDGM In 2020, the share of home health periods referred from the community was 74.3 percent compared with 25.7 percent referred from a hospital or institutional PAC, similar to the proportions from the prior year (Table 8-3). These

shares remained steady throughout 2020, even as the number of hospital discharges plummeted in March and April and then began to increase (data not shown).

Similarly, the distribution of home health periods by the period's timing did not change significantly. For example, in 2020, the share of periods classified as late under the PDGM rose about 4 percentage points to 68.9 percent (Table 8-3). In addition, the share of cases qualifying for LUPA payments, which are paid significantly lower rates than case mix-adjusted full-period payments, did not change significantly.

In 2020, beneficiaries had similar clinical conditions under the PDGM We also found that the distribution of 30-day periods across the 12 clinical categories did not change significantly in 2020 relative to the prior year (Table 8-4). For example, the share of 30-day periods

**TABLE
8-5****In 2020, more periods were reported in greater functional-debility and high-comorbidity payment groups**

	Share of 30-day periods	
	2019	2020
Reported functional status (high = greater debility)		
Low	33.0%	25.7%
Medium	34.0	32.7
High	33.0	41.6
Comorbidity group (high = more/more severe comorbidities)		
None	54.3	49.1
Low	37.2	37.0
High	8.5	13.9

Note: Home health services initiated in 2019 were paid under 60-day episodes. For this table, home health care services initiated in 2019 were recalculated as 30-day periods to provide comparable units of service in the two years. Thirty-day periods are included in the year that the period ended.

Source: MedPAC analysis of 2019 home health Limited Data Set file and 2020 home health standard analytic file.

initiated with MMTA for cardiac/circulatory conditions or with need for complex nursing interventions as a primary reason for home health care declined by 2.3 percentage points and 1.4 percentage points, respectively, while the share of periods initiated due to wound care needs or MMTA for infectious disease grew by 1.9 percentage points and 0.9 percentage points, respectively. Since the PDGM assigns the clinical group based on the reported primary reason for home health care, the consistency between 2019 and 2020 indicates that beneficiaries were referred to home health care for similar conditions in these years. The steady proportions of clinical conditions for the two years suggest that broader disruptions to the health care system, such as canceled elective surgeries or beneficiaries electing not to use home health services to avoid potential exposure to the coronavirus, did not materially affect the clinical mix of patients typically served in home health care.

Changes in functional status and rates of comorbidities should be interpreted carefully In 2020, the reported acuity for home health beneficiaries was higher than

in 2019 for two measures of severity: the reported functional status of beneficiaries at the start of the 30-day period and the number of cases with a high level of clinical comorbidities (recognized by the PDGM with higher payments) (Table 8-5). Between 2019 and 2020, the share of 30-day home health periods that reported the highest level of functional debility rose from 33.0 percent to 41.6 percent (the PDGM raises payments as reported debility increases). During this period, the share of patients coded in the highest-paying comorbidity group rose from 8.5 percent to 13.9 percent. However, these findings should be interpreted cautiously. In the past, the Commission has voiced concerns that functional status may be susceptible to provider coding practices and is therefore a less reliable indicator of patient severity (Medicare Payment Advisory Commission 2019). In addition, changes in the coding of comorbid conditions typically follow the implementation of new case-mix systems, and CMS expected that HHAs would change coding practices to report more of these conditions when it proposed the PDGM (Centers for Medicare & Medicaid Services 2019). Changes in agency coding practice in response to

**TABLE
8-6**

Mean CMS-HCC score for home health beneficiaries by quarter of use, 2019 and 2020

	Quarter				Annual average
	1	2	3	4	
2019	2.54	2.24	2.12	2.02	2.05
2020	2.44	2.28	2.09	1.99	2.00

Note: CMS-HCC (CMS hierarchical condition category). Home health services initiated in 2019 were paid under 60-day episodes. For this table, home health care services initiated in 2019 were recalculated as 30-day periods to provide comparable units of service in the two years. Thirty-day periods are included in the quarter that the period ended.

Source: MedPAC analysis of data from the 2019 and 2020 Medicare CMS-HCC files.

the new payment model's incentives likely contributed significantly to changes in reported patient severity, while other factors in the case-mix system do not appear to have been materially affected. It is not clear to what extent the PHE contributed to changes in reported patient severity.

In 2020, CMS-HCC risk scores of home health care beneficiaries declined slightly The review of patient attributes under the PDGM (Table 8-3, p. 282; Table 8-4, p. 283; and Table 8-5, opposite page) indicates that in 2020, patient characteristics did not shift significantly from 2019 on most measures, suggesting that neither the PHE nor the implementation of the PDGM led to a significant change in the case mix of Medicare beneficiaries using home health care. This finding was further bolstered using another measure—the average CMS hierarchical condition category (CMS-HCC) scores for Medicare home health beneficiaries in 2019 and 2020 (Table 8-6). These scores predict a beneficiary's Medicare cost relative to the national average based on a range of demographic, enrollment, and clinical characteristics. The CMS-HCC includes a broader range of risk factors than the PDGM, such as categories for Medicaid enrollment, beneficiary age and sex, and numerous clinical conditions. It measures risk using clinical data from a full year of medical service and is less affected by changes in HHA coding practices. While the CMS-HCC is not used in setting home health payments, it provides a broad measure of the acuity of Medicare beneficiaries.

On an annual basis, the mean CMS-HCC score for FFS beneficiaries who used home health was slightly lower in 2020, indicating that patients' health status was slightly less severe compared with 2019. The quarterly pattern of HCC change was the same for both years, with the first quarter in each year having the highest scores, then declining through the fourth quarter. The CMS-HCC trends suggest that neither the PHE nor the implementation of the PDGM significantly changed the average home health agency's mix of cases in 2020.

Increased use of telehealth services during the PHE makes it difficult to interpret the 2020 decline in in-person visits In 2020, the number of in-person visits provided to home health beneficiaries fell by 18.6 percent relative to 2019 (Table 8-7, p. 286). This decline reflects fewer beneficiaries served and fewer 30-day periods provided, but the number of in-person home health visits fell more than the number of home health users. In-person therapy visits declined by more than in-person nursing visits, likely reflecting the impact of the PDGM, which no longer provides additional payment for periods that cover more therapy services.

The decline in in-person visits could also reflect two trends during the PHE: the reluctance of beneficiaries to receive services in the home and growth in the use of telehealth. Shortly after the onset of the PHE, CMS expanded the use of telehealth in home health care,

**TABLE
8-7**

In-person therapy visits declined more than skilled nursing visits

	In-person visits (in millions)			Category as a share of all in-person visits	
	2019	2020	Annual change	2019	2020
Physical therapy	34.1	25.5	-25.3%	34%	31%
Occupational therapy	10.8	7.5	-31.0	11	9
Speech-language pathology	2.1	1.5	-29.1	2	2
Skilled nursing	45.2	40.9	-9.5	45	50
Medical social services	0.8	0.5	28.4	1	1
Home health aide	6.6	5.2	-21.6	7	6
Total	99.7	81.1	-18.6	100	100

Note: Home health services initiated in 2019 were paid under 60-day episodes. For this table, home health care services initiated in 2019 were recalculated as 30-day periods to provide comparable units of service in the two years. Thirty-day periods are included in the year that the period ended. Components may not sum to totals due to rounding. Percent change columns were calculated on unrounded data.

Source: MedPAC analysis of 2019 home health Limited Data Set file and 2020 home health standard analytic file.

permitting agencies to provide virtual visits and other telehealth services under the benefit. The expanded coverage of telehealth was initially for the duration of the PHE but was later made permanent. Several reports suggest that HHAs' use of telehealth grew significantly during the PHE. A large national for-profit HHA provider reported that the quarterly number of telehealth visits it conducted increased 48 percent to 261,000 visits after the PHE was declared (Holly 2021). A survey found that 71 percent of HHAs expanded their telehealth programs in 2020 (Shang et al. 2020). Several HHAs and industry experts we interviewed indicated that telehealth and virtual visits expanded substantially during the PHE, surging at the beginning of the PHE and receding in later months.

The expansion required HHAs to report the costs of telehealth services on their Medicare cost report, but there was no requirement to report any other information about telehealth use. As a result, no Medicare data are available on the type of telehealth HHAs provided, the characteristics of patients who received such services, or the number of virtual visits or other telehealth services beneficiaries received. Medicare claims report only in-person visits, and so the services reported in Table 8-7 do not include any

telehealth services beneficiaries received (i.e., virtual visits).

2020 decline in therapy services accounts for most of the decline in in-person visits Though the absence of data on virtual visits creates some uncertainty about the total services provided during a home health period, a review of the in-person visit data for 2020 provides some insight about home health care changes at the beneficiary level. Table 8-8 indicates that for 30-day periods without a LUPA, the average number of in-person visits between 2019 and 2020 fell from 10.2 visits to 9.2 visits. This decline was mostly due to a drop in in-person therapy visits (including physical, occupational, and speech-language pathology). Notably, however, in-person skilled nursing visits per period rose slightly, by 0.6 percent. Several factors could account for the stability of in-person nursing visits provided, such as skilled nursing requiring more hands-on care that cannot be provided through telehealth, in-person nursing visits substituting for fewer therapy visits when possible, or beneficiary preferences about the types of service they were willing to accept in the home during the PHE.⁸ The increased number of virtual visits and other telehealth

**TABLE
8-8****The number of in-person visits per non-LUPA 30-day period declined in 2020**

	Number of in-person visits per non-LUPA 30-day period		Annual percent change
	2019	2020	
Skilled nursing	4.6	4.6	0.6%
Physical therapy	3.5	2.9	-16.9
Occupational therapy	1.1	0.9	-23.8
Speech-language pathology	0.2	0.2	-23.1
Medical social services	0.1	0.1	-21.1
Home health aide	0.7	0.6	-14.2
Total	10.2	9.2	-9.4

Note: LUPA (low-use payment adjustment). Home health services initiated in 2019 were paid under 60-day episodes. For this table, home health care services initiated in 2019 were recalculated as 30-day periods to provide comparable units of service in the two years. Thirty-day periods are included in the year that the period ended. Components may not sum to totals due to rounding. Percent change columns were calculated on unrounded data.

Source: MedPAC analysis of 2019 home health Limited Data Set file and 2020 home health standard analytic file.

services likely offset some of the decline in services noted in Table 8-8.

Fewer in-person therapy visits could reflect the impact of the PDGM, since the new model makes a flat payment regardless of the number of in-person therapy visits provided, while the predecessor system raised payments as the number of these visits increased. Between 2019 and 2020, the share of home health periods (excluding LUPA periods) receiving at least one in-person therapy visit fell from 65 percent to 57 percent. At the same time, among those home health periods with at least one in-person therapy visit, the average number of in-person therapy visits fell from 7.6 visits to 6.6 visits (Table 8-9, p. 288). For these periods, the share of 30-day periods with 6 or more in-person therapy visits dropped, while the share with 5 or fewer in-person visits increased. A comparison of the change for in-person therapy visits across the 12 clinical categories of the PDGM indicates a drop of about 1 in-person therapy visit per period in each category (data not shown). However, the expanded use of telehealth, which could be used to provide both nursing and physical therapy services,

could have compensated for some of the in-person visit decline. Although the elimination of in-person therapy visits as a payment factor in the PPS changed the incentive to provide more therapy services than otherwise necessary, CMS reiterated that it expected HHAs to base care on patient needs and not change therapy plans of care or limit these services due to the payment system's new model (Centers for Medicare & Medicaid Services 2021).

Quality of care: 2020 data are difficult to assess

The quality of care in 2020 is difficult to assess due to the effects of the PHE on beneficiaries and providers. Each year, we track changes in Medicare's quality measures and assess whether performance has improved, declined, or remained steady. However, we do not use the reported 2020 results for quality measures to inform our conclusions about the adequacy of Medicare payments to home health agencies. Data for 2020 reflect temporary changes in the delivery of care and data limitations unique to the PHE rather than actual trends in quality. In addition, the Commission's quality metrics rely on

**TABLE
8-9****In 2020, share of 30-day periods with at least one in-person therapy visit declined**

	2019	2020
Share of 30-day periods with at least one in-person therapy visit	65%	57%
Average in-person therapy visits per 30-day period (for periods with at least one in-person therapy visit)	7.6	6.6
Distribution of 30-day periods with one or more in-person therapy visits		
1 to 3 in-person therapy visits	18.7%	24.9%
3 to 5 in-person therapy visits	23.9%	25.1%
6 to 9 in-person therapy visits	31.3%	27.7%
10 or more in-person therapy visits	26.0%	22.3%

Note: Table includes 30-day periods that were full periods of home health care and did not qualify for LUPA payments. Home health services initiated in 2019 were paid under 60-day episodes. For this table, home health care services initiated in 2019 were recalculated as 30-day periods to provide comparable units of service in the two years. Thirty-day periods are included in the year that the period ended. Components may not sum to totals due to rounding.

Source: MedPAC analysis of 2019 home health Limited Data Set file and 2020 home health standard analytic file.

risk-adjustment models that use performance from previous years to predict beneficiary risk. COVID-19 is a new diagnosis and is not included in the current risk-adjustment models, though many associated conditions are. As a result, our risk models do not fully represent the acuity and mix of patients receiving care in 2020.

Detecting changes attributable to the PDGM, even without the impact of the PHE, would be challenging. The Commission has observed in previous reports that annual changes in average payment per 60-day home health episode did not correlate with yearly trends in home health care quality (Medicare Payment Advisory Commission 2014).

We evaluate quality of care using two measures: average risk-adjusted rates of successful discharge to the community and all-condition hospitalizations within a stay. Successful discharge to the community includes beneficiaries discharged to the community who did not have an unplanned hospitalization and did not die in the succeeding 30 days. The hospitalization measure captures all unplanned hospitalizations (admissions and readmissions) and outpatient

observation stays that occur during the home health spell of service (beneficiaries who died during a SNF stay are excluded from the measure). Discharges to hospice or beneficiaries with the hospice benefit are excluded from the calculation of both measures. COVID-19-related deaths are captured in the discharge to community measure but not the hospitalization measure. Both measures are uniformly defined and risk adjusted across HHAs, SNFs, inpatient rehabilitation facilities, and long-term care hospitals. Inclusion of all PAC sectors takes another step toward achieving a unified payment system and evaluation of outcomes across PAC settings.⁹ Providers with at least 60 spells in the year (the minimum count to meet a reliability threshold of 0.7) were included in calculating the average HHA rate.

In 2020, the share of Medicare beneficiaries hospitalized during their home health stay declined to 18.3 percent, an improvement over the trend in the previous five years, which averaged 21.1 percent (Table 8-10). Conversely, between 2019 and 2020, the share of patients discharged successfully to the community dropped from 72.2 percent to 60.9 percent. Given

**TABLE
8-10**

Quality trends for 2020 were mixed

	Prepandemic					
	2015	2016	2017	2018	2019	2020
Successful discharge to the community	68.3%	69.2%	69.6%	70.4%	72.2%	60.9%
Hospitalization during home health spell	20.6	20.8	21.4	21.5	21.4	18.3

Note: "Successful discharge to the community" includes beneficiaries discharged to the community (including those discharged to the same nursing home) who did not have an unplanned hospitalization or die in the 30 days after discharge. The hospitalization measure captures all unplanned hospital admissions and readmissions and outpatient observation stays that occurred during the stay. Both measures are uniformly defined and risk adjusted across the four post-acute care settings. Providers with at least 60 stays in the year (the minimum count to meet a reliability of 0.7) were included in calculating the average facility rate.

Source: MedPAC analysis of Medicare Provider Analysis and Review and home health standard analytical files from CMS.

the various disruptions to the health care delivery system in 2020, it is difficult to determine the factors that account for the improvement in hospitalization rates and the drop in successful discharges to the community. Technical factors could also account for some of these results. Though the patient characteristics of beneficiaries receiving home health care in 2020 did not change significantly, our models may not have accounted for aspects of patient risk attributable to home health care beneficiaries during the pandemic. For these reasons, the changes in home health care quality need to be interpreted carefully and may have little, if any, relationship to the adequacy of Medicare payments in 2020.

The Commission no longer includes measures of patient functional improvement in our assessment of quality. The Commission contends that maintaining and improving functional status is a key goal of PAC but has raised serious questions about the reliability of currently reported information (Medicare Payment Advisory Commission 2019). Because functional assessments are used in the case-mix system to establish payments, it is unlikely that this information can be divorced from payment incentives. In its June 2019 report to the Congress, the Commission discussed possible strategies to improve the assessment data, the importance of monitoring the reporting of these data, and alternative measures of function (such as

patient-reported surveys) that do not rely on provider-completed assessments (Medicare Payment Advisory Commission 2019). The experience of home health care indicates that HHA practices can be influenced by payment policy. For example, the share of episodes coded with the highest functional debility rose in 2020 when CMS implemented the new payment model (Table 8-5, p. 284). In addition, a review of the home health value-based purchasing program noted that agencies had revised patient assessment practices to improve their quality scores under the program; as a result, improvement on some quality measures may have reflected revised assessment practices and not improvement in the quality of care provided.

Patient experience measures indicate that most beneficiaries were satisfied with their home health care in 2019

HHAs collect Home Health Care Consumer Assessment of Healthcare Providers and Systems® (HH-CAHPS®) surveys from a sample of patients served, which CMS uses to calculate results for five measures of patient experience included in the overall rating.¹⁰ The HH-CAHPS measures key components of quality by assessing whether something that should happen during a stay (such as clear communication) actually happened or how often it happened. In 2019, 84 percent of surveyed patients rated their overall HHA experience a 9 or 10 on a 10-point scale (Table 8-11, p. 290).¹¹

**TABLE
8-11****Home health patient experience measures, 2019**

HH-CAHPS® measure	2019
Overall care: How patients rated the overall care from the HHA	84%
Likely to recommend: Patients who would definitely recommend the HHA to friends and family	78
Professional care: How well the home health team gave care in a professional way	88
Communication: How well the home health team communicated with patients	85
Discussion of care: How well the home health team discussed medicines, pain, and home safety with patients	83

Note: HH-CAHPS® (Home Health Care Consumer Assessment of Healthcare Providers and Systems®), HHA (home health agency). HH-CAHPS is a standardized 34-item survey of patients' evaluations of home health care. The survey items are combined to calculate measures of patient experience for each agency. The HH-CAHPS percentages included in the table are shares of patients who gave "top-box," or the most positive, responses to HH-CAHPS survey items. The top-box response is "9" or "10" (high) for the HHA overall care item, "Definitely yes" for likely to recommend the agency, and "Always"/"yes" for the three composite measures (professional care, communication, discussion of care). Results are based on surveys from a sample of HHA patients from January to December for the year in question.

Source: CMS summary of HH-CAHPS public report of survey results tables.

Seventy-eight percent of patients reported that they would definitely recommend the HHA to family and friends. Measures of professional care, communication, and discussion of care were all over 80 percent.

Providers' access to capital: Access to capital is adequate

In 2020, the all-payer margin for freestanding HHAs averaged 8.1 percent, indicating that many HHAs yield positive financial results that should appeal to capital markets. HHAs are not as capital intensive as other providers because they do not require extensive physical infrastructure, and most are too small to attract interest from capital markets. Few HHAs access capital through publicly traded shares or through public debt, such as issuance of bonds. In 2020, Medicare accounted for about 53 percent of revenue for freestanding HHAs.

Information on publicly traded home health care companies provides some insight into access to capital, but it has limitations. Publicly traded companies may have other lines of business in addition to home health care, such as hospice, Medicaid-covered services, and private-duty nursing. Also, publicly traded companies are a small portion of the total number of HHAs in the

industry. However, since they are the largest corporate entities in home health care, they can provide some insight about the industry's financial status.

Analysis of the for-profit publicly traded companies indicates that they have access to capital. Financial analysts have noted that, while the firms saw reduced volume in the second quarter of 2020, demand recovered in later months and did not constrict access to capital. While aggregate Medicare revenues were lower in 2020 for some firms, these declines reflected lower volume and were offset by lower total costs for Medicare services. Financial analysts anticipate that firms will experience an increase in volume as inpatient hospital services increase, though other factors, such as the future course of the PHE, could affect volume.

Medicare payments and providers' costs: Higher payment per in-person visit in 2020

In 2020, the average payment per 30-day (non-LUPA) period for freestanding agencies was \$2,047. Though we typically report the annual payment increase, 2020 is the first year of a new unit of payment, with no comparable payments in 2019. As an alternative, we compared the average payment per in-person visit in

2019 and 2020, since in-person visits are a primary unit of service in the home health benefit and data on the number of visits are available for both years. Between 2019 and 2020, Medicare's payment per visit increased by about 16 percent, from \$180 per in-person visit to \$209 per in-person visit under the PDGM.¹² The per visit payment increase reflects the budget-neutrality requirement under the BBA of 2018, which requires Medicare to maintain expenditures at a pre-PDGM baseline. The increase also reflects the other payment policies in 2020, including the annual payment update of 1.5 percent, a 3.46 percent payment reduction that CMS implemented in anticipation of utilization and coding changes in the PDGM's first year, and the suspension of the sequester. Finally, a 4 percent increase in case-mix acuity in 2020, determined using data simulating 2019 payments under the PDGM, also raised payments in 2020.

The drop in in-person visits per 30-day period is a substantial factor in the higher payment per visit under the PDGM. When setting the PDGM base rate, CMS, consistent with the requirements of the BBA of 2018 requirements, assumed the number of in-person visits in a 30-day period would remain stable; thus, the rate is based on a higher level of utilization than occurred in 2020.¹³ The base rate also does not reflect the shift to a less costly mix of services due to the drop in therapy services. If telehealth visits had been counted, the 2020 per visit payment increase would likely have been lower.

The decline in in-person visits under the PDGM was similar to the outcome in 2000 when Medicare switched from a cost-based home health reimbursement system to a PPS that used 60-day episodes of care. In that year, the number of visits per 60-day episode fell and was lower than the amount CMS assumed when it set the base payment for the newly established PPS; as a result, in 2001, the Medicare margin for home health care exceeded 20 percent. Though in-person visits per period could rebound in future years as the effects of the PHE recede, the pattern of visits and payments observed in 2020 is similar to the experience early in the history of the home health PPS that led to years of payments well in excess of costs.

In 2020, the average cost per 30-day period rose by 3.1 percent, greater than the 1.4 percent average annual

increase in cost per 60-day episode between 2017 and 2019. Utilization trends under the PDGM suggest that the new payment model could have slowed cost growth. In 2020, the 1.0-visit decline per 30-day period lowered the cost of care, since fewer visits were provided in a period. In addition, the mix of services in 2020 was less costly, since higher-cost in-person therapy visits (the most expensive in-person service HHAs provide) accounted for most of the decline. Without these changes, costs in 2020 would have been higher.

The PHE has led to reported price increases in labor and other services needed to deliver home health care, plus additional costs for personal protective equipment. The volume decline in 2020 due to the PHE could also have caused HHAs to experience negative economies of scale. However, the 10 percent increase in average cost per visit for both skilled nursing and physical therapy was higher than the rise of input prices indicated by the 2020 home health market basket. Because these cost hikes were likely driven by the PHE, increases in per visit costs could be lower in future years.

Medicare margins for freestanding HHAs increased sharply in 2020

In 2020, the aggregate Medicare margin for freestanding HHAs jumped almost 5 percentage points to 20.2 percent (Table 8-12, p. 292).¹⁴ The margin ranged from 4.1 percent to 31.8 percent for those at the 25th percentile and 75th percentile, respectively, of the margin distribution (data not shown). For-profit HHAs had higher margins than nonprofit HHAs, and rural HHAs had slightly higher margins than urban HHAs. Agencies with higher volume had better financial results, likely reflecting the economies of scale possible for larger operations. For example, margins for HHAs in the bottom quintile of volume averaged 11.6 percent, compared with a 22.4 percent average margin for HHAs in the top quintile.

In 2020, HHAs received substantial payments through PHE-related relief programs, such as the Provider Relief Fund, Paycheck Protection Program, and the Small Business Administration Loan Forgiveness program. When these relief funds are included, the Medicare aggregate margin for freestanding HHAs in 2020 was 21.9 percent (data not shown).¹⁵

**TABLE
8-12****Medicare margins for freestanding home health agencies, 2019 and 2020**

	Medicare margins		Share of home health agencies	Share of periods
	2019	2020		
All	15.4%	20.2%	100%	100%
Geography				
Majority urban	16.1	20.0	87.4	85.2
Majority rural	14.2	21.6	12.6	14.8
Type of ownership				
For profit	17.4	22.7	87.4	80.6
Nonprofit	11.4	12.4	12.6	19.4
Volume quintile				
First (smallest)	9.7	11.6	20	2.6
Second	11.4	14.0	20	6.4
Third	13.3	17.0	20	11.1
Fourth	14.1	18.8	20	19.7
Fifth (largest)	17.5	22.4	20	60.2

Note: Home health agencies were classified as majority urban if they provided more than 50 percent of episodes to beneficiaries in urban counties and were classified as majority rural if they provided more than 50 percent of episodes to beneficiaries in rural counties. These data do not include federal Provider Relief Fund payments that HHAs received due to the public health emergency. Share of home health agencies and periods are as of 2020.

Source: MedPAC analysis of Medicare home health cost report files from CMS.

The Commission includes hospital-based HHAs in its calculation of acute care hospitals' Medicare margins because these agencies operate in the financial context of hospital operations. In 2020, margins for hospital-based HHAs were -21.6 percent (data not shown). The lower margins of hospital-based HHAs are attributable chiefly to their higher costs, some of which are a result of overhead costs allocated to the HHA from its parent hospital. Hospital-based HHAs help their parent institutions financially if they can shorten inpatient stays, lowering expenses in the more costly inpatient hospital setting.

Relatively efficient HHAs serve patients similar to those at all other HHAs

The Commission is required by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 to consider the costs associated with efficient providers. The analysis informs the Commission's update discussion by examining the adequacy of payments for those providers that perform relatively well on cost and quality measures.

The Commission follows two principles when selecting a set of efficient providers. First, the providers must do

relatively well on both cost and quality metrics. Second, performance has to be consistent, meaning that the provider cannot have poor performance on any metric in any of three consecutive years preceding the year under evaluation. The Commission's approach is to examine how many providers meet a preestablished set of criteria. It does not establish a set share (for example, 10 percent) of providers to be considered efficient and then define criteria to meet that pool size.

To identify efficient HHAs, we examined cost efficiency and quality at freestanding HHAs to identify a cohort that demonstrated better performance on these metrics relative to peers (Table 8-13, p. 294). The cost measure was on a per episode basis, adjusted for risk (patients' health status) and local wages; the quality measures were risk-adjusted rates of hospitalizations during the home health spell and rate of successful discharge to the community after the home health spell. Our approach categorized an HHA as relatively efficient if it was in the best performing third on at least one measure (low cost per episode, a low hospitalization rate, or a high rate of beneficiaries with a successful discharge to the community) and was not in the worst performing third of any of these measures for three consecutive years (2017 to 2019). Providers also had to have complete claims, quality, and cost report data for 2017 to 2020. In 2020, about 15 percent of freestanding HHAs met the criteria to be classified as efficient.

For 2020, a year that includes the effects of the PHE and PDGM implementation, we selected providers based on their performance in 2017 to 2019, a period prior to the two events. Consequently, the results for this report should be interpreted carefully because the data for 2020 could reflect factors unrelated to the relative efficiency of HHAs.

In 2020, relative to other HHAs, efficient HHAs served a similar mix of patients and had a similar mix of nursing, therapy, aide, and social services visits but had a median cost per period that was about 1 percent lower. Relatively efficient providers had a median hospitalization rate that was 3.4 percentage points lower (lower is better). Relatively efficient HHAs provided 0.6 fewer in-person visits per period and had a median margin that was 4.5 percentage points higher. Efficient providers were less likely to be for profit,

tended to provide fewer 30-day periods in rural areas, and had a median Medicare margin of 24.3 percent.

The Commission projects that Medicare margins will remain high in 2022

In modeling 2022 payments, we incorporate policy changes that will go into effect between the year of our most recent data, 2020, and the year for which we are making the margin projection, 2022. The major changes are:

- a 2.0 percent payment update for 2021;
- a 0.3 percent decrease in payments in 2021 and 2022 due to the phasing out of the rural add-on payments for home health care in the BBA of 2018;
- a 2.6 percent payment update for 2022;
- a 0.7 percent increase in 2022 to reflect a change to the outlier policy CMS implemented for 2022;¹⁶
- the suspension of the payment sequester under the Budget Control Act through March 31, 2022, a reduced payment sequester of 1 percent from April 1, 2022, to June 30, 2022, and the resumption of the sequester on July 1, 2022; and
- an estimated 3.6 percent rise in cost per 30-day period in 2021 and 3.1 percent rise in 2022, based in part on the home health market basket for these years.

On the basis of these policies and assumptions, the Commission projects a margin of 17.0 percent in 2022.

The margin projection for 2022 assumes a rate of cost inflation that is high relative to past experience. In 2011 to 2019—the last 10 years the 60-day payment episode was in effect—the average increase in cost per episode was about 0.5 percent. Annual changes in this period varied from a 3.4 percent drop to a 3.0 percent climb, though in most years the annual change up or down was 1.0 percent or less. However, the PHE likely exposed HHAs to cost inflation that they have not typically experienced, resulting in the higher than average cost per period increase of 3.1 percent in 2020. While the past experience of HHAs would suggest that this high rate of cost growth will not continue, some effects of the PHE, such as higher costs for labor, could persist through 2022. As a result, the Commission's

**TABLE
8-13****Performance of relatively efficient home health agencies in 2020**

Provider characteristics	Relatively efficient providers	All other providers
Number of home health agencies	463	2,701
Share that are for profit	70.6%	77.7%
Median		
Medicare margin	24.3%	19.8%
Hospitalization during home health spell	16.5%	19.9%
Successful discharge to community relative to expected	1.11	1.03
Standardized cost per episode	\$1,281	\$1,294
Patient severity case-mix index	1.11	1.03
Visits per period		
Average in-person visits per period	8.2	8.8
Share of in-person visits by type		
Skilled nursing	48%	49%
Aide	5%	5%
MSS	1%	1%
Therapy	46%	45%
HHA size		
Median number of 30-day payment periods	993	997
Share of episodes		
Low-use episode	10.0%	7.8%
Outlier episode	5.6%	7.8%
Provided to rural beneficiaries	22.2%	27.3%

Note: MSS (medical social services), HHA (home health agency). Sample includes freestanding HHAs with complete data for three consecutive years. "Therapy" includes physical, occupational, and speech-language pathology visits. "Low-use periods" are those with low numbers of in-person visits, and these periods are paid on a per visit basis (the threshold for these payments depends on the payment group a period is assigned to, and it ranges from two to six in-person visits). "Outlier episodes" are those that received a very high number of in-person visits and qualified for outlier payments. Shares may not sum to 100 percent due to rounding.

Source: MedPAC analysis of Medicare cost reports and home health standard analytic file from CMS.

projection for 2022 assumes that costs will grow by the home health market basket for 2021 and 2022, for an average increase of about 3.47 percent a year. However, if this rate of cost growth returns to the annual rates observed before 2020, Medicare margins in 2022 could be higher than 17 percent.

How should Medicare payments change in 2023?

Our review of payment adequacy for Medicare home health service indicates that access is more than adequate in most areas and that payments substantially

exceed costs. On the basis of these findings, the Commission has concluded that home health payments should be significantly reduced. We anticipate that payments in 2022 will substantially exceed costs. These excess payments do not accrue to the advantage of the beneficiary or the Medicare program and do not encourage the efficient use of the home health care benefit.

Home health care can be a high-value benefit when it is appropriately and efficiently delivered. Medicare beneficiaries often prefer to receive care at home instead of in institutional settings, and home health care can be provided at lower costs than institutional care. However, Medicare's payments for home health services are too high, and the excess payments diminish the service's value as a substitute for more costly services. In addition, broad geographic variation in the use of the home health benefit indicates inefficiencies in some areas of the country.

RECOMMENDATION 8-1

For calendar year 2023, the Congress should reduce the 2022 Medicare base payment rate for home health agencies by 5 percent.

RATIONALE 8-1

A 5 percent reduction in 2023 would represent a significant action to address the magnitude of the excess payments embedded in Medicare's home health payment rates. However, this reduction would likely be inadequate to align Medicare payments with providers' actual costs. Though the PHE was a disruption for HHAs, it did not significantly change the industry's financial outlook or service delivery practices; in fact, Medicare margins in 2020 were substantially higher than in 2019.

IMPLICATIONS 8-1

Spending

- This recommendation would decrease federal program spending by \$750 million to \$2 billion in 2023 and by \$5 billion to \$10 billion over 5 years.

Beneficiary and provider

- We do not expect this recommendation to have adverse effects on beneficiaries' access to appropriate care. Given the current level of

payments, we do not expect the recommendation to affect providers' willingness to deliver appropriate home health care.

Requiring HHAs to report the telehealth services they provide to Medicare beneficiaries under the home health benefit

The lack of detailed information on the use of telehealth in 2020 impaired our ability to assess the changes to the benefit in this year, limiting our ability to assess the impact of the PDGM and the PHE. In 2020, in-person visits during 30-day periods fell by an average of 1.0 visit, but virtual visits likely increased, offsetting some of this decline. Since virtual visits in some instances may have substituted for in-person visits, we lack important context for assessing the in-person visit decline.

As the use of telehealth in home health care grows, the lack of detailed information about these visits could also compromise CMS's ability to set payments accurately under the home health PPS. In the PDGM, CMS sets payment for each case-mix group based on the total cost of the in-person visits provided in a 30-day period. Without claims-level information on telehealth use, CMS must rely on facility-level overhead costs to set payments that include the use of telehealth services. To the extent that telehealth use varies across clinical categories or other beneficiary characteristics, the payment for a given payment group may be too high or too low. Payment accuracy would be improved by requiring HHAs to report the use of telehealth services on home health claims.

RECOMMENDATION 8-2

The Secretary should require that home health agencies report telehealth services provided during a 30-day period.

RATIONALE 8-2

The lack of information about the frequency, duration, or modality of telehealth services received during a 30-day home health period makes it challenging to characterize service use under the benefit for payment accuracy or other policy analysis. Given the

recent expansion of telehealth coverage under the home health benefit, the Commission contends that HHAs should be required to report the delivery of virtual visits and other telehealth services on Medicare claims, similar to what Medicare requires for in-person visits provided by HHAs and other services under the benefit.¹⁷ Collecting information on telehealth use during a period would ensure that these services are accounted for when analyzing beneficiaries' use of home health care services and when setting payments under the home health PPS. The information reported should include the type of telehealth, dates of service, and duration of service.

IMPLICATIONS 8-2

Spending

- This recommendation would not change payments relative to current law.

Beneficiary and provider

- Beneficiaries' access to care should not be affected. Including data on telehealth when constructing the home health case-mix index should protect access to care for beneficiaries who use more of these services. HHAs may incur some costs to provide the additional administrative data. ■

Endnotes

- 1 The Coronavirus Aid, Relief, and Economic Security (CARES) Act of 2020 (P.L. 226-136) permanently expanded ordering and supervision authority for home health care to include nurse practitioners, clinical nurse specialists, and physician assistants (before this statute, only physicians had this authority). State laws on medical scope of practice also govern the services these practitioners are permitted to deliver and may limit the ability of some practitioners to order home health care.
- 2 The seven MMTA categories include surgical care, cardiac and circulatory, endocrine, gastroenterology/genitourinary, infectious disease, respiratory, and other conditions.
- 3 The statute requires CMS to raise or lower the home health base rate to account for the difference in spending if aggregate actual expenditures deviate from the expenditures expected under CMS's estimate. CMS has the authority to make permanent adjustments when it determines that an observed deviation from expected behavior will continue in future years. The statute provides the authority for temporary (one-year) adjustments when CMS identifies overpayments or underpayments that occurred in a prior year.
- 4 CMS computed the budget-neutrality target for 2020 by applying the 153-group payment system that was in effect in 2019 to the claims that were paid under the PDGM in 2020. The budget-neutral level of Medicare spending identified by this method was determined to be lower than the actual spending under the PDGM in 2020.
- 5 In prior years, the Commission has reported access based on ZIP code data from Medicare Compare. However, this file was not produced during 2020 due to the disruption associated with the PHE. As a result, in this report we use a measure based on U.S. counties.
- 6 Data from the U.S. Small Business Administration indicates that \$7.7 billion has been distributed to providers classified as “home health care services” under the North American Industry Classification System. This category covers a broader range of home health services than Medicare home health agencies, including home care providers such as personal care services, homemaker and companion services, physical therapy, medical social services, medications, medical equipment and supplies, counseling, 24-hour home care, occupation and vocational therapy, dietary and nutritional services, speech therapy, audiology, and high-tech care such as intravenous therapy. It is unclear how much of the \$7.7 billion has been received by Medicare HHAs.
- 7 If we approximate marginal cost as total Medicare costs minus fixed building and equipment costs, then marginal profit can be calculated as follows:

$$\text{Marginal profit} = (\text{Medicare payments} - (\text{total Medicare costs} - \text{fixed costs})) / \text{Medicare payment}.$$

This comparison is a lower bound on the marginal profit because we do not consider any potential labor costs that are fixed.
- 8 The clinical training for physical therapy and skilled nursing overlap in some instances; for example, both fields provide training for wound care.
- 9 The risk adjustment for successful discharge to the community measure includes age and sex of the beneficiary, end-stage renal disease (ESRD) and disability status for Medicare entitlement, principal diagnosis, comorbidities, the length of the preceding hospital stay (if there was one), and a count of the hospitalizations during the preceding year. Risk adjusters for the hospitalization measure include primary diagnosis, comorbidities and severity of illness, special conditions (severe wounds, difficulty swallowing, and bowel incontinence), age and sex, disability and ESRD status, hospitalization in the previous month, days in the intensive care unit during a preceding hospitalization (if there was one), a count of the hospitalizations during the preceding year, and the provision of ventilator care during the PAC stay.
- 10 CAHPS® is a registered trademark of the Agency for Healthcare Research and Quality.
- 11 CMS is not publicly reporting HH-CAHPS results based on surveys collected in the first two quarters of 2020.
- 12 These payment per visit amounts were computed by dividing the total Medicare PPS payments in each year by the total number of visits (for 2020, only payments and in-person visits for 30-day periods paid under PDGM were included).
- 13 The BBA of 2018 required CMS to set spending under the PDGM so that it was equal to what Medicare would have spent under the predecessor payment system if the latter had been in effect in 2020.
- 14 This analysis relies on cost reports for 2019 and 2020.
- 15 The amount of the relief funds included in the calculation of Medicare margins was determined by applying the

proportion of an HHA's revenues attributable to Medicare in 2019 to the total PHE relief funds reported on the cost report.

- 16 In the 2022 home health payment rule, CMS lowered the fixed loss threshold to increase the number of periods that qualified for outlier payments.

- 17 For in-person visits, Medicare requires HHAs to report the date of a visit, type of practitioner, duration of services, and medical supplies utilized.

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C H A P T E R

9

Inpatient rehabilitation facility services

R E C O M M E N D A T I O N

- 9** For fiscal year 2023, the Congress should reduce the 2022 Medicare base payment rate for inpatient rehabilitation facilities by 5 percent.

COMMISSIONER VOTES: YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0

Inpatient rehabilitation facility services

Chapter summary

Inpatient rehabilitation facilities (IRFs) are hospitals and hospital units that provide intensive rehabilitation services to patients after illness, injury, or surgery. Rehabilitation programs are supervised by rehabilitation physicians and include services such as physical and occupational therapy, rehabilitation nursing, speech–language pathology, and prosthetic and orthotic services. In 2020, Medicare spent \$8.0 billion on IRF care provided to fee-for-service (FFS) beneficiaries in about 1,160 IRFs nationwide. About 335,000 beneficiaries had 379,000 IRF stays. On average, the FFS Medicare program accounted for about 54 percent of IRF discharges.

In this chapter, we make a recommendation on a payment rate update for 2023. Because of standard data lags, the most recent complete data we have are from 2020 for most payment adequacy indicators. We have considered the effects of the coronavirus public health emergency (PHE) and associated relief policies on our indicators and whether those effects are likely to be temporary or permanent. To the extent that the effects of the PHE are temporary changes—even across multiple years—or vary significantly across individual IRFs, they are best addressed through targeted temporary funding policies rather than a permanent change to all IRFs’ payment rates in 2023 and future years. Based on information

In this chapter

- Are Medicare payments adequate in 2022?
- How should Medicare payments change in 2023?

available at the time of publication, we do not anticipate any long-term effects other than wage increases, which will be accounted for under the current-law annual updates to the IRF market basket. Instead, to the extent that the PHE continues, any needed additional financial support should be targeted to affected IRFs that are necessary for access.

Assessment of payment adequacy

In 2020, some IRF payment adequacy indicators improved while others declined; however, indicators varied substantially across IRFs and reflect temporary changes during the PHE rather than changes in the overall adequacy of Medicare payments to IRFs. In general, our indicators of Medicare payment adequacy for IRFs are positive.

Beneficiaries' access to care—Despite the impact of the PHE on the daily operations of IRFs and other health care providers, our analysis of IRF supply and volume of services provided and IRFs' marginal profit under Medicare's IRF prospective payment system suggest that access remains adequate.

- **Capacity and supply of providers**—After declining for several years, the number of IRFs increased from 1,152 IRFs in 2019 to 1,159 IRFs in 2020. Over time, the number of hospital-based and nonprofit IRFs has fallen, while the number of freestanding and for-profit IRFs has increased. In 2020, the average IRF occupancy rate remained at 67 percent, indicating that capacity is more than adequate to meet demand for IRF services.
- **Volume of services**—In 2020, the number of Medicare cases per 10,000 FFS beneficiaries fell by 5.0 percent, but this decline likely reflects the decrease in elective acute care hospital services requiring subsequent IRF care, not the adequacy of Medicare payments.
- **Marginal profit**—The marginal profit, an indicator of whether IRFs with excess capacity have an incentive to treat more Medicare beneficiaries, was 19.0 percent for hospital-based IRFs and 38 percent for freestanding IRFs—a very positive indicator of patient access.

Quality of care—Quality of care is difficult to assess for 2020. We present average risk-adjusted rates of successful discharge to the community and all-condition hospitalizations during the IRF stay, but we do not draw conclusions about why quality has improved, worsened, or stayed the same.

Providers' access to capital—IRF providers have exhibited good access to capital throughout the PHE. Despite variation among provider types, in general, the parent institutions of hospital-based IRFs continued to have strong access

to capital. The major freestanding IRF chain, accounting for about 31 percent of Medicare IRF discharges in 2020, continued expanding during the PHE and returned all Provider Relief Fund revenue, suggesting good access to capital. IRFs' access to capital in large part depends on their total (all-payer) profitability, and in 2020, the total (all-payer) margin remained stable at 10.2 percent for freestanding IRFs.

Medicare payments and providers' costs—The aggregate Medicare margin for IRFs has remained above 13 percent since 2010, reaching over 14 percent in 2018. From 2019 to 2020, IRF cost growth outpaced payment growth, lowering the Medicare margin to 13.5 percent in 2020.

This year, because federal relief funds were intended to help cover lost revenue and payroll costs—including lost revenue from Medicare patients and the cost of staff who help treat these patients—we include a portion of these relief funds (based on FFS Medicare's share of 2019 all-payer operating revenue) in our Medicare margins. After including an estimate of Medicare's share of federal relief funds, the aggregate Medicare margin in 2020 rose to 14.9 percent. Our analysis identifying relatively efficient IRFs found that the median Medicare margin for these IRFs was about 18 percent. On average, these IRFs were larger and had higher occupancy rates, contributing to greater economies of scale and lower unit costs.

While the coronavirus PHE has made 2020 and 2021 anomalous years in many respects and it is impossible to predict with certainty the extent to which the effects of the PHE will continue into 2022 and beyond, we expect IRFs' aggregate Medicare margin in 2022 to slightly decrease relative to 2020, to 14 percent. The decline in the Medicare margin will depend in large part on the duration and severity of the coronavirus pandemic, volume changes, case-mix changes, and cost growth, as well as any additional payment or other policy changes enacted during the pandemic.

How should Medicare payment rates change in 2023?

Under current law, base payment rates under the IRF prospective payment system (PPS) are projected to increase by about 2.1 percent in 2023. This amount is higher than in 2019 and prior years because of the expiration of statutory reductions in IRF updates required by the Affordable Care Act of 2010 in each year from 2010 through 2019. Given our positive payment adequacy indicators and the fact that we anticipate most of the changes caused by the public health emergency to be temporary, the Commission

recommends that for fiscal year (FY) 2023, the FY 2022 IRF base payment rate be reduced by 5 percent. The Commission anticipates that this recommendation would provide IRFs with sufficient revenues to maintain beneficiaries' access to IRF care and bring IRF PPS payment rates closer to the cost of delivering high-quality care efficiently. ■

Background

After illness, injury, or surgery, some patients need intensive inpatient rehabilitative care, including physical, occupational, and speech therapy. Such services can be provided in inpatient rehabilitation facilities (IRFs).¹ IRFs must be focused primarily on treating conditions that typically require intensive rehabilitation, among other requirements. IRFs can be freestanding facilities or specialized units within hospitals. To qualify for a covered IRF stay, a beneficiary must be able to tolerate and benefit from intensive therapy and must have a condition that requires frequent and face-to-face supervision by a rehabilitation physician. Other patient admission criteria also apply. In 2020, Medicare spent \$8.0 billion on IRF care provided to fee-for-service (FFS) beneficiaries in about 1,160 IRFs nationwide.² About 335,000 beneficiaries had almost 379,000 IRF stays. On average, Medicare FFS beneficiaries accounted for about 54 percent of IRF discharges.

Since January 2002, Medicare has paid IRFs under a per discharge prospective payment system (PPS).³ Under the IRF PPS, each Medicare patient is assigned to a rehabilitation impairment category (RIC) based on the principal diagnosis or impairment and further classified within a RIC to a case-mix group (CMG) based on the level of motor and cognitive function and, for some CMGs, the patient's age. Within each CMG, patients are further classified into one of four tiers based on the presence of certain comorbidities that have been found to increase the cost of care. The IRF PPS also has outlier payments for patients who are extraordinarily costly.

The Commission's analysis has found that FFS Medicare beneficiaries who use IRFs are more likely to be female, over the age of 80, aged or disabled without end-stage renal disease, and White, compared with the overall population of FFS Medicare beneficiaries. In 2020, the share of Medicare discharges who were dual-eligible beneficiaries (enrolled in both Medicare and Medicaid) was about 21 percent.

Medicare facility requirements for IRFs

To qualify as an IRF for Medicare payment, a facility must meet the Medicare conditions of participation for acute care hospitals (ACHs).⁴ It must also:

- have a preadmission screening process to determine that each prospective patient is likely to benefit significantly from an intensive inpatient rehabilitation program;
- ensure that the patient receives close medical supervision and provide—through qualified personnel—rehabilitation nursing, physical therapy, occupational therapy, and, as needed, speech-language pathology and psychological (including neuropsychological) services, social services, and orthotic and prosthetic services;
- have a medical director of rehabilitation with training or experience in rehabilitation who provides services in the facility on a full-time basis for freestanding IRFs or at least 20 hours per week for hospital-based IRF units;
- use a coordinated interdisciplinary team led by a rehabilitation physician that includes a rehabilitation nurse, a social worker or case manager, and a licensed therapist from each therapy discipline involved in the patient's treatment;
- have a plan of treatment for each patient that is established, reviewed, and revised as needed by a physician in consultation with other professional personnel who provide services to the patient; and
- meet the compliance threshold, which requires that no less than 60 percent of patients admitted to an IRF have as a primary diagnosis or comorbidity at least 1 of 13 conditions specified by CMS.⁵ The intent of the compliance threshold is to distinguish IRFs from ACHs. If an IRF does not meet the compliance threshold, Medicare pays for all its cases based on the inpatient hospital PPS rather than the IRF PPS.

Medicare coverage criteria for beneficiaries

Medicare applies additional criteria that govern whether IRF services are covered for an individual Medicare beneficiary. For an IRF claim to be considered reasonable and necessary, the patient must be reasonably expected to meet the following requirements at admission:⁶

- The patient requires active and ongoing therapy in at least two modalities, one of which must be physical or occupational therapy.
- The patient can actively participate in and benefit from intensive therapy that most typically consists of three hours of therapy a day at least five days a week.
- The patient is sufficiently stable at the time of admission to actively participate in the intensive rehabilitation program.
- The patient requires supervision by a rehabilitation physician. This requirement is satisfied by face-to-face physician visits with a patient at least three days a week. Beginning with the second week of admission to the IRF, a nonphysician practitioner who is determined by the IRF to have specialized training and experience in inpatient rehabilitation may conduct one of the three required face-to-face visits with the patient per week, provided that such duties are within the nonphysician practitioner's scope of practice under applicable state law.
- The patient requires an intensive and coordinated interdisciplinary team approach to the delivery of rehabilitative care.

Are Medicare payments adequate in 2022?

In 2020, IRF payment adequacy indicators varied across IRFs, and the aggregate changes reflect changes during the public health emergency (PHE) rather than changes in the overall adequacy of Medicare payments to IRFs. (For a description of how the coronavirus pandemic has been incorporated into our payment adequacy framework, see text box.)

To assess whether payments for fiscal year 2022 are adequate to cover the costs providers incur and how much providers' costs are expected to change in the coming year (2023), we examine several indicators of payment adequacy. Specifically, we assess beneficiaries' access to care by examining the

capacity and supply of IRFs and changes over time in the volume of services provided, quality of care, providers' access to capital, and the relationship between Medicare payments and providers' costs.

Although the impact of the coronavirus pandemic on IRFs is evolving, our indicators of IRF payment adequacy are positive. (For an overview of how our payment adequacy analysis takes the PHE into account, see Chapter 2.)

Beneficiaries' access to care: IRF supply and service volume suggest sufficient access

We have no direct indicators of beneficiaries' access to IRF care. Although there are IRF admission criteria, it is not clear when IRF care is necessary or beneficial for a given patient or when another, potentially lower-cost post-acute care (PAC) provider (such as a skilled nursing facility (SNF)) could provide appropriate care. The absence of IRFs in some areas of the country implies that beneficiaries in these areas receive similar services in other settings. Nevertheless, our analysis of IRF supply and volume of services provided suggests that capacity remains adequate to meet demand. Moreover, the marginal profit, an indicator of whether IRFs with excess capacity have an incentive to treat more Medicare beneficiaries, was robust in 2020 for both freestanding and hospital-based IRFs, thus providing a very positive indicator of patient access.

Number of IRFs and occupancy rates suggest adequate capacity and supply

After gradually declining from 2015 to 2019, the number of IRFs increased from 1,152 IRFs in 2019 to 1,159 facilities in 2020 (Table 9-1, p. 310). After a slight decrease in for-profit IRFs from 2018 to 2019, the number of freestanding and for-profit facilities continued to grow in 2020. Between 2015 and 2019, the number of hospital-based IRFs fell by 1.9 percent and the number of nonprofit IRFs fell by 1.8 percent, while the number of freestanding IRFs and for-profit IRFs rose by 3.4 percent and 2.8 percent, respectively.

In 2020, almost 75 percent of IRFs were hospital based; the rest were freestanding facilities (Table 9-1, p. 310). However, because hospital-based units have, on average, fewer beds and a lower share of Medicare

The coronavirus public health emergency and the Commission's assessment of payment adequacy for inpatient rehabilitation facilities

On January 31, 2020, the Secretary of Health and Human Services first declared the coronavirus public health emergency (PHE). In late March 2020, the nation's health care system began to experience major changes in service utilization, as elective procedures were postponed to preserve clinical staffs availability and equipment for COVID-19 patients. The PHE has had tragic and disproportionate effects on Medicare beneficiaries. (For details on the pandemic's effects on beneficiaries' health and access to care, see Chapter 1.) It has also had damaging effects on the nation's health care workforce, with frontline health care workers facing burnout and risks to their health and safety from treating COVID-19 cases.

From the perspective of assessing the adequacy of Medicare payments, the PHE has also had material effects on all of the Commission's payment adequacy indicators. Because of standard data lags, the most recent complete data we have are from 2020 for most payment adequacy indicators; we also include preliminary data from 2021 where possible. As described in this chapter, the effects of the PHE on indicators of Medicare's payment adequacy to inpatient rehabilitation facilities (IRFs) included:

- dramatic drops in patient volume in spring 2020, largely rebounding by July 2020 but with a net decline nevertheless in annual discharges in 2020 relative to 2019;
- an increase in the patient acuity level, which generated a higher case-mix index relative to 2019;
- substantial federal funding that IRFs received from the Congress; and
- the suspension of the 2 percent sequestration on Medicare payments, which increased payments to IRFs.

In this chapter, we use available data and changes in payment policy to project IRF margins for 2022 and recommend payment rate updates for 2023; however, significant uncertainty remains about the extent to which the pandemic will last and whether certain changes to IRF volume and financial performance will persist past the end of the PHE. Therefore, while analyzing 2020 data is important in understanding what happened to beneficiaries' access to care, quality of care, providers' access to capital, and Medicare's payments and providers' costs, it will be more difficult to interpret these indicators than is typically the case.

As the Commission stated last year, to the extent that the effects of the coronavirus pandemic are temporary—even if over multiple years—or vary significantly across individual IRFs, they are best addressed through targeted temporary funding policies rather than a permanent change to all IRFs' payment rates in 2023 and future years. Only permanent effects of the pandemic will be factored into the Commission's recommended updates to Medicare base payment rates. ■

discharges, in 2020, they accounted for only 43 percent of Medicare discharges. In contrast, freestanding IRFs made up just over 25 percent of the IRF supply but in 2020 accounted for 53 percent of Medicare discharges (Table 9-1, p. 310). Similarly, the share of IRFs that

are for profit is about 35 percent, but in 2020 they accounted for 53 percent of Medicare discharges. For-profit IRFs are disproportionately freestanding compared with hospital-based ownership.

**TABLE
9-1****The number of for-profit and freestanding IRFs continued to grow in 2020**

Type of IRF	Share of Medicare FFS discharges 2020	Number of IRFs						Average annual change	
		2015	2016	2017	2018	2019	2020	2015–2019	2019–2020
All IRFs	100%	1,182	1,188	1,178	1,170	1,152	1,159	–0.6%	0.6%
Urban	90	1,020	1,026	1,019	1,014	1,000	1,004	–0.5	0.4
Rural	6	162	162	159	156	152	155	–1.6	2.0
Freestanding	53	262	273	279	290	299	310	3.4	3.7
Hospital based	43	920	915	899	880	853	849	–1.9	–0.5
Nonprofit	37	681	676	655	642	634	623	–1.8	–1.7
For profit	53	352	370	392	400	393	414	2.8	5.3
Government	6	138	133	125	121	116	113	–4.2	–2.6

Note: IRF (inpatient rehabilitation facility), FFS (fee-for-service). The number of facilities are for the calendar year. Components may not sum to totals due to missing data.

Source: MedPAC analysis of Provider of Services data and Medicare Provider Analysis and Review data from CMS, 2020.

In 2020, the number of urban IRFs increased by 0.4 percent, after gradually declining from 2016 to 2019. Similarly, the total number of rural IRFs increased slightly to 155 IRFs, up from 152 in 2019, after more than 5 consecutive years of decline. Because the vast majority (over 90 percent) of rural IRFs are hospital-based units in ACHs, the increase in number of rural IRFs could reflect the targeted distribution of provider relief funds received by rural ACHs. Overall, fewer rural ACHs closed in 2020 than 2019, possibly due to provider relief funds allocated to small hospitals (for more details, see Chapter 3). It is likely that provider relief funds also influenced changes in the supply of rural IRFs.

In 2020, the average IRF occupancy rate was steady at 67 percent. In freestanding IRFs, the average occupancy rate was 69 percent, while the average occupancy rate for hospital-based IRFs was 64 percent. These rates suggest that capacity is more than adequate to meet demand for IRF services.

Although IRFs provide a more intense level of therapy, IRFs are not the sole provider of rehabilitation services in communities. SNFs also provide inpatient rehabilitation services, and home health agencies, comprehensive outpatient rehabilitation facilities, and independent therapy providers furnish care at home or on an outpatient basis. Therefore, despite slight changes in the supply of some IRF providers, it is unlikely that areas exist where IRFs are the only provider of rehabilitation therapy services available to Medicare beneficiaries.

Patterns of use in IRFs suggest influence of PHE and related policies

The most common condition treated by IRFs in 2020 was stroke—accounting for almost one-fifth of cases—followed by other neurological conditions, debility, and fracture of the lower extremity (Table 9-2).

In 2020, we observed some changes in the share of certain case types. From 2019 to 2020, the share of IRF

**TABLE
9-2****Patterns of use in IRFs changed in 2020**

Condition	Share of IRF Medicare FFS cases			Meets compliance threshold ^a	Percentage point change	
	2010	2019	2020		2010–2019	2019–2020
Stroke	20.1%	19.8%	19.1%	yes	–0.4	–0.6
Other neurological conditions	9.8	14.4	14.0	yes	4.6	–0.4
Debility	10.0	12.3	13.5	no	2.3	1.2
Fracture of the lower extremity	14.3	10.0	11.3	yes	–4.3	1.3
Brain injury	7.3	11.0	11.2	yes	3.7	0.2
Other orthopedic conditions	6.7	8.1	7.4	no	1.3	–0.6
Cardiac conditions	4.9	6.1	5.8	no	1.2	–0.3
Spinal cord injury	4.3	4.9	4.7	yes	0.5	–0.2
Major joint replacement of lower extremity	11.4	3.7	2.9	^b	–7.8	–0.8
All other conditions	11.1	10.0	10.2	^c	–1.1	0.2

Note: IRF (inpatient rehabilitation facility), FFS (fee-for-service). “Other neurological conditions” includes multiple sclerosis, Parkinson’s disease, polyneuropathy, and neuromuscular disorders. “Fracture of the lower extremity” includes hip, pelvis, and femur fractures. Patients with debility have generalized deconditioning not attributable to other conditions. “Other orthopedic conditions” excludes fractures of the hip, pelvis, and femur, and hip and knee replacements. “All other” includes conditions such as amputations, arthritis, and pain syndrome. “Brain injury” and “spinal cord injury” include both traumatic and nontraumatic injuries. All FFS Medicare IRF cases with valid patient assessment information were included in this analysis. Yearly figures presented in the table are rounded, but figures in the percentage point change columns were calculated using unrounded data.

^aThe compliance threshold requires that at least 60 percent of an IRF’s patients have 1 of 13 specified diagnoses or have a comorbidity that could cause significant decline in functional ability such that the patient requires intensive rehabilitation. Some FFS cases with conditions that do not meet the compliance threshold could thus be counted toward the threshold if they had certain comorbidities. In response to the coronavirus public health emergency, CMS waived the compliance threshold beginning in March 2020.

^bCases admitted for rehabilitation after major joint replacement of the lower extremity count toward the compliance threshold if joint replacement was bilateral, if the patient had a body mass index of 50 or greater, or if the patient was age 85 or older.

^cConditions in the “all other” category that meet the compliance threshold include congenital deformity, lower limb amputations, major multiple traumas, burns, and certain arthritis cases.

Source: MedPAC analysis of Inpatient Rehabilitation Facility–Patient Assessment Instrument data from CMS.

discharges with stroke fell slightly from 19.8 percent to 19.1 percent and the share of IRF discharges with cardiac conditions such as heart attack fell from 6.1 percent to 5.8 percent (Table 9-2) after rising somewhat from 2018 to 2019 (data not shown). The Centers for Disease Control and Prevention estimated that 41 percent of U.S. adults, many with treatable and preventable cardiovascular conditions such as strokes and heart attacks, delayed seeking medical care in the early months of the PHE because of concerns about contracting COVID-19 (Czeisler et al. 2020). It is

possible that these circumstances align with the slight decreases we observed in these cases in 2020.

Between 2019 and 2020, the share of IRF discharges with major joint replacement of lower extremities declined from 3.7 percent to 2.9 percent, and the share of other orthopedic cases such as shoulder replacements fell from 8.1 percent to 7.4 percent (Table 9-2). The combination of ACHs temporarily suspending elective surgeries and patients themselves electing to delay surgeries likely affected IRF admissions for these case types. In contrast, after a gradual decline

The coronavirus public health emergency's impact on fiscal year 2020 data

This year we analyzed 2020 claims and provider cost reports that reflect the impact of the pandemic, as well as the complex interactions of funding and policy changes related to the public health emergency (PHE).

2020 claims data

It is instructive to understand the timing of the PHE and PHE-related policy changes that are reflected in fiscal year 2020 claims data to understand the magnitude of their impact on 2020 results

(Figure 9-1). For health care sectors, including inpatient rehabilitation facilities (IRFs), with payment years that begin with the federal fiscal year, the first four months of the payment year (October 2019 to January 2020) occurred before the PHE was declared (January 31, 2020). Therefore, PHE-related policies (which started on different dates throughout fiscal year 2020) impacted claims data at different time points in providers' payment years and will not reflect the full fiscal year of data. For example, the suspension of the sequester, which

FIGURE 9-1

Fiscal year 2020 time line

FY 2020

PHE declared

Sequester suspended
(effective through June 2022)

Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
CY 2019			CY 2020								

Note: FY (fiscal year), PHE (public health emergency), CY (calendar year). The 2 percent sequestration reduction to payments was suspended until March 31, 2022. The sequester will be phased back in beginning with a 1 percent reduction in payments beginning on April 1, 2022, through June 30, 2022.

(continued next page)

from 2010 to 2019, acute conditions that require immediate attention, such as fractures of the lower extremities, including hip, pelvis, and femur, rose in 2020 to 11.3 percent, up from 10 percent in 2019. CMS's waiver during the PHE of the "three-hour rule" (see text box on Medicare waivers, p. 315), allowing IRFs to admit patients even if they were not able to tolerate

three hours of intense therapy a day, also could have influenced the mix of case types.

Between 2019 and 2020, the share of IRF cases with diagnosis of debility increased from 12.3 percent to 13.5 percent of IRF discharges (Table 9-2, p. 311). This condition includes a mix of patients with a

The coronavirus public health emergency's impact on fiscal year 2020 data (cont.)

is set to expire under current law at the end of June 2022, was in effect for five months of fiscal year 2020, from May 2020 through the end of the fiscal year. Therefore, fiscal year 2020 claims data will capture only five months of the suspension of the sequester.

2020 cost report data

For providers, including IRFs, that submit cost reports to CMS, we estimate total Medicare-allowable costs and assess the relationship between Medicare's payments and those costs, which we express as a margin. Within each sector, 2020 cost reports included in this year's analysis of Medicare margins reflect varying numbers of months that overlap with the PHE because providers' cost reports can start on different months of the year. Cost reports for 2020 are those with a midpoint falling in fiscal year 2020. To the extent that providers' cost reporting periods overlap with the PHE, Medicare payments reported on cost reports will reflect the suspension of the sequester

and other policy changes; providers' costs will reflect PHE-related costs (e.g., personal protective equipment, supplies, labor). Providers received billions of dollars in additional grants that will not be captured in claims or Medicare payments on cost reports, so they will not be reflected in Medicare margins. However, all providers must report Provider Relief Fund payments on the cost report's statement of revenues for informational purposes.

Almost 40 percent of IRFs in this year's analysis have cost reporting years that began January 1, but the remainder started throughout the year. In aggregate, providers included in the analysis of IRFs' 2020 cost reports had about 63 percent of the months in their cost reporting year in the PHE period—February 2020 through December 2020. Similarly, we estimate that providers included in the analysis of IRFs' 2020 cost reports had about 40 percent of the months in their cost reporting year in the period following the suspension of the sequester, starting in May 2020. ■

state of general weakness or discomfort that may be an outcome of one or more conditions, including COVID-19 (Czeisler et al. 2020, Encompass Health 2021a). In 2020, in addition to waiving the 3-hour rule, CMS waived the “60 percent rule,” which requires that at least 60 percent of patients admitted to an IRF have as a primary diagnosis or comorbidity at least 1 of 13 qualifying conditions. The waiver of these rules allowed IRFs to treat a broader mix of patients, including those without a qualifying condition or who were unable to tolerate intensive therapy, possibly leading IRFs to admit a greater number of cases categorized as debility.

IRF Medicare volume grew while length of stay fell in 2020

In general, relatively few Medicare beneficiaries use IRF services because, to qualify for Medicare coverage,

IRF patients must be able to tolerate and benefit from rehabilitation therapy that is intensive, which is usually interpreted to mean at least three hours of therapy a day for at least five days a week. Although the PHE waiver of the “three-hour rule” (see text box on Medicare waivers, p. 315) made it easier to access IRF services in 2020, the combination of factors described above affected IRF volume.

From 2015 to 2017, the number of FFS cases steadily rose, then jumped to about 409,000 cases in 2019 (Table 9-3, p. 314). In 2020, however, the total number of FFS IRF cases fell by 7.4 percent to about 379,000 cases (controlling for the number of FFS beneficiaries, FFS cases declined by 5 percent in 2020). Consistent with the impact of the PHE, the number of cases fell around April 2020 but began to rise, reaching over

**TABLE
9-3**

In 2020, the number of IRF users and cases fell, while length of stay and payments per case grew

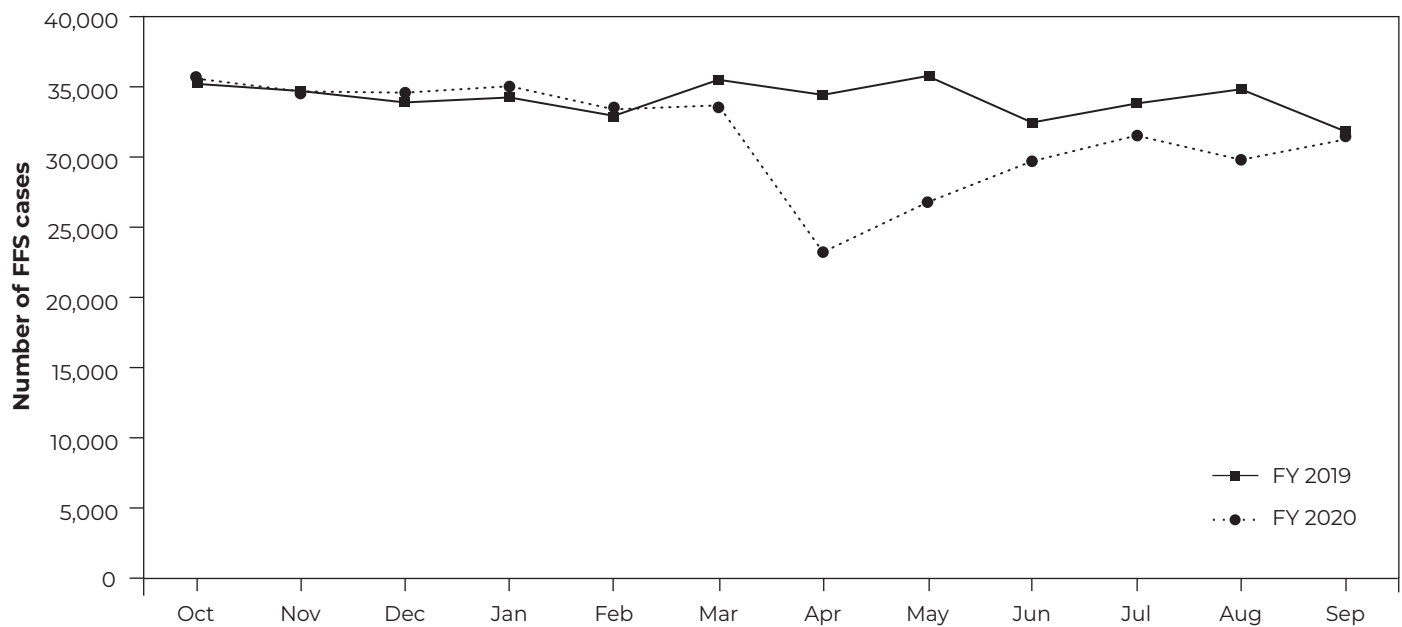
	2015	2017	2019	2020	Average annual change	
					2015–2019	2019–2020
Number of FFS cases	393,475	396,294	409,059	378,756	0.8%	–7.4%
Cases per 10,000 FFS beneficiaries	103.3	102.0	106.0	100.9	0.5	–5.0
Payment per case	\$18,527	\$19,481	\$20,417	\$21,765	2.0	6.6
ALOS (in days)	12.7	12.7	12.6	12.9	–0.2	2.0
Users	354,343	354,618	363,285	335,421	0.5	–8.0

Note: IRF (inpatient rehabilitation facility), FFS (fee-for-service), ALOS (average length of stay).

Source: MedPAC analysis of Medicare Provider Analysis and Review data from CMS.

**FIGURE
9-2**

FFS Medicare beneficiaries' IRF cases declined markedly in spring 2020 but slowly rebounded by summer 2020



Note: FFS (fee-for-service), IRF (inpatient rehabilitation facility), FY (fiscal year).

Source: MedPAC analysis of Medicare Provider Analysis and Review, Common Medicare Environment data.

Medicare waivers to increase access to IRF services and ease burden during the coronavirus public health emergency

CMS enacted numerous waivers to increase Medicare beneficiaries' access to inpatient rehabilitation facility (IRF) services and ease the burden on health care providers during the coronavirus public health emergency (Centers for Medicare & Medicaid Services 2020a). These waivers included:

- **Housing acute care patients in IRFs.** CMS allows hospitals to provide acute inpatient services in areas of the hospital typically reserved for other types of inpatient care, such as rehabilitation or psychiatric care.
- **"60 percent rule" waiver.** CMS allows IRFs to admit patients and exclude them from the 60 percent rule calculation if an IRF admits a patient solely to respond to the emergency and the patient's medical record properly identified the patient as such.
- **"Three-hour rule" waiver.** Under the "three-hour rule" waiver, IRFs are allowed to admit patients even if they are unable to tolerate three hours of therapy a day at least five days per week. ■

95 percent of prepandemic levels by the end of the fiscal year (Figure 9-2) (see the text box on the PHE's impact on 2020 data, pp. 312–313). A large portion of IRF volume comes from patients who are transferred from the ACH setting after surgery. Although the share of ACH cases discharged to IRFs was unaffected in 2020, the drop in volume in April 2020 is consistent with a temporary suspension of elective surgeries in ACHs from March through May 2020. The rebound in volume in summer 2020 may have been the result of the pent-up demand for surgical services after many FFS beneficiaries' surgeries had been canceled or delayed. Overall, between 2019 and 2020, the number of FFS IRF users dropped by 8 percent, from about 363,000 FFS beneficiaries to about 335,000 (Table 9-3). Controlling for the number of beneficiaries enrolled in FFS, the number of IRF cases fell 5 percent in 2020.

The increase in the acuity level (described earlier) of IRF patients is one of several factors that contributed to the rise in payments per case and average length of stay. In 2020, payments per case rose by 6.6 percent to about \$22,000 per case and the average length of stay grew by 2.0 percent to 12.9 days (Table 9-3).

Marginal profit provides incentive to treat more Medicare beneficiaries

Another measure of access is whether providers have a financial incentive to expand the number of Medicare beneficiaries they serve. In considering whether to treat a patient, a provider with excess capacity compares the marginal revenue it will receive (i.e., the Medicare payment) with its marginal costs—that is, the costs that vary with volume.⁷ If Medicare payments are larger than the marginal costs of treating an additional beneficiary, a provider has a financial incentive to increase its volume of Medicare patients. In contrast, if payments do not cover the marginal costs, the provider could have a disincentive to care for Medicare beneficiaries. We examined freestanding and hospital-based IRFs' marginal profit to assess whether both types of providers have a financial incentive to increase the number of Medicare beneficiaries they serve. We found that Medicare payments in 2020 exceeded marginal costs by a substantial amount—19 percent for hospital-based IRFs and 38 percent for freestanding IRFs—suggesting that IRFs with available beds have a strong incentive to admit Medicare patients.

Quality of care is difficult to assess

The quality of care in 2020 is difficult to assess due to the effects of the coronavirus pandemic on beneficiaries and providers. Each year, we track changes in the quality measures and assess whether they have gotten better or worse or stayed the same. While we report 2020 results for our quality measures, we have not used those results to inform our conclusions about trends in IRFs' quality of care because the results reflect temporary changes in the delivery of care and data limitations unique to the PHE rather than trends in quality. In addition, the Commission's quality metrics rely on risk-adjustment models that use performance from previous years to predict beneficiary risk. COVID-19 is a new diagnosis and is not included in the current risk-adjustment models, though many associated conditions are. As a result, our models may not adequately represent the acuity and mix of patients receiving care in 2020. Therefore, we report the changes observed in the quality measures but do not draw conclusions about whether quality has improved, worsened, or stayed the same.

We evaluate quality of care using two measures: average risk-adjusted rates of successful discharge to the community and all-condition hospitalizations during an IRF stay. Successful discharge to the community includes beneficiaries discharged to the community (including those discharged to the same nursing home where the beneficiary was before the hospitalization) who did not have an unplanned hospitalization and did not die in the succeeding 30 days. The hospitalization measure captures all unplanned hospitalizations (admissions and readmissions) and outpatient observation stays that occur during the stay (beneficiaries who died during the IRF stay are excluded from the measure). Discharges to hospice or beneficiaries with the hospice benefit are excluded from the calculation of both measures.⁸ Both measures are uniformly defined and are risk adjusted across home health agencies, SNFs, IRFs, and long-term care hospitals—thus representing one more step toward achieving a unified payment system and evaluation of outcomes across PAC settings.

Risk-adjusted rates of successful discharge to the community and all-condition hospitalizations within the IRF stay

Rehospitalizations expose beneficiaries to hospital-acquired infections, increase the number of transitions between settings (which are disruptive to patients), and can result in medical errors (such as medication errors). In addition, they increase Medicare spending. The all-condition hospitalizations measure captures all unplanned acute care hospitalizations and outpatient observation stays that occur during the IRF stay (a lower rate of hospitalizations is better). Because IRFs are themselves hospitals, the rate of rehospitalizations to acute care is typically low relative to that of SNFs.

In 2020, the national average rate of risk-adjusted all-condition hospitalizations for IRFs remained steady at about 7.8 percent (Table 9-4). There were not large differences by type of IRF; however, freestanding IRFs had a slightly higher rate of all-condition hospitalizations during the stay than hospital-based IRFs or both nonprofit and for-profit IRFs (8.0 percent vs. 7.8 percent for all others).

We also examined average risk-adjusted rates of successful discharge to the community. In 2020, the rate of successful discharge to the community was 67.3 percent (Table 9-4). There were not large differences by ownership, but hospital-based and nonprofit IRFs had slightly higher rates of successful discharge to the community than freestanding and for-profit IRFs did.

Providers' access to capital: Largest chain expanded through the pandemic; freestanding IRF all-payer margin remained strong

Access to capital allows IRFs to maintain, modernize, and expand their facilities. Almost three-quarters of IRF providers are hospital-based units that would access any necessary capital through their parent institutions. Therefore, in assessing access to capital for hospital-based IRFs, we look at the availability of capital for ACHs. Overall, as detailed in the hospital chapter of this report (Chapter 3), hospitals maintained strong access to bonds and other capital markets in 2020 and 2021. Hospitals issued about \$17 billion in new financing in each of 2020 and 2021, below 2019 levels but higher than in 2018. Hospital construction spending

**TABLE
9-4****Risk-adjusted quality indicators for IRFs held steady or improved slightly from 2015 to 2020**

	2015	2016	2017	2018	2019	2020
All-condition hospitalizations within an IRF stay (all IRFs)	7.9%	7.7%	7.9%	7.7%	7.8%	7.8%
Nonprofit	7.8	7.6	7.8	7.7	7.7	7.8
For profit	7.9	7.7	7.9	7.7	7.9	7.8
Hospital based	7.8	7.6	7.8	7.7	7.7	7.8
Freestanding	8.1	7.9	8.0	7.8	7.8	8.0
Successful discharge to community (all IRFs)	64.6%	64.6%	64.8%	65.1%	65.5%	67.3%
Nonprofit	64.9	64.7	64.9	65.1	65.6	67.6
For profit	64.2	64.5	64.7	65.1	65.3	66.8
Hospital based	65.0	65.1	65.2	65.5	66.0	67.9
Freestanding	63.4	63.3	63.6	64.0	64.2	66.0

Note: IRF (inpatient rehabilitation facility). Successful discharge to the community includes beneficiaries discharged to the community (including those discharged to the same nursing home) who did not have an unplanned hospitalization or die in the 30 days after discharge. The all-condition hospitalization measure captures all unplanned hospital admissions and readmissions and outpatient observation stays that occur during the stay. Both measures are uniformly defined and risk adjusted across the four post-acute care settings. Providers with least 60 stays in the year (the minimum count to meet a reliability of 0.7) were included in calculating the average facility rate. High rates of successful discharge to the community indicate better quality. High rates of hospitalizations during a stay indicate worse quality.

Source: MedPAC analysis of Inpatient Rehabilitation Facility–Patient Assessment Instrument data from CMS.

also remained strong in 2020, at about \$25 billion, similar to prior years. In addition, hospitals' temporary access to capital increased substantially in 2020 as ACHs received over \$83 billion in accelerated Medicare payments.⁹ The coronavirus PHE affected hospitals' access to capital in 2020 and 2021, with different effects on different groups of hospitals. However, in aggregate, the additional federal support hospitals received—as well as advance Medicare payments—increased hospitals' access to capital in 2020. Although we cannot confirm the exact amount of federal support received by hospital-based IRFs, in conversations with associations representing these types of IRFs, we learned that many received Provider Relief Fund payments to help cover COVID-19–related losses.

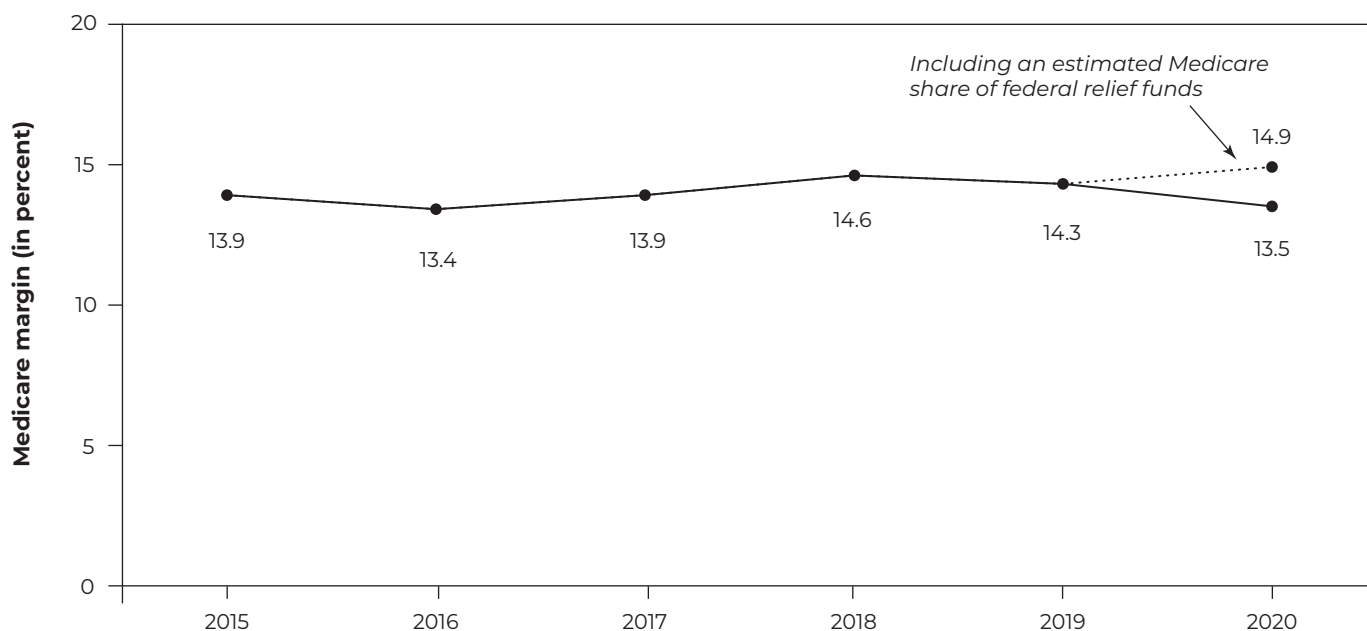
To assess freestanding IRFs' access to capital, we look at the availability of capital for publicly traded

IRFs. Market analysts indicate that the IRF industry's largest chain, Encompass Health—which owned over 50 percent of freestanding IRFs in 2020 and accounted for over 31 percent of all Medicare IRF discharges—has good access to capital. This assessment is reflected in the chain's continued expansion through the pandemic. In 2020 alone, the company opened four new facilities, one of which was a joint venture with another medical center (Encompass Health 2021a). In 2021, the company planned to open 8 facilities, followed by an additional 12 new facilities in 2022. Six of these are located in Florida, following the recent partial repeal of Florida's certificate-of-need law, effective July 2021.¹⁰ The company is slated to open nine new IRFs in 2023 (Encompass Health 2021b).

As part of a vertical integration strategy, the company continues to acquire home health agencies and hospice

**FIGURE
9-3**

IRFs' overall Medicare margin increased in 2020 when including an estimated Medicare share of federal relief funds



Note: IRF (inpatient rehabilitation facility). The top line indicates the overall Medicare margin after including a share of reported relief funds, allocated based on fee-for-service Medicare's share of each IRF's prior-year revenues. IRFs' Medicare margin is calculated as aggregate Medicare payments minus aggregate allowable Medicare costs, divided by aggregate payments. "Overall margin" refers to the aggregate margin across multiple types of IRFs (including freestanding, hospital based, urban, rural, nonprofit, for profit, and government).

Source: MedPAC analysis of IRF cost reports.

providers to expand its PAC business and drive more effective collaboration between its rehabilitation facilities and home health agencies. In response to the pandemic, mergers and acquisitions (M&A) activity was minimal in 2020. However, in 2021, M&A activity picked up again: The company acquired or opened 9 home health agencies and 12 hospice locations. Encompass Health reported that the suspension of sequestration in 2020 contributed to growth in revenue per discharge and continued to contribute to growth in 2021. Though Encompass Health initially received approximately \$237 million in relief funds in April 2020, it returned all funds before the end of the second quarter of 2020—further emphasizing that this company's access to capital was good.

Most other freestanding IRFs are independent or local chains with a limited number of facilities. The extent

to which these providers have access to capital is less clear. IRFs' access to capital depends in large part on their total (all-payer) profitability. In 2020, total margins for freestanding IRFs remained strong, with an aggregate margin of 10.2 percent. Profitability varied by ownership. In 2020, for-profit freestanding IRFs had an aggregate total margin of 14.0 percent compared with about 1.0 percent for nonprofit freestanding IRFs. Data were not available to calculate total margins for hospital-based IRFs. Despite comparatively low average Medicare margins in hospital-based IRFs, evidence suggests that these units make a positive financial contribution to their parent hospitals. For example, in 2020, hospitals' aggregate total margins across all lines of service were slightly higher in hospitals with IRF units compared with those without such units (6.5 percent vs. 6.2 percent).

**TABLE
9-5**

IRFs' costs per case grew faster than payments per case in 2020

	Annual change 2018–2019	Annual change 2019–2020	
		Without PRF	With PRF
Payments per case	2.0%	7.5%	9.5%
Cost per case	2.4	8.5	N/A

Note: IRF (inpatient rehabilitation facility), PRF (Provider Relief Fund), N/A (not applicable). Percent changes are calculated based on consistent two-year cohorts.

Source: MedPAC analysis of Medicare cost report data from CMS.

Though Medicare FFS volume fell from 2019 to 2020, the IRF industry reported growth in revenues attributable to Medicare Advantage (MA) enrollees. For example, in the fourth quarter of 2020, Encompass Health reported that the share of their revenues represented by MA enrollees rose to 14.2 percent, up from 10.6 percent in 2019 (Encompass Health 2021a). A combination of prior-authorization waivers in part of 2020 and an increase in clinical collaboration with MA plans likely contributed to this growth (Encompass Health 2021a).

Medicare payments and providers' costs: Medicare margins remained high without including share of federal relief funds

Since 2015, the aggregate Medicare margin for IRFs has been above 13 percent. In 2020, the aggregate margin fell slightly from 2019 levels but remained high at 13.5 percent. Because federal relief funds were intended to help cover lost revenue and payroll costs—including lost revenue from Medicare patients and the cost of staff who help treat these patients—we also estimated the aggregate margin including reported relief funds (based on FFS Medicare's share of 2019 all-payer operating revenue). Including an estimated Medicare share of federal relief funds proportional to FFS Medicare's share of IRFs' revenue in the prior year, IRFs' FFS Medicare margin between 2019 and 2020 rose from 14.3 percent to 14.9 percent (Figure 9-3). While our 2020 Medicare margins use the best available data, payment adequacy metrics involving federal relief

funds need to be interpreted with caution, as they are still subject to change and are sensitive to IRFs' cost reporting periods (see the text box on the PHE's impact on 2020 data, pp. 312–313).

Growth in IRFs' payments per case was faster in 2020 than in prior years, but costs per case grew even faster

Both IRF PPS payments per case and costs per case grew faster in 2020 than in prior years, but in 2020 costs per case grew faster than payments per case (Table 9-5).

From 2019 to 2020, IRFs' payments per case grew 7.5 percent compared with 2.0 percent from 2018 to 2019 (Table 9-5). When including an estimated Medicare share of federal relief funds, payments per case grew 9.5 percent. The faster growth in 2020 relative to prior years resulted from several factors that affected IRF payments in 2020:

- **Higher annual update to payment rates:** In 2020, the annual update to IRF PPS base rates was 2.5 percent, higher than in prior years primarily because the budgetary reductions mandated through 2019 expired.¹¹
- **Suspension of the sequester during the PHE:** Along with the annual payment update, during the PHE, the Congress increased Medicare IRF payments by suspending the 2 percent sequestration on the Medicare program's share of all FFS payments

beginning May 1, 2020, currently through March 2022. From April 2022 through June 2022, a 1 percent sequester cut will be in effect, with the full 2 percent cut resuming thereafter.

- **Faster growth in case mix:** Between 2019 and 2020, IRFs' overall case-mix index (CMI) increased 11 percent, from 1.24 to 1.38, substantially faster than the 3 percent average decrease in CMI between 2018 and 2019, from 1.28 to 1.24. Some growth in CMI in 2020 likely reflects increased coding intensity (as opposed to real change in IRF patients' average condition), but unless the growth in coding intensity dramatically increased in 2020 relative to prior years, most of the faster growth in reported case mix likely reflects an increase in the average resource needs of IRF patients. In 2020, there were no major changes in the distribution of condition types treated in IRFs (see Table 9-2, p. 311), so the change in CMI reflects:
 - *Increase in patient comorbidities:* Between 2019 and 2020, more IRF cases were coded with comorbidities that increase payment under the IRF PPS. For example, the share of claims for neurological conditions other than stroke that were coded with comorbidities rose from 67.2 percent to 72.4 percent (data not shown). Likewise, the share of claims for orthopedic conditions other than lower extremity joint replacements and fractures that were coded with comorbidities increased from 47.9 percent to 52.3 percent.
 - *Temporary flexibility in IRF criteria:* The waiver of the "three-hour rule" during the PHE, which allowed IRFs to admit patients even if they were not able to tolerate three hours of intense therapy a day, likely allowed IRFs to admit a broader mix of cases, including patients with greater functional impairment, as well as patients with more comorbidities.

IRFs themselves have reported that the patients admitted from acute care settings during the PHE have been sicker. For example, the largest publicly traded IRF company reported that their patient acuity increased in the second quarter of 2020 because the deferral of elective procedures and patient anxiety

resulted in only the most acute patients seeking care, pushing their CMI up to 1.44 compared with 1.38 in the same quarter of 2019 (Encompass Health 2020).

From 2019 to 2020, IRFs' costs per case grew 8.5 percent, compared with 2.4 percent growth from 2018 to 2019 (Table 9-5, p. 319). The faster growth in 2020 relative to prior years resulted from several factors that affected IRF costs in 2020:

- **Faster growth in case mix:** As noted above, while some growth in case mix in 2020 likely reflects increases in coding intensity, most of the faster growth in reported case mix likely reflects an increase in the average resource needs of IRF patients.
- **Spreading fixed costs over fewer IRF cases:** Between 2019 and 2020, the 7.4 percent drop in FFS Medicare IRF cases meant that fixed costs were spread over fewer cases, escalating cost growth per IRF case.
- **Increase in labor costs:** The largest publicly traded IRF company reported higher labor costs during the PHE as a result of paying for additional staff, overtime, and paid time off (Encompass Health 2021a). While the IRF market basket accounts for projected changes in wage rates, it does not account for unexpected labor cost increases such as additional staff or hours.
- **Increase in supplies:** During the PHE, IRFs purchased additional supplies to protect patients and staff from contracting COVID-19, including personal protective equipment and COVID-19 tests.
- **Increase in IRF length of stay:** Patients who have longer stays generally incur greater costs than patients with shorter stays. Between 2019 and 2020, IRFs' average length of stay increased 2.0 percent, from 12.6 days to 12.9 days.

Medicare margins were in line with historical trends after including Medicare's share of federal relief funds

In 2020, the aggregate margin was 13.5 percent, down from 14.3 percent in 2019. Historically, facilities' Medicare margins vary across facility types. In assessing this variation in 2020, we examined Medicare margins by facility affiliation, ownership, size,

FFS Medicare share, and low-income patient share. Table 9-6 (p. 323) shows IRF Medicare margins in 2020, both with and without the share of federal relief funds.

Affiliation Freestanding IRFs have historically had stronger financial performance than hospital-based IRFs. In 2020, the Medicare margin for freestanding IRFs (which accounted for 53 percent of Medicare discharges from IRFs) was 23.5 percent. When we include an estimated Medicare share of federal relief funds, the Medicare margin for freestanding IRFs increased by 0.7 percentage point (Table 9-6, p. 323). In contrast, hospital-based IRFs' Medicare margin was 1.6 percent in 2020. When we include an estimated Medicare share of federal relief funds, the Medicare margin for hospital-based IRFs increased by 2.4 percentage points.

Several factors account for the disparity in margins between hospital-based and freestanding IRFs. First, hospital-based IRFs are more likely to be nonprofit; they also tend to have fewer beds and therefore fewer opportunities to take advantage of economies of scale. These factors may explain why hospital-based IRFs appear to be less stringent in their control of costs. Between 2010 and 2019, costs per case for hospital-based IRFs grew 21.8 percent, compared with 12.2 percent for freestanding IRFs (data not shown). However, in 2020, both types of providers faced costs unique to the PHE spread across fewer cases, resulting in cost growth of around 8 percent for both facility types.

Second, cases with extraordinarily high costs, called outlier cases, contributed to differences in margins. In general, hospital-based IRFs are much more likely than freestanding IRFs to have high-cost outlier cases (13.0 percent of cases compared with 3.1 percent). Indeed, 77 percent of Medicare's IRF outlier payments were made to hospital-based facilities. Although these payments diminish losses per outlier case, by design they do not completely cover their costs. It is not clear whether the large number of outlier cases in hospital-based IRFs stems from differences in unit cost, unmeasured clinical complexity that is not fully captured by the case-mix system, or both. Even controlling for differences in wages, case mix, and outliers, freestanding IRFs had a median standardized cost per case in 2020 that was 25 percent lower than that of hospital-based IRFs (\$12,687 vs. \$16,869).¹² Nevertheless, one-quarter of hospital-based IRFs had Medicare

margins greater than 14 percent, indicating that many hospitals can manage their IRF units profitably.

Ownership Similar to freestanding and hospital-based IRFs, for-profit IRFs historically average a substantially higher Medicare margin than nonprofit IRFs. In 2020, the Medicare margin for for-profit IRFs (which accounted for 53 percent of Medicare IRF discharges) was 23.7 percent (Table 9-6, p. 323), which rose by 0.3 percentage point when Medicare's estimated share of federal relief funds was included. In contrast, nonprofit IRFs' Medicare margin in 2020 was -0.7 percent, which rose by 3.3 percentage points when Medicare's estimated share of federal relief funds was included.

Nonprofit IRFs are far more likely than for-profit IRFs to be hospital based, which likely contributes to the disparity in margins. In 2020, among hospital-based IRFs, the Medicare margin for nonprofit units (which accounted for 28.6 percent of Medicare IRF discharges) was 1.6 percent, which rose by 3.5 percentage points when Medicare's estimated share of federal relief funds was included (data not shown for subcategories of for-profit and nonprofit IRFs). In comparison, the Medicare margin for for-profit units (which accounted for 9.9 percent of Medicare IRF discharges) was 12.0 percent, which decreased by 0.7 percent when Medicare's estimated share of federal relief dollars was included. Among freestanding IRFs, nonprofit facilities (which accounted for 5.0 percent of Medicare IRF discharges) had an average Medicare margin of 4.1 percent, which rose by 2.1 percentage points when Medicare's estimated share of federal relief dollars was included. Freestanding for-profit IRFs (which accounted for 50 percent of Medicare IRF discharges) had a Medicare margin of 21 percent, which rose by 1.1 percentage points when Medicare's estimated share of federal relief funds was included.

Facility size In 2020, the aggregate Medicare margin for IRFs with 10 or fewer beds was -6.5 percent, which rose by 3.3 percentage points when Medicare's estimated share of federal relief dollars was included (Table 9-6, p. 323). In comparison, the Medicare margin for IRFs with 65 or more beds was 19.3 percent, which rose by 0.7 percentage point when Medicare's estimated share of federal relief dollars was included. These differences are in large measure due to economies of scale; that is, smaller facilities have higher unit costs. In 2020, the median standardized cost for IRFs with

fewer than 10 beds was 43 percent higher than for IRFs with 65 or more beds (\$18,406 compared with \$12,913; data not shown). Smaller facilities also tend to have lower occupancy rates than large facilities (in 2020, 56 percent compared with 72 percent), also contributing to differences in costs.

FFS Medicare share Medicare margins tended to rise as the share of Medicare patients increased. In 2020, the aggregate Medicare margin was 6.1 percent for IRFs in which less than half of discharges were covered by FFS Medicare (Table 9-6). This margin rose 2.1 percentage points when Medicare's estimated share of federal relief dollars was included. In comparison, the Medicare margin for IRFs in which more than three-quarters of discharges were covered by FFS Medicare was 19.5 percent, which rose by 0.4 percentage point when Medicare's estimated share of federal relief dollars was included. The high aggregate Medicare margin in IRFs with high Medicare shares indicates that Medicare payments substantially exceed the costs of caring for beneficiaries.

Low-income share FFS Medicare margins also vary by the IRF's share of low-income patients. Similar to the disproportionate share hospital adjustment for ACHs, IRFs receive low-income percentage (LIP) payments that are intended to offset costs incurred by treating a large or disproportionate number of low-income patients. Unlike ACHs, IRFs are not required to reach a threshold share of low-income patients before becoming eligible for the LIP adjustment. In 2020, the Medicare margin for IRFs with a large share of low-income patients (constituting more than 25 percent of the facility's discharges) was 4.8 percent, which rose 3 percentage points when Medicare's estimated share of federal relief dollars was included (Table 9-6). In comparison, the Medicare margin for IRFs with low shares of low-income patients (less than 5 percent of a facility's discharges) was 15.5 percent, which rose by 0.5 percentage point when Medicare's estimated share of federal relief dollars was included.

Efficient provider analysis

Table 9-7 (p. 324) details the characteristics of relatively efficient providers by quality measures; cost and payment measures; and facility differences in case mix, length of stay, occupancy rates, number of beds, and discharges for stroke and other neurological conditions. (For a more detailed discussion of the

Commission's methodology for identifying relatively efficient IRFs, see text box, p. 325.¹³)

Our analysis included the 932 IRFs that met the data requirements and minimum case count (60). In total, 230 IRFs were identified as relatively efficient providers. Hospital-based nonprofit IRFs represented about 41 percent of the relatively efficient group, compared with 34 percent of freestanding for-profit IRFs.

Our analysis finds that, compared with other IRFs, relatively efficient IRFs had lower (better) rates of hospitalization but slightly lower (worse) rates of successful discharge to the community.

Between 2019 and 2020, the median overall Medicare margin among relatively efficient IRFs rose from 15.8 percent to 17.9 percent, compared with a drop from 4.6 percent to 3.9 percent for other IRFs (Table 9-7, p. 324; 2019 data not shown). While payment rates to all IRFs were similar, standardized costs per discharge for the relatively efficient group were 16 percent lower, leading to a large difference (17.9 percent vs. 3.9 percent) in the median Medicare margin.

Relatively efficient IRFs were, on average, larger and had higher occupancy rates compared with other IRFs (Table 9-7, p. 324), leading to greater economies of scale. The mix of cases also differed somewhat between the relatively efficient and other IRFs. Compared with other IRFs, relatively efficient IRFs had a slightly higher average case-mix index and more cases with other neurological conditions but somewhat smaller shares of stroke cases.

How should Medicare payments change in 2023?

The coronavirus PHE has made 2020 and 2021 anomalous years in many respects, and it is impossible to predict with certainty the extent to which these effects will continue into 2022. Our best estimate is that IRFs' Medicare margin in 2022 will only slightly increase relative to 2020, driven by higher cost growth in 2021 and 2022 than in prepandemic years.

To estimate 2022 payments, costs, and margins with 2020 data, the Commission considers policy changes effective in 2021 and 2022. These changes include:

**TABLE
9-6****Aggregate IRF Medicare margins remained high, with or without including share of federal relief funds**

Type of IRF	Margins						
	2015	2016	2017	2018	2019	2020	
						Without PRF	With PRF
All IRFs	13.9%	13.3%	13.9%	14.7%	14.3%	13.5%	14.9%
Hospital based	2.1	0.9	1.4	2.5	2.1	1.6	4.0
Freestanding	26.6	25.9	25.6	25.4	24.7	23.5	24.2
Nonprofit	3.5	1.8	2.0	2.5	1.5	-0.7	2.6
For profit	25.0	24.5	24.3	24.6	24.2	23.7	24.0
Government	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Urban	14.3	13.7	14.2	15.0	14.7	13.8	15.0
Rural	8.4	9.1	8.3	9.9	8.6	8.9	12.5
Number of beds							
1 to 10	-7.7	-10.1	-10.5	-5.7	-4.2	-6.5	-3.2
11 to 24	-0.4	-0.3	0.6	2.1	2.0	2.5	4.8
25 to 64	16.0	15.0	15.7	16.9	16.0	15.0	16.5
65 or more	22.9	22.5	22.0	21.2	20.9	19.3	20.0
FFS Medicare share							
<50%	7.0	6.3	6.2	7.1	7.0	6.1	8.2
50% to 75%	17.6	16.9	17.3	18.1	17.6	16.7	17.9
>75%	17.8	19.1	20.9	21.5	20.9	19.5	19.9
Low-income patient share							
0% to 5%	16.9	16.2	17.5	16.8	16.4	15.5	16.0
5% to 10%	16.2	16.5	17.0	17.8	17.9	16.9	18.1
10% to 15%	18.3	14.6	13.9	16.8	15.4	13.9	15.6
15% to 20%	7.9	11.7	15.4	14.2	14.5	15.1	16.4
20% to 25%	4.0	5.8	2.6	5.8	2.6	8.2	10.1
>25%	9.1	7.2	7.1	6.5	6.4	4.8	7.8

Note: IRF (inpatient rehabilitation facility), FFS (fee-for-service), N/A (not applicable). Government-owned facilities operate in a different financial context from other facilities, so their margins are not necessarily comparable. Their margins are not presented separately here, although they are included in the margins for other groups (e.g., "all IRFs"), where applicable.

Source: MedPAC analysis of cost report data from CMS.

- an update of 2.4 percent in 2021 based on an IRF market basket increase of 2.4 percent and an offsetting multifactor productivity adjustment of 0 percent;
- the suspension of the 2 percent Medicare sequestration from May 2020 through the end of March 2022 and 1 percent relief from April 2022 through the end of June 2022 due to the coronavirus PHE;

**TABLE
9-7**

Characteristics of relatively efficient providers, 2020

Performance in 2020	Type of IRF		Ratio of relatively efficient to other IRFs
	Relatively efficient IRFs	Other IRFs	
Quality measures:			
All-condition hospitalization rate	7.4%	7.6%	0.97
Successful discharge to community rate	66.3%	68.3%	0.97
Cost and payment measures:			
Payment per discharge	\$22,228	\$23,128	0.96
Standardized cost per discharge	\$13,840	\$16,554	0.84
Medicare margin	17.9%	3.9%	N/A
Facility characteristics:			
Facility case-mix index	1.40	1.37	1.02
Length of stay (in days)	12.6	12.8	0.98
Occupancy rate	68.8%	65.8%	1.05
Number of beds	32	25	1.28
Share of discharges for:			
Stroke	17.1%	21.1%	0.81
Other neurological conditions	10.0%	7.5%	1.34
Share of facilities:			
Freestanding for profit	34.3%	18.5%	N/A
Hospital-based nonprofit	40.8%	51.7%	N/A

Note: IRF (inpatient rehabilitation facility), N/A (not applicable). All data are medians unless otherwise indicated. The analysis included 932 IRFs that met the data requirements and minimum case counts (60). IRFs were identified as "relatively efficient" based on a cost measure (costs per discharge) and two quality measures (rates of hospitalizations during the stay and successful discharge to community) between 2017 and 2019. Relatively efficient IRFs were those in the best third of the distribution for one measure and not in the worst third for any measure in each of the three years. Costs per discharge were standardized for differences in area wages; mix of cases; and prevalence of high-cost outliers, short-stay outliers, and transfer cases. Quality measures were calculated for all facilities with 60 or more fee-for-service stays. Successful discharge to the community includes beneficiaries discharged to the community (including those discharged to the same nursing home) who did not have an unplanned hospitalization or die in the 30 days after discharge. The all-condition hospitalization measure captures all unplanned hospital admissions and readmissions and outpatient observation stays that occur during the stay. High rates of hospitalization during the stay indicate worse quality, and high rates of successful discharge to community indicate better quality. "Other neurological conditions" includes multiple sclerosis, Parkinson's disease, polyneuropathy, and neuromuscular disorders.

Source: MedPAC analysis of Medicare cost report data, Medicare Provider Analysis and Review data, and Inpatient Rehabilitation Facility–Patient Assessment Instrument data from CMS for 2017 to 2020.

- an estimated case-mix growth of 1 percent in 2021 because of an observed higher acuity case mix in IRFs;
- an update of 1.9 percent in 2022 based on an IRF market basket increase of 2.6 percent and an offsetting multifactor productivity adjustment of 0.7 percent; and

Identifying relatively efficient inpatient rehabilitation facilities

The Commission is required by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 to consider the costs associated with an efficient provider. To make this assessment, we examined the financial performance of inpatient rehabilitation facilities (IRFs) that had consistently low costs per discharge and high quality using our new cross-sector quality measures. We calculated the cost per discharge using cost report and claims data and adjusted for differences in area wages; mix of cases; and prevalence of high-cost outliers, short-stay outliers, and transfer cases. For quality measures, we used risk-adjusted rates of successful discharge to the community and all-condition hospitalizations during a stay. To be included in the group of IRFs that furnished relatively low-cost, high-quality care, an IRF had to be (1) in the best performing third of the distribution of adjusted cost per discharge or of one of the quality measures for three consecutive years (2017 through 2019) and (2) not in the worst performing third of the distribution of adjusted cost per discharge or either of the quality measures for three consecutive years. Only IRFs with at least 60

Medicare fee-for-service discharges were included in the analysis.

The method we used to assess performance attempts to limit drawing incorrect conclusions about performance based on poor data. Using three years (rather than just one year) of data to categorize IRFs as efficient avoids categorizing providers based on random variation or on one “unusual” year. After determining whether an IRF was relatively efficient based on having relatively low costs and good quality care for three years in a row, we calculated performance on several quality and cost measures in 2020. By first assigning an IRF to a group (relatively efficient or other) and then examining the group’s performance in the next year, we avoid having a facility’s poor data affect both its own categorization and the assessment of the group’s performance. Thus, an IRF’s erroneous data in 2017, 2018, or 2019 could result in its inaccurate assignment to a group, but because the group’s performance is assessed with data from 2020, these “bad” data would not directly affect the assessment of the group’s performance. ■

- changes to the high-cost outlier amount in 2021 and 2022, which raised payments by 0.4 percentage point in 2021 and will lower payments by 0.4 percentage point in 2022.

The annual update to the base payment rate is also substantially higher than in prior years because of the expiration of statutory reductions in IRF updates required by the Affordable Care Act of 2010 in each year from 2010 through 2019.

In terms of cost, in 2020, cost growth increased by 8.5 percent, compared with 2.4 percent in 2019. Many factors related to the PHE drove cost growth in 2020,

including faster growth in case mix, spreading fixed costs over fewer IRF cases, labor cost increases, increase in supplies, and longer average length of stay. While the historical cost growth in the IRF sector is low and past experience of IRFs would suggest this high rate of cost growth will not continue, some effects of the PHE, such as higher costs of labor, could persist through 2022. For that reason, the Commission’s margin projection for 2022 assumes that for the 2021 and 2022 IRF market baskets, costs will increase an average of 2.5 percent a year. Considering these assumptions, we project an aggregate Medicare margin of 14 percent for IRFs in 2022.

For fiscal year 2009 through fiscal year 2017, the Commission recommended a 0 percent update to the IRF payment rate. For fiscal years 2018 through 2021, however, as the payment adequacy indicators remained positive and the aggregate Medicare margin neared historic highs, the Commission recommended that the Congress reduce IRF payment rates by 5 percent. Because our recommendations were not enacted and because, in the absence of legislative action, CMS is required by statute to apply an adjusted market basket increase, payments have continued to rise. Despite the changes to payments and costs related to the PHE, aggregate Medicare margins for IRFs have remained above 13 percent since 2015, with or without the inclusion of the estimated Medicare share of federal relief funds. Absent congressional action, payments to IRFs will increase in fiscal year 2023 by an estimated 2.1 percent. Reducing the payment rate for IRFs would better align Medicare payments with the costs of IRF care.

RECOMMENDATION 9

For fiscal year 2023, the Congress should reduce the 2022 Medicare base payment rate for inpatient rehabilitation facilities by 5 percent.

RATIONALE 9

The combination of low historical cost growth and increasing average payments has resulted in overpayments to IRFs. A high aggregate margin in 2020 of 13.5 percent (14.9 percent with estimated Medicare share of federal relief funds) and our projected margin for 2022 (14 percent) indicate that Medicare payments substantially exceed the costs of caring for beneficiaries. This excess contributes to Medicare's long-run sustainability challenges. For every fiscal year since 2009, the Commission has recommended that the update to the IRF payment rate be eliminated or that the payment rate be reduced. However, CMS has been required by statute to apply an adjusted market basket increase each year. Reducing the payment rate for IRFs by 5 percent for fiscal year 2022 would better align Medicare payments with the costs of IRF care.

We do recognize that the coronavirus PHE will affect all payment adequacy indicators in 2021. However, despite recent PHE-related changes that increased cost growth in IRFs in 2020, we expect these costs to

normalize in subsequent years. We do not anticipate any long-term changes that will persist past the end of the PHE and therefore warrant inclusion in the annual update to IRF payments in 2023. Instead, to the extent that the coronavirus PHE continues into 2023, any needed additional financial support should be targeted to affected IRFs that are necessary for access.

Furthermore, in 2022, we expect currently positive IRF payment adequacy indicators to remain strong, driven by substantially higher annual updates to IRF payment rates in 2021 and 2022 with the expiration of statutory reductions in IRF updates required by the Affordable Care Act in each year from 2010 through 2019.

IMPLICATIONS 9

Spending

- Under current law, the base payment rate under the IRF PPS is projected to increase by about 2.1 percent in 2023. Relative to current law, this recommendation would decrease Medicare spending by between \$750 million and \$2 billion in 2023 and by between \$5 billion and \$10 billion over five years.

Beneficiary and provider

- We do not expect this recommendation to have an adverse effect on Medicare beneficiaries' access to care or out-of-pocket spending. This recommendation could increase financial pressure on some providers. We expect that relatively efficient providers will continue to be willing and able to care for Medicare beneficiaries. ■

Endnotes

- 1 More frequently, Medicare beneficiaries receive inpatient rehabilitation services in skilled nursing facilities (SNFs), in part because there are many more SNFs than IRFs nationwide.
- 2 Throughout this chapter, we use the term “FFS Medicare” or “traditional Medicare” as equivalents to the CMS term “Original Medicare.” Collectively, we distinguish the payment model represented by these terms from other models such as Medicare Advantage or advanced alternative payment models that may use FFS mechanisms but which are designed to create different financial incentives.
- 3 More information about the prospective payment system for IRFs is available at https://www.medpac.gov/wp-content/uploads/2021/11/medpac_payment_basics_21_irf_final_sec.pdf.
- 4 During the public health emergency (PHE), some exceptions have been made to Medicare’s facility requirements for IRFs to help health care providers in affected communities manage patient flow. For example, during the PHE, an IRF that agrees to admit a patient to help a nearby hospital free up an acute care bed may exclude that patient from its compliance threshold calculation, as long as the patient’s medical record properly indicates that the patient was admitted solely to respond to the PHE (Centers for Medicare & Medicaid Services 2020b). The compliance threshold (commonly referred to as the “60 percent rule”) requires that no less than 60 percent of patients admitted to an IRF have as a primary diagnosis or comorbidity at least 1 of 13 conditions specified by CMS.
- 5 The 13 conditions are stroke; spinal cord injury; congenital deformity; amputation of a lower limb; major multiple trauma; hip fracture; brain injury; certain other neurological conditions (multiple sclerosis, Parkinson’s disease, cerebral palsy, and neuromuscular disorders); burns; three arthritis conditions for which appropriate, aggressive, and sustained outpatient therapy has failed; and hip or knee replacement when it is bilateral, the patient’s body mass index is greater than or equal to 50, or the patient is age 85 or older.
- 6 During the PHE, some exceptions were made to IRF Medicare coverage criteria for beneficiaries to help health care providers contain the spread of COVID-19. For example, the Secretary waived Section 412.622(a)(3)(ii), commonly referred to as the “3-hour rule,” the criterion that patients treated in IRFs generally receive at least 15 hours of therapy per week. IRFs should strive to provide typical IRF levels of care for beneficiaries admitted during the coronavirus public health emergency who require and can benefit from such care (Centers for Medicare & Medicaid Services 2020b).
- 7 If we approximate marginal cost as total Medicare cost minus fixed building and equipment cost, then:

$$\text{Marginal profit} = (\text{payments for Medicare services} - (\text{total Medicare costs} - \text{fixed building and equipment costs})) / \text{Medicare payments}.$$
- 8 The risk adjustment for the successful discharge to the community measure includes age and sex of the beneficiary, end-stage renal disease (ESRD) and disability status for entitlement, principal diagnosis, comorbidities, the length of stay of the preceding hospital stay (if there was one), and a count of the hospitalizations during the preceding year. Risk adjusters for the hospitalization measure include primary diagnosis, comorbidities and severity of illness, special conditions (severe wounds, difficulty swallowing, and bowel incontinence), age and sex, disability and ESRD status, hospitalization in the previous month, days in the intensive care unit during a preceding hospitalization (if there was one), a count of the hospitalizations during the preceding year, and the provision of ventilator care during the PAC stay. Providers with least 60 stays in the year, the minimum count to meet a reliability of 0.7, were included in calculating the average facility rate.
- 9 For more details on the COVID-19 Accelerated and Advance Medicare Payments Program, see <https://www.cms.gov/files/document/covid-medicare-accelerated-and-advance-payments-program-covid-19-public-health-emergency-repayment.pdf>.
- 10 Effective July 1, 2021, certain specialty hospitals, including inpatient rehabilitation facilities, are exempt from the certificate-of-need (CON) review in Florida. A CON requires the state to determine whether there is enough demand for the services before construction of a new health care facility.
- 11 The Affordable Care Act of 2010 required a budgetary reduction to IRF PPS payments in each year from 2010 to 2019.
- 12 Additionally, evidence suggests that assessments of patients’ motor and cognitive function are not reliably consistent across IRFs. Some in the industry have postulated that hospital-based IRFs devote less time to training assessment staff and verifying the accuracy of assessments, resulting

in less reliable measures of patients' motor and cognitive function in these facilities. Others assert that some freestanding IRFs aggressively assess their patients in a way that maximizes payment. To the extent that hospital-based IRFs consistently assess their patients as less disabled than do their freestanding counterparts, for whatever reason, their payments—and margins—will be systematically lower.

- 13 Previous Commission analyses suggest that assessment and scoring practices contribute to greater profitability in some IRFs (Medicare Payment Advisory Commission 2016); therefore, the results of this year's efficient provider analysis must be interpreted with caution.

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C H A P T E R

10

**Long-term care
hospital services**

R E C O M M E N D A T I O N

- 10** For fiscal year 2023, the Secretary should increase the 2022 Medicare base payment rate for long-term care hospitals by the estimate of market basket minus the applicable productivity adjustment.

COMMISSIONER VOTES: YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0

Long-term care hospital services

Chapter summary

Long-term care hospitals (LTCHs) provide care to beneficiaries who need hospital-level care for relatively extended periods of time. To qualify as an LTCH, a facility must meet Medicare's conditions of participation for acute care hospitals and have an average length of stay of more than 25 days for certain Medicare patients. In 2020, Medicare spent \$3.4 billion on care provided in LTCHs; about 71,000 fee-for-service Medicare beneficiaries had about 77,600 LTCH stays.

Medicare pays for care in LTCHs under the LTCH prospective payment system (PPS) for cases that meet the qualifying criteria specified in law (in the Pathway for SGR Reform Act of 2013). LTCH qualifying cases are those with an immediately preceding acute care hospital (ACH) stay who either have 3 or more days in an intensive care unit or coronary care unit or receive mechanical ventilation for at least 96 hours in the LTCH. Under the dual payment-rate system, cases that do not meet Medicare's qualifying criteria may be treated in LTCHs but are paid a lower rate. After a four-year transition period from 2016 through 2019, during which they were paid a blended rate, LTCHs were slated to be paid lower site-neutral rates for cases that did not meet the qualifying criteria starting in 2020. However, site-neutral payments have not yet been fully implemented

In this chapter

- Are Medicare payments adequate in 2022?
- How should Medicare payments change in 2023?

because they were temporarily waived during the coronavirus public health emergency (PHE).

In this chapter, we recommend a payment rate update for 2023. While policies in effect during the coronavirus PHE have temporarily delayed the complete transition to site-neutral rates, the extent to which LTCHs shift toward cases that qualify for the standard LTCH PPS rate will ultimately determine the industry's financial performance under Medicare's LTCH PPS. To assess the adequacy of standard payments under the LTCH PPS for cases meeting the LTCH criteria, some analyses in this chapter focus on LTCHs treating a high share (more than 85 percent) of LTCH PPS-qualifying cases, consistent with the goals of the dual payment-rate system.

Because of standard data lags, the most recent complete data we have for most payment adequacy indicators are from 2020. In presenting these data, we discuss the effects of the coronavirus PHE and PHE-related policies on LTCHs and use data from prior years as context for 2020 changes. To the extent that the effects of the PHE are temporary or vary significantly across LTCHs, they are best addressed through targeted temporary funding policies, such as those that have been enacted, rather than a permanent change to all LTCHs' payment rates in 2023 and future years.

Assessment of payment adequacy

Beneficiaries' access to care—We consider the capacity and supply of LTCH providers and changes over time in the volume of services they furnish. We expect and have seen reductions in these metrics since the implementation of the dual payment-rate system that began to be phased in with cost reporting periods starting in fiscal year 2016.

- **Capacity and supply of providers**—The number of LTCHs began to decrease in 2013, but the decline has been more rapid since the implementation of the dual payment-rate system. Between 2019 and 2020, the decline in the supply of LTCHs slowed compared with the prior three years. Average LTCH occupancy in 2020 was 65 percent, which was similar to the 2019 occupancy rate.
- **Volume of services**—Before the pandemic, LTCH volume had been falling during the transition to site-neutral rates for nonqualifying cases. From 2016 through 2019, after controlling for the number of Medicare fee-for-service beneficiaries, total LTCH case volume fell about 10 percent annually, compared with a 12.4 percent decline in case volume in 2020.

Cases meeting the LTCH qualifying criteria had also declined prepandemic, but less than cases overall. Between 2016 and 2019, qualifying cases per beneficiary fell about 2 percent annually, compared with an 11 percent decline in 2020.

- **Medicare marginal profit**—Medicare marginal profit, an indicator of whether LTCHs with excess capacity have an incentive to admit Medicare patients, averaged about 18 percent across LTCHs in 2020. For LTCHs with a high share of qualifying cases, marginal profit was 20 percent in 2020, an increase over 2019 reflecting temporary PHE-related policies that raised Medicare payments.

Quality of care—Aggregate risk-adjusted rates of successful discharge to the community declined, and rates of all-condition hospitalizations within a stay remained unchanged during the dual payment-rate phase-in period (2016 through 2019). In 2020, the risk-adjusted rate of hospitalizations was higher (6.1 percent) than in prior years, as was the rate of successful discharge to the community (23 percent). Given the effects of the pandemic, we do not draw conclusions about whether the changes reflect the adequacy of Medicare's payments.

Providers' access to capital—The pending implementation of site-neutral rates for nonqualifying cases starting in 2020 coupled with payment reductions to annual updates required by statute have limited opportunities for growth and reduced the industry's need for capital to expand. In 2020, temporary payment policies to create additional inpatient capacity during the coronavirus PHE raised payments for nonqualifying LTCH cases. In addition, the Coronavirus Aid, Relief, and Economic Security (CARES) Act, enacted in March 2020, gave LTCHs access to relief funds and temporary suspension of the sequester. In 2020, the all-payer LTCH margin with relief funds included was 4 percent; all else equal, the margin was 2.7 percent excluding relief funds.

Medicare payments and providers' costs—Annual Medicare aggregate margins for all LTCHs have been variable and negative during the phase-in of the dual payment-rate system because providers' costs grew more than Medicare payments between 2016 and 2019. LTCHs with a high share of qualifying cases in 2019 had a Medicare aggregate margin of 2.9 percent. Fueled by the suspension of the 2 percent sequestration reduction and temporary waivers of site-neutral payments and other LTCH payment criteria, Medicare aggregate margins in 2020 increased to 6.9 percent. While the waiver of some site-neutral payment rules has delayed full implementation of the dual payment-

rate system, we expect continued changes in admission patterns when site-neutral rates resume for cases that do not meet the LTCH PPS criteria. We project that LTCHs' Medicare aggregate margin for facilities with more than 85 percent of Medicare discharges meeting the LTCH PPS criteria will be 3 percent in 2022.

How should Medicare payment rates change in 2023?

Based on payment adequacy indicators and in the context of ongoing changes to payment policy, the Commission's recommendation for fiscal year 2023 would increase the 2022 Medicare base payment rate for LTCHs by the market basket minus the applicable productivity adjustment. This update supports LTCHs in their provision of safe and effective care for Medicare beneficiaries meeting the LTCH PPS criteria for payment at the standard LTCH PPS rate. ■

Background

While most chronically critically ill (CCI) patients—those with profound debilitation of multiple systems, frequently with ongoing respiratory failure—are treated in acute care hospitals, some are treated in long-term care hospitals (LTCHs). To qualify as an LTCH for Medicare payment, a facility, which can be freestanding or colocated with another hospital, must meet Medicare’s conditions of participation for short-term acute care hospitals (ACHs) and have an average length of stay of more than 25 days for certain Medicare patients.¹ LTCHs are located in primarily urban areas and are not distributed uniformly across the country.

As in 2019, in 2020, less than 1 percent of fee-for-service (FFS) Medicare ACH stays were discharged to LTCHs. About 71,000 FFS Medicare beneficiaries had about 77,600 LTCH stays.² FFS Medicare beneficiaries accounted for 51 percent of LTCHs’ discharges covered by any payer and had an average Medicare length of stay of 27.6 days, up from 26.8 days in 2019. In 2020, Medicare program payments to LTCHs, exclusive of beneficiary cost sharing, were about \$3.4 billion (Office of the Actuary 2021).

Medicare’s prospective payment system for LTCHs

Under Medicare’s LTCH prospective payment system (PPS), payments for discharges are adjusted for differences in expected resource use due to patient differences using the Medicare severity long-term care diagnosis related group (MS-LTC-DRG) patient classification system.³ MS-LTC-DRGs classify patients primarily according to diagnoses and procedures using the same groupings used in ACHs paid under the inpatient PPS (IPPS), but the MS-LTC-DRG relative weights are specific to LTCH qualifying cases. The LTCH PPS makes high-cost outlier payments for cases that are extraordinarily costly and makes lower short-stay outlier payments for cases with shorter-than-average lengths of stay.⁴

Site-neutral payments for nonqualifying cases in LTCHs were phased in over four years, but full implementation was temporarily waived due to the public health emergency

LTCHs were statutorily created as a category of Medicare providers in the early 1980s to exempt 40 chronic disease hospitals from Medicare’s IPPS

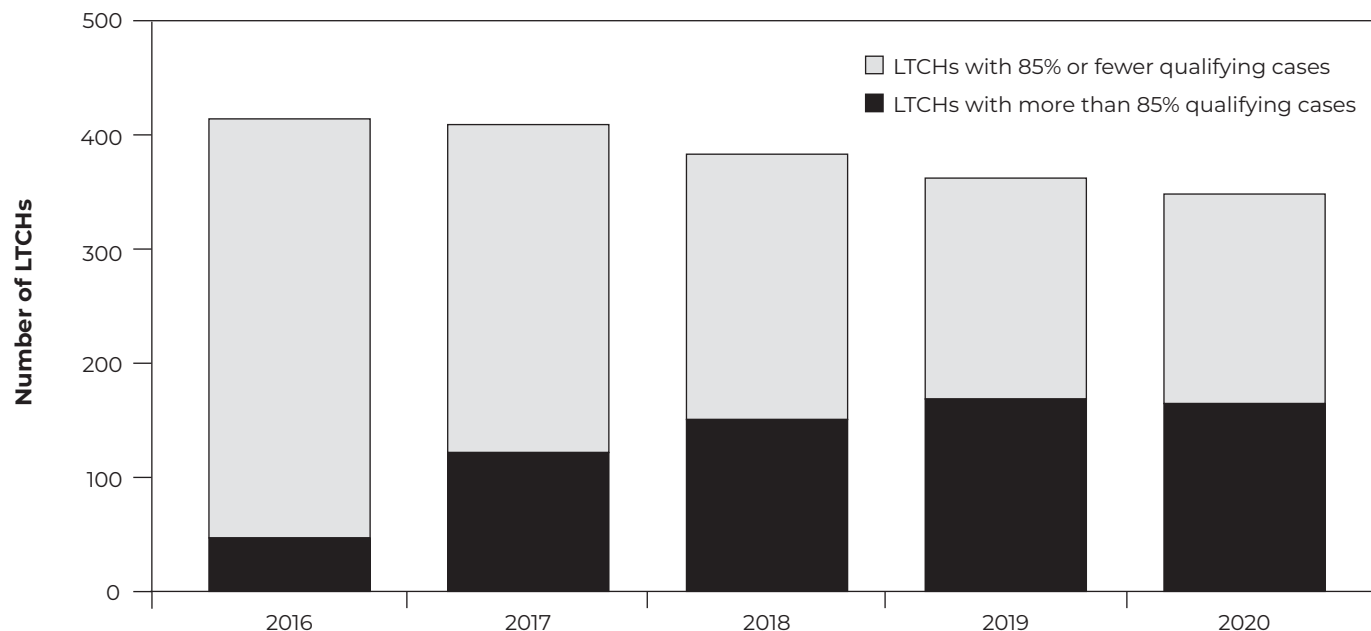
for ACHs (Einav et al. 2021). By 2014, the sector had expanded to more than 400 LTCHs. The Pathway for SGR Reform Act of 2013 established a dual payment-rate system for LTCHs, which mandated that the higher standard LTCH PPS rate be paid only for cases that had an ACH stay immediately preceding LTCH admission and for which either the ACH stay included at least 3 days in an intensive care unit (ICU) or the case received prolonged mechanical ventilation in the LTCH, defined as at least 96 hours. LTCH PPS-qualifying cases are referred to as “cases meeting the LTCH PPS criteria” or “qualifying cases.” When an LTCH treats a beneficiary whose case does not meet the LTCH PPS criteria (referred to as a “nonqualifying case”), it is paid a site-neutral rate, which is the lower of an amount based on Medicare’s IPPS payments or 100 percent of the costs of the case.⁵

Site-neutral payments for cases in LTCHs were phased in between 2016 and 2019. During this period, for cases that did not meet the criteria specified above, LTCHs received a transitional blended payment of 50 percent of the standard LTCH PPS rate paid for qualifying cases and 50 percent of the lower site-neutral rate. Full site-neutral rates were to have been paid for nonqualifying cases starting the month a facility’s cost reporting year began in fiscal year 2020. However, the Coronavirus Aid, Relief, and Economic Security (CARES) Act of 2020 temporarily waived certain provisions relating to site-neutral payments during the coronavirus public health emergency (PHE) to allow for expansion of inpatient capacity (Centers for Medicare & Medicaid Services 2020a). Effective for claims with an admission date on or after January 27, 2020, and continuing through the duration of the PHE, all cases admitted are paid the LTCH PPS standard federal rate and are counted as discharges paid the LTCH PPS rate for purposes of calculating an LTCH’s discharge payment percentage.⁶ Under current law, site-neutral rates will resume after the PHE. CMS also waived the 25-day average length-of-stay requirement to participate in the LTCH PPS when an LTCH admits or discharges patients to meet PHE-driven demands. This requirement will resume with a hospital’s first cost reporting period that does not include the PHE waiver period.⁷

Because this chapter is concerned with the adequacy of Medicare’s payments under the LTCH PPS, we restrict some analyses to LTCHs that had more than 85 percent of their Medicare cases meet the criteria for the LTCH

**FIGURE
10-1**

Growth in the number and share of LTCHs with more than 85 percent of Medicare cases meeting the LTCH PPS criteria stalled in 2020



Note: LTCH (long-term care hospital), PPS (prospective payment system). “Medicare cases meeting the LTCH PPS criteria” refers to Medicare cases that meet the criteria specified in the Pathway for SGR Reform Act of 2013 for payment under the LTCH prospective payment system.

Source: MedPAC analysis of the LTCH Final Rule Impact files for fiscal years 2018 through 2022.

PPS rate, which we also refer to as “qualifying cases.”⁸ Rates for cases that do not meet the LTCH PPS criteria are paid based on IPPS rates. Between 2016 and 2019, the number and share of all LTCHs with more than 85 percent of qualifying cases increased each year (Figure 10-1). In 2016, about 11 percent of LTCHs met this threshold, compared with more than 47 percent in 2019. In 2020, growth in the size of this cohort stalled, remaining at 47 percent of LTCHs. These facilities treated 47 percent of all Medicare FFS cases and 56 percent of qualifying Medicare FFS cases; in aggregate, 92 percent of the FFS Medicare cases in these facilities were qualifying cases.

Each year, based on the most recent year of data, we define the cohort of LTCHs with more than 85 percent of Medicare cases meeting the criteria for the LTCH PPS rate. While LTCHs can move in and out of this group from year to year, we found that LTCHs

that achieve a high share of qualifying cases are likely to remain in this cohort the following year. We also found that 44 percent of LTCHs that billed Medicare each year from 2016 through 2020 did not reach the 85 percent proportion of qualifying cases in any year, though collectively their number and share of site-neutral cases declined over the period. Just under half of these LTCHs are in Texas or Louisiana.

Profile of Medicare LTCH users

As in prior years, FFS Medicare beneficiaries who used LTCHs in 2020 were disproportionately dually eligible for Medicare and Medicaid compared with the overall population of FFS Medicare beneficiaries. Dual-eligible beneficiaries accounted for about 17 percent of all beneficiaries but represented about 43 percent of Medicare LTCH users, 44 percent of LTCH cases, and 43 percent of LTCH qualifying cases (Medicare Payment Advisory Commission 2021a).

**TABLE
10-1****About 30 percent of qualifying LTCH cases die during their LTCH stay or within 30 days of discharge**

		2015	2016	2017	2018	2019	2020
Death in LTCH	Nonqualifying cases	8%	7%	6%	6%	6%	8%
	Qualifying cases	17	16	16	16	16	17
Death within 30 days of discharge	Nonqualifying cases	9	9	9	9	9	10
	Qualifying cases	13	13	13	13	13	14

Note: LTCH (long-term care hospital). "Qualifying cases" refers to Medicare stays that meet the criteria specified in the Pathway for SGR Reform Act of 2013 to qualify for payment under the LTCH prospective payment system. "Nonqualifying cases" refers to Medicare stays that do not meet the criteria specified in the Pathway for SGR Reform Act of 2013. The share of qualifying cases is defined as having that specified share of cases in the reported year (e.g., 2018 rates are for providers with the designated share of cases in 2018); therefore, the providers in those groups can vary from year to year. Mortality rates in this table are unadjusted for patient characteristics, so changes in patient severity can affect rates each year.

Source: MedPAC analysis of Medicare Provider Analysis and Review and enrollment data from CMS.

LTCH users are also disproportionately male, under age 65, diagnosed with end-stage renal disease, and Black compared with the overall population of FFS Medicare beneficiaries. Higher rates of LTCH use by Black beneficiaries could be due to the concentration of LTCHs in areas of the country with larger Black populations (Dalton et al. 2012, Kahn et al. 2010). Another contributing factor may be a greater incidence of critical illness in this population (Mayr et al. 2010) and a greater likelihood to opt for LTCH care, since Black beneficiaries are less likely than White beneficiaries to elect hospice care (Medicare Payment Advisory Commission 2021b).

LTCH users' complex critical illnesses are reflected in their unadjusted mortality rates, as shown in Table 10-1. In 2020, about 17 percent of qualifying cases died during an LTCH stay and 14 percent died within 30 days of discharge. Among qualifying cases, unadjusted mortality rates varied based on which qualifying criteria the case met. Among cases that received mechanical ventilation services in the LTCH for 96 hours, 26 percent died during their LTCH stay in 2020, compared with 14 percent for those qualifying solely because of a stay of 3 or more days in an ICU (data not shown). These differences between the two groups are consistent with data in 2019.

Are Medicare payments adequate in 2022?

To address whether LTCH PPS payments for 2022 are adequate to cover the costs that LTCHs incur in furnishing services to Medicare beneficiaries, we examine metrics of beneficiaries' access to care, including the capacity and supply of LTCH providers, changes over time in the volume of services furnished, and providers' willingness to admit Medicare beneficiaries; quality of care; providers' access to capital; and Medicare payments and providers' costs for LTCH PPS-qualifying cases. During the transition to the dual payment-rate system, our payment adequacy analysis for LTCHs considered the anticipated effects of this policy on our payment adequacy metrics.

Beneficiaries' access to care: Expected reductions in supply and volume continue, without affecting access to care

As Medicare phased in the dual payment-rate system, reductions in the overall supply of LTCHs and the volume of services they furnish were expected as facilities adapted to the new payment incentives to treat higher-acuity cases that qualify for the standard LTCH PPS rate. Total volume and volume per capita

The coronavirus public health emergency, the Commission's payment adequacy framework, and analysis of LTCHs' payment adequacy in 2020

On January 31, 2020, the Secretary of Health and Human Services first declared the coronavirus public health emergency (PHE). In March 2020, the first wave of COVID-19 cases hit the U.S. (For details on the effects of COVID-19 on beneficiaries' health and access to care, see Chapter 1.) Among its many responses to the unfolding national crisis, the Congress created multiple funding streams for health care providers, including suspension of the 2 percent sequestration payment adjustment applied to all Medicare fee-for-service (FFS) claims and creation of the Provider Relief Fund (PRF), which furnished qualified providers with payments for health care expenses or lost revenue due to the pandemic. In addition to funding, the Congress and CMS altered Medicare payments and policies and granted regulatory flexibilities starting in March 2020 (Podulka and Blum 2020).

As a result of the coronavirus pandemic and policy responses to the PHE, changes in our payment adequacy indicators in 2020 reflect temporary changes during the PHE far more than changes in the overall adequacy of Medicare payments to long-term care hospitals (LTCHs). (For a description of how the pandemic has been incorporated into our payment adequacy framework, see Chapter 2.) Because of standard data lags, the most recent complete data we have are from 2020 for most payment adequacy indicators. In brief, the effects of the PHE on indicators of Medicare's payment adequacy to LTCHs include:

- dramatic drops in inpatient hospital volume in spring 2020 that affected the number of referrals to post-acute care providers, including LTCHs;
- increases in all-payer margins driven by federal relief funding;
- increases in Medicare payments for site-neutral cases due to the waiver of certain LTCH payment policies; and

- increases in Medicare payments due to temporary suspension of the 2 percent sequestration payment adjustment.

In this chapter, we use available data and changes in payment policy to project LTCH margins for 2022 and recommend payment rate updates for 2023; however, uncertainty remains about the extent to which the pandemic and related payment flexibilities will last and whether changes to hospital volume, LTCH volume, and financial performance will persist past the PHE. Therefore, while analyzing 2020 data is an important part of understanding what happened to beneficiaries' access to care, quality of care, providers' access to capital, and Medicare's payments and providers' costs, it is more difficult to interpret these indicators than is typically the case. For many of the metrics in this chapter, we present data from 2020 as well as prepandemic historical trends for context.

As the Commission stated last year, temporary effects of the coronavirus pandemic or effects that vary significantly across providers are best addressed through targeted temporary funding policies rather than a permanent change to all providers' payment rates in 2023 and future years.

Timing of 2020 claims, cost reports, and coronavirus public health emergency-related policies

This year we analyzed 2020 claims and provider cost reports that reflect the impact of the pandemic, as well as the complex interactions of PHE-related funding and policy changes.

Claims data from 2020

It is instructive to understand the timing of the PHE and PHE-related policy changes that are reflected in fiscal year 2020 claims data (Figure 10-2). For sectors whose payment years begin with the federal fiscal year (which includes LTCHs), the first four months of the 2020 payment year occurred before the PHE

(continued next page)

The coronavirus public health emergency, the Commission's payment adequacy framework, and analysis of LTCHs' payment adequacy in 2020 (cont.)

**FIGURE
10-2**

Fiscal year 2020 time line

FY 2020

**LTCHs paid site-neutral rates
for nonqualifying cases**

PHE declared

Site-neutral payments waived: All LTCH cases paid LTCH PPS rates
(effective through the end of the PHE)

Sequester suspended
(effective through June 2022)

Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
CY 2019			CY 2020								

Note: FY (fiscal year), LTCH (long-term care hospital), PHE (public health emergency), PPS (prospective payment system), CY (calendar year). The CARES Act suspended the 2 percent sequestration reduction to payments from May 1, 2020, through December 31, 2020. The Consolidated Appropriations Act, 2021, suspended it through December 31, 2021. The Protecting Medicare and American Farmers from Sequester Cuts Act suspended the 2 percent reduction from January through March 2022 and applies a 1 percent reduction from April through June 2022.

was declared, on January 27, 2020. After four years of being paid blended rates, LTCHs were then to be paid full site-neutral rates for nonqualifying LTCH cases in fiscal year 2020, beginning in the first month of their cost reporting year. Because the temporary PHE-related policy to waive site-neutral payments and pay the LTCH standard federal prospective payment system (PPS) rates for all cases went into effect starting January 27, 2020, providers with cost reporting years that started in October through January received site-neutral rates for nonqualifying cases before the waiver. The suspension of the sequester, which is set to

expire under current law in June 2022, was in effect starting in May 2020.⁹

Cost report data from 2020

For providers, including LTCHs, that submit cost reports to CMS, we estimate total Medicare-allowable costs and assess the relationship between Medicare's payments and those costs, which we express as a payment margin. Within each sector, 2020 cost reports included in this year's analysis of Medicare margins reflect varying numbers of months overlapping the PHE because providers' cost reports can start on different months of the

(continued next page)

The coronavirus public health emergency, the Commission's payment adequacy framework, and analysis of LTCHs' payment adequacy in 2020 (cont.)

year; the Commission defines 2020 cost reports as those with a midpoint falling in fiscal year 2020. Medicare payments to providers with cost reporting periods overlapping the PHE include temporary add-on payments and suspension of the sequester; providers' reported costs reflect PHE-related costs (e.g., personal protective equipment, supplies, labor). Providers received billions of dollars in additional grants that are not reflected in claims or Medicare payments on cost reports, so they are not reflected in Medicare margins. All providers must report relief fund payments on their cost report's statement of revenues for informational purposes.

Almost 40 percent of LTCHs in this year's analysis of cost reports have cost reporting years that begin on September 1, but the remainder start at different

months throughout the year. In aggregate, providers included in the analysis of LTCHs' 2020 cost reports had approximately 60 percent of the months in their cost reporting year in the PHE period—February 2020 through December 2020. Similarly, we estimate that providers included in the analysis of LTCHs' 2020 cost reports had approximately one-third of the months in their cost reporting year in the period following the suspension of the sequester starting in May 2020. These shares of months overlapping the PHE and in the period following the sequester waiver are similar for LTCHs with high shares of qualifying cases in 2020. Given the variation in cost reporting years and the duration of the PHE, we expect data in future years to reflect effects of the PHE and related policies. ■

fell in 2020, but 2020 monthly volume compared with 2019 showed bigger declines before the PHE, likely due to changes in admission patterns in response to rolling implementation of site-neutral payments for nonqualifying cases.

Capacity and supply of providers: Decrease in number of LTCHs began in 2013 and continued through 2020

Before the passage of the dual payment-rate system in the Pathway for SGR Reform Act of 2013, lawmakers implemented policies over time to constrain growth in the supply of LTCHs because of concerns about the growth in and appropriate use of costly LTCH-level care. The Medicare, Medicaid, and SCHIP Extension Act of 2007 (MMSEA) and subsequent legislation imposed a limited moratorium on new LTCHs and new beds in existing LTCHs from December 2007 through December 2012. During that time, new LTCHs were able to enter the Medicare program only if they met exceptions to the moratorium.¹⁰ The Pathway for

SGR Reform Act of 2013 and subsequent legislation implemented a new moratorium from April 1, 2014, through September 30, 2017.¹¹

During the phase-in of the dual payment-rate system between 2016 and 2019, the number of LTCHs paid under the LTCH PPS fell by an average of 4.2 percent per year, as shown in Table 10-2. Between 2019 and 2020, the number of LTCHs paid under the LTCH PPS fell 3.6 percent.

Between fiscal year 2017 and 2021, 83 LTCHs have closed, representing about 19 percent of facilities and 16 percent of beds. The closures occurred primarily in market areas with multiple LTCHs. From October 2015 through 2020, almost 80 percent of the MedPAC areas with an LTCH closure had at least one other LTCH.¹² In the remaining areas, the closest LTCH was within about two driving hours of the LTCH that closed. The geographic distribution of active LTCHs and LTCHs that closed between 2017 and 2021 is shown in Figure 10-3 (p. 344).

**TABLE
10-2****The number of LTCHs fell in 2020, but not as much as the decline during the dual payment-rate system transition period (2016–2019)**

Type of LTCH	2019	2020	Average annual change 2016–2019	Change 2019–2020
LTCHs paid under the LTCH PPS	361	348	–4.2%	–3.6%
LTCHs with valid cost reports*	351	325	–4.8	–7.4
Nonprofit	61	52	–4.9	–14.8
For profit	271	258	–5.4	–4.8
Government	19	15	5.9	–21.1

Note: LTCH (long-term care hospital), PPS (prospective payment system). The Medicare, Medicaid, and SCHIP Extension Act of 2007 and subsequent legislation imposed a moratorium on new LTCHs and new LTCH beds in existing facilities from December 29, 2007, through December 29, 2012. The Pathway for SGR Reform Act of 2013 and subsequent legislation implemented a new moratorium from April 1, 2014, through September 30, 2017.

*LTCHs with valid cost reports as of August 31, 2021.

Source: Data for LTCHs paid under the LTCH PPS are from the Provider of Services (POS) file, based on the applicable fiscal year. Data for LTCHs with valid cost reports are from the Commission's analysis of cost report data in the applicable fiscal year. The counts in the POS and the counts with valid cost reports differ due to the timing of the files and applicable data trims to the cost report files. In addition, the decline in the number of LTCHs with valid cost reports between 2019 and 2020 reflects delays in reporting. The October 31, 2021, cut of the cost reports contained valid data for 11 additional providers; inclusion of these additional cost reports did not materially affect the calculation of payments, costs, or margins that we report using the August 31, 2021, cost reports.

In 2018 and 2019, average occupancy was 63 percent for all LTCHs. LTCHs that had more than 85 percent of their Medicare cases meet the LTCH PPS criteria (“qualifying cases”) had a higher aggregate occupancy rate (67 percent) than all LTCHs. Aggregate occupancy rates for providers included in our 2020 cost report analysis were similar to the rates in 2018 and 2019. Recent occupancy levels, combined with declining volume of cases paid the site-neutral rate, suggest that remaining LTCHs have capacity to treat additional LTCH qualifying cases. Further, many patients treated in LTCHs can be treated in other settings.

Volume of services: LTCH volume had been falling before the PHE during the dual payment-rate system transition period

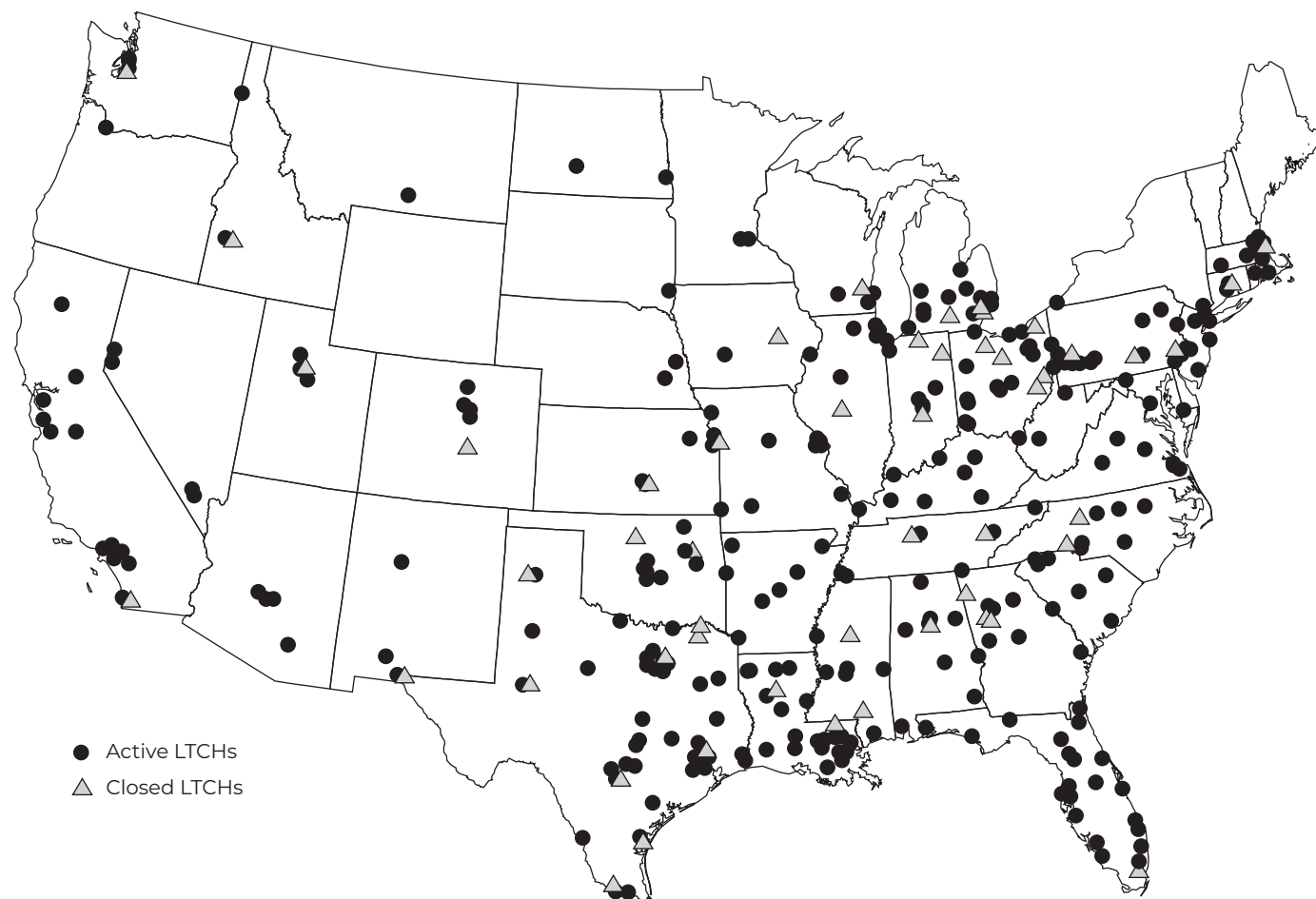
In 2020, the volume of all LTCH cases fell nearly 15 percent, while the volume of LTCH-qualifying cases fell 13.4 percent. This reduction is due, in part, to the overall reduction in upstream acute care volume during the pandemic, but the volume of LTCH cases has been falling steadily since the start of the dual payment-rate system, before the PHE (Table 10-3, p. 345). From

2016 to 2019, total LTCH cases per 10,000 beneficiaries dropped by about 10 percent annually, largely due to the decline in nonqualifying cases. Controlling for the number of FFS beneficiaries, qualifying cases fell by an average of just 2 percent per year over the same period.

In 2020, the share of qualifying LTCH cases was about 76 percent, similar to the share in 2019 (Table 10-3, p. 345).¹³ Before 2020, LTCH qualifying cases as a share of total cases had been increasing each year of the transition to the dual payment-rate system because the reduction in the number of site-neutral cases was greater than the reduction in the number of LTCH qualifying cases. Between 2019 and 2020, the decline in site-neutral (“nonqualifying”) cases per beneficiary was smaller than in the pre-PHE dual payment-rate system transition period, while the decline in qualifying cases per beneficiary was larger. Due to temporary PHE-related payment changes to allow for greater flexibility and expanded hospital capacity, the average payment per case for nonqualifying cases between 2019 and 2020 increased 26 percent.

**FIGURE
10-3**

Active and closed long-term care hospitals, 2017–2021



Note: LTCH (long-term care hospital). Map does not show Alaska and Hawaii, which each had one active LTCH and no closed LTCHs. "Active LTCHs" were continuously open between 2017 and 2021; "closed LTCHs" closed between 2017 and 2021.

Source: MedPAC analysis of cost report data from CMS.

In fiscal year 2020, before the implementation of temporary PHE-related policy changes for LTCHs, providers began receiving site-neutral rates (rather than the transitional blended rates) for nonqualifying cases starting the month that a facility's cost reporting year began. While the PHE likely contributed to volume reductions in 2020, the biggest monthly LTCH case volume differences between 2019 and 2020 occurred in December, January, and February, *before* the first major wave of COVID-19 cases in March 2020 (Figure 10-4, p. 346). Although the PHE-related LTCH payment waivers

were in effect for claims with an admission date on or after January 27, 2020, they were not passed until March 2020 and were then applied retroactively. Before the passage of these temporary waivers, providers had incentives to reduce the number and share of site-neutral cases. The PHE-related temporary waiver of the site-neutral payments, together with the waivers of requirements for length of stay and discharge payment percentage (the ratio of FFS discharges that qualify for the LTCH PPS rate to the LTCH's total number of Medicare discharges requirements), may

**TABLE
10-3****LTCH volume had been falling during the dual payment-rate system transition period largely due to declining volume of nonqualifying cases**

	2019	Average annual change 2016–2019	2020	Percent change 2019–2020
Cases				
All	91,147	–10.1%	77,603	–14.9%
Nonqualifying cases	23,160	–24.2	18,702	–19.2
Qualifying cases	67,987	–2.0	58,901	–13.4
Share of qualifying cases	75%	8.6	76%	1.8
Cases per 10,000 FFS beneficiaries				
All	23.8	–10.1	20.9	–12.4
Nonqualifying cases	6.1	–24.2	5.0	–16.9
Qualifying cases	17.8	–2.0	15.8	–10.9
Payment per case				
All	\$41,448	0.6	\$45,634	10.1
Nonqualifying cases	\$25,738	–8.0	\$32,401	25.9
Qualifying cases	\$46,800	0.4	\$49,835	6.5
Average length of stay (in days)				
All	26.8	–0.1	27.6	3.0
Nonqualifying cases	23.3	–2.9	23.8	2.4
Qualifying cases	28.0	0.1	28.8	2.8

Note: LTCH (long-term care hospital), FFS (fee-for-service). “Qualifying cases” refers to Medicare cases that meet the criteria specified in the Pathway for SGR Reform Act of 2013 to qualify for payment under the LTCH prospective payment system. All counts are for stays covered by FFS Medicare and do not include those in private plans.

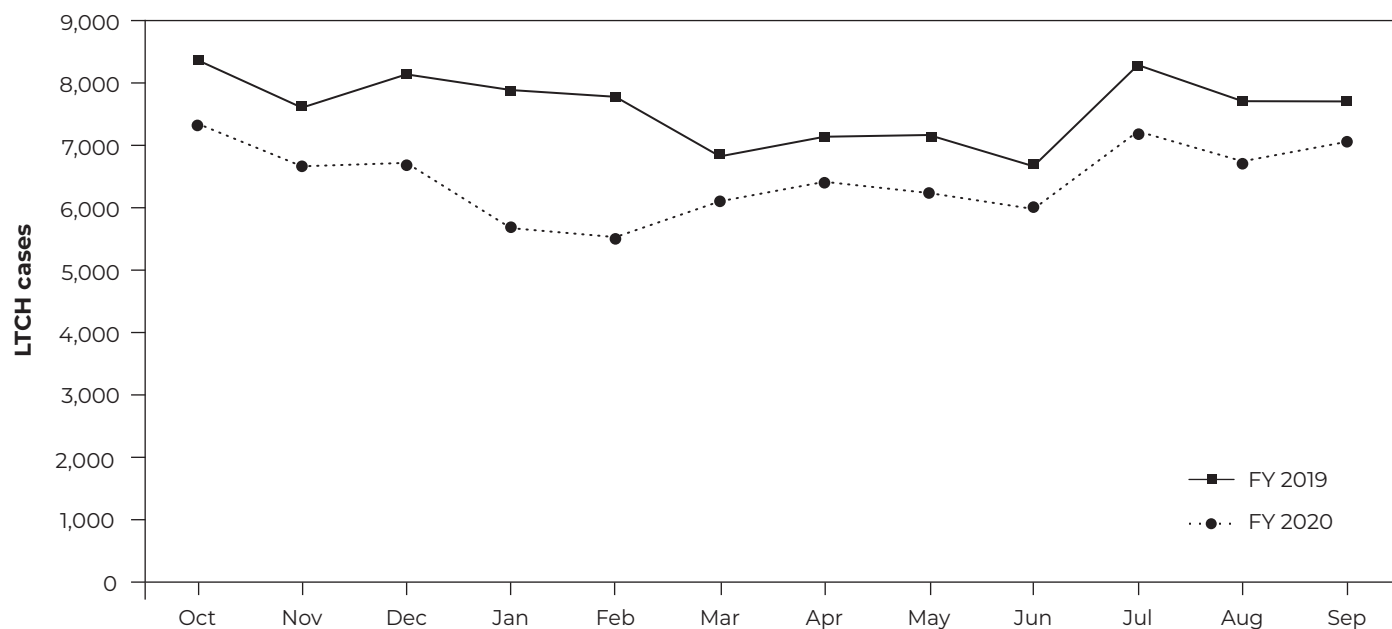
Source: MedPAC analysis of Medicare Provider Analysis and Review data from CMS and the 2021 annual report of the Boards of Trustees of the Medicare trust funds.

have contributed to increases in case volume compared with the fiscal year’s beginning months, when site-neutral payments started to go into effect. Increased LTCH volume starting in March may reflect LTCHs treating the first wave of COVID-19 cases and providing expanded inpatient capacity in areas where hospitals experienced shortages of staff, space, or supplies during COVID-19 surges. Once additional flexibility is no longer needed and the temporary PHE-related policies expire, we expect that the volume of site-neutral cases will continue to decline, in response to the incentives of the dual payment-rate system.

In 2020, among all LTCHs, the top 20 LTCH diagnoses remained unchanged from 2019 and made up 68 percent of LTCH stays, up from 66 percent of stays in 2019 (data not shown). The most frequently occurring diagnosis was pulmonary edema and respiratory failure (MS–LTC–DRG 189), accounting for 19 percent of stays, compared with 20 percent in 2019. Though still the most common LTCH diagnosis in 2020, the absolute number of MS–LTC–DRG 189 cases was down 19 percent. Diagnoses that included respiratory conditions were 46 percent of LTCH cases, up 3 percentage points from the previous year.¹⁴ Only

**FIGURE
10-4**

The largest monthly differences in LTCH case volume between fiscal years 2019 and 2020 preceded the first wave of COVID-19 cases and temporary PHE-related LTCH payment policy changes in March 2020



Note: LTCH (long-term care hospital), PHE (public health emergency), FY (fiscal year). Data include stays covered by FFS Medicare only, not stays covered by private plans.

Source: MedPAC analysis of Medicare Provider Analysis and Review data for fiscal years 2019 and 2020.

one DRG in the top 20—respiratory infections and inflammations with MCC (MS-LTC-DRG 177)—rose in number of cases from 2019.

Among LTCHs with high shares of qualifying cases in 2020, stays were even more concentrated among a small number of diagnosis groups, as they had been in prior years.¹⁵ The top 20 diagnoses made up nearly 77 percent of stays for these LTCHs (Table 10-4); 55 percent of cases (less than 1 percentage point higher than in 2019) in these LTCHs involved diagnoses that were respiratory conditions or involved prolonged mechanical ventilation. The absolute number of respiratory cases in LTCHs fell in 2020.

Financial incentives to serve Medicare beneficiaries across LTCHs

Another measure of access is whether providers have a financial incentive to expand the number of Medicare

beneficiaries they serve. In considering whether to treat a patient, a provider with excess capacity compares the marginal revenue it will receive (i.e., the Medicare payment) with its marginal costs—that is, the costs that vary with volume. If Medicare payments are greater than the marginal costs of treating an additional beneficiary, a provider with capacity has a financial incentive to increase its volume of Medicare patients. In contrast, if payments do not cover the marginal costs, the provider could have a disincentive to care for Medicare beneficiaries.¹⁶

In 2020, the average LTCH marginal profit on Medicare cases was about 18 percent, up from 15 percent in 2019. This value is a positive indicator of access because it suggests that LTCHs with available beds continue to have a financial incentive to admit FFS Medicare beneficiaries, provided they are not capacity

**TABLE
10-4****The top 20 MS-LTC-DRGs made up nearly 77 percent of FFS Medicare stays at LTCHs with a high share of qualifying cases in 2020**

MS-LTC-DRG	Description	Stays	Share of stays
189	Pulmonary edema and respiratory failure	7,847	21.9%
207	Respiratory system diagnosis with ventilator support 96+ hours	7,073	19.8
871	Septicemia without ventilator support 96+ hours with MCC	1,917	5.4
208	Respiratory system diagnosis with ventilator support ≤ 96 hours	1,450	4.1
177	Respiratory infections and inflammations with MCC	1,047	2.9
166	Other respiratory system OR procedures with MCC	886	2.5
4	Tracheostomy with ventilator support 96+ hours or primary diagnosis except face, mouth, and neck without major OR procedure	849	2.4
981	Extensive OR procedure unrelated to principal diagnosis with MCC	800	2.2
949	Aftercare with CC/MCC	731	2.0
682	Renal failure with MCC	693	1.9
291	Heart failure and shock with MCC	492	1.4
592	Skin ulcers with MCC	453	1.3
314	Other circulatory system diagnoses with MCC	440	1.2
862	Postoperative and post-traumatic infections with MCC	435	1.2
870	Septicemia with ventilator support 96+ hours with MCC	433	1.2
919	Complications of treatment with MCC	431	1.2
539	Osteomyelitis with MCC	400	1.1
559	Aftercare, musculoskeletal system and connective tissue with MCC	389	1.1
853	Infectious and parasitic disease with OR procedure with MCC	322	0.9
637	Diabetes with MCC	319	0.9
Top 20 MS-LTC-DRGs		27,407	76.6

Note: MS-LTC-DRG (Medicare severity long-term care diagnosis related group), FFS (fee-for-service), LTCH (long-term care hospital), MCC (major complication or comorbidity), OR (operating room), CC (complication or comorbidity). MS-LTC-DRGs are the case-mix system for LTCH facilities. Counts are for stays covered by FFS Medicare and do not include those in private plans. "Qualifying stays" refers to Medicare cases that meet the criteria specified in the Pathway for SGR Reform Act of 2013 for payment under the LTCH prospective payment system.

Source: MedPAC analysis of Medicare Provider Analysis and Review data from CMS.

constrained. For LTCHs with a high share of Medicare qualifying cases, marginal profit was even higher, at 20 percent, about 3 percentage points higher than in 2019. The higher Medicare marginal profit among these providers suggests that LTCHs with available beds continue to have a financial incentive to increase their occupancy with FFS Medicare beneficiaries who meet the LTCH qualifying criteria.

Prepandemic, risk-adjusted measures show slight decline in quality; quality of care in 2020 is difficult to assess

While we report 2020 results for our quality measures (average risk-adjusted rates of successful discharge to the community and all-condition hospitalizations within a stay), they reflect conditions unique to the PHE that confound our measurement and assessment

**TABLE
10-5****Between 2016 and 2019, mean risk-adjusted rates of discharge to the community declined and hospitalizations for LTCHs were flat**

	2016	2017	2018	2019	2020
Hospitalization	5.4%	5.3%	5.2%	5.3%	6.1%
Successful discharge to the community	25.4	24.4	22.9	22.1	23.0

Note: LTCH (long-term care hospital). The hospitalization measure captures all unplanned hospital admissions and readmissions and outpatient observation stays that occur during the stay. "Successful discharge to the community" comprises beneficiaries discharged to the community (including those discharged to the same nursing home) who did not have an unplanned hospitalization or die in the 30 days after discharge. Both measures are uniformly defined and risk adjusted across the four post-acute care settings. Providers with least 60 stays in the year (the minimum count to meet a reliability of 0.7) were included in calculating the average facility rate.

Source: MedPAC analysis of Medicare Provider Analysis and Review data from CMS.

of trends in 2020. Increased mortality related to COVID-19 and capacity constraints at acute care hospitals could affect both measures. In addition, the Commission's quality metrics rely on risk-adjustment models that use performance from previous years to predict beneficiary risk. COVID-19 is a new diagnosis and is not included in the current risk adjustment models, though many associated conditions are. As a result, our models may not adequately adjust for the acuity of patients receiving LTCH care in 2020. Therefore, we report the changes we observed in the quality measures but do not draw conclusions about whether quality improved, worsened, or stayed the same in 2020.

We evaluate quality of care using average risk-adjusted rates of successful discharge to the community and all-condition hospitalizations within a stay. "Successful discharge to the community" comprises beneficiaries discharged to the community (including those discharged to the same nursing home where the beneficiary was before the hospitalization) who did not have an unplanned hospitalization and did not die in the succeeding 30 days. The hospitalization measure captures all unplanned hospitalizations (admissions and readmissions) and outpatient observation stays that occur during the stay (beneficiaries who died during the LTCH stay are excluded from the measure). Discharges to hospice or beneficiaries with the hospice

benefit are excluded from the calculation of both measures. Both measures are uniformly defined and risk adjusted across home health agencies, skilled nursing facilities, inpatient rehabilitation facilities, and LTCHs—thus taking another step toward achieving a unified payment system and evaluation of outcomes across post-acute care (PAC) settings.¹⁷

Between 2016 and 2019—before the PHE—average rates of hospitalization were steady (lower rates are better) and average rates of successful discharge to the community from LTCHs fell each year (higher rates are better) (Table 10-5). During the 2016 to 2019 period, patient acuity increased as a greater share of cases met the LTCH qualifying criteria and more facilities treated a greater share of qualifying cases. In 2020, the risk-adjusted rate of hospitalizations was higher (6.1 percent) than in prior years, yet the rate of successful discharge to the community was also higher (23 percent). These cross-PAC measures are risk adjusted, but to the extent that the adjustment does not account for certain patient characteristics, changes in LTCHs' patients could affect the sector's rate of successful discharge. Notwithstanding the PHE, because the risk-adjustment model for these measures pools cases in all four PAC settings, the model may not work as well for evaluating LTCH cases, given their small contribution to the overall combined-PAC case count.

Providers' access to capital: Implementation of LTCH dual payment-rate system slowed investment

Access to capital allows LTCHs to maintain, modernize, and expand their facilities. If LTCHs were unable to access capital, it might reflect problems with the adequacy of Medicare payments. During the transition to the dual payment-rate system, we expected disruption and contraction in the sector as the industry adapted to Medicare's payment rules. During the transition, the industry diversified service lines and shifted portfolios through closures and sales (Kindred Healthcare 2017, Kindred Healthcare 2015, Select Medical 2017, Select Medical 2015).

The LTCH sector is largely for profit and consists of two large chains (Select Medical and Kindred Healthcare), multiple regional chain operators, and independent providers. Because the sector is small, market analysis of the industry is scant. Evidence from the two largest companies providing LTCH services suggests they have had access to capital during the PHE period. Select Medical, the largest LTCH operator, is a publicly traded company. The adjusted EBITDA (earnings before interest, taxes, depreciation, and amortization) margin for the Select Medical's LTCH segment was 16.5 percent for the year ended December 31, 2020, compared with 13.9 percent for the prior year (Select Medical 2021a). For its LTCH business segment in 2020, Select Medical reported increased revenue, patient days, and revenue per patient day compared with 2019. Through the second quarter of 2021, revenue and revenue per patient day were up compared with 2020. The company reported revenue from relief funds and other temporary payments and noted that Medicare's "relaxation of certain admissions restrictions have contributed to volume increases in certain of its hospitals" in 2020 (Select Medical 2021b). Select Medical also acquired multiple LTCHs in 2021 and announced new joint ventures (Muoio 2021b).

Kindred Healthcare, the second largest operator of LTCHs, has attracted investment from private equity since 2018, when it was acquired by Humana and two private equity firms and ceased being publicly traded (Kindred Healthcare 2018). In October 2021, LifePoint Health, which was taken private in 2018 when it was purchased by Apollo Global Management and merged with the private equity firm's RCCH

HealthCare Partners, announced its acquisition of Kindred Healthcare (Muoio 2021a). The new 79-hospital company, Scion Health, will include 61 of Kindred's long-term acute care hospitals and 18 of LifePoint's community hospitals (Muoio 2021a).

LTCHs' access to capital largely depends on these hospitals' total (all-payer) profitability, which has been variable but positive in the dual payment-rate phase-in period. During that period (2016 to 2019), the share of Medicare revenue fell from almost 50 percent to about 37 percent of total LTCH revenue, largely due to a reduction in the number of Medicare cases, particularly site-neutral cases. In 2020, Medicare payments constituted 36 percent of total LTCH revenue.

Temporary payment policies related to the coronavirus pandemic have delayed the implementation of fully site-neutral payments and provided LTCHs with higher LTCH PPS payments for nonqualifying LTCH cases. In addition, the CARES Act, passed in March 2020, gave LTCHs access to funds through several mechanisms, including the Provider Relief Fund, Medicare Accelerated and Advance Payments Program, employer payroll tax deferral, Paycheck Protection Program, and elimination of the sequester. (These funding sources were in addition to temporary pandemic-related LTCH payment policy changes.) In 2020, the aggregate all-payer margin was 4 percent with Provider Relief Fund revenue included and 2.7 percent excluding relief funds reported on cost reports, all else equal, indicating that relief funds and PHE-related increases in payment buoyed all-payer LTCH margins to rates above prepandemic levels. In 2018 and 2019, the aggregate all-payer margin was about 2 percent.

Although PHE-related waivers of site-neutral payments have deferred the complete phase-in of such payments, the Commission expects that the industry will continue to contract until after the LTCH dual payment-rate system becomes fully implemented and that LTCHs will adjust their admission patterns and cost structures accordingly. We anticipate that, after the PHE, LTCHs with a higher share of qualifying cases will continue to have stronger financial performance when the dual payment-rate system is fully implemented. In 2020, LTCHs with more than 85 percent of their Medicare cases meeting the LTCH PPS criteria had an aggregate all-payer margin of 6 percent, up from 3.2 percent in 2019.

**TABLE
10-6****Pandemic-related payment increases drove growth in LTCH Medicare PPS payments per case between 2019 and 2020**

	Average change 2016–2018	Change 2018–2019	Change 2019–2020
Payments per case			
All LTCHs	–1.5%	3.0	9.1%
LTCHs with >85% qualifying cases in 2020	1.7	2.3	8.7
Cost per case			
All LTCHs	1.1	4.5	4.2
LTCHs with >85% qualifying cases in 2020	2.7	3.6	4.9

Note: LTCH (long-term care hospital), PPS (prospective payment system). “LTCHs with >85% qualifying cases” refers to facilities for which more than 85 percent of their Medicare cases qualify for the full LTCH PPS rate. Payments do not include relief funds.

Source: MedPAC analysis of cost report data from CMS.

Medicare’s payments for LTCH services exceeded providers’ costs in 2020

Driven by temporary PHE-related payment rate increases for site-neutral cases and temporary suspension of the 2 percent sequestration reduction, the aggregate Medicare margin for all LTCHs rose to 3.6 percent in 2020, a 5 percentage point increase from 2019. LTCHs with more than 85 percent of their cases qualifying for the LTCH PPS rate in 2020 had Medicare margins of 6.9 percent (excluding relief funds), compared with 2.9 percent in 2019. These LTCHs were just under half of all facilities and cases in 2020.

Payments per LTCH stay grew faster than costs in 2020

Based on data from 2020 cost reports, payments per stay in all LTCHs increased 9 percent in aggregate to about \$46,000 per case (Table 10-6). For LTCHs with high shares (more than 85 percent) of qualifying cases, payments per stay increased almost 9 percent to more than \$51,000 per case. The 2020 increase in payments per case reflects the higher payments for LTCH rate-qualifying cases, a net 2.5 percent annual update to the LTCH PPS, and increased case mix. It also reflects temporary payment increases related to the PHE, including suspension of the 2 percent sequestration

and increased payments for site-neutral cases in 2020. Retroactive to January 27, 2020, LTCHs were paid LTCH PPS rates for all cases. This waiver of site-neutral payments is in effect until the end of the PHE. Due to varying months that are captured in 2020 cost reports, the number of “waiver months” reflected on providers’ cost reports varies, as discussed in the text box (pp. 340–342).

In 2020, reduced case volume, increased acuity, longer stays, and coronavirus pandemic-related costs likely contributed to aggregate growth in costs per case. According to cost report data, between 2019 and 2020, aggregate cost per case for all LTCHs rose 4.2 percent. Before 2020, LTCH cost growth had been variable from year to year. The 2020 increase was higher than average growth between 2016 and 2018 but consistent with growth from 2018 to 2019. While LTCHs experienced pandemic-related cost pressures, they were also uniquely prepared to care for complex, fragile patients with multiple system failures in need of care for respiratory conditions. For LTCHs with high shares (more than 85 percent) of qualifying cases in 2020, cost per case increased 4.9 percent, which was higher than in previous years, during the dual payment-rate system phase-in. For all LTCHs, including those with high shares of qualifying cases, the increase

**TABLE
10-7**

LTCHs' Medicare aggregate margin had been negative during the phase-in of site-neutral rates for nonqualifying cases but increased in 2020 due to higher Medicare payments

Type of LTCH	Share of LTCHs 2020	Medicare margin			
		2017	2018	2019	2020
All	100%	-2.2%	-0.5%	-1.6%	3.6%
Nonprofit	16	-13.0	-11.7	-12.2	-12.7
For profit	79	-0.3	1.3	0.4	6.3

Note: LTCH (long-term care hospital). Nonprofit and for-profit rows sum to 95 percent of facilities because margins for government-owned facilities, which account for 5 percent of providers, are not shown. The Medicare margin does not include relief funds.

Source: MedPAC analysis of Medicare cost report data from CMS.

in payments per case because of temporary PHE-related payment increases more than offset the 2020 cost growth (Table 10-6).

Medicare aggregate margins were higher in 2020 than in previous years, fueled by temporary PHE-related payment increases

From 2017 through 2019, Medicare aggregate margins for LTCHs were negative. Overall volume declined as providers transitioned to the dual payment-rate system and received blended site-neutral and LTCH PPS rates for nonqualifying cases. In 2020, Medicare aggregate margins (excluding relief funds) for all LTCHs increased to 3.6 percent (Table 10-7). With reported Provider Relief Fund revenue allocated to Medicare payments, margins were 5 percent (data not shown).¹⁸ Between 2019 and 2020, the difference between nonprofit and for-profit LTCHs' margins widened, owing to higher growth in payments per case among for-profit LTCHs—10.6 percent—compared with just 1.6 percent for nonprofit LTCHs. At least some of this difference was likely an artifact of the differences in cost reporting years among nonprofit and for-profit LTCHs. For-profit LTCHs, in aggregate, had a greater portion of their cost reporting year overlap with the period of temporary PHE-related waiver of site-neutral (rather than full LTCH PPS) payments.

The LTCH Medicare aggregate margins in 2020 reflect LTCH PPS payments for qualifying cases and various payment rates in effect during the year for nonqualifying cases (Table 10-7). However, because this chapter is concerned with how payments for qualifying cases paid under the standard LTCH PPS rate compare with the cost of these cases, we examine margins for LTCHs with a high share (greater than 85 percent) of qualifying cases in the most recent year. Each year, these providers have had consistently higher aggregate margins than the other providers (Table 10-8, p. 352). In 2020, LTCHs with a high share of qualifying cases had Medicare aggregate margins, excluding relief funds, of 6.9 percent, compared with 2.9 percent in 2019. As with the full sample of LTCHs, nonprofit providers had lower margins than for-profit providers among LTCHs with a high share of qualifying cases. As noted in the text box (pp. 340–342), variations in providers' cost reporting years and their overlap with the PHE and related policies affected payments and costs in 2020. Because of the start dates of their cost reporting year, nonprofit LTCHs' margins reflect slightly less overlap with sequester-relief months than do for-profit LTCHs' margins. In addition, for-profit LTCHs had a larger portion of their cost reporting period overlap with the period of temporary PHE-related waiver of site-neutral payments.

**TABLE
10-8****Medicare aggregate margins for LTCHs with a high share of LTCH PPS-qualifying cases, 2017–2020**

	Medicare margin			
	2017 (N = 117)	2018 (N = 141)	2019 (N = 168)	2020 (N = 152)
All high-share LTCHs	4.6%	4.7%	2.9%	6.9%
Nonprofit	–6.9	–5.6	–6.9	2.3
For profit	6.5	6.2	4.2	7.4

Note: LTCH (long-term care hospital), PPS (prospective payment system). “High-share LTCHs” refers to a cohort of LTCHs defined by their share (over 85 percent) of Medicare stays that meet the criteria specified in the Pathway for SGR Reform Act of 2013 for payment under the LTCH PPS each year. The Medicare margin does not include relief funds.

Source: MedPAC analysis of Medicare Provider Analysis and Review and cost report data from CMS.

LTCHs with high Medicare margins in 2020 had higher Medicare patient shares, higher occupancy, lower costs per case, and higher payments per case

In prior years, higher costs per stay and lower payments per stay drove differences in financial performance between LTCHs with the lowest (bottom quartile) and highest (top quartile) Medicare margins.¹⁹ High-margin LTCHs had a higher average case mix than low-margin LTCHs, a higher share of Medicare cases meeting the LTCH PPS criteria, and higher occupancy rates. After accounting for differences in case mix and local market input price levels, low-margin LTCHs had higher standardized costs and lower standardized payments per discharge. Outlier payments constituted a larger share of total payments to low-margin LTCHs compared with high-margin LTCHs. When these outlier payments were removed from total payments, the standardized payment per discharge for low-margin LTCHs was lower than for high-margin LTCHs. Differences between the low-margin and high-margin quartile groups in 2020 (Table 10-9) were generally consistent with differences in prior years. However, in 2020, the mean shares of qualifying cases were similar between the two groups. These results are likely confounded by variations in cost reporting years and higher payment rates for site-neutral cases during the PHE.

How should Medicare payments change in 2023?

To determine how Medicare payments to LTCHs should change in 2023, we first project Medicare payments, LTCHs’ costs, and Medicare margins for 2022, considering the experience of LTCHs with a high share of cases qualifying for the standard LTCH PPS rates in 2020. Starting with payment and cost information, we consider (1) expected changes to costs of caring for FFS Medicare beneficiaries between 2020 and 2022 and (2) Medicare payment changes in current law in 2021 and 2022 at the time of this writing. Cost growth for LTCHs is estimated to be 2.7 percent in 2021 and 3.0 percent in 2022.²⁰ The payment changes that affect our projection of the 2022 margin include:

- market basket increase of 2.3 percent for fiscal year 2021, with no productivity adjustment, for a net update of 2.3 percent;
- market basket increase of 2.6 percent for fiscal year 2022, with a productivity adjustment of –0.7 percent, for a net update of 1.9 percent;
- budget-neutrality adjustments for the elimination of the 25 percent rule in 2021;²¹
- budget-neutrality adjustments for changes to the area wage index in 2021 and 2022;²²

**TABLE
10-9****LTCHs in the top quartile of Medicare margins in 2020 had higher occupancy, higher case mix, lower costs, and higher payments per case**

Characteristics	High-margin quartile	Low-margin quartile
Mean Medicare margin	19.9%	-21.1%
Mean total stays per facility (all payers)	486	475
Medicare patient share	58%	45%
Occupancy rate	72%	57%
Mean CMI	1.23	1.18
Mean per discharge:		
Standardized costs	\$27,430	\$39,840
Standard Medicare payment*	\$40,835	\$38,787
High-cost outlier payments	\$3,991	\$5,888
Share of:		
Cases meeting the LTCH PPS criteria	70%	69%
LTCHs that are for profit	88	68

Note: LTCH (long-term care hospital), CMI (case-mix index), PPS (prospective payment system). Figures presented include only established LTCHs—those that filed valid cost reports in both 2019 and 2020. High-margin-quartile LTCHs were in the top 25 percent of the distribution of Medicare margins. Low-margin-quartile LTCHs were in the bottom 25 percent of the distribution of Medicare margins. The Medicare margin does not include relief funds. Standardized costs have been adjusted for differences in case mix and area wages. Case-mix indexes have been adjusted for differences in short-stay outliers across facilities. “Cases meeting the LTCH PPS criteria” refers to Medicare stays that meet the criteria specified in the Pathway for SGR Reform Act of 2013 for payment under the LTCH PPS. Government providers were excluded.

*Excludes outlier payments.

Source: MedPAC analysis of LTCH cost reports and Medicare Provider Analysis and Review data from CMS.

- CARES Act suspension of the 2 percent sequestration reduction to payments from May 1, 2020, through December 31, 2020; extension of the suspension by the Consolidated Appropriations Act, 2021, through December 31, 2021; and further extension in the Protecting Medicare and American Farmers from Sequester Cuts Act (relief from 2 percent reduction from January through March 2022 and 1 percent relief from April through June 2022).

We estimate that, for cases meeting the LTCH PPS criteria, the net result of these changes will be a payment rate increase of about 3.5 percent from 2020 to 2022.

Assuming the payment changes in current law for facilities that achieved this high share of qualifying cases in 2020, we project that the aggregate margin among these providers will decrease to about 3 percent in 2022. Though the full transition to site-neutral payments for nonqualifying cases does not affect payments for cases paid under the LTCH PPS, it does affect the Medicare margins of LTCHs with high shares of qualifying cases because these providers care for a small share of site-neutral cases (about 8 percent of all their cases in aggregate in 2020). Absent coronavirus PHE-related payment policy changes, the phase-in of the dual payment-rate system would have been complete, and all LTCHs would have been paid the site-neutral rate for cases not meeting the

LTCH PPS criteria by 2021. However, as noted above, LTCHs received full LTCH standard federal payments for nonqualifying cases for all fiscal year 2021 and will for at least part of 2022.²³ In our projections for 2022, we assumed that site-neutral payments (set under the IPPS) resumed in January 2022 because, at the time of the analysis, this was when the PHE was set to expire. If the PHE is extended, margins in 2022 will be higher because of temporarily increased payments for nonqualifying cases. To the extent that LTCHs have a greater share of qualifying cases after the PHE ends, we expect their margins to be higher. LTCHs that maintain a low share of qualifying cases will see their payments, set under the IPPS, reduced once site-neutral payments are implemented.

In 2023, the payment update for cases meeting the LTCH PPS criteria is expected to equal the projected LTCH market basket of 2.6 percent, less an adjustment for productivity of 0.6 percent, but that may change by the time CMS determines the final 2023 update. The final update will include August 2022 estimates of 2023 growth in wages and other inputs and thus could be lower or higher than the current projected update, given future projections of input price inflation and productivity.

Based on these indicators, the Commission concludes that a positive payment update is necessary to support LTCHs focused on cases meeting the LTCH PPS criteria and to ensure that Medicare beneficiaries maintain access to safe and effective LTCH care.

RECOMMENDATION 10

For fiscal year 2023, the Secretary should increase the 2022 Medicare base payment rate for long-term care hospitals by the estimate of market basket minus the applicable productivity adjustment.

RATIONALE 10

Our payment adequacy measures for LTCHs are positive, reflect expected changes under the dual payment-rate system, or are consistent with the effects of the coronavirus PHE and related policies. The aggregate Medicare margin for LTCHs with a high share of cases that meet the LTCH PPS criteria for 2020 was positive, indicating that LTCHs can operate under current payment rates. We estimate that the Medicare

margin will decline to 3 percent for these facilities in 2022. Projections of LTCHs' margins are sensitive to assumptions about the continuation of PHE-related waivers. PHE policies that extended beyond January 2022 (our assumption based on the PHE expiration at the time of our analysis) could cause margins to be higher because of temporary policies that increased payment for site-neutral cases. Though waived during the PHE, site-neutral payments (set under the IPPS) will resume when the PHE ends, absent any policy changes. In the post-PHE period, we assume market-basket-level cost growth, which is the best estimate available. Because of these factors, a market basket update is appropriate, given the shift in the industry toward higher-acuity patients and the Commission's desire to support LTCHs that have a high share of cases meeting the LTCH PPS criteria while maintaining financial pressure on an industry that historically has been highly responsive to changes in payment policy.

IMPLICATIONS 10

Spending

- In 2023, the payment update for cases meeting the LTCH PPS criteria is expected to equal the projected LTCH market basket less an adjustment for productivity. This recommendation would therefore have no impact on program spending.

Beneficiary and provider

- We do not expect this recommendation to have adverse effects on beneficiaries' access to care or providers' willingness or ability to care for Medicare beneficiaries meeting the LTCH PPS criteria for payment at the standard LTCH PPS rate. ■

Endnotes

- 1 The Medicare, Medicaid, and SCHIP Extension Act of 2007 also requires LTCHs to have a patient review process that screens patients to ensure appropriateness of admission and continued stay, daily physician on-site availability, and interdisciplinary treatment teams of health care professionals. The Pathway for SGR Reform Act of 2013 specifies that, beginning in fiscal year 2020, LTCHs are also required to maintain a discharge payment percentage (DPP)—the ratio of FFS discharges that qualify for the LTCH PPS rate to the LTCH's total number of Medicare discharges—of 50 percent or higher.
- 2 Throughout this chapter, we use the term “FFS Medicare” to mean traditional Medicare or what CMS calls “Original Medicare.”
- 3 More information on the prospective payment system for LTCHs is available at https://www.medpac.gov/wp-content/uploads/2021/11/medpac_payment_basics_21_ltch_final_sec.pdf.
- 4 High-cost outlier cases are identified by comparing their costs with a threshold that is the MS-LTC-DRG payment for the case plus a fixed loss amount (\$26,778 in 2020). Medicare pays 80 percent of the LTCH's costs above the threshold. In fiscal year 2020, high-cost outlier payments were made for about 13 percent of LTCH cases. The prevalence of high-cost outlier cases varied by LTCH ownership. About 13 percent of cases in for-profit LTCHs were high-cost outliers compared with 18 percent of cases in nonprofit LTCHs. LTCHs are paid adjusted PPS rates for patients who have short stays. Short-stay outliers (SSOs) are cases with a length of stay less than or equal to five-sixths of the geometric average length of stay for the MS-LTC-DRG. For SSOs, LTCHs are paid a rate equal to an amount that is a blend of the IPPS-comparable amount for the MS-DRG and 120 percent of the LTCH per diem payment amount up to the full LTCH PPS standard federal payment rate. As the length of stay for the SSO increases, the portion of payment attributable to the LTCH per diem increases.
- 5 The Bipartisan Budget Act of 2018 specified that the IPPS-comparable amount would be reduced by 4.6 percent per year for fiscal years 2018 through 2026.
- 6 Section 3711(b)(2) of the CARES Act provides a waiver of the application of the site-neutral payment rate under Section 1886(m)(6)(A)(i) of the Act for those LTCH admissions that are in response to the PHE and occur during the coronavirus PHE period. Under this provision, all LTCH cases admitted during the PHE period will be paid the relatively higher LTCH PPS standard federal rate (Centers for Medicare & Medicaid Services 2020a). For cost-reporting periods beginning on or after October 1, 2019, an LTCH that has not maintained the required discharge payment percentage (DPP) is paid the full IPPS comparable amount for all discharges until its DPP reaches 50 percent or higher; however, Section 3711(b)(1) of the CARES Act waives the payment adjustment under Section 1886(m)(6)(C)(ii) of the Act for LTCHs that do not have a DPP that is at least 50 percent during the PHE period. (An LTCH's DPP is its ratio of FFS discharges that qualify for the LTCH PPS rate to the LTCH's total number of Medicare discharges.)
- 7 The Secretary of Health and Human Services first determined the existence of a coronavirus PHE on the basis of confirmed cases of COVID-19 in the U.S. on January 31, 2020. At the time of publication, the coronavirus PHE had been renewed multiple times, most recently on January 14, 2022.
- 8 The 85 percent threshold originated from conversations with industry representatives and stakeholders as a reasonable goal for financial stability under Medicare.
- 9 The CARES Act suspended the 2 percent sequestration reduction to payments from May 1, 2020, through December 31, 2020. The Consolidated Appropriations Act, 2021, suspended it through December 31, 2021. The Protecting Medicare and American Farmers from Sequester Cuts Act suspended the 2 percent reduction from January through March 2022 and applied a 1 percent reduction from April through June 2022.
- 10 MMSEA and subsequent legislation allowed exceptions to the moratorium for (1) LTCHs that began their qualifying period (demonstrating an average Medicare length of stay greater than 25 days) on or before December 29, 2007; (2) entities that had a binding or written agreement with an unrelated party for the construction, renovation, lease, or demolition of an LTCH, with at least 10 percent of the estimated cost of the project already expended on or before December 29, 2007; (3) entities that had obtained a state certificate of need on or before December 29, 2007; (4) existing LTCHs that had obtained a certificate of need for an increase in beds issued on or after April 1, 2005, and before December 29, 2007; and (5) LTCHs that were in a state with only one other LTCH and that sought to increase beds after the closure or decrease in the number of beds of the state's other LTCH.
- 11 The Pathway for SGR Reform Act of 2013, as amended by the Protecting Access to Medicare Act of 2014, allowed exceptions to the moratorium for (1) LTCHs that began their qualifying period (demonstrating an average Medicare length of stay greater than 25 days) on or before April 1, 2014; (2) entities that had a binding or written agreement with an unrelated party for the construction, renovation,

lease, or demolition of an LTCH, with at least 10 percent of the estimated cost of the project already expended on or before April 1, 2014; and (3) entities that had obtained a state certificate of need on or before April 1, 2014.

- 12 We define MedPAC areas as metropolitan statistical areas within a state or rest-of-state nonmetropolitan areas, depending on where beneficiaries reside (Medicare Payment Advisory Commission 2017).
- 13 Although nonqualifying cases were paid qualifying-case rates during the PHE, they are identifiable as nonqualifying cases in claims data.
- 14 The following MS-LTC-DRGs are considered related to respiratory illness or prolonged use of mechanical ventilation: MS-LTC-DRG 4, tracheostomy with ventilator support 96+ hours or primary diagnosis except face, mouth, and neck without major operating room (OR) procedure; MS-LTC-DRG 166, other respiratory system OR procedures with major complication or comorbidity (MCC); MS-LTC-DRG 177, respiratory infections and inflammations with MCC; MS-LTC-DRG 189, pulmonary edema and respiratory failure; MS-LTC-DRG 207, respiratory system diagnosis with ventilator support 96+ hours; MS-LTC-DRG 208, respiratory system diagnosis with ventilator support ≤ 96 hours; MS-LTC-DRG 870, septicemia with prolonged ventilator support with MCC.
- 15 “High share of qualifying cases” refers to a cohort of LTCHs defined by their share (over 85 percent) of Medicare stays that meet the criteria specified in the Pathway for SGR Reform Act of 2013 for payment under the LTCH PPS each year.
- 16 If we approximate marginal cost as total Medicare costs minus fixed building and equipment costs, then marginal profit can be calculated as follows:

$$(\text{Payments for Medicare services} - (\text{total Medicare costs} - \text{fixed building and equipment costs})) / \text{Medicare payments}$$

This comparison is a lower bound on the marginal profit because we do not consider any potential labor costs that are fixed.

- 17 The risk adjustment for the successful discharge to the community measure includes age and sex of the beneficiary, end-stage renal disease (ESRD) and disability status for entitlement, principal diagnosis, comorbidities, the length of stay of the preceding hospital stay (if there was one), and a count of the hospitalizations during the preceding year. Risk adjusters for the hospitalization measure include primary diagnosis, comorbidities and severity of illness, special conditions (severe wounds, difficulty swallowing, and bowel incontinence), age and sex, disability and ESRD status, hospitalization in the previous month, days in the intensive care unit during a preceding hospitalization (if there was

one), a count of the hospitalizations during the preceding year, and the provision of ventilator care during the PAC stay. Providers with least 60 stays in the year, the minimum count to meet a reliability of 0.7, were included in calculating the average facility rate.

- 18 Federal relief funds were intended to help cover lost revenue and payroll costs, including lost revenue from Medicare patients and the cost of staff that help treat these patients. We allocated a portion of these relief funds (based on FFS Medicare’s share of 2019 all-payer operating revenue) to determine the Medicare margin inclusive of those funds.
- 19 Many new LTCHs operate at a loss for a period after opening. For this analysis of high-margin and low-margin LTCHs, we examined only LTCHs that submitted valid cost reports in both 2019 and 2020. We excluded government-owned LTCHs because they operate in a different financial context than other LTCHs, making their financial performance not comparable.
- 20 Market basket estimates for 2021 and 2022 are from the third quarter of 2021. Because they were revised upward, the most recent estimates are higher than estimates CMS used to update the LTCH PPS payments for fiscal years 2021 and 2022.
- 21 CMS established the “25 percent threshold rule” to set a limit on the share of cases that can be admitted to an LTCH from certain referring ACHs and reduce payment for some LTCHs with cases that exceed the threshold. Although the policy was intended to create disincentives for LTCHs to admit a large share of their patients from a single ACH, it was never fully implemented. In its final 2019 payment rule, CMS eliminated the 25 percent threshold rule (Centers for Medicare & Medicaid Services 2018). The 2020 standard federal rate included a temporary, one-time budget-neutrality adjustment of 0.990737 in connection with the elimination of the 25 percent rule (Centers for Medicare & Medicaid Services 2020b). The 2021 standard federal rate included a permanent, one-time budget-neutrality adjustment of 0.991294 for the elimination of the 25 percent threshold rule (Centers for Medicare & Medicaid Services 2020b).
- 22 The 2021 standard federal rate included an area wage budget-neutrality factor of 1.0016837 (Centers for Medicare & Medicaid Services 2020b). The 2022 standard federal rate included an area wage budget-neutrality factor of 1.002848 (Centers for Medicare & Medicaid Services 2021).
- 23 The CARES Act also temporarily waived the requirement that, on or after October 1, 2019, to be paid the LTCH PPS rate, a facility must have maintained a discharge payment percentage (DPP) of at least 50 percent. An LTCH’s DPP is its ratio of FFS discharges that qualify for the LTCH standard federal PPS rate to the LTCH’s total number of Medicare discharges.

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C H A P T E R

11

Hospice services

R E C O M M E N D A T I O N S

- 11-1** For fiscal year 2023, the Congress should eliminate the update to the 2022 Medicare base payment rates for hospice and wage adjust and reduce the hospice aggregate cap by 20 percent.

COMMISSIONER VOTES: YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0

-
- 11-2** The Secretary should require that hospices report telehealth services on Medicare claims.

COMMISSIONER VOTES: YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0

Hospice services

Chapter summary

The Medicare hospice benefit covers palliative and support services for beneficiaries who are terminally ill with a life expectancy of six months or less if the illness runs its normal course. When beneficiaries elect to enroll in the Medicare hospice benefit, they agree to forgo Medicare coverage for conventional treatment of their terminal illness and related conditions. In 2020, more than 1.7 million Medicare beneficiaries (including almost half of decedents) received hospice services from 5,058 providers, and Medicare hospice expenditures totaled \$22.4 billion.

In this chapter, we make a recommendation concerning the payment rate update for 2023. Because of standard data lags, the most recent complete hospice data we have for utilization and costs is from 2020 and for margins, from 2019. We have considered the effects of the coronavirus public health emergency (PHE) and associated relief policies on our indicators and whether those effects are likely to be temporary or permanent. To the extent that the effects of the PHE are temporary changes or vary significantly across individual hospice providers, they are best addressed through targeted temporary funding policies rather than a permanent change to all hospices' payment rates in 2023 and future years. Based on information available at the time of publication, we do not generally anticipate long-term PHE-related effects on the

In this chapter

- Are Medicare payments adequate in 2022?
- How should Medicare payments change in 2023?
- Additional hospice policy issues

hospice sector, except for increased wage rates, which we account for in our margin projection. Instead, to the extent that the PHE continues, any needed additional financial support should be targeted to affected hospice providers that are necessary for access.

Assessment of payment adequacy

The indicators of payment adequacy for hospices—beneficiary access to care, quality of care, provider access to capital, and Medicare payments relative to providers' costs—are positive.

Beneficiaries' access to care—In 2020, hospice use among Medicare beneficiaries, which has been growing for more than a decade, increased overall. Tragically, with the pandemic leading to an 18 percent increase in deaths among Medicare beneficiaries in 2020, hospice use also increased, with the number of Medicare decedents using hospice growing by 9 percent.

- **Capacity and supply of providers**—In 2020, the number of hospice providers increased by 4.5 percent, due to growth in the number of for-profit hospices, continuing a more than decade-long trend of substantial market entry by for-profit providers.
- **Volume of services**—The number of beneficiaries using hospice services at the end of life continued to grow. However, the share of Medicare decedents using hospice declined between 2019 and 2020, from 51.6 percent to 47.8 percent, as deaths increased more rapidly than hospice enrollments. Between 2019 and 2020, average lifetime length of stay among decedents grew from 92.5 days to 97.0 days, and the median length of stay was stable at 18 days.
- **Medicare marginal profit**—In 2019, Medicare payments to hospice providers exceeded marginal costs by roughly 17 percent. This rate of marginal profit suggests that providers have a strong incentive to treat Medicare patients and is a positive indicator of patient access.

Quality of care—Quality of care is difficult to assess for 2020. Due to the pandemic, CMS suspended collection of hospice quality data submitted by providers (the Hospice Item Set and the Consumer Assessment of Healthcare Providers and Systems® (CAHPS®) Hospice Survey) for the first half of 2020; data that include performance in the second half of 2020 will become available in 2022. Based on the most recent data reflecting performance through 2019, hospice quality, as measured by scores on the hospice CAHPS, was stable. Performance on a measure of visits in the last three days of life improved slightly in 2019. Separate Commission analysis of nurse and social worker

visits in the last days of life suggests some decline in in-person visits between 2019 and 2020, which is likely tied to the pandemic and is not necessarily a reflection of quality of care.

Providers' access to capital—Hospices are not as capital intensive as other provider types because they do not require extensive physical infrastructure. Continued growth in the number of for-profit providers (about a 7 percent increase in 2020) and reports of strong investor interest in the sector suggest that capital is available to these providers. Less is known about access to capital for nonprofit freestanding providers, for which capital may be more limited. Hospital-based and home health-based hospices have access to capital through their parent providers.

Medicare payments and providers' costs—Measures of Medicare payments and costs suggest that Medicare payments are more than sufficient to cover providers' costs.

- **Cost growth**—Between 2018 and 2020, hospice cost growth was generally modest. Average cost per day for routine home care, the level of care that accounts for more than 98 percent of hospice days, increased 0.5 percent between 2018 and 2019 and 1.2 percent between 2019 and 2020. In contrast, average cost per day for general inpatient care, inpatient respite care, and continuous home care, which are provided relatively infrequently, rose substantially in 2020.
- **Medicare aggregate margin**—The 2019 Medicare aggregate margin, which is an indicator of the adequacy of Medicare payments relative to providers' costs, was 13.4 percent, up from 12.4 percent in 2018. (Hospice margins are presented through 2019 because of the data lag required to calculate cap overpayment amounts.) For 2022, the Commission projects a Medicare aggregate margin of about 13 percent.

In addition to indicators of hospice payment adequacy, this chapter also discusses the hospice aggregate cap. The cap limits the total payments a hospice provider can receive in a year in aggregate. The aggregate cap functions as a mechanism that reduces payments to hospices with long stays and high margins. In 2019, about 19 percent of hospices exceeded the cap; their Medicare aggregate margin was about 22 percent before and 10 percent after application of the cap. In March 2020 and 2021, the Commission recommended that the hospice aggregate cap be wage adjusted and reduced by 20 percent,

which would reduce aggregate payments by focusing payment reductions on providers with disproportionately long stays and high margins.

How should Medicare payments change in 2023?

Based on generally positive indicators of payment adequacy and strong margins, the Commission has concluded that, in aggregate, payments are more than sufficient to cover providers' costs. The Commission's recommendation is that the hospice payment rates in 2023 be held at their 2022 levels. In addition, the Commission recommends that the hospice aggregate cap be wage adjusted and reduced by 20 percent, which would focus payment reductions on providers with disproportionately long stays and high margins.

Another issue discussed in this chapter is the lack of reporting of telehealth visits on hospice claims. In response to the PHE, CMS modified the hospice conditions of participation to permit hospice providers to furnish services using telecommunication systems during the PHE, under certain circumstances. However, hospices are unable to report on the use of telehealth services on Medicare claims (with the exception of social worker phone calls, which have historically been reported on claims). The lack of this information has impaired our ability to understand the frequency and the role that telehealth has played during the PHE. For this reason, the Commission's recommendation is that CMS should require hospice providers to report telehealth visits on Medicare claims. ■

Background

Medicare began offering the hospice benefit in 1983, pursuant to the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). The benefit covers palliative and support services for beneficiaries who are terminally ill with a medical prognosis indicating that the individual's life expectancy is six months or less if the illness runs its normal course. A broad set of services is included, such as nursing care; physician services; counseling and social worker services; hospice aide (also referred to as home health aide) and homemaker services; short-term hospice inpatient care (including respite care); drugs and biologics for symptom control; supplies; home medical equipment; physical, occupational, and speech therapy; bereavement services for the patient's family; and other services for palliation of the terminal illness and related conditions. Most commonly, hospice care is provided in patients' homes, but hospice services are also provided in nursing facilities, assisted living facilities, hospice facilities, and hospitals. In 2020, more than 1.7 million Medicare beneficiaries received hospice services, and Medicare hospice expenditures totaled about \$22.4 billion.

Beneficiaries receive the Medicare hospice benefit only if they choose to; if they do, they agree to forgo Medicare coverage for conventional treatment of the terminal illness and related conditions. Medicare continues to cover items and services unrelated to the terminal illness and its related conditions. For each person admitted to a hospice program, a written plan of care must be established and maintained by an interdisciplinary group (which must include a hospice physician, registered nurse, social worker, and pastoral or other counselor) in consultation with the patient's attending physician, if there is one. The plan of care must identify the services to be provided (including management of discomfort and symptom relief) and describe the scope and frequency of services needed to meet the patient's and family's needs.

Beneficiaries elect hospice for defined benefit periods. The first hospice benefit period is 90 days. For a beneficiary to elect hospice initially, two physicians—a hospice physician and the beneficiary's attending physician—are generally required to certify that the beneficiary has a life expectancy of six months or less

if the illness runs its normal course.¹ If the patient's terminal illness continues to engender the likelihood of death within 6 months, the hospice physician can recertify the patient for another 90 days and for an unlimited number of 60-day periods after that, as long as the patient remains eligible.² Beneficiaries can disenroll from hospice at any time (referred to as "revoking hospice") and can reelect hospice for a subsequent period as long as the beneficiary meets the eligibility criteria. Most commonly, hospice care is provided in patients' homes, but hospice services may also be provided in nursing facilities, assisted living facilities, hospice facilities, and other inpatient settings.

Over the last decade, hospice spending grew substantially. Between 2010 and 2020, Medicare spending on hospice care grew at an average annual rate of 5.7 percent, increasing from \$12.9 billion to \$22.4 billion. Specifically, between 2010 and 2012, Medicare hospice spending rose rapidly from \$12.9 billion to \$15.1 billion, remained flat between 2012 and 2014 (reflecting in part the implementation of the sequester), and has increased since 2014. Between 2019 and 2020, Medicare hospice spending increased 7.4 percent, reflecting an increase in the number of beneficiaries using hospice care, a 2.6 percent update in the 2020 hospice base payment rates, and the suspension of the 2 percent payment sequester beginning May 2020. Not included in the payment totals for 2020 are the federal relief funds received by some providers in 2020. According to the Medicare cost reports, these payments for freestanding hospice providers totaled roughly \$500 million in cost report year 2020. Although the intent of these funds was to provide relief broadly to support care for patients regardless of payer, it is notable that Medicare is the largest payer of hospice services, covering roughly 90 percent of all hospice patient days in 2020.

Medicare payment for hospice services

The Medicare program pays a daily rate to hospice providers. The hospice provider assumes all financial risk for costs and services associated with care for the patient's terminal illness and related conditions. The hospice provider receives payment for every day a patient is enrolled, regardless of whether the hospice staff visits the patient or otherwise provides a service each day. This payment design is intended

to encompass not only the cost of visits but also other costs that a hospice incurs for palliation and management of the terminal condition and related conditions, such as on-call services, care planning, drugs, medical equipment, supplies, patient transportation between sites of care that are specified in the plan of care, and short-term hospice inpatient care.

Payments are made according to a fee schedule that has four levels of care: routine home care (RHC), continuous home care (CHC), inpatient respite care (IRC), and general inpatient care (GIP). The four levels are distinguished by the location and intensity of the services provided. RHC is the most common level of hospice care, accounting for 98.7 percent of Medicare-covered hospice days in 2020. The other levels of care are available to manage needs in certain situations. GIP is provided in a facility on a short-term basis to manage symptoms that cannot be managed in another setting. CHC is intended to manage a short-term symptom crisis in the home and involves eight or more hours of care per day, mostly nursing. IRC is care in a facility for up to five days to provide a break for an informal caregiver. Unless a hospice provides CHC, IRC, or GIP on any given day, it is paid at the RHC rate. The level of care can vary throughout a patient's hospice stay as the patient's needs change.

Beginning in January 2016, Medicare pays two per diem rates for RHC—a higher rate for the first 60 days of a hospice episode and a lower rate for days 61 and beyond (about \$203 and \$161 per day, respectively, in 2022). (Previously, RHC was paid a single, uniform daily rate.) Medicare also makes additional payments (about \$61 per hour in 2022 for up to four hours per day) for registered nurse and social worker visits that occur during the last seven days of life for patients receiving RHC. The 2016 RHC payment structure was intended to better align payments with the costs of providing hospice care, which tend to be higher at the beginning and end of an episode and lower in the middle. Because of this U-shaped pattern of hospice visits, long stays in hospice have historically been profitable. The changes CMS made to the RHC payment structure in 2016 have only modestly reduced the variability in profitability by length of stay.

Beginning fiscal year 2020, CMS rebased the payment rates for the three higher-intensity, less frequently

provided levels of hospice care (CHC, IRC, GIP). To better align payments with the costs for these three levels of care, CMS increased the CHC payment rate by 40 percent, the IRC rate by 156 percent, and the GIP rate by 35 percent. To offset the projected increase in spending, the payment rates for RHC in fiscal year 2020 were reduced slightly (by 2.7 percent, which, when offset by the annual payment update, resulted in a net reduction of less than 1 percent). Although CMS estimated that the payment rates for RHC in 2019 exceeded costs by 18 percent to 19 percent, the statute required that any rebalancing of the payment rates be budget neutral. Because RHC accounts for over 98 percent of hospice days, only a small decline in the RHC rates was needed to offset the increases for the three less frequent levels of care. In fiscal year 2022, CMS pays \$1,068 per day for GIP, \$474 per day for IRC, and \$61 per hour for CHC.

Hospice payment rates are updated annually by the hospital market basket. The market basket index is reduced by a productivity adjustment. Hospices that do not report quality data receive a 2 percentage point reduction in their annual payment update, and beginning fiscal year 2024 this penalty will increase to 4 percentage points (in accord with the Consolidated Appropriations Act, 2021).

Beneficiary cost sharing for hospice services is minimal. Hospices can, but are not required to, charge coinsurance of 5 percent for each prescription provided outside the inpatient setting (not to exceed \$5) and for inpatient respite care (not to exceed the inpatient hospital deductible). (For a more complete description of the hospice payment system, see https://www.medpac.gov/wp-content/uploads/2021/11/medpac_payment_basics_21_hospice_final_sec.pdf.)

Medicare hospice payment limits (“caps”)

The Medicare hospice benefit was designed to give beneficiaries a choice in their end-of-life care, allowing them to forgo conventional treatment (often in inpatient settings) and die at home, with family, according to their personal preferences.

The inclusion of the Medicare hospice benefit in TEFRA was based in large part on the premise that the new benefit would be a less costly alternative

to conventional end-of-life care (Government Accountability Office 2004, Hoyer 2007). Studies show that beneficiaries who elect hospice incur less Medicare spending in the last one or two months of life than comparable beneficiaries who do not, but also that Medicare spending for beneficiaries is higher for hospice enrollees than for nonenrollees in the earlier months before death. In essence, a hospice's net reduction in Medicare spending decreases the longer the patient is enrolled, and beneficiaries with long hospice stays tend to incur higher Medicare spending than those who do not elect hospice (Medicare Payment Advisory Commission 2008). Studies have been mixed on whether hospice has saved the Medicare program money in the aggregate compared with conventional care.³ Research by a Commission contractor examined the literature and conducted a new market-level analysis of hospices' effect on Medicare expenditures. That study found that while hospice produces savings for some beneficiaries, such as those with cancer, overall, hospice has not reduced net Medicare program spending and may have even increased net spending because of very long stays among some hospice enrollees (Direct Research 2015).

When the Congress established the hospice benefit, it included two limitations, or "caps," on payments to hospices in an effort to make cost savings more likely. The first cap limits the share of inpatient care days that a hospice can provide to 20 percent of its total Medicare patient care days. This cap is rarely exceeded; any inpatient days provided in excess of the cap are paid at the RHC payment rate.

The second, more visible cap limits the aggregate Medicare payments that an individual hospice can receive. This aggregate cap was established in statute when the hospice benefit was created and was intended to ensure that the benefit would generate savings compared with conventional care. The cap was initially pegged at 40 percent of the estimated cost of conventional care for cancer patients in the last six months of life. In the first year, the cap was set at \$6,500, and it has been increased annually by a measure of inflation.⁴ The hospice cap is the only significant fiscal constraint on the growth of program expenditures for hospice care (Hoyer 2007).

Under the cap, if a hospice's total Medicare payments exceed its total number of Medicare beneficiaries served multiplied by the cap amount (\$31,297.61 in 2022), it must repay the excess to the program.⁵ Beneficiaries who receive hospice care in multiple cap years or from multiple hospice providers are reflected in the beneficiary count of the cap calculation for a particular cap year and hospice provider in a prorated manner.⁶ This cap is not applied individually to the payments received for each beneficiary, but rather to the total payments across all Medicare patients served by the hospice in the cap year. It is important to note that the cap is not a limit on Medicare's coverage of hospice services for patients. Rather, it limits how much Medicare will pay a hospice provider in the aggregate for its patient population. After the year ends, Medicare totals all its payments to the provider, and if that amount exceeds the number of beneficiaries multiplied by the aggregate cap amount, Medicare requires the hospice to repay the excess to the Medicare program.⁷ In 2019, we estimate that the share of hospices that exceeded the cap was about 19 percent.

Are Medicare payments adequate in 2022?

To address whether payments in 2022 are adequate to cover the costs of the efficient delivery of care and how much providers' payments should change in the coming year (2023), we examine several indicators of payment adequacy. Specifically, we assess beneficiaries' access to care by examining the capacity and supply of hospice providers, changes over time in the volume of services provided, quality of care, providers' access to capital, and the relationship between Medicare's payments and providers' costs. However, it is difficult to assess the quality of care in 2020 due to the temporary suspension of quality reporting data.

While it is impossible to predict the future with any certainty, given the evolving coronavirus pandemic, we anticipate that hospice payment adequacy indicators will remain positive in 2022. (For a description of how the coronavirus pandemic has been incorporated into our payment adequacy framework, see the text box on pp. 368–369.)

The coronavirus public health emergency and the Commission's payment adequacy framework

On January 31, 2020, the Secretary of Health and Human Services first declared the coronavirus public health emergency (PHE). In late March 2020, the nation's health care system began to experience major changes in service utilization, as elective procedures were postponed to preserve clinical staff's availability and equipment for COVID-19 patients. The PHE has had tragic effects on beneficiaries' health, including a disproportionate effect on Medicare beneficiaries. Since the onset of the PHE, deaths among Medicare beneficiaries have increased substantially. (For details on the effects of the pandemic on beneficiaries' health and access to care, see Chapter 1.) The pandemic has also had damaging effects on the nation's health care workforce, with frontline health care workers facing burnout and risks to their health and safety from treating COVID-19 cases.

From the perspective of assessing the adequacy of Medicare payments, the PHE has also had material effects on the Commission's payment adequacy indicators. Because of standard data lags, the most recent complete data we have are from 2019 or 2020 for most payment adequacy indicators; however, we also include preliminary information from 2021 where possible. As described in more detail later in this chapter, the effects of the PHE on indicators of Medicare's payment adequacy to hospices include:

- an increase in the number of beneficiaries receiving hospice services in 2020 due to increased mortality rates (however, the share of decedents who used hospice declined in 2020, reflecting a more rapid increase in deaths than in hospice enrollments);
- a shift in the location of hospice care, with more patients receiving care at home, in assisted living

(continued next page)

Beneficiaries' access to care: Indicators continue to be favorable

Our analysis of access indicators—including trends in the supply of providers, utilization of hospice services, and Medicare marginal profit—shows that beneficiaries' access to care in 2020 was generally favorable.

Capacity and supply of providers: Supply of hospices continued to grow, driven by growth in for-profit providers

In 2020, 5,058 hospices provided care to Medicare beneficiaries, a 4.5 percent increase from the prior year (Table 11-1, p. 370). For-profit hospices accounted for all of the net increase in the number of hospices. Between 2019 and 2020, the number of for-profit hospices increased by 7.1 percent, while the number of nonprofit hospices declined by 2.8 percent, and government-owned hospices declined by 0.7 percent. As of 2020, about 73 percent of hospices were for profit, 24 percent were nonprofit, and 3 percent were government

owned. Because for-profit providers tend to be smaller on average than nonprofits, for-profit providers account for about 49 percent of hospice patients, while nonprofit and government providers account for 47 percent and 4 percent, respectively (data not shown).

Growth in the number of freestanding hospices accounted for all of the net growth in the number of hospice providers in 2020 and throughout the preceding decade (Table 11-1, p. 370). Between 2019 and 2020, the number of freestanding providers increased by 6.1 percent, while the number of hospital-based and home health-based hospices declined by 3.3 percent and 2.6 percent, respectively.⁸ The number of skilled nursing facility (SNF)-based hospices is very small and was unchanged in 2020. As of 2020, about 83 percent of hospices were freestanding, 9 percent were home health based, 8 percent were hospital based, and less than 1 percent were SNF based.

The coronavirus public health emergency and the Commission's payment adequacy framework (cont.)

facilities, and in hospitals and fewer patients receiving hospice in nursing facilities and hospice facilities;

- suspension of collection of certain quality data for part of 2020;
- a Medicare payment policy change that increased payments to hospices through the suspension of the 2 percent sequestration beginning May 2020; and
- substantial federal relief funding that hospices received during their 2020 fiscal year.

In this chapter, we use available data and changes in payment policy to project hospice margins for 2022 and recommend payment rate updates for 2023; however, significant uncertainty remains about the duration of the pandemic as well as the extent to which certain changes to hospice

volume and financial performance will persist past the end of the PHE. Therefore, while analysis of 2020 data is important in understanding what happened to beneficiaries' access to care, quality of care, providers' access to capital, and Medicare's payments and providers' costs, it will be more difficult to interpret these indicators than is typically the case.

As the Commission stated last year, to the extent that the effects of the coronavirus pandemic are temporary—even if over multiple years—or vary significantly across individual hospices, they are best addressed through targeted temporary funding policies rather than a permanent change to all hospices' payment rates in 2023 and future years. Only permanent effects of the pandemic will be factored into our recommended changes in Medicare base payment rates. ■

The number of rural hospices has declined since 2010, falling about 1.0 percent between 2019 and 2020 (Table 11-1). As of 2020, 83 percent of hospices were in urban areas and 17 percent were in rural areas (which is roughly similar to the share of Medicare beneficiaries living in rural areas). The number of hospices in rural areas is not necessarily reflective of hospice access for rural beneficiaries for several reasons. A count of the number of rural hospices does not capture the size of those hospice providers, their capacity to serve patients, or the size of their service area. Furthermore, a count of rural hospices does not take into account hospices with offices in urban areas that also provide services in rural areas. While the number of rural hospices has declined in the last several years, the share of rural decedents using hospice grew through 2019 (see Table 11-3, p. 372). In addition, the number of rural beneficiaries receiving hospice services increased in 2020 (data not shown).

The majority of the growth in the number of hospice providers in 2020 was concentrated in two states—California and Texas. Between 2019 and 2020, California gained 112 hospices and Texas gained 45 hospices, continuing the trend in recent years of substantial market entry by hospice providers in these two states. From 2015 to 2020, California gained 110 hospices per year and Texas gained 42 hospices per year on average. In addition, several other states experienced substantial gains in the number of hospices in 2020, including Arizona, Georgia, Nevada, and Michigan (a net increase of 18, 15, 11, and 7 providers, respectively). In 2020, some states saw the number of hospice providers decline, although these changes were generally modest. The two states (Ohio and Mississippi) with the largest decline in the number of providers in 2020 nevertheless experienced an increase in the number of Medicare decedents receiving hospice services that year.

**TABLE
11-1****Increase in total number of hospices driven by growth in for-profit providers**

Category	2010	2017	2018	2019	2020	Average annual percent change 2010–2019	Percent change 2019–2020
All hospices	3,498	4,488	4,639	4,840	5,058	3.7%	4.5%
For profit	1,958	3,101	3,234	3,436	3,680	6.4	7.1
Nonprofit	1,316	1,226	1,245	1,255	1,220	–0.5	–2.8
Government	224	161	159	148	147	–4.5	–0.7
Freestanding	2,401	3,525	3,701	3,936	4,178	5.6	6.1
Hospital based	609	470	453	429	415	–3.8	–3.3
Home health based	465	471	463	456	444	–0.2	–2.6
SNF based	23	22	22	19	19	–2.1	0.0
Urban	2,485	3,603	3,760	3,976	4,196	5.4	5.5
Rural	950	879	872	859	850	–1.1	–1.0

Note: SNF (skilled nursing facility). Some categories do not sum to total because of missing data for some providers. The rural and urban definitions used in this table are based on updated definitions of the core-based statistical areas (which rely on data from the 2010 census).

Source: MedPAC analysis of Medicare cost reports, Provider of Services file, and Medicare hospice claims data from CMS.

Patterns of care among new hospices in California and Texas suggest that additional oversight is warranted, particularly given the rapid entry of new providers in these states. In our March 2021 report to the Congress,

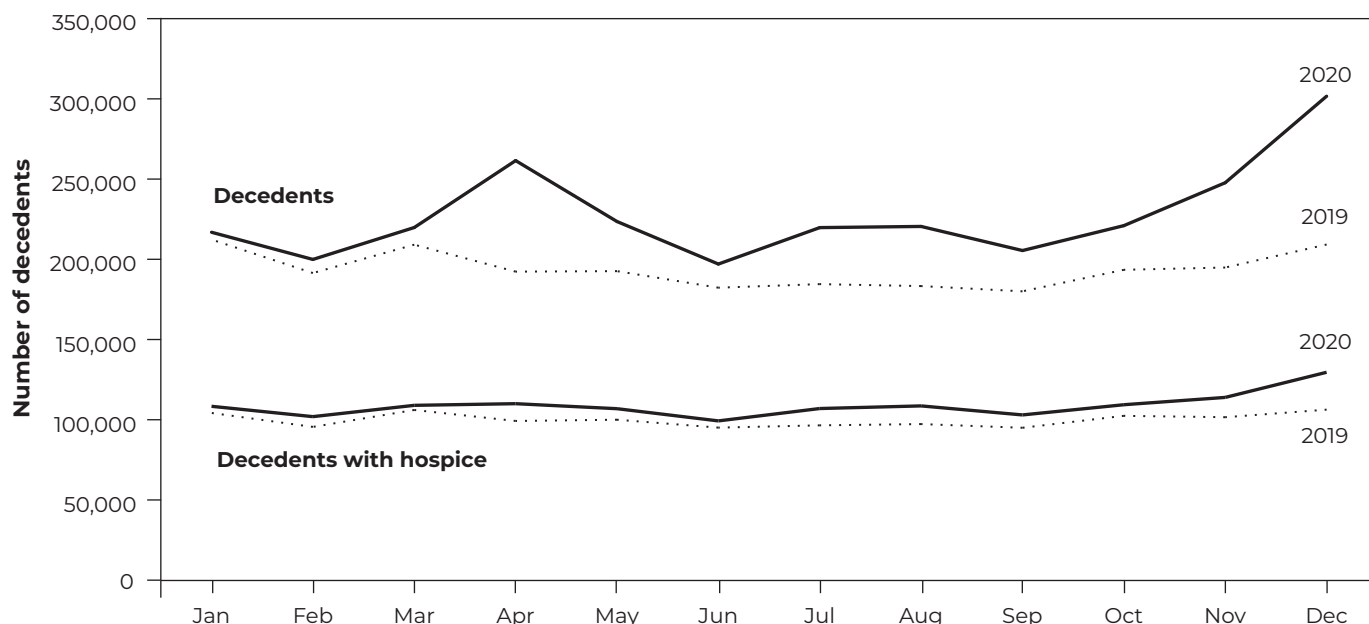
an analysis of new hospices in California and Texas found that these providers tended to be small, with long average lengths of stay, high live-discharge rates, and high rates of exceeding the aggregate cap. Nearly

**TABLE
11-2****Number of Medicare decedents and number of decedents using hospice grew substantially in 2020**

	2010	2017	2018	2019	2020	Average annual percent change 2010–2019	Percent change 2019–2020
Number of Medicare decedents (millions)	1.99	2.28	2.31	2.32	2.73	1.7%	17.6%
Number of Medicare decedents who used hospice (millions)	0.87	1.14	1.17	1.20	1.31	3.6	9.0
Share of decedents who used hospice	43.8%	49.8%	50.6%	51.6%	47.8%		

Note: The number of decedents who used hospice reflects decedents who used hospice in the last calendar year of life. Analysis excludes beneficiaries without Medicare Part A because hospice is a Part A benefit. Yearly figures presented in the table are rounded, but figures in the percent change columns were calculated using unrounded data.

Source: MedPAC analysis of data from the Common Medicare Enrollment file and hospice claims data from CMS.

**FIGURE
11-1****Monthly trends in Medicare decedents and hospice use, 2019–2020**

Note: The number of decedents who used hospice reflects decedents who used hospice in the last calendar year of life. Analysis excludes beneficiaries without Medicare Part A because hospice is a Part A benefit.

Source: MedPAC analysis of data from the Common Medicare Enrollment file and hospice claims data from CMS.

all were for profit. Recently, the state of California passed two laws to address concerns about rapid growth in the number of hospices and questionable business practices among some providers. California has placed a moratorium on new hospice licenses beginning January 2022 and bolstered its state laws governing hospice referral and patient enrollment practices (California Legislature 2021).

The number of hospice providers is not necessarily an indicator of beneficiary access to hospice. The supply of providers—as measured by the number of hospices per 10,000 Medicare decedents—varies substantially across states. In the past, we have concluded that no relationship exists between the supply of hospice providers and the rate of hospice use across states (Medicare Payment Advisory Commission 2021, Medicare Payment Advisory Commission 2010).

Hospice use overall continues to increase

In 2020, with the onset of the pandemic, deaths among Medicare beneficiaries and hospice use among Medicare decedents increased. Between 2019 and 2020, deaths among Medicare beneficiaries increased by nearly 18 percent and the number of Medicare decedents who used hospice in their year of death increased by 9 percent (Table 11-2). Because growth in deaths outpaced growth in the number of hospice users in 2020, the share of Medicare decedents using hospice declined between 2019 and 2020, from 51.6 percent to 47.8 percent (Table 11-2).

The effects of the pandemic on beneficiary deaths and hospice use are shown in finer detail using monthly data (Figure 11-1). A sharp increase in deaths occurred in April 2020, corresponding to the first wave of the pandemic; deaths rose again in the summer of, and end of, 2020. The number of decedents using hospice was higher in

**TABLE
11-3****Share of decedents using hospice increased from 2010 to 2019 but declined in 2020 as growth in deaths outpaced growth in hospice use****Share of Medicare decedents who used hospice**

	2010	2018	2019	2020	Average annual percentage point change 2010–2019	Percentage point change 2019–2020
All decedent beneficiaries	43.8%	50.6%	51.6%	47.8%	0.9	–3.8
FFS beneficiaries	42.8	49.7	50.7	47.2	0.9	–3.5
MA beneficiaries	47.2	52.3	53.2	48.7	0.7	–4.5
Dually eligible for Medicaid	41.5	47.5	49.3	42.3	0.9	–7.0
Not Medicaid eligible	44.5	51.5	52.4	49.8	0.9	–2.6
Age						
<65	25.7	28.8	29.5	26.5	0.4	–3.0
65–74	38.0	40.6	41.0	37.2	0.3	–3.8
75–84	44.8	51.2	52.2	48.3	0.8	–3.9
85+	50.2	61.1	62.7	59.0	1.4	–3.7
Race/ethnicity						
White	45.5	52.7	53.8	50.8	0.9	–3.0
Black	34.2	39.7	40.8	35.5	0.7	–5.3
Hispanic	36.7	42.5	42.7	33.3	0.7	–9.4
Asian American	30.0	38.8	39.8	36.1	1.1	–3.7
North American Native	31.0	37.8	38.5	33.5	0.8	–5.0
Sex						
Male	40.1	45.9	46.7	42.9	0.7	–3.8
Female	47.0	55.0	56.3	52.7	1.0	–3.6
Beneficiary county						
Urban	45.6	51.8	52.8	48.8	0.8	–4.0
Micropolitan	39.2	48.2	49.7	46.7	1.2	–3.0
Rural, adjacent to urban	39.0	47.9	49.5	46.1	1.2	–3.4
Rural, nonadjacent to urban	33.8	42.4	43.8	40.6	1.1	–3.2
Frontier	29.2	35.3	36.2	33.3	0.8	–2.9

Note: FFS (fee-for-service), MA (Medicare Advantage). For each demographic group, the share of decedents who used hospice is calculated as follows: The number of beneficiaries in the group who both died and received hospice in 2020 is divided by the total number of beneficiaries in the group who died in 2020. Beneficiary location reflects the beneficiary's county of residence in one of four categories (urban, micropolitan, rural adjacent to urban, or rural nonadjacent to urban) based on an aggregation of the Urban Influence Codes (UICs). This chart uses the 2013 UIC definition. The frontier category is defined as population density equal to or less than six people per square mile and overlaps the beneficiary county of residence categories. Yearly figures presented in the table are rounded, but figures in the percentage point change columns were calculated using unrounded data. Analysis excludes beneficiaries without Medicare Part A because hospice is a Part A benefit.

Source: MedPAC analysis of data from the Common Medicare Enrollment file and hospice claims data from CMS.

each month of 2020 compared with the same month of 2019. In months when deaths rose, the number of decedents using hospice also rose, but somewhat more slowly. The share of decedents using hospice was higher in the first two months of 2020 than in those months of 2019, but beginning March 2020, as deaths rose, the share of decedents using hospice declined in 2020 compared with 2019.

It is not unexpected that growth in deaths would outpace growth in hospice use during a pandemic. Given the intensive hospital care that can be involved in treating severe COVID-19, patients for whom these treatments are not successful may be more likely to die in the hospital than patients with chronic illnesses. Analysis of data from the Centers for Disease Control and Prevention indicates that about 63 percent of decedents ages 65 and older who died of COVID-19 died in an inpatient setting (Centers for Disease Control and Prevention 2021). In addition, at the beginning of the pandemic, concerns about infection control and outbreaks led nursing facilities to restrict access to patients by outside visitors, including hospice staff, which may also have contributed to the decline in the share of decedents using hospice in 2020. Thus, the decrease in the share of decedents using hospice during the PHE is not a reflection of Medicare payment adequacy.

Overall, trends in hospice use among Medicare decedents generally suggest that access is favorable. In 2020, the number of Medicare decedents who received hospice increased 9 percent. Before 2020, the share of decedents using hospice had been increasing over the span of two decades. From 2000 to 2019, hospice use rates among decedents more than doubled, increasing from less than 25 percent to more than 50 percent of decedents (data for 2000 not shown).⁹ We also observe growth in hospice use over time among different beneficiary groups. By beneficiary group—beneficiaries enrolled in fee-for-service (FFS) Medicare or Medicare Advantage (MA); Medicare-only beneficiaries and beneficiaries dually eligible for Medicare and Medicaid; age, race, and sex; and urban or rural residence—the share of decedents using hospice increased between 2010 and 2019 for each group (Table 11-3). In 2020, across each of these groups, the number of decedents using hospice increased, but the share of decedents using hospice declined, as growth in deaths exceeded growth in hospice enrollment. Across groups, larger

declines in the share of decedents using hospice in 2020 generally reflect larger increases in deaths during the PHE.

Hospice use is slightly higher among decedents in MA than in FFS (Table 11-3).¹⁰ Once a beneficiary in an MA plan elects hospice care, the beneficiary receives hospice services through a provider paid by Medicare FFS. In March 2014, the Commission urged that this policy be changed, recommending that hospice be included in the MA benefits package (Medicare Payment Advisory Commission 2014). In January 2021, as part of its value-based insurance design (VBID) models in MA, CMS's Center for Medicare & Medicaid Innovation (CMMI) launched a demonstration permitting MA organizations to provide hospice and palliative care services for their enrollees to test the effects of adding the hospice benefit to MA (Centers for Medicare & Medicaid Services 2020b). For 2022, 13 MA organizations (which comprise 115 plan benefit packages spanning 461 counties) will furnish hospice benefits under the VBID model (Centers for Medicare & Medicaid Services 2021a).

Hospice use continues to vary by beneficiary characteristics (Table 11-3). These differences in hospice use rates have persisted over time, even though rates grew for all groups between 2010 and 2019. In 2020, hospice use was less prevalent among Medicare decedents under age 65 (who are also likely to be dually eligible for Medicare and Medicaid) and most prevalent among those ages 85 and older. Female beneficiaries were also more likely than male beneficiaries to use hospice, which partly reflects the longer average life span for women and greater hospice use among older beneficiaries. Medicare decedents who are dually eligible for Medicaid are less likely to use hospice than other Medicare decedents.

Hospice use also varies by racial and ethnic group, with higher use rates among White decedents than other racial and ethnic groups (Table 11-3). The reasons for these differences are not fully understood. Studies have cited a number of possible factors, such as cultural or religious beliefs, preferences for end-of-life care, disparities in access to care or provider communications about end-of-life care, socioeconomic factors, and mistrust of the medical system (Barnato et al. 2009, Brown et al. 2018, Cohen 2008, Crawley et al. 2000, LoPresti et al. 2016, Martin et al. 2011).

**TABLE
11-4****Actual hospice use by beneficiary location and simulated use under scenario in which all decedents used hospice at urban rate, 2020**

Beneficiary location	Number of Medicare decedents			Difference between actual and simulated number of hospice users
	All	Using hospice (actual)	Using hospice if same use rate as urban areas (simulated counterfactual)	
Urban	2,205,700	1,075,400	1,075,400	N/A
Micropolitan	285,800	133,600	139,300	5,800
Rural adjacent	138,800	63,900	67,700	3,800
Rural nonadjacent	81,400	33,100	39,700	6,600
Frontier	23,200	7,700	11,300	3,600

Note: "Beneficiary location" reflects the beneficiary's county of residence in one of four categories (urban, micropolitan, rural adjacent to urban, or rural nonadjacent to urban) based on an aggregation of the Urban Influence Codes (UICs). This chart uses the 2013 UIC definitions. The frontier category is defined as population density equal to or less than six people per square mile and overlaps the beneficiary county of residence categories. Numbers in table are rounded. The difference in number of users displayed in the table may not equal the difference calculated using the components displayed in the table due to rounding. Analysis excludes beneficiaries without Medicare Part A because hospice is a Part A benefit.

Source: MedPAC analysis of data from the Common Medicare Enrollment file and hospice claims data from CMS.

Over the years, a greater share of urban decedents than rural decedents have used hospice (Table 11-3, p. 372). However, hospice use rates increased for all categories of rural areas between 2010 and 2019, with the difference in hospice use rates between urban and rural areas narrowing between 2010 and 2019 for all categories of rural areas except frontier areas. In frontier areas, hospice use grew at a similar rate as in urban areas between 2010 and 2019, such that the difference in hospice use between urban and frontier areas was stable over the period.

The number of Medicare decedents residing in frontier areas is relatively small (Table 11-4). In 2020, just over 23,000 Medicare beneficiaries in frontier areas died. Of those decedents, 7,700 received hospice that year. If decedents in frontier areas had hospice use rates similar to decedents in urban areas, about 3,600 more frontier beneficiaries would have used hospice in 2020 (11,300 instead of 7,700).

It is uncertain what factors account for lower hospice use rates in frontier areas. Given the small numbers of

beneficiaries and low population density in these areas, long travel times to some patients could contribute to lower hospice use rates. However, hospice use rates vary across a range of other beneficiary characteristics, and differences can be driven by a complex set of factors such as patient and family preferences, type of illness, and whether physicians and hospitals discuss hospice with patients. Consequently, lower use rates do not necessarily indicate lack of access to a hospice provider. In the future, we plan to continue to monitor access to care in frontier and rural areas.

In 2020, the main location where hospice patients receive care shifted. The number of Medicare decedents receiving hospice at home, in an assisted living facility, and in a hospital increased while the number of decedents receiving hospice in a nursing facility or hospice facility decreased that year (Table 11-5). The decline in the number of Medicare decedents who received hospice care in nursing facilities in 2020 is notable because of the substantial increase in the death rate among nursing facility residents that year. According to a study by the Office of Inspector General

**TABLE
11-5****The location of hospice care shifted in 2020**

Main location of hospice care	Number of Medicare decedents who received hospice (in thousands)		Percent change 2019–2020
	2019	2020	
Home	588	696	18%
Nursing facility	248	233	–6%
Assisted living facility	136	150	11%
Hospice facility	135	126	–7%
Hospital	87	96	10%

Note: “Main location of hospice care” reflects the setting in which the hospice patient received the most days of care.

Source: MedPAC analysis of data from the Common Medicare Enrollment file and hospice claims data from CMS.

(OIG), about 42 percent of nursing home residents (including those in SNF Part A stays and long-term nursing facility stays) were diagnosed with COVID-19 or likely COVID-19 in 2020, and mortality rates among nursing facility residents (from any cause) increased by 32 percent that year (Office of Inspector General 2021a). The decline in hospice care in the nursing facility setting is likely driven by the pandemic and unrelated to Medicare payment adequacy. Due in part to concerns about COVID-19 exposure in facilities among some patients and families, nursing facility occupancy rates fell in 2020 and fewer patients received care in that setting than in 2019. In addition, at the beginning of the pandemic, concerns about infection control and outbreaks led nursing facilities to restrict outside visitors, including hospice staff, which likely contributed to the decline in hospice use among nursing home residents in 2020.¹¹ Also, to the extent that nursing facilities transferred patients with severe COVID-19 to hospitals for treatment, patients for whom treatment was not successful may have been more likely to die in the hospital setting than receive hospice care in the nursing facility, as might more typically occur for patients with chronic illnesses.

Volume of services: Hospice use and length of stay increased in 2020

In 2020, the number of Medicare beneficiaries receiving hospice services continued to increase. About

1.72 million beneficiaries used hospice services, up 6.6 percent from about 1.61 million in 2019 (Table 11-6, p. 376). Between 2019 and 2020, the number of hospice days furnished to Medicare beneficiaries also increased 4.9 percent, from about 122 million days to about 128 million days.¹² During that period, the mix of hospice days by level of care shifted. Between 2019 and 2020, the share of days accounted for by RHC increased from 98.4 percent to 98.7 percent, owing to the 5 percent increase in the number of RHC days, while the number of GIP, CHC, and IRC days declined (by 9 percent, 18 percent, and 38 percent, respectively) (data not shown). The decline in days of the three infrequent levels of care may be related in part to the pandemic (e.g., anecdotal reports suggest that more limited access to facilities, less patient or family interest in facility care, and nurse staffing shortages among some hospices may have played a role), although GIP and CHC days had been on a modest downward trend before 2020.

Most hospice decedents have short stays, but some have very long stays (Figure 11-2, p. 377). In 2020, one-quarter of hospice decedents had stays of 5 days or less, half had stays of 18 days or less, and three-quarters had stays of 87 days or less. At the same time, 10 percent of hospice decedents had stays of more than 287 days. Between 2019 and 2020, hospice average lifetime length of stay among decedents increased from 92.5 days to 97.0 days.¹³ Median length of stay was stable at 18 days (Table 11-6, p. 376). Length of stay

**TABLE
11-6****Hospice expenditures and use increased in 2020**

Category	2010	2018	2019	2020	Average annual change, 2000–2018	Change, 2018–2019	Change, 2019–2020
Total spending (in billions)	\$12.9	\$19.2	\$20.9	\$22.4	5.1%	8.5%	7.4%
Number of hospice users (in millions)	1.15	1.55	1.61	1.72	3.8%	3.7%	6.6%
Number of hospice days for all hospice beneficiaries (in millions)	81.6	113.5	121.8	127.8	4.2%	7.3%	4.9%
Average lifetime length of stay among decedents (in days)	87.0	90.3	92.5	97.0	0.5%	2.5%	4.8%
Median lifetime length of stay among decedents (in days)	18	18	18	18	0 days	0 days	0 days

Note: "Lifetime length of stay" is calculated for decedents who were using hospice at the time of death or before death and reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during their lifetime. Total spending, number of hospice users, number of hospice days, and average length of stay displayed in the table are rounded; the percentage change for number of users and total spending is calculated using unrounded data.

Source: MedPAC analysis of the Common Medicare Enrollment file and the Medicare Beneficiary Database from CMS.

among decedents with the shortest stays remained stable (2 days at the 10th percentile and 5 days at the 25th percentile), while it increased for those with longer stays (from 85 days to 87 days at the 75th percentile and from 266 days to 287 days at the 90th percentile) (Figure 11-2).

Hospice lifetime length of stay is generally similar for hospice decedents in FFS Medicare and MA. Average length of stay for decedents in 2020 was 98.2 days for FFS beneficiaries and 95.2 days for MA beneficiaries (data not shown). Long stays in hospice tend to be slightly shorter for MA decedents than for FFS decedents (281 days for MA beneficiaries compared with 292 days for FFS beneficiaries at the 90th percentile of stays in 2020), while short stays in hospice tend to be slightly longer for MA decedents than for FFS decedents (median length of stay of 18 days and 17 days, respectively).

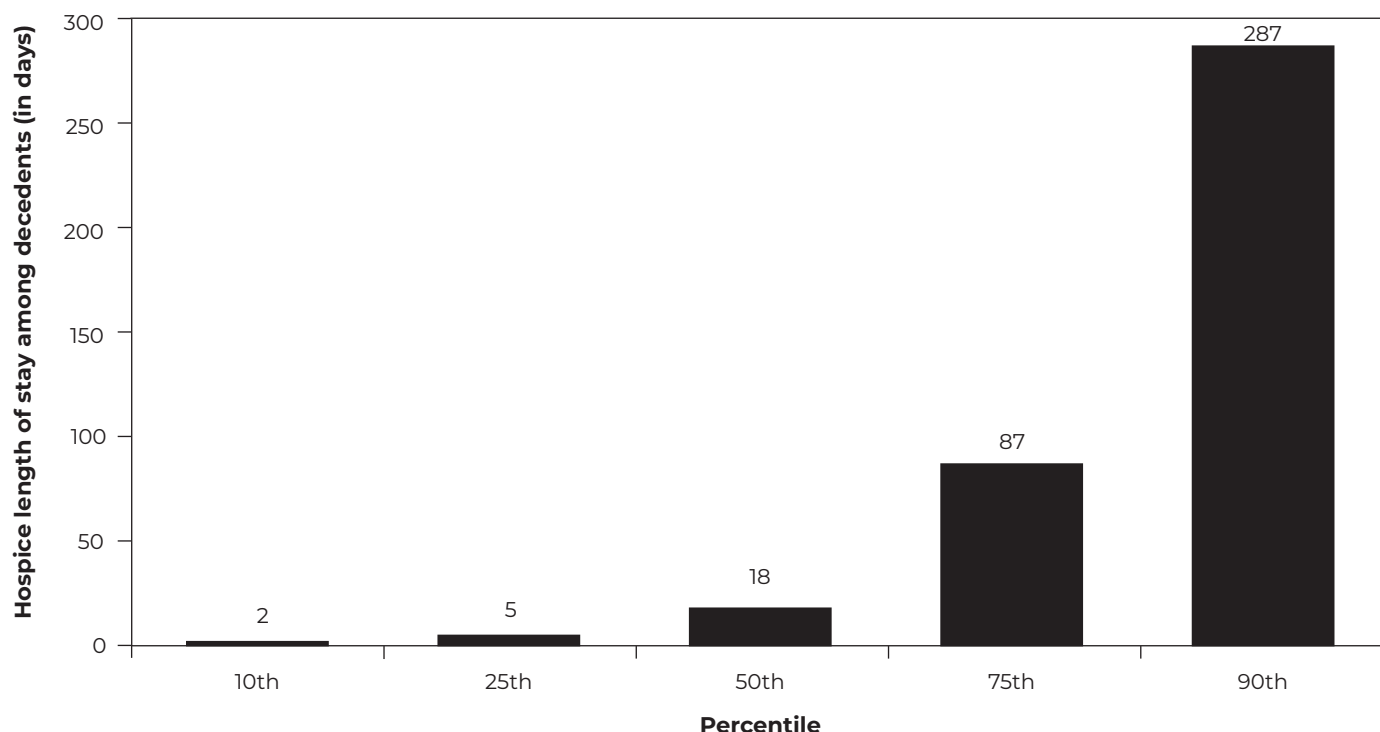
Hospice lengths of stay vary by observable patient characteristics, such as patient diagnosis and location, which permits providers to identify and enroll patients

likely to have long (more profitable) stays if they believe it is financially advantageous to do so (Table 11-7, p. 378). For example, Medicare hospice decedents in 2020 with neurological conditions and chronic obstructive pulmonary disease had substantially higher average lengths of stay (161 days and 135 days, respectively) compared with decedents with cancer (53 days). Although this information is not broken out separately, about 27,000 hospice decedents had a hospice primary diagnosis of COVID-19 in 2020, their median length of stay was 3 days, and average length of stay was 26 days.¹⁴

In addition, length of stay varies by the setting in which care is provided. In 2020, average length of stay was higher among Medicare decedents whose main care setting was an assisted living facility (172 days) or a nursing facility (133 days) compared with home (90 days) (Table 11-7, p. 378). In particular, hospice patients in assisted living had markedly longer stays compared with those in other settings, even for the same diagnosis, which warrants further monitoring and

**FIGURE
11-2**

Most hospice decedents in 2020 had relatively short stays, but some had very long stays



Note: Lifetime length of stay is calculated for decedents who were using hospice at the time of death or before death and reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during their lifetime.

Source: MedPAC analysis of the Common Medicare Enrollment file and the Medicare Beneficiary Database from CMS.

investigation in CMS's medical review efforts. These patterns of differences in length of stay by diagnosis and location of care have persisted over many years.

Lengths of stay vary by type of provider ownership as well as by patient characteristics (Table 11-7, p. 378). In 2020, average length of stay was substantially longer among for-profit hospices than among nonprofit hospices (115 days compared with 73 days). The reason for longer length of stay among for-profit hospices has two components: (1) for-profit hospices have more patients with diagnoses that tend to have longer stays, and (2) for-profit hospice beneficiaries have longer stays for all diagnoses than beneficiaries who

receive care from nonprofit hospices (data not shown). For example, among decedents with a neurological diagnosis, average length of stay was 184 days in for-profit hospices and 130 days in nonprofits. Underlying this difference is variation in length of stay for patients with the longest stays. For example, the 90th percentile length of stay for neurological decedents was substantially higher in for-profit hospices (543 days) compared with nonprofits (390 days).

The Commission has previously expressed concern about very short hospice stays. More than one-quarter of hospice decedents enroll in hospice only in the last week of life, a length of stay that is commonly

**TABLE
11-7****Hospice length of stay among decedents by
beneficiary and hospice characteristics, 2020**

Characteristic	Average length of stay (in days)	Percentile of length of stay				
		10th	25th	50th	75th	90th
Beneficiary						
Diagnosis						
Cancer	53	3	6	16	50	129
Neurological conditions	161	4	9	40	191	483
Heart/circulatory	109	2	5	19	101	324
COPD	135	3	6	32	156	403
Other	54	2	3	7	31	149
Main location of care						
Home	90	3	7	23	82	244
Nursing facility	133	3	7	26	145	410
Assisted living facility	172	5	13	59	222	491
Hospice						
Hospice ownership						
For profit	115	2	4	22	59	349
Nonprofit	73	3	6	13	107	206
Type of hospice						
Freestanding	97	2	5	17	84	288
Home health based	73	2	5	15	63	202
Hospital based	59	2	4	11	48	163

Note: COPD (chronic obstructive pulmonary disease). Length of stay is calculated for Medicare beneficiaries who died in 2020 and used hospice that year and reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during their lifetime. The location categories reflect where the beneficiary spent the largest share of their days while enrolled in hospice. "Diagnosis" reflects primary diagnosis on the beneficiary's last hospice claim.

Source: MedPAC analysis of Medicare hospice claims data, the Common Medicare Enrollment file, the Medicare Beneficiary Database, Medicare hospice cost reports, and Provider of Services file from CMS.

thought to be of less benefit to patients than enrolling somewhat earlier. Very short hospice stays occur across a wide range of diagnoses (Table 11-7). These very short stays stem largely from factors unrelated to the Medicare hospice payment system: Some physicians are reluctant to have conversations about hospice or tend to delay such discussions until death is imminent; some patients and families have difficulty accepting a terminal prognosis; and financial incentives

in the FFS system encourage increased volume of clinical services (compared with palliative care provided by hospice providers) (Medicare Payment Advisory Commission 2009). In addition, some analysts point to the requirement that beneficiaries forgo intensive conventional care to enroll in hospice as a factor that contributes to deferring hospice care, resulting in short hospice stays.

A number of initiatives seek to address concerns about potentially late hospice enrollments and the quality of end-of-life care more generally. Since 2016, under the physician fee schedule, Medicare has paid for advance care planning conversations between beneficiaries and their physician or advanced practice registered nurse or physician assistant. In 2016, CMS also launched a demonstration program (called the Medicare Care Choices Model (MCCM)) that permits certain FFS beneficiaries who are eligible for hospice (but not enrolled in the Medicare hospice benefit) to enroll in the demonstration and receive palliative and supportive care from a hospice provider while continuing to receive “curative” care from other providers.¹⁵ An evaluation of the first three years of experience with the MCCM reported that demonstration participants were more likely to enroll in hospice before death and to do so about a week earlier than comparison group decedents. The evaluation report concluded, based on the experience of 2,766 MCCM enrollees who died within 365 days of enrollment and met MCCM eligibility criteria, that the MCCM resulted in estimated net savings of \$21 million due to lower acute care costs at the end of life among participants (Harris et al. 2020).¹⁶

In March 2014, the Commission recommended that hospice be included in the MA benefits package, which would give plans greater incentives to develop and test new models aimed at improving end-of-life care and care for beneficiaries with advanced illnesses (Medicare Payment Advisory Commission 2014). As noted earlier, CMMI launched a VBID demonstration in January 2021 that tests, for MA plans participating in the demonstration, the inclusion of hospice services in the MA benefit. MA plans participating in the demonstration may also offer palliative care outside the hospice benefit, transitional concurrent hospice and curative care, and hospice benefits (e.g., meals, transportation, or additional in-home caregiver support) to enrollees under certain circumstances.

In addition to MA plans, accountable care organizations (ACOs)—which are accountable for a defined Medicare population’s total spending, including end-of-life care and hospice—are entities that could provide hospice care and potentially reduce costs by implementing policies that would facilitate beneficiaries’ use of end-of-life care in a way that is consistent with their preferences. Research examining the effect of ACOs

TABLE
11-8

Nearly 60 percent of Medicare hospice spending in 2020 was for patients with stays exceeding 180 days

	Medicare hospice spending, 2020 (in billions)
All hospice users in 2020	\$22.4
Beneficiaries with LOS > 180 days	13.3
Days 1–180	4.2
Days 181–365	4.1
Days 366+	4.9
Beneficiaries with LOS ≤ 180 days	9.2

Note: LOS (length of stay). “LOS” reflects the beneficiary’s lifetime LOS as of the end of 2020 (or at the time of discharge in 2020 if the beneficiary was not enrolled in hospice at the end of 2020). All spending reflected in the table occurred only in 2020. Breakout groups do not sum to totals because of rounding.

Source: MedPAC analysis of 100 percent hospice claims standard analytical file and an Acumen LLC data file on hospice lifetime length of stay (which is based on an analysis of historical claims data).

on patterns of end-of-life care and hospice use are nascent, but findings to date suggest that the effects are modest (Gilstrap et al. 2018).

The Commission has also expressed concern about very long hospice stays. In 2020, Medicare spent about \$13.3 billion, nearly 60 percent of hospice spending that year, on patients with stays exceeding 180 days (Table 11-8). About \$4.9 billion of that spending was on additional hospice care for patients who had already received at least one year of hospice services (i.e., already twice the presumptive eligibility period for the hospice benefit). Although the 2016 changes to the payment structure for RHC reduced payments for long stays and increased payments for short stays to some extent, patients with long stays continue to account for a large share of hospice spending.

Several factors contribute to some providers treating more patients with very long stays than other

**TABLE
11-9****Hospices that exceeded Medicare's annual payment cap, 2015–2019**

	2015	2016	2017	2018	2019
Estimated share of hospices exceeding the cap	12.3%	12.7%	14.0%	16.3%	19.0%
Average payments over the cap per hospice exceeding it (in thousands)	\$316	\$295	\$273	\$334	\$384
Payments over the cap as share of overall Medicare hospice spending	1.0%	1.0%	1.0%	1.3%	1.7%

Note: The aggregate cap statistics reflect the Commission's estimates and may differ from the CMS claims processing contractors' calculations.
*Spending in cap year 2017 reflects an 11-month period from November 1, 2016, to September 30, 2017. For years before 2017, the cap year was defined as the period beginning November 1 and ending October 31 of the following year. Beginning in 2018, the cap year is aligned with the federal fiscal year (October 1 to September 30 of the following year).

Source: MedPAC analysis of Medicare hospice claims data, Medicare hospice cost reports, and Medicare Provider of Services file from CMS.

providers. Given the uncertainty associated with predicting life expectancy, some differences across providers in length of stay are expected due to random variation; however, persistent differences in length of stay over time for individual providers suggest that additional factors are at work. Since long stays in hospice are more profitable than short stays, financial incentives likely play a role in why some providers treat more patients with very long stays than do other providers. The sources from which providers seek referral may also contribute to length-of-stay differences. For example, beneficiaries who reside in assisted living facilities tend to have longer stays than beneficiaries residing in other settings, even for the same diagnosis. The potential for patients from the assisted living facility and nursing facility settings to increase a provider's census of long-stay patients was pointed out in a recent investor call by a publicly traded hospice company (Chemed 2021a). It is also possible that some providers' interpretations of the hospice eligibility criteria differ from others' interpretations, resulting in some providers admitting patients for hospice care before other providers would consider them eligible.

Among the hospices with very long stays are those that exceed the hospice aggregate cap. In 2019, we estimate

that about 19.0 percent of hospices exceeded the aggregate payment cap, an increase from the prior year (16.3 percent in 2018) (Table 11-9).¹⁷ On average, above-cap hospices exceeded the cap by about \$384,000 in 2019, up from \$334,000 in 2018.

Above-cap hospices have fewer patients per year, on average, than below-cap hospices and are more likely to be for-profit, freestanding, recent entrants to the Medicare program, and located in urban areas (Table 11-10). Above-cap hospices have substantially longer stays than below-cap hospices, even for patients with similar diagnoses. Above-cap hospices also have substantially higher rates of discharging patients alive than other hospices. As the Commission has noted in past reports, these length-of-stay and live-discharge patterns suggest that above-cap hospices are admitting patients who do not meet the hospice eligibility criteria, which merits further investigation by OIG and CMS.

With the variation in practice patterns across hospices and concerns about the potential for some hospices to focus on patients likely to have long stays and high profitability, the Commission has advocated over the years for a targeted approach to auditing hospice providers, focusing the most resources on providers

**TABLE
11-10****Characteristics of above-cap and below-cap hospices, 2019**

	Above-cap hospices	Below-cap hospices
Average number of patients per year	130	400
Share of hospices by:		
Date of entry into Medicare program		
Pre-2000	5%	38%
2000–2009	15%	26%
2010 onward	79%	36%
Provider characteristics		
Urban	96%	79%
For profit	97%	65%
Freestanding	97%	76%
Share of patients by diagnosis		
Cancer	15%	26%
Neurological	32%	23%
Heart/circulatory	36%	29%
COPD	6%	5%
Other	10%	17%
Average lifetime length of stay for patients through 2019 (in days; all patients—not limited to decedents)		
Cancer	128	74
Neurological	360	232
Heart/circulatory	278	160
COPD	295	190
Other	197	95
Share of patients discharged alive	39%	16%

Note: COPD (chronic obstructive pulmonary disease). Data on average length of stay reflect lifetime length of stay as of the end of cap year 2019 for all patients who received care during 2019, including patients who were discharged deceased, discharged alive, or remained a patient.

Source: MedPAC analysis of hospice claims file, Medicare hospice cost reports, Medicare Provider of Services file from CMS, and an Acumen LLC data file on hospice lifetime length of stay (which is based on an analysis of historical claims data).

for which such scrutiny is warranted. In March 2009, the Commission recommended that CMS conduct medical reviews of all hospice stays exceeding 180 days among those hospice providers for which these long stays exceeded a specified share of the provider's caseload. Similarly, in this report and prior reports,

the Commission has expressed concern about very long hospice stays in assisted living facilities among some hospice providers and long stays and high live-discharge rates among above-cap hospices. The Commission has suggested that more program integrity scrutiny is warranted in those areas.

**TABLE
11-11****Average number of in-person visits per week declined in 2020**

	Average number of visits or calls per patient per week		
	2018	2019	2020
Total visits	4.4	4.3	3.5
Nurse visits	1.8	1.8	1.6
Aide visits	2.2	2.2	1.7
Social worker visits	0.3	0.3	0.2
Social worker calls and visits	0.4	0.4	0.3

Note: "Visits" refer to in-person visits only. "Nurse visits" include both registered nurse and licensed practical nurse visits. Number of visits by category may not sum to total due to rounding.

Source: MedPAC analysis of Medicare hospice claims data from CMS.

A targeted auditing approach that shows promise focuses on providers that receive a high share of their payments for hospice patients before the last year of life. In our March 2017 report, we show that the share of payments hospice providers receive for a beneficiary's care before the last year of life varies across providers. A provider with an unusually high share of payments derived from care furnished to patients earlier in the disease trajectory—for example, before the last year of life—could signal questionable admitting practices and warrant further scrutiny of those providers (Medicare Payment Advisory Commission 2017).

In addition to targeted auditing, other measures could address providers' aberrant utilization patterns. For example, a compliance threshold policy—similar to the inpatient rehabilitation facility 60 percent rule and the long-term care hospital 50 percent rule—could be considered for hospice providers as a way to limit the potential for a subset of providers to profit by pursuing outlier admitting and discharge practices (Medicare Payment Advisory Commission 2021). Furthermore, there may be a role for educational efforts that give physicians information on how the timing of their hospice referrals compares with that of other physicians. Such efforts could educate physicians about both early and late referrals to hospice.

Hospice visits

To facilitate access to care during the PHE, CMS has given hospice providers the flexibility to provide visits using telecommunication systems in certain circumstances. For beneficiaries receiving the RHC level of care, hospices can provide services using "telehealth" during the PHE, if feasible and appropriate, to ensure that the beneficiary continues to receive reasonable and necessary services for palliation of the terminal illness and related conditions. Provision of telehealth visits must be included in the patient's plan of care and tied to patient-specific need.

We generally lack data on telehealth visits provided by hospices during the PHE. Although hospices can report the total costs of telehealth services on Medicare cost reports, hospices are unable report information about the use of telehealth services for each hospice patient on Medicare claims. Social worker calls, which historically have been on claims (before the PHE), are the one exception. The lack of data on telehealth visits limits our ability to understand the scope and frequency of services received by beneficiaries during the PHE.

In 2020, in-person visits to hospice beneficiaries decreased (Table 11-11). For beneficiaries receiving RHC, hospices provided on average 4.3 in-person visits per week from nurses, social workers, and aides in 2019

**TABLE
11-12****Average number and length of in-person visits during the last week of life declined in 2020**

	2015	2018	2019	2020
Nurse visits in last 7 days of life				
Average number of visits per day	0.59	0.64	0.66	0.62
Average length of each visit (in 15-minute increments)	5.00	4.56	4.44	4.37
Average visit time per day (in 15-minute increments)	2.96	2.94	2.94	2.70
Social worker visits in last 7 days of life				
Average number of visits per day	0.09	0.10	0.10	0.07
Average length of visits (in 15-minute increments)	4.22	4.02	4.01	3.79
Average visit time per day (in 15-minute increments)	0.37	0.41	0.42	0.28

Note: Nurse visits include both registered nurse (RN) and licensed practical nurse (LPN) visits. Although the new payment system makes additional payments only for RN (not LPN) visits in the last days of life, we have included both types of visits in this chart because data specific to RNs are not available for 2015.

Source: MedPAC analysis of Medicare hospice claims data from CMS.

and 3.5 in-person visits per week in 2020. The largest decrease in visits occurred with aides (from 2.2 visits per week to 1.7 visits per week on average). Nurse in-person visits also declined somewhat, from an average of 1.8 visits per week to 1.6 visits per week. This decline in in-person nurse visits likely stems from effects of the pandemic and does not reflect Medicare payment adequacy. For example, reluctance among some beneficiaries and families to have health care personnel in their homes may have contributed to a reduction in in-person visits. Because we lack data on any telehealth visits furnished by nurses, we are unable to quantify the extent to which telehealth was used to supplement in-person nurse visits. However, from discussions with hospice providers, we know that telehealth nurse visits were utilized to some extent. In the case of social worker visits, the claims data do provide information on the role of in-person visits and telephone calls. Between 2019 and 2020, in-person social worker visits declined from an average of 0.3 visits per week to 0.2 visits per week. Social worker phone calls increased slightly, but this increase did not fully offset the decline in in-person social worker visits.

One feature of the 2016 hospice payment system modifications is additional payment for certain visits

in the last days of life. The purpose of these additional payments is to compensate hospices for the higher patient need and visit intensity in the last days of life. The hospice provider is eligible for additional payments for registered nurse and social worker visits that occur during the last seven days of life for patients receiving RHC. These payments are in addition to the base payment that the hospice receives for each day of care. These visits are paid at an hourly rate (up to four hours per day) as a means of targeting the payments toward those hospices that provide more visits in the last days of life. Only in-person visits qualify for the additional payments.

We estimate that, in calendar year 2020, Medicare paid hospice providers roughly \$216 million for registered nurse and social worker visits in the last seven days of life. In examining the frequency and length of visits that occurred in the last days of life between 2015 and 2019, we found that visit patterns in the last days of life were relatively stable. Over this period, the number of visits grew slightly while the length of each visit fell slightly (Table 11-12). In 2020, most likely related to the pandemic, both the number of in-person visits and the length of in-person visits by nurses and social workers

in the last days of life declined. It is notable, however, that the average number of in-person visits by nurses in the last days of life in 2020 remained higher than the 2015 level.

Medicare marginal profit as a measure of access

Another measure of access is whether providers have a financial incentive to expand the number of Medicare beneficiaries they serve. In considering whether to treat a patient, a provider with excess capacity compares the marginal revenue it will receive (i.e., the Medicare payment) with its marginal costs—that is, the costs that vary with volume. If Medicare payments are larger than the marginal costs of treating an additional beneficiary, a provider has a financial incentive to increase its volume of Medicare patients. In contrast, if payments do not cover the marginal costs, the provider could have a disincentive to care for Medicare beneficiaries.¹⁸ For hospice providers, we find that 2019 Medicare marginal profit was roughly 17 percent, suggesting that providers with the capacity to do so had a strong incentive to treat Medicare patients.

Quality of care is difficult to assess

Quality of care is difficult to assess for 2020 due to the effects of the coronavirus pandemic on beneficiaries and providers. Each year we track changes in quality measures and determine whether they have gotten better, gotten worse, or stayed the same. Due to the pandemic, submission of hospice quality data by providers—the Hospice Item Set and the Consumer Assessment of Healthcare Providers and Systems® (CAHPS®) Hospice Survey—was suspended for the first and second quarters of 2020. Quality data reflecting the second half of 2020 have not yet been publicly released and will become available in 2022. As discussed in our March 2021 report, based on hospice quality data reflecting performance through 2019, hospice quality has been stable. Scores on the CAHPS Hospice Survey were stable through 2019. Scores on a composite measure of seven processes of care at hospice admission were very high in 2019, and the composite measure was nearly “topped out,” defined as scores so high and unvarying that meaningful distinctions and improvement in performance can no longer be made. Performance on a measure of visits in the last three days of life improved slightly in 2019.

As discussed, the Commission’s analysis of in-person nurse and social worker visits in the last days of life

suggests some decline in visits between 2019 and 2020. While we report these 2020 results, we have not used them to inform our conclusions about trends in the quality of care provided to Medicare beneficiaries because they reflect temporary changes in the delivery of care and data limitations unique to the PHE rather than trends in the quality of care provided to beneficiaries. Therefore, we report the changes observed in the quality measures but do not draw conclusions about whether quality has improved, worsened, or stayed the same in 2020.

Future quality measures

With quality measurement in general, the Commission consistently maintains that outcome measures are preferable to process measures. Although outcome measures for hospice are particularly challenging, the Commission believes that outcome measures such as patient-reported pain and other symptom-management measures merit further exploration. In the hospice final rule for fiscal year 2022, CMS indicated that as part of the new hospice patient assessment instrument currently under development (referred to as the Hospice Outcomes & Patient Evaluation (HOPE)), CMS is developing three candidate outcome measures related to symptom management: timely reduction of pain impact, reduction in pain severity, and timely reduction of symptoms. CMS stated that a technical expert panel reviewed these measures and thought they were viable measures of hospice quality, and the agency continues to develop all three measures.

In the fiscal year 2022 final rule, CMS finalized its proposal to publicly report hospice star ratings based on the CAHPS survey beginning in 2022 (Centers for Medicare & Medicaid Services 2021b). CMS also adopted a new claims-based quality measure, referred to as the Hospice Care Index, with public reporting beginning no earlier than May 2022. That measure will identify hospice providers with unusual patterns of care across 10 measures. The 10 measures include 4 related to the provision of visits to hospice patients, 4 related to aspects of live discharges, 1 that reflects Medicare hospice spending per beneficiary, and 1 that gauges whether the provider furnished any high-intensity care (continuous home care or general inpatient care). The agency also indicated interest in developing additional claims-based measures in the future—for example, measures of hospice quality

**TABLE
11-13****Rates of hospice live discharge and reported reason for discharge, 2018–2020**

Category	2018	2019	2020
Live discharges as a share of all discharges, by reason for live discharge			
All live discharges	17.0%	17.4%	15.4%
No longer terminally ill	6.3	6.5	5.6
Beneficiary revocation	6.6	6.5	5.7
Transferred hospice providers	2.2	2.3	2.2
Moved out of service area	1.6	1.7	1.6
Discharged for cause	0.3	0.3	0.3
Providers' overall rate of live discharge as a share of all discharges, by percentile (for providers with more than 30 discharges)			
10th percentile	8.5%	8.6%	7.5%
25th percentile	12.0	12.3	10.9
50th percentile	17.9	18.9	16.9
75th percentile	27.8	29.5	26.6
90th percentile	42.5	46.6	43.3

Note: Percentages may not sum to total due to rounding. "All discharges" includes patients discharged alive or deceased.

Source: MedPAC analysis of the 100 percent hospice claims standard analytical file, Medicare hospice cost reports, and Medicare Provider of Services file from CMS.

related to hospice services on weekends, transitions after hospice live discharge, postmortem visits, and Medicare expenditures per beneficiary, including the share of spending for hospice care before the last year of life and the share of nonhospice spending during hospice election. (For further discussion of nonhospice spending during hospice elections, see the section on additional hospice policy issues, pp. 395–400.)

Live-discharge rates

The Commission has, over the years, raised concern about hospice providers with unusually high live-discharge rates compared with other hospice providers. Hospice providers are expected to have some live discharges because some patients change their mind about using the hospice benefit and disenroll from hospice or their condition improves and they no longer meet the hospice eligibility criteria. However, claims data showing providers with

substantially higher rates of live discharge than their peers could signal a problem with quality of care or program integrity, such as a hospice provider not meeting the needs of patients and families or admitting patients who do not meet the eligibility criteria.

In 2020, the aggregate rate of live discharge (that is, live discharges as a share of all discharges) was 15.4 percent, a decline of 2 percentage points from 2019 (Table 11-13). In recent years before 2020, live-discharge rates were stable or modestly increasing. Thus, the decline in live-discharge rates in 2020 likely reflects the effects of the pandemic and the higher beneficiary mortality rates during 2020. As in prior years, hospice claims data show “beneficiary revocation” and “beneficiary no longer terminally ill” as the most common reasons for live discharge in 2020 (accounting for 5.7 percent and 5.6 percent of hospice discharges in 2020, respectively).¹⁹

Live-discharge rates vary by patient diagnosis. In 2020, the rate was higher for hospice beneficiaries with chronic obstructive pulmonary disease (26 percent), heart and circulatory conditions (19 percent), and neurological conditions (18 percent) than for those with cancer (10 percent) or other diagnoses (12 percent) (data not shown). The diagnoses that tend to have higher live-discharge rates are the same diagnoses that tend to have longer stays (lengths of stay by diagnosis are shown in Table 11-7, p. 378).

Some providers have unusually high live-discharge rates. In 2020, among providers with more than 30 discharges, the median live-discharge rate was about 17 percent, but 10 percent of providers had live-discharge rates in excess of 43 percent (Table 11-13, p. 385). Hospices with very high live-discharge rates were disproportionately for-profit and recent entrants to the Medicare program (entered in 2010 or after) and had an above-average rate of exceeding the aggregate payment cap (data not shown). Small hospices as a group also had substantially higher live-discharge rates than larger hospices—42 percent for hospices with 30 or fewer discharges (data not shown).

Providers' access to capital: Hospices have good access to capital

Hospices in general are not as capital intensive as other provider types because they do not require extensive physical infrastructure (although some hospices have built their own inpatient units, which require significant capital). Overall, access to capital for hospices appears adequate, given the continued entry of for-profit providers in the Medicare program.

In 2020, the number of for-profit providers grew by about 7 percent, indicating that capital has been accessible to these providers. Although the pandemic has affected hospice providers' operations in a number of ways, financial reports indicate that publicly traded companies continued to have strong financial performance through the third quarter of 2021 (Amedisys 2021a, Amedisys 2021b, Chemed 2021a, Chemed 2021b, Encompass Health 2021a, Encompass Health 2021b, LHC Group 2021a, LHC Group 2021b). After an initial decline in patient volume at the outset of the pandemic, publicly traded firms generally reported that hospice patient admissions, average daily census, or both had returned to similar or above prepandemic levels in the second half of 2020. Reports on 2021

admissions and average daily census were more mixed, with some companies reporting decreases in one or both of these metrics, while some companies reported stability or increases. Some companies noted that waves of the COVID-19 Delta variant in 2021 resulted in admission of more patients nearer to the end of life and shorter lengths of stay. Several companies also reported a lower average daily census due to fewer referrals from nursing facilities and assisted living facility settings, which are traditionally sources of long-stay patients, although these companies indicated that referral patterns had begun to or were expected to normalize. Some publicly traded companies also reported increasing wage rates and staff recruitment challenges. Nonetheless, publicly traded companies' margins continue to be strong. According to financial reports, the hospice sector continues to garner substantial investment interest from private equity firms and investors, and market valuations of hospice companies are high (Vossell 2021). It is also notable that CMS's changes to the hospice payment system in 2016 have generally been viewed as modest.

Among nonprofit freestanding providers, less is known about access to capital, which may be limited. Hospital-based and home health-based nonprofit hospices have access to capital through their parent providers, which currently appear to have adequate access to capital in both sectors.

A provider's all-payer total margin—which reflects how its total revenues compare with its total costs for all lines of business and all payers—can influence a provider's ability to obtain capital. Irregularities in how some hospices report data on their total revenues and total expenses on their cost reports prevent us from calculating a reliable estimate of all-payer total margins for hospices. Among hospice payers, however, Medicare accounts for about 90 percent of hospice days, and hospices' Medicare margins are strong.

Medicare payments and providers' costs

To make an assessment of payment adequacy, we examine the relationship between Medicare payments and providers' costs. Medicare margins illuminate this relationship. To understand the drivers of Medicare margins, we also examine trends in providers' costs and how costs vary across types of providers.

Specifically, we examine cost trends through 2020 and Medicare margins through 2019. Margins are presented only through 2019 because they incorporate an estimate of hospice aggregate cap overpayments, and a significant lag exists for these data.

Hospice costs

In 2020, hospice costs per day across all levels of care and hospice providers averaged about \$149, an increase of about 0.9 percent from 2019 (2019 data not shown). Among the factors accounting for low growth were low growth in cost per day for the RHC level of care and a shift in the mix of hospice days, with the share of days accounted for by RHC (the lowest-cost level of care) between 2019 and 2020 rising from 98.4 percent to 98.7 percent.

Hospice costs per day vary substantially by type of provider (Table 11-14), which is one reason for differences in hospice margins across provider types. In 2020, freestanding hospices had lower average costs per day than provider-based hospices (i.e., home health-based hospices and hospital-based hospices). For-profit and rural hospices also had lower average costs per day than their respective counterparts. Many factors contribute to variation in hospice costs across providers. One factor is length of stay. Hospices with longer stays have lower costs per day on average. Freestanding and for-profit hospices have substantially longer stays than other hospices and as a result have lower costs per day. Another factor relates to overhead costs. Included in the costs of provider-based hospices are overhead costs allocated from the parent provider, which contributes to provider-based hospices' higher costs compared with freestanding providers. The Commission maintains that payment policy should focus on the efficient delivery of services and that if freestanding hospices are able to provide high-quality care at a lower cost than provider-based hospices, payment rates should be set accordingly; the higher costs of provider-based hospices should not be a reason for increasing Medicare payment rates.

Table 11-15 (p. 388) presents estimates of average hospice costs by level of care for hospice providers from 2018 through 2020. Hospice costs for RHC grew modestly between 2018 and 2020. Average cost per day for RHC, the level of care that accounts for more than 98 percent of hospice days, increased 0.5 percent

**TABLE
11-14**

Total hospice costs per day varied by type of provider, 2020

Average total cost per day	
All hospices	\$149
Freestanding	144
Home health based	159
Hospital based	224
For profit	131
Nonprofit	176
Urban	151
Rural	133

Note: Data reflect aggregate costs per day for all types of hospice care combined (routine home care, continuous home care, general inpatient care, and inpatient respite care) for all payers. "Days" reflects the total number of days for which the hospice was responsible for care of its patients, regardless of whether the patient received a visit on a particular day. Data are not adjusted for differences in case mix or wages across hospices.

Source: MedPAC analysis of Medicare hospice cost reports and Medicare Provider of Services file from CMS.

between 2018 and 2019 and 1.2 percent between 2019 and 2020. In contrast, average cost per day for the three less frequent levels of care—general inpatient care, inpatient respite care, and continuous home care—that together account for 1.3 percent of hospice days rose substantially in 2020 (by 15 percent, 37 percent, and 6 percent, respectively). Anecdotal reports suggest that the substantial increase in cost for facility-related care may in part reflect the effects of the pandemic (e.g., more limited access to some facilities may have resulted in hospices seeking placements for patients in alternate facilities, possibly at higher cost).

Hospice payment rates were rebased by level of care in 2020. Payment rates were increased in 2020 for GIP, IRC, and CHC, generally bringing them closer to estimated cost than they had been in prior years (Table 11-15, p. 388). To offset those payment rate increases, the RHC rates were reduced slightly. In 2020, RHC payment rates remained substantially above cost. The

**TABLE
11-15****Hospice costs and payment rates by level of care, 2018–2020**

Category	Share of days 2020	Average cost per day*			FY 2020 payment rate per day*
		2018	2019	2020	
Routine home care	98.7%	\$131.54	\$132.20	\$133.79	\$165.95
General inpatient care	1.0	914.90	945.90	1,085.56	1,021.25
Inpatient respite care	0.2	529.93	538.23	736.11	450.10
Continuous home care* (dollars per hour)	0.2	48.48	52.39	55.45	58.15

Note: FY (fiscal year). For routine home care, the average payment rate per day reflects the average actual amount paid (incorporating days paid at the higher days 1–60 rate and the lower days 61+ rate). Percentages may not sum to 100 due to rounding.

*Cost estimates and payment rates reflect dollars per day except for continuous home care, which is dollars per hour.

Source: MedPAC analysis of Medicare hospice cost reports, 100 percent hospice claims data, and Provider of Services file from CMS.

average payment for RHC in 2020 (across days 1 to 60 and days 61+) was \$166 compared with an average cost of about \$134.

Hospice margins

In 2019, the Medicare aggregate margin for hospice providers was 13.4 percent, up from 12.4 percent in 2018 (Table 11-16).²⁰ Medicare aggregate margins varied widely across individual hospice providers: –5.1 percent at the 25th percentile, 12.4 percent at the 50th percentile, and 25.5 percent at the 75th percentile (data not shown). Our estimates of Medicare aggregate margins exclude overpayments to above-cap hospices and are calculated based on Medicare-allowable, reimbursable costs, consistent with our approach in other Medicare sectors.²¹

We excluded nonreimbursable bereavement and volunteer costs from our margin calculations. The statute requires that hospices offer bereavement services to family members of their deceased Medicare patients (Section 1861(dd)(2)(A)(i) of the Social Security Act); however, the statute prohibits Medicare payment for these services (Section 1814(i)(1)(A)). Hospices report the costs associated with bereavement services on the Medicare cost report in a nonreimbursable cost center. We also exclude nonreimbursable volunteer costs from our margin calculations.²² If we had included nonreimbursable bereavement and volunteer costs in our margin calculation, it would have reduced the

aggregate Medicare margin by at most 1.2 percentage points and 0.4 percentage point, respectively.

Hospice margins vary by provider characteristics, such as type of hospice (freestanding or provider based), type of ownership (for profit or nonprofit), patient volume, and urban or rural location (Table 11-16). In 2019, freestanding hospices had higher Medicare aggregate margins (16.2 percent) than home health–based or hospital-based hospices (9.6 percent and –18.4 percent, respectively). Provider-based hospices typically have lower Medicare aggregate margins than freestanding hospices for several reasons, including their shorter stays and the allocation of overhead costs from the parent provider to the provider-based hospice. In 2019, the Medicare aggregate margin was considerably higher for for-profit hospices (19.2 percent) than for nonprofit hospices (6.0 percent). The Medicare aggregate margin for freestanding nonprofit hospices was higher (10.5 percent) than the margin for nonprofit hospices overall (data not shown). Generally, hospices' Medicare aggregate margins vary by the provider's volume—hospices with more patients have higher margins on average. Hospices in urban areas have a slightly higher overall Medicare aggregate margin (13.6 percent) than those in rural areas (11.5 percent).

In 2019, above-cap hospices had favorable margins even after the return of overpayments (Table 11-16). Above-cap hospices had a Medicare aggregate margin of about 22.5 percent before the return of

**TABLE
11-16****Hospice Medicare aggregate margins by selected characteristics, 2015 to 2019**

Category	Share of hospices 2019	2015	2016	2017	2018	2019
All	100%	9.9%	10.9%	12.5%	12.4%	13.4%
Freestanding	81	13.8	14.0	15.3	15.1	16.2
Home health based	9	3.3	6.2	8.1	8.4	9.6
Hospital based	9	-23.8	-16.7	-13.8	-16.5	-18.4
For profit	71	17.7	17.9	20.0	19.0	19.2
Nonprofit	26	0.1	2.2	2.5	3.8	6.0
Urban	82	10.4	11.4	12.9	12.6	13.6
Rural	18	4.8	6.3	8.9	10.3	11.5
Patient volume (quintile)						
Lowest	20	-5.3	-3.1	-1.1	-3.1	-4.5
Second	20	4.3	6.2	6.7	5.6	6.2
Third	20	10.7	11.2	13.8	13.8	13.5
Fourth	20	13.0	13.1	15.2	14.0	15.8
Highest	20	9.9	11.1	12.5	12.7	13.9
Below cap	81	9.9	10.7	12.6	12.5	13.8
Above cap (excluding cap overpayments)	19	9.8	12.6	12.1	10.1	10.0
Above cap (including cap overpayments)	19	21.4	20.2	21.9	21.8	22.5

Note: Medicare aggregate margins for all provider categories exclude overpayments to above-cap hospices, except where specifically indicated. Medicare aggregate margins are calculated based on Medicare-allowable, reimbursable costs. Margin by hospice ownership status is based on hospices' ownership designation from the Medicare cost report. The rural and urban definitions used in this chart are based on updated definitions of the core-based statistical areas (which rely on data from the 2010 census).

Source: MedPAC analysis of Medicare hospice cost reports, Medicare hospice claims data, and Medicare Provider of Services file from CMS.

overpayments but had a margin of 10.0 percent after the return of overpayments. The Medicare aggregate margin for below-cap hospices was 13.8 percent.

Hospice profitability is closely related to length of stay. Hospices with longer stays have higher margins. For example, in an analysis of hospice providers based on the share of their patients' stays exceeding 180 days, the Medicare aggregate margin ranged from -2.5 percent for hospices in the lowest quintile to 22.8 percent for hospices in the second highest quintile (Table 11-17, p. 390). Hospices in the quintile with the greatest share of their patients exceeding 180 days had

a 13.4 percent Medicare aggregate margin after the return of cap overpayments, but without the hospice aggregate cap, these providers' margins would have averaged 22.5 percent (latter figure not shown in table).

Hospices with a large share of patients in nursing facilities and assisted living facilities also have higher Medicare aggregate margins than other hospices (Table 11-18, p. 391). For example, in 2019, the 50 percent of hospices with the highest share of patients residing in nursing facilities had a Medicare aggregate margin of about 16 percent compared with a roughly 10 percent margin for providers with fewer nursing facility

**TABLE
11-17****Hospice Medicare aggregate
margins by length of stay, 2019**

Hospice characteristic	Medicare margin
Average length of stay	
Lowest quintile	-2.1%
Second quintile	11.2
Third quintile	19.4
Fourth quintile	20.8
Highest quintile	17.7
Share of stays > 180 days	
Lowest quintile	-2.5
Second quintile	10.3
Third quintile	19.9
Fourth quintile	22.8
Highest quintile	13.4

Note: Medicare aggregate margins for all provider categories exclude overpayments to above-cap hospices. Medicare aggregate margins are calculated based on Medicare-allowable, reimbursable costs.

Source: MedPAC analysis of Medicare hospice cost reports, Common Medicare Enrollment file, Medicare hospice claims data, and Medicare Provider of Services file from CMS.

patients. For the half of providers with the largest share of patients in assisted living, the Medicare aggregate margin was about 16 percent, compared with a margin of about 8 percent for other hospices. Some of the difference in margins among hospices with different concentrations of nursing facility and assisted living facility patients was driven by differences in their patients' diagnostic profile and length of stay. However, hospices may find caring for patients in facilities more profitable than caring for patients at home for reasons in addition to length of stay. As discussed in our June 2013 report, there may be efficiencies in treating hospice patients in a centralized location in terms of mileage costs and staff travel time, as well as having facilities serve as referral sources for new patients. Nursing facilities can also be a more efficient setting for hospices to provide care because of the overlap in

responsibilities between the hospice and the nursing facility. Analyses in our June 2013 report suggest that a reduction to the RHC payment rate for patients in nursing facilities is warranted because of this overlap (Medicare Payment Advisory Commission 2013).

Our 2019 Medicare aggregate margin estimates reflect hospices' financial performance in the fourth year of the new RHC payment structure, which began in January 2016. The move away from a single base rate for RHC to a two-tiered base rate, with additional payments for certain visits in the last seven days of life, was expected to modestly reduce the variation in profitability across hospices. In fact, the variation across providers by length of stay initially narrowed, but it has since widened to nearly the same degree of variation that existed before the payment change.²³

Projected 2022 Medicare aggregate margin

To project the 2022 Medicare aggregate margin, we model the policy changes that went into effect between 2019 (the year of our most recent margin estimates) and 2022. The policies include annual payment updates in 2020, 2021, and 2022 of 2.6 percent, 2.4 percent, and 2.0 percent, respectively. The updates for these years reflect the market basket update and a productivity adjustment. In addition, our margin projection for 2022 reflects current law regarding the sequester: suspension of the 2 percent sequester from May 2020 through March 2022, reduction of the sequester to 1 percent from April to June 2022, and reinstatement of the 2 percent sequester beginning in July 2022.

An area of uncertainty stemming from the pandemic is providers' cost growth. While hospice providers are likely to face some additional costs related to the pandemic (e.g., costs of personal protective equipment, testing, and telehealth equipment), certain regulatory flexibilities granted during the PHE (e.g., greater use of telehealth and suspension of some training and supervision requirements) may yield some offsetting cost savings. As discussed previously, cost growth in 2020 was modest for routine home care—the level of care that accounts for more than 98 percent of days—at about 1.2 percent. Based on information available at the time of publication, we do not generally anticipate long-term PHE-related effects in the hospice sector, except for increased wage rates, which are accounted for via CMS's market basket index. For our 2022 Medicare aggregate margin projection, we assume

a rate of cost growth equal to the projected growth in the market basket (which is higher than hospice cost growth in recent years and reflects the most current data available on wage growth). Taking these factors into account, for 2022, we project a Medicare aggregate margin for hospices of about 13 percent. This projection excludes nonreimbursable costs associated with bereavement services and volunteers (which, if included, would reduce the aggregate margin by at most 1.2 percentage points and 0.4 percentage point, respectively).

Policy to modify the hospice aggregate cap

In its March 2021 report to the Congress, the Commission determined that the aggregate level of hospice payments exceeded the amount necessary to provide high-quality care and that payments could be reduced in 2022. Rather than recommend an across-the-board reduction, the Commission recommended that payments in fiscal year 2022 be frozen at the fiscal year 2021 levels and that the aggregate level of payments be reduced through a policy to modify the cap.

The Commission recommended that the aggregate cap be wage adjusted and reduced by 20 percent. Because the hospice payments are wage adjusted but the aggregate cap is not, the cap is stricter in some areas of the country than in others. Wage adjusting the cap would make it equitable across all providers.²⁴ The Commission also recommended that the aggregate cap be reduced by 20 percent. This reduction would focus payment reductions on providers with disproportionately long stays and high margins, while leaving the majority of providers unaffected by the cap reduction. The Congress did not act on the Commission’s recommendation to modify the aggregate cap.

Last year, we simulated the effect of the cap recommendation using historical data (2018). We have repeated that simulation with the most recently available data (2019) to provide an updated sense of its impact. An important caveat to our cap-policy simulations is that the simulation is based on historical data and makes no projections or behavioral assumptions. Although we are not able to incorporate potential behavioral changes in our simulation, we note the possibility that some providers might respond to

TABLE 11-18 Hospice Medicare aggregate margins by providers’ share of patients residing in facilities, 2019

Hospice characteristic	Medicare margin
Share of patients in nursing facilities	
Lowest half	9.7%
Highest half	16.3
Share of patients in assisted living facilities	
Lowest half	8.4
Highest half	16.4

Note: Medicare aggregate margins for all provider categories exclude overpayments to above-cap hospices. Medicare aggregate margins are calculated based on Medicare-allowable, reimbursable costs.

Source: MedPAC analysis of Medicare hospice cost reports, Medicare hospice claims data, and Medicare Provider of Services file from CMS.

cap changes by adjusting their admissions practices to remain under the cap.

Under the Commission’s cap recommendation—that the aggregate cap be wage adjusted and lowered—we estimate that the share of hospices exceeding the cap would increase, while the majority of providers would remain under the cap. In our simulation, the estimated share of hospices exceeding the cap in 2019 would change from 19 percent (the estimated actual rate) to 33 percent (Table 11-19, p. 392).²⁵ The additional providers estimated to exceed the cap would be predominantly for profit (88 percent) and freestanding (92 percent), with a long average length of stay (243 days) and a high 2019 Medicare aggregate margin (22 percent) (data not shown). Our simulation estimates that about two-thirds of providers would be under the cap, with many of these providers being substantially below the cap (Figure 11-3, p. 393). Under the modified cap policy, if a provider’s payments as a share of the modified cap are less than 100 percent, the provider remains below the cap. Across all providers, our simulation finds that about 40 percent of hospices would be 25 percent or more below the cap under

**TABLE
11-19****Simulated share of providers exceeding the aggregate cap
in 2019 under rebasing and a policy to modify the aggregate cap**

Share of providers exceeding the cap		
	2019 actual	2019 simulated with rebasing and modified cap
All	19%	33%
Freestanding	22	39
Home health based	5	15
Hospital based	1	3
For profit	26	44
Nonprofit	2	8
Urban	22	37
Rural	4	18

Note: This analysis simulates the effect of rebasing and policy to wage adjust and reduce the cap by 20 percent using 2018 data. The simulation assumes no changes in utilization in response to the policy. Although we are not able to incorporate potential behavioral changes in our simulation, it is possible that some providers might respond to cap changes by adjusting their admissions practices to remain under the cap.

Source: MedPAC analysis of Medicare claims data for hospice providers.

this policy (i.e., payments as a share of the modified cap would be less than or equal to 75 percent). As described in our March 2020 report, a greater share of rural hospices, nonprofit hospices, and provider-based hospices would be substantially below the cap than the overall share of hospices nationally.

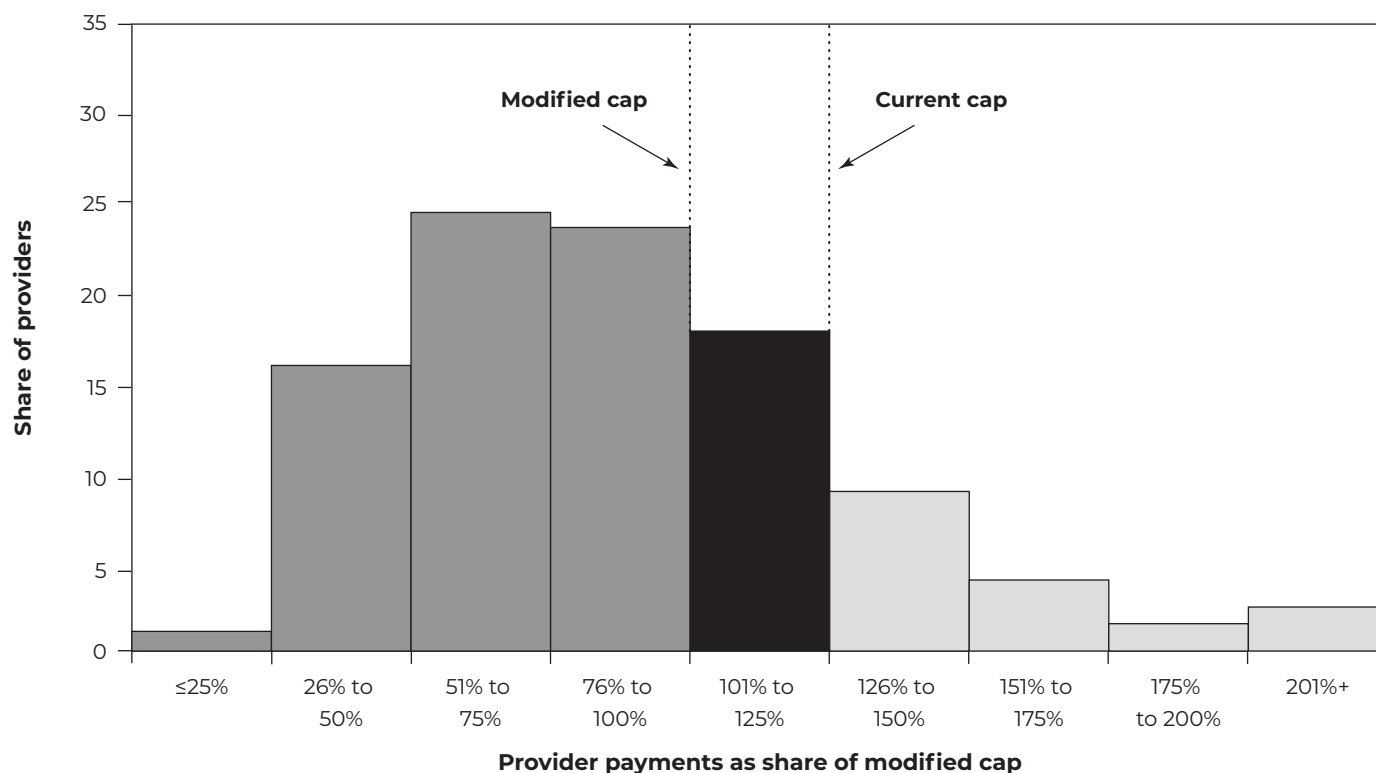
We estimate that the cap policy would have reduced aggregate Medicare program payments in 2019 by about 3.7 percent (assuming no changes in utilization). The reductions in payments would occur among a subset of providers with disproportionately long stays and high margins. For example, our simulation finds that the cap policy change would reduce payments for hospices in the top two length-of-stay quintiles (by about 7 percent in the fourth quintile and about 17 percent in the fifth (highest) quintile), while payments for other hospices would remain largely unchanged (Table 11-20, p. 394). The effects of the cap policy by category of hospice provider depend on the prevalence of providers in each category with disproportionately

long stays. Per category, for-profit and freestanding hospices are estimated to have reduced payments under the policy to modify the cap, while payments to nonprofit and hospital-based providers (the two groups with the lowest margins) would be largely unaffected.

Under the modified cap policy, we expect that beneficiaries will continue to have good access to hospice care. As discussed in our March 2020 report, the current aggregate cap is equivalent to the amount that Medicare pays for a routine home care stay of about 179 days (assuming a wage index of 1.0). Because the cap is applied in the aggregate across the provider's entire patient population (including both short and long stays) and not at the individual level, a hospice provider can provide a substantial amount of long stays and remain under the cap. For example, consider a hypothetical hospice with a wage index of 1.0 whose patients received only RHC. Under the current cap, if half of the hospice's patients each had a length of stay of 30 days, the other half could have an average length

FIGURE
11-3

Many hospices would remain substantially below the cap under a modified cap policy



Note: The figure simulates the amount that providers would have been above or below the cap in 2019 under rebasing and the policy to wage adjust and reduce the aggregate cap by 20 percent. This simulation assumes no changes in utilization in response to the policy changes. New providers that enter Medicare after the start of the cap year do not have cap overpayments calculated and are not included in this figure.

Source: MedPAC analysis of Medicare claims data for hospice providers.

of stay of up to 335 days before that provider would exceed the cap.²⁶ The length-of-stay patterns in this hypothetical example are much longer than typical for the hospice population (for patients with both short and long stays), demonstrating the extent to which hospices that exceed the current cap have outlier utilization patterns. In the hypothetical example, if the hospice cap were reduced by 20 percent, the hospice provider could have half of its patients with 30-day stays and the other half with an average stay of 257 days before the provider would exceed the reduced aggregate cap amount.

There is evidence suggesting that some hospices are inappropriately using live discharges as a way to limit

their cap liabilities. CMS and OIG should monitor this type of behavior under current policy and any changes under a policy to reduce the cap. In addition, there could be merit in considering a payment penalty for hospices with unusually high rates of live discharges. For example, live-discharge rates could be included in a compliance threshold policy, as discussed in our March 2021 report.

In aggregate, both urban and rural providers are estimated to experience reduced payments under the cap policy modification; however, these payment reductions would occur among the subset of urban and rural providers with disproportionately long stays and high margins. For example, both urban and rural

**TABLE
11-20****Simulated effect on hospice
payments of policy to
modify the aggregate cap****Percent change in Medicare
payments based on
simulation of cap policy:
Wage adjust and reduce
the cap by 20%**

All	-3.7%
Freestanding	-4.2
Home health based	-1.4
Hospital based	-0.1
For profit	-5.9
Nonprofit	-0.8
Urban	-3.6
Rural	-4.3
Share of stays > 180	
Lowest quintile	0.0
Second quintile	0.0
Third quintile	-0.1
Fourth quintile	-7.3
Highest quintile	-17.4

Note: This analysis, using 2019 data, simulates the effect of a policy to wage adjust and reduce the cap by 20 percent. The simulation assumes no changes in utilization in response to the policy.

Source: MedPAC analysis of Medicare claims and cost report data for hospice providers from CMS and an Acumen LLC data file on hospice lifetime length of stay (which is based on an analysis of historical claims data).

providers in the two highest length-of-stay quintiles had substantial Medicare aggregate margins in 2019, with payment-to-cost ratios ranging from 1.13 to 1.32; these providers would experience payment declines under the cap policy modification, as seen in Table 11-21. Table 11-21 also shows that rural providers with fewer long-stay patients and lower margins (e.g., providers in the two lowest length-of-stay quintiles) would experience a slight increase in their payments (which reflects the effects of rebasing while their payments are generally unaffected by the cap policy).

**How should Medicare payments
change in 2023?**

The indicators of payment adequacy for hospices—beneficiary access to care, quality of care, provider access to capital, and Medicare payments relative to providers' costs—are generally positive. The Commission has concluded that aggregate payments are more than sufficient to cover providers' costs and that the payment rates in 2023 should be held at their 2022 levels. In addition, the Commission has concluded that aggregate payments should be reduced by wage adjusting and reducing the hospice aggregate cap, an approach that focuses payment reductions on providers with the longest stays and high margins.

RECOMMENDATION 11-1

For fiscal year 2023, the Congress should eliminate the update to the 2022 Medicare base payment rates for hospice and wage adjust and reduce the hospice aggregate cap by 20 percent.

RATIONALE 11-1

Our indicators of access to care are generally positive, and there are signs that the aggregate level of payment for hospice care exceeds the level needed to furnish high-quality care to beneficiaries. The number of providers, number of beneficiaries enrolled in hospice, days of hospice care, and average length of stay increased in 2020. The 2019 Medicare marginal profit was about 17 percent. Given that the number of for-profit providers increased by 7 percent, access to capital appears strong. The 2019 Medicare aggregate margin was 13.4 percent, about 1 percentage point higher than in 2018. The projected 2022 Medicare aggregate margin is about 13 percent. Given the margin in the industry and our other positive payment adequacy indicators, we anticipate that the aggregate level of payments could be reduced and would still be sufficient to cover providers' costs. In light of the differential financial performance across providers, the Commission recommends keeping the payment rates unchanged in 2023 at the 2022 levels for all providers, and the Commission restates its March 2020 and March 2021 recommendations to modify the hospice aggregate cap to focus payment reductions on providers with disproportionately long stays and high margins. Our recommendation would bring aggregate

**TABLE
11-21****Simulated effect of rebasing and policy to modify the aggregate cap on 2019 payment-to-cost ratios for urban and rural hospices**

2019 payment-to-cost ratios						
	All providers		Urban		Rural	
	Actual	Simulated with rebasing and policy to wage adjust and reduce cap	Actual	Simulated with rebasing and policy to wage adjust and reduce cap	Actual	Simulated with rebasing and policy to wage adjust and reduce cap
Lowest quintile	0.98	1.00	0.98	1.01	0.92	0.93
Second quintile	1.11	1.13	1.12	1.13	1.07	1.08
Third quintile	1.25	1.23	1.25	1.24	1.21	1.19
Fourth quintile	1.30	1.20	1.30	1.19	1.31	1.22
Highest quintile	1.16	0.95	1.13	0.94	1.32	1.02

Note: This analysis, using 2019 data, simulates the effect of rebasing and policy to wage adjust and reduce the cap by 20 percent. The simulation assumes no changes in utilization in response to the policy.

Source: MedPAC analysis of Medicare claims and cost report data for hospice providers.

payments closer to costs, would lead to savings for beneficiaries and taxpayers, and would be consistent with the Commission's principle that it is incumbent on Medicare to maintain financial pressure on providers to constrain costs.

IMPLICATIONS 11-1**Spending**

- Under current law, hospices are projected to receive an update in fiscal year 2022 equal to 2.0 percent (based on a projected market basket of 2.6 percent and a projected productivity adjustment of 0.6 percent). Our recommendation would decrease federal program spending relative to the statutory update by \$250 million to \$750 million in one year and between \$5 billion and \$10 billion over five years.

Beneficiary and provider

- We do not expect this recommendation to have an adverse effect on beneficiaries' access to care. This recommendation is not expected to affect providers' willingness or ability to care for Medicare beneficiaries.

Additional hospice policy issues**Require hospices to report telehealth services on claims if providers are permitted to provide services via telehealth**

Hospice is often referred to as a "high-touch" service, and in-person visits play an important role in the care of patients and their families near the end of life. In response to the PHE, CMS modified the hospice conditions of participation to permit hospice providers to furnish services using telehealth during the PHE, under certain circumstances. Although hospices can report the costs of telehealth services on Medicare cost reports, they are unable to report telehealth use on Medicare claims (with the exception of social worker phone calls). As a result, we lack information on the extent to which beneficiaries received hospice services using telehealth during the PHE.

RECOMMENDATION 11-2

The Secretary should require that hospices report telehealth services on Medicare claims.

RATIONALE 11-2

The lack of information about hospice visits furnished via telecommunication systems makes it difficult to fully characterize the delivery of hospice services during the PHE. Although the flexibility to provide service via telecommunication systems is tied to the PHE, it is unclear how long the PHE will continue. For as long as CMS permits use of telehealth services in the hospice setting, CMS should require that hospices report data on those services via claims to permit an understanding of the role that such visits are playing in hospice care. Having such data will facilitate program oversight and monitoring. CMS could operationalize this data reporting through the use of a claims modifier (or through the use of different revenue codes, similar to how social worker phone calls have historically been reported on hospice claims). With this recommendation, the Commission is not taking a position on the merits of broader telehealth use in the hospice sector but rather opining on the need for claims reporting of telehealth visits if they are permitted.

IMPLICATIONS 11-2

Spending

- The recommendation would not change payments relative to current law.

Beneficiary and provider

- Beneficiaries' access to care would not be directly affected, but the recommendation would enhance CMS's ability to monitor access to care. Hospice providers may incur some additional administrative costs associated with including additional data on claims.

Nonhospice spending for hospice enrollees

Medicare's payments to hospices are intended to cover all services associated with the terminal condition and related conditions. For Medicare beneficiaries enrolled in the hospice benefit, Part A and Part B services unrelated to the terminal condition are covered through the regular fee-for-service (FFS) program, even for beneficiaries enrolled in Medicare Advantage (MA). Part D drugs unrelated to the terminal condition are covered through a prescription drug plan or MA prescription drug plan. CMS has stated in regulations over the years that the agency considers virtually all services at the end of life to be related to the terminal condition or related conditions, and therefore these

services should be covered under the hospice benefit rather than separately paid through FFS or Part D (Centers for Medicare & Medicaid Services 2019).

To examine historical patterns of nonhospice services and spending for hospice enrollees, we contracted with Acumen LLC to quantify nonhospice service use and spending on Part A and Part B services and Part D drugs while beneficiaries were enrolled in hospice in 2018. We excluded nonhospice spending that occurred on days that the beneficiary was admitted to hospice or was discharged alive in order to avoid counting FFS spending that may have occurred before beneficiaries enrolled or after they disenrolled. We included only days that the beneficiary was enrolled in hospice. Spending estimates do not include physician visits provided by the hospice patient's attending physician (either those employed by the hospice or independent) that are billed as related to the terminal condition.

In 2018, the Medicare program spent \$19.2 billion on the hospice benefit and \$1.1 billion, or an additional 5.6 percent, on nonhospice services for beneficiaries enrolled in hospice. Beneficiaries spent an additional \$177 million on cost sharing for nonhospice services while enrolled in hospice that year. The effect of nonhospice spending is also illustrated through average per day payment amounts. In 2018, Medicare spent an average of \$169.56 per day on the hospice benefit and an average of \$9.53 per day on nonhospice services for beneficiaries enrolled in hospice; beneficiaries spent an average of \$1.56 per day on cost sharing for nonhospice services.

Of the total \$1.3 billion in spending on nonhospice services for hospice enrollees in 2018, the largest category of spending was for Part D drugs (\$508 million), representing 40 percent of total nonhospice spending (Table 11-22). The next largest shares of spending were for physician and supplier services (\$301 million), outpatient hospital services (\$177 million), and inpatient hospital services (\$173 million). Of the roughly \$480 million in total spending on physician, supplier, and outpatient hospital services, spending was highest on evaluation and management services (\$180 million), ambulance services (\$62 million), and emergency department visits (\$49 million) (data not shown).

Among beneficiaries using hospice in 2018, almost half (47 percent) received at least one Part A or Part B service or Part D drug during their hospice stay that

**TABLE
11-22****Nonhospice spending and service use
among hospice beneficiaries, 2018**

Medicare services	Program spending and beneficiary cost sharing (in millions)	Share of spending	Share of beneficiaries with overlapping service
All	\$1,256	100%	47.4%
Any Part A or Part B	748	60	34.4
Inpatient	173	14	0.9
SNF	18	1	0.1
Home health	18	1	1.8
Outpatient	177	14	10.1
Physician and supplier	301	24	28.5
DME	61	5	6.2
Part D	508	40	31.6*

Note: SNF (skilled nursing facility), DME (durable medical equipment). Spending reflects Medicare program spending and beneficiary cost sharing for nonhospice services received while a beneficiary was enrolled in hospice. For Part D, spending includes the plan payment amount, low-income cost-sharing subsidy, and beneficiary cost sharing. Nonhospice services furnished on the first day of hospice election or the day of a live discharge are excluded. Data are not wage adjusted.

*The 31.6 percent of hospice beneficiaries with a Part D overlapping service is calculated using data for all hospice beneficiaries, including those without Part D. Among hospice beneficiaries with Part D, the percentage with an overlapping Part D prescription is about 40 percent.

Source: MedPAC analysis of Acumen LLC data.

was paid for outside the hospice benefit by Medicare FFS, a prescription drug plan, or an MA prescription drug plan. Over the course of an entire episode (which may have begun before 2018 or continued beyond 2018), about 52 percent of hospice beneficiaries received a service or drug paid for outside the hospice benefit (data not shown). While a higher proportion of FFS beneficiaries had a claim paid outside of hospice over the course of an episode compared with MA beneficiaries (54 percent vs. 49 percent, respectively), both had high shares.

Among hospice enrollees with Medicare Part D in 2018, about 40 percent of beneficiaries received a Part D-covered prescription while enrolled in hospice. The categories of drugs that accounted for the most 2018 Part D spending among hospice enrollees were antidiabetics (\$74 million), psychotherapeutic and neurological agents (\$47 million), antiasthmatic and bronchodilator agents (\$44 million), and anticoagulants

(\$43 million).²⁷ Part D spending while in hospice was higher for hospice beneficiaries who were under age 65, dually eligible for Medicare and Medicaid, resided in long-term care facilities, and those who were discharged alive or revoked their hospice election than for other beneficiaries.

While hospice enrollees were likely using many of these Part D-covered drugs before their hospice admission, if the drugs were used to treat the terminal condition or related conditions before the hospice admission, the hospice provider has coverage responsibility for the drugs once the beneficiary elects hospice.²⁸ However, an OIG audit of a sample of hospice claims from 2016 suggested that a substantial portion of Part D spending for beneficiaries enrolled in hospice should have been paid by hospices or beneficiaries rather than by Part D. Based on review of a sample of 200 claims, OIG concluded that out of the \$422.7 million of Part D spending for hospice enrollees in 2016, hospice

**TABLE
11-23**

**Nonhospice spending
varies across hospice providers**

Provider percentile of nonhospice spending (for providers with more than 30 patients)	Average total spending per day on nonhospice services
10th	\$4.04
25th	5.98
50th	8.81
75th	13.06
90th	19.50

Note: Analysis includes providers with more than 30 Medicare patients in 2018. Spending reflects Medicare program spending and beneficiary cost sharing for nonhospice services received while a beneficiary was enrolled in hospice, including Part A, Part B, and Part D services. For Part D, spending includes the plan payment amount, low-income cost-sharing subsidy, and beneficiary cost sharing. Nonhospice services furnished on the first day of hospice election or the day of a live discharge are excluded. Data are not wage adjusted.

Source: MedPAC analysis of data from Acumen LLC.

providers should have paid for at least \$160.8 million of drugs reimbursed by Part D and likely should have paid for many of the drugs accounted for by the remaining \$261.9 million of Part D spending on hospice enrollees that year (Office of Inspector General 2019).²⁹

Although it is difficult to quantify without more detailed clinical data, it is likely that a sizable portion of Part A and Part B services paid for outside the hospice benefit are also related to the beneficiaries' terminal condition and related conditions. To get an initial sense, we compared the hospice primary diagnosis to the primary diagnosis on claims for nonhospice services. Since nonhospice services could be related to the terminal condition and related conditions, even if the primary diagnoses on the hospice and nonhospice claims are different, our approach likely substantially understates the share of nonhospice services that are related to the terminal condition.³⁰ Despite this significant limitation, we found evidence of overlap. For example, among beneficiaries with a hospice primary diagnosis of a heart or circulatory condition who had an inpatient hospital admission paid by Medicare FFS while on hospice, about 27 percent of those hospital

stays had a primary diagnosis of a heart or circulatory condition. In addition, 21 percent of physician or hospital outpatient claims for those beneficiaries had a primary diagnosis of a heart or circulatory condition.

A recent OIG audit of FFS claims for durable medical equipment, prosthetics, orthotics, and supplies (DMEPOS) furnished to hospice enrollees between January 2015 and April 2019 found evidence of inappropriate payments for these services (Office of Inspector General 2021b). Based on a sample of claims, OIG estimated that \$117 million out of \$186 million in Medicare payments to DMEPOS providers were inappropriate because the services were for palliation or management of the hospice enrollee's terminal condition or related conditions. OIG identified several factors that contributed to inappropriate payments, including (1) the DMEPOS supplier was unaware of the beneficiary's hospice status, (2) the DMEPOS claims processing contractor's system edits that should have prevented the improper payments were not effective or did not exist, and (3) some DMEPOS suppliers inappropriately appended a modifier to the claim (the GW modifier) indicating the service was unrelated to the hospice enrollee's terminal condition or related conditions, when the service was actually related.³¹

Our analysis found that the amount of nonhospice spending for hospice enrollees varies across hospice providers. In 2018, among providers with more than 30 patients that year, median nonhospice spending per day was \$8.81. For the top 25 percent of providers, nonhospice spending was \$13.06 or more per day; for the top 10 percent of providers, nonhospice spending was \$19.50 or more per day (Table 11-23). For-profit, freestanding, and urban hospices were more likely to be in the top 25 percent of providers (in terms of nonhospice spending) compared with their counterparts (Table 11-24). In addition, hospices that exceeded the aggregate cap, had a long average length of stay, or had a high live-discharge rate were also more likely to have high nonhospice spending (Table 11-24).

CMS has recently taken administrative action to address concerns about nonhospice spending for hospice enrollees. Beginning in October 2020, hospices are required to include in the beneficiary's hospice election statement specific information about the scope of the hospice benefit, the waiver of some

services when a beneficiary elects hospice, and the potential that, in rare circumstances, services may not be covered by the hospice provider because they are unrelated to the terminal condition and related conditions. Hospices are also required to notify beneficiaries that they have the right to request an addendum that includes a list of services the hospice considers unrelated and outside the scope of hospice for a particular patient. It is too soon to know what effect, if any, these administrative requirements will have on the amount of nonhospice spending that occurs for beneficiaries enrolled in hospice.

Payment by Medicare FFS or Medicare Part D for services that should be covered under the hospice benefit represents duplicate payment. Auditing is one tool the Medicare program can use to address potential duplicate payment. The new addendum about noncovered services that CMS is requiring hospices to supply to beneficiaries if requested could facilitate auditing type efforts. However, auditing is time consuming and may have limited scope. Other approaches could be considered to reduce the potential for duplicate payment.

For beneficiaries enrolled in MA, carving hospice into the MA benefit, as the Commission recommended in 2014, could help create greater accountability for nonhospice spending. Under an MA carve-in, plans would have financial responsibility for all care received by their members who elect hospice and would be better positioned to manage and coordinate the issue of related and unrelated services through their contractual arrangements with providers. Currently, as part of the CMS Innovation Center's value-based insurance design models, a small number of MA plans are providing hospice services for their enrollees.

For FFS beneficiaries, several approaches could be considered to improve provider incentives regarding nonhospice spending for hospice enrollees. For example, FFS Medicare could bundle into the hospice benefit all services a beneficiary would need, regardless of whether they are related to the terminal condition and related conditions. A fully bundled approach would have the benefit of simplicity in that there would be no need to distinguish between related and unrelated services. It would require hospices to take on more financial risk, and as a result, it might increase incentives for some providers to encourage patients to disenroll from hospice as a way to shift costs to FFS

**TABLE
11-24**

Characteristics of hospice providers with high nonhospice spending, 2018

Provider characteristics	Share of providers in the top 25 percent of nonhospice spending
All	25%
Freestanding	28
Home health based	14
Hospital based	10
For profit	30
Nonprofit	13
Urban	26
Rural	21
Above cap	39
Top 25% for mean episode length of stay	35
Top 25% for live-discharge rate	45

Note: Analysis includes providers with more than 30 Medicare patients in 2018.

Source: MedPAC analysis of data from Acumen LLC.

if a beneficiary incurs an expensive service. A live-discharge penalty could potentially be paired with a bundled policy as one way to address concerns about live discharges under a bundled approach.

Alternatively, hospice providers with nonhospice spending above a specified threshold could be subject to a penalty that would reduce their hospice payments by a certain amount. A penalty policy would place some financial risk on providers, but less risk than a bundled policy. Nonetheless, a penalty could give providers an incentive to ensure that they effectively educate families and beneficiaries about the scope of services available from hospice and who the family should call in an emergency. It could also give hospices an incentive to coordinate with providers that previously

provided services to the beneficiary to ensure that they do not bill Medicare for additional services once the beneficiary has enrolled in hospice.

Hospice industry stakeholders point out that operational and systems issues may contribute to nonhospice spending for hospice enrollees. For example, industry groups have stated that hospice providers may not know that a beneficiary is receiving care from a nonhospice provider and contend that hospices need more information on nonhospice services that are billed by nonhospice providers for their hospice patients. Although under the hospice conditions of participation, hospice providers are responsible for communicating and coordinating with nonhospice providers, there may be opportunities to enhance the information hospice providers have on

how nonhospice spending for their patients compares to that of other hospice providers.³² For example, in 2021, as part of CMS's Program for Payment Patterns Electronic Reporting initiative, hospice providers began receiving an annual report of the number of Part D paid prescriptions per episode for their patients compared with that of other hospices. Data on Part A and Part B nonhospice spending are not included in this report, but such information could be informative. Industry groups also point to data lags that exist when a beneficiary elects hospice but that status is not yet reflected in data systems as another issue that could result in nonhospice claims being paid. Operational and systems issues like these could be taken into account when designing policies to address nonhospice spending for hospice enrollees. ■

Endnotes

- 1 If a beneficiary does not have an attending physician, they can initially elect hospice based on the certification of the hospice physician alone.
- 2 When first established under TEFRA, the Medicare hospice benefit limited coverage to 210 days of hospice care. The Medicare Catastrophic Coverage Repeal Act of 1989 and the Balanced Budget Act of 1997 eased this limit. Benefit periods are now two 90-day periods, followed by 60-day periods.
- 3 Some studies have found large cost savings due to hospice, while others have found little or no savings overall. A contractor report sponsored by the Commission examined the difference in the methodologies used in the literature (Direct Research 2015). The report found that large hospice cost savings found by some studies are likely an artifact of the methodology used rather than a reflection of the effect of hospice on Medicare spending. In particular, the report reviewed the methodology used by six studies. Four studies that looked at a fixed time period prior to death (e.g., last year or half-year) showed small costs or small savings for hospice users, depending on time period and population studied. By contrast, two studies that looked only at the period of hospice enrollment (and compared it to a “pseudo”-enrollment period created for nonhospice decedents) showed very large (e.g., 24 percent) cost savings for hospice decedents. Because the date of enrollment/pseudo-enrollment will influence the calculated savings or costs, the report suggests that issues with the assignment of a pseudo-enrollment date to nonhospice enrollees make this methodology biased to find savings.
- 4 The aggregate cap increased annually by the rate of growth in the consumer price index for all urban consumers for medical care through 2016. In accord with the Improving Medicare Post-Acute Care Transformation Act of 2014 and the Consolidated Appropriations Act, 2021, the aggregate cap is updated annually by the same factor as the hospice payment rates (market basket net of productivity and other adjustments) from 2017 through 2030.
- 5 The 2022 cap year is aligned with the federal fiscal year (October 1, 2021, to September 30, 2022). Payments for the cap year reflect the sum of payments to a provider for services furnished in that year.
- 6 The beneficiary count starts with the number of beneficiaries treated by the hospice in the cap year. If a beneficiary receives care from more than one hospice, in more than one cap year, or both, that beneficiary is generally represented as a fraction in the beneficiary count of the cap calculation. In general, the fraction is calculated based on a proportional methodology and reflects the number of days of hospice care in a cap year that the beneficiary received from that hospice as a share of all days of hospice care received by that beneficiary from all hospices in all years. Because the fraction a beneficiary represents in a prior year’s cap calculation can change going forward as that beneficiary continues to receive hospice care in subsequent cap years, CMS claims processing contractors can revisit the cap calculation for up to three years to update the beneficiary count and collect additional overpayments. Some hospices have elected an alternative methodology for handling the beneficiary count when a patient receives care in more than one cap year—called the streamlined methodology. For a detailed description of the two methodologies for the beneficiary count and when they are applicable, see our March 2012 report (Medicare Payment Advisory Commission 2012).
- 7 When the CMS claims processing contractor calculates cap overpayments for the most recent cap year, the contractor can also reopen the cap calculation for a hospice provider for up to three prior years to adjust the prior years’ beneficiary count to more accurately take into account beneficiaries who continued to receive hospice beyond the end of that cap year (as described in more detail in note 6).
- 8 Type of hospice reflects the type of cost report filed (a hospice files a freestanding hospice cost report or is included in the cost report of a hospital, home health agency, or skilled nursing facility). The type of cost report does not necessarily reflect where patients receive care. For example, all hospice types may serve some nursing facility patients.
- 9 One driver of increased hospice use over the past decades has been growing use by patients with noncancer diagnoses, owing to increased recognition that hospice can care for such patients. Beneficiaries with any diagnosis where the life expectancy is six months or less are eligible to receive hospice services under Medicare. In 2020, 76 percent of Medicare beneficiaries who used hospice had a noncancer diagnosis, a slight increase from 75 percent in 2019 and up from 48 percent in 2000.
- 10 Throughout this chapter, we use the term “FFS Medicare” or “traditional Medicare” as equivalents for the CMS term “Original Medicare.” Collectively, we distinguish the payment model represented by these terms from other models such as Medicare Advantage or advanced alternative payment models that may use FFS mechanisms but are designed to create different financial incentives.

- 11 In March 2020, to limit COVID-19 exposure and spread among nursing facility residents, CMS issued guidance restricting nursing facility visitations by all visitors and nonessential health care personnel, except for certain compassionate care situations, such as an end-of-life situation (Centers for Medicare & Medicaid Services 2020a). Although CMS's guidance permitted nursing facility visits by outside hospice staff, hospice industry groups reported that some facilities limited access to outside hospice staff. Over time, CMS provided additional guidance to states and facilities about phased reopening and expanded visitation (Centers for Medicare & Medicaid Services 2020c). In November 2021, CMS issued guidance that visits are allowed for all residents at all times (Centers for Medicare & Medicaid Services 2021c).
- 12 In 2020, growth in the number of beneficiaries receiving hospice care (6.6 percent) exceeded growth in the total number of hospice days furnished (4.9 percent). As a result, average hospice days furnished per patient in 2020 was slightly lower than in 2019. However, at the subgroup level, average days per patient increased between 2019 and 2020 for both (1) hospice patients who died during the year and (2) hospice patients who remained alive throughout the year. Despite increases in average days per patient among both of these subgroups in 2020, aggregate days per patient decreased because of a shift in the mix of patients. In 2020, decedents, who receive fewer days of hospice care than nondecedent hospice patients, made up a greater share of hospice patients in 2020 than 2019. The greater share of hospice patients dying in 2020 than in 2019 is likely related to the pandemic and increased mortality rates among beneficiaries in 2020.
- 13 Underlying the increase in average hospice lifetime length of stay for beneficiaries who died in 2020 are divergent trends for beneficiaries depending on when they first received hospice services. Among decedents who first received hospice services prior to the calendar year of their death, hospice lifetime length of stay increased substantially to about 335 days for decedents in 2020 compared to about 321 days for decedents in 2019. About one-third of the increase in hospice lifetime length of stay for this group of decedents occurred in the calendar year of death (an average increase of about 4 days) and two-thirds occurred prior to the calendar year of death (an average increase of about 10 days). In contrast, between 2019 and 2020, among decedents who first received hospice in the calendar year of death, hospice lifetime length of stay declined slightly from 30.3 days to 29.6 days. Roughly 77 percent of decedents in both 2019 and 2020 first received hospice services in the calendar year of death, while 23 percent first received hospice prior to the calendar year of death.
- 14 Overall, the distribution of diagnoses among Medicare hospice decedents shifted modestly in 2020. Beneficiaries with neurological conditions and “other” conditions (a category that includes COVID-19) made up a slightly greater share of hospice decedents in 2020 than 2019, while beneficiaries with terminal diagnoses of cancer, heart and circulatory conditions, and COPD accounted for a slightly smaller share of hospice decedents in 2020 than the prior year. This shift in the diagnosis mix of hospice decedents largely reflects the substantial increase in the number of hospice decedents with neurological conditions and “other” conditions between 2019 and 2020.
- 15 The term *curative care* is often used interchangeably with *conventional care* to describe treatments intended to be disease modifying.
- 16 To be eligible for the MCCM, a beneficiary had to meet the following criteria: had Medicare FFS Part A and Part B as primary insurance for the prior 12 months; had prognosis of life expectancy of 6 months or less; had diagnosis of cancer, congestive heart failure, COPD, or HIV/AIDS; had at least 1 hospital encounter and at least 3 office visits in the last 12 months; had not elected hospice in the last 30 days; lived in a traditional home continuously for the last 30 days; and resided within the service area of the participating hospice. Enrollment in the MCCM was concentrated among hospice providers. Through September 2019, of the 89 participating hospices, 9 providers accounted for about 54 percent of enrollment (Harris et al. 2020).
- 17 The estimates of hospices over the cap are based on the Commission's analysis. While the estimates are intended to approximate those of the CMS claims processing contractors, differences in available data and methodology have the potential to lead to different estimates. An additional difference between our estimates and those of the CMS contractors relates to the alternative cap methodology that CMS established in the hospice final rule for 2012 (Centers for Medicare & Medicaid Services 2011). Based on that regulation, for cap years before 2012, hospices that challenged the cap methodology in court or made an administrative appeal had their cap payments calculated from the challenged year going forward using a new, alternative methodology. For cap years from 2012 onward, all hospices have their cap liability calculated using the alternative methodology unless they elect to remain with the original method. For estimation purposes, we assume that the CMS contractors used the alternative methodology for cap year 2012 onward. Estimates for cap years 2011 and earlier assumed that the original cap methodology was used.

- 18 To calculate marginal profit, we approximate marginal cost as total Medicare costs minus fixed building and equipment costs. With this approach, marginal profit is calculated as follows:
- $$\text{Marginal profit} = (\text{payments for Medicare services} - (\text{total Medicare costs} - \text{fixed building and equipment costs})) / \text{Medicare payments}.$$
- This comparison is a lower bound on the marginal profit because we do not consider any potential labor costs that are fixed.
- 19 Our analysis focuses on the broadest measure of live discharges, including live discharges initiated by the hospice (because the beneficiary is no longer terminally ill or because the beneficiary is discharged for cause) and live discharges initiated by the beneficiary (because the beneficiary revokes their hospice enrollment, transfers hospice providers, or moves out of the area). Some stakeholders argue that live discharges initiated by the beneficiary are outside the hospice's control and should not be included in a live-discharge measure. Because beneficiaries may choose to revoke hospice for a variety of reasons, which in some cases are related to the hospice provider's business practices or quality of care, we include revocations in our analysis. A CMS contractor, Abt Associates, found that rates of live discharge—due to beneficiary revocations and discharges because beneficiaries are no longer terminally ill—increase as hospice providers approach or surpass the aggregate cap (Plotzke et al. 2015). The contractor report suggested this pattern could reflect hospice-encouraged revocations or inappropriate live discharges and merit further investigation.
- 20 The aggregate Medicare margin is calculated as follows: $((\text{sum of total Medicare payments to all providers}) - (\text{sum of total Medicare costs of all providers})) / (\text{sum of total Medicare payments to all providers})$. Estimates of total Medicare costs come from providers' cost reports. Estimates of Medicare payments and cap overpayments are based on Medicare claims data.
- 21 Hospices that exceed the Medicare aggregate cap are required to repay the excess to Medicare. We do not consider the overpayments to be part of hospice revenues in our margin calculation.
- 22 The statute requires Medicare hospice providers to use some volunteers in the provision of hospice care. Costs associated with recruiting and training volunteers are generally included in our margin calculations because they are reported in reimbursable cost centers. The only volunteer costs that would be excluded from our margins are those associated with the nonreimbursable volunteer cost center.
- 23 When providers are grouped based on the share of their patients' stays exceeding 180 days, in 2015 (the year before the payment changes) the spread in margins between the lowest length-of-stay quintile (–8.9 percent) and the second highest length-of-stay quintile (20.4 percent) was over 29 percentage points. By 2017, the difference in margins across those length-of-stay quintiles had narrowed to 22 percentage points (as shown in our March 2020 report). However, by 2019, the difference in margins across those quintiles increased to about 26 percentage points.
- 24 As discussed in our March 2020 report, the hospice cap could be wage adjusted in the following manner: For each provider, Medicare could calculate the provider's wage index ratio and adjust the aggregate cap accordingly. $\text{Wage index ratio} = \text{provider's actual payments in cap year} / \text{amount that provider's payments would have been without wage adjustment}$. $\text{Wage-adjusted cap for a particular provider} = \text{national cap} \times \text{wage index ratio for the provider}$. The cap calculation would otherwise work the same as it does today. If the provider's payments in the cap year exceeded the wage-adjusted cap multiplied by the number of beneficiaries served, the provider would repay the excess to the government.
- 25 These estimates are based on constant 2019 utilization data. Although we are not able to incorporate potential behavioral changes in our simulation, it is possible that some providers might respond to cap changes by adjusting their admissions practices to remain under the cap.
- 26 This hypothetical example involves a hospice that provided only RHC to its patients. The aggregate cap equates to a smaller number of days for the other, more intense, higher-paid levels of care. However, the three other levels of care are typically furnished only for a short period, so the general principle that providers have room within the cap to furnish very long stays to some patients without exceeding the cap applies to providers that furnish the three higher-intensity levels of care as well. In addition, this example involves beneficiaries who receive hospice care entirely within a cap year. When beneficiaries receive hospice care across multiple cap years, methodologies exist to apportion the hospice cap amount for the beneficiary across cap years. In that situation, the average length of stay that results in a hospice exceeding the cap varies and depends on several factors, such as how many beneficiaries receive care entirely within the cap year versus multiple cap years and what share of a beneficiary's hospice days occur in only the cap year versus within other cap years.

- 27 The majority of Part D spending for hospice enrollees occurs after the first month of hospice. Our analysis of Part D spending for hospice beneficiaries who enrolled in and were discharged from hospice in 2017 or 2018 found that 65 percent of Part D spending that occurred during these beneficiaries' hospice episodes occurred after the first 30 days of hospice.
- 28 In some situations, a hospice provider may determine that a medicine a beneficiary utilized prior to enrolling in hospice is no longer clinically appropriate for the patient (i.e., not reasonable and necessary for palliation of the terminal condition and related conditions). In that situation, if the beneficiary wished to remain on the medicine, the beneficiary would be liable for its cost rather than the hospice.
- 29 For the sample of claims that OIG reviewed, OIG asked each hospice if in retrospect they should have paid for the Part D claims. The \$160.8 million estimate is based on the proportion of claims that hospice providers acknowledged they should have paid for, extrapolated to the total Part D spending for hospice enrollees.
- 30 For example, a beneficiary receiving treatment for a pressure ulcer or urinary tract infection would likely have a different diagnosis on the claim for treatment of those conditions than their hospice primary diagnosis.
- 31 One of the systems issues OIG identified was that the DMEPOS claims processing contractors were not automatically denying DMEPOS claims for hospice enrollees submitted without a GW modifier. For hospice enrollees, providers of Part B services are required to append the GW modifier to a claim when the service is unrelated to the terminal condition and related conditions and therefore eligible for FFS payment. If the service is related to the terminal condition or related conditions, the GW modifier should not be appended to the claim and the claim should be denied. In response to the OIG report, CMS issued manual guidance to the DMEPOS contractors to deny all DMEPOS claims for hospice enrollees without a GW modifier. In addition to this issue, OIG recommended other steps by the DMEPOS claims processing contractors to reduce inappropriate DMEPOS payments, including postpayment review to address claims that may have been paid very early in a hospice stay before the CMS data systems were updated to reflect the beneficiary's hospice status; pre- or postpayment review of claims submitted with the GW modifier to confirm the services were unrelated to the hospice beneficiary's terminal illness; and education of DMEPOS suppliers that use the GW modifier inappropriately (Office of Inspector General 2021b).
- 32 The hospice conditions of participation include requirements that hospice providers communicate and coordinate with nonhospice providers. The hospice conditions of participation Section 418.56(e) require that "the hospice must develop and maintain a system of communication and integration, in accordance with the hospice's own policies and procedures, to . . . provide for an ongoing sharing of information with other non-hospice healthcare providers furnishing services unrelated to the terminal illness and related conditions." CMS has stated that "given the comprehensive nature of the Medicare hospice benefit and the CoPs regarding the pivotal role hospices are required to play in care coordination, we believe hospices are primarily responsible for communication and care coordination with non-hospice providers while a beneficiary is under a hospice election" (Centers for Medicare & Medicaid Services 2019).

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CHAPTER 12

The Medicare Advantage program: Status report and mandated report on dual- eligible special needs plans

The Medicare Advantage program: Status report and mandated report on dual-eligible special needs plans

Chapter summary

Each year, the Commission provides a status report on the Medicare Advantage (MA) program. In 2021, the MA program included 4,778 plan options offered by 186 organizations, enrolled nearly 27 million beneficiaries (46 percent of Medicare beneficiaries with both Part A and Part B coverage), and paid MA plans an estimated \$350 billion (not including Part D drug plan payments). To monitor program performance, we examine MA enrollment trends, plan availability for the coming year, and payments for MA plan enrollees relative to spending for fee-for-service (FFS) Medicare beneficiaries. We also provide updates on risk adjustment, risk coding practices, and the current state of quality reporting in MA.

The MA program gives Medicare beneficiaries the option of receiving benefits from private plans rather than from the traditional FFS Medicare program. The Commission strongly supports the inclusion of private plans in the Medicare program; beneficiaries should be able to choose among Medicare coverage options, including the traditional FFS Medicare program and the alternative delivery systems that private plans provide. Because Medicare pays private plans a predetermined rate—risk adjusted per enrollee—rather than a per service rate, plans have greater incentives

In this chapter

- Increasingly robust MA enrollment, plan availability, and rebates financed by higher payments relative to FFS spending
- Risk adjustment: Coding intensity inflates payments to MA plans
- Quality in MA is difficult to evaluate
- Mandated report: Comparing the performance of D-SNPs and other plans that serve dual-eligible beneficiaries

than FFS providers to innovate and use care management techniques to deliver more efficient care.

For the past two years, the coronavirus public health emergency has had a significant and tragic impact on beneficiaries. Policymakers have been concerned that the disruption in service utilization and plan administrative activities could impact payments in unexpected ways. However, because Medicare payments to MA plans are established before the start of each calendar year based on prior years' data, overall plan revenues in 2020 remained at prepandemic levels while service use declined, resulting in increased profitability for most MA plans. Although utilization remained below prepandemic levels and most publicly traded insurers reported profitability in 2021, some plans are concerned that lower utilization in 2020 limited their ability to document diagnoses, resulting in smaller risk adjustments and lower plan revenues in 2021. The effect of risk adjustments on 2021 revenues is not yet known and likely varies across the industry. In 2022, Medicare payments to MA plans are increased because of the expectation that deferred care will raise utilization above prepandemic levels. We do not anticipate that the pandemic will have a deleterious impact on overall plan revenues.

Many indicators point to an increasingly robust MA program, including growth in enrollment, increased plan offerings, and, for the sixth straight year, a historically high level of extra benefits financed by payments to plans through rebates. In 2022, the average Medicare beneficiary has a choice of 36 plans, and the average MA plan enrollee has access to nearly \$2,000 in extra benefits annually that Medicare FFS enrollees cannot access without purchasing additional health insurance coverage. Medicare payments for MA extra benefits have increased by 53 percent since 2019. In this way, payments to MA plans have increasingly been used to provide an indirect subsidy to offer expanded benefits for MA enrollees. Medicare spending for these extra benefits (plus plan administrative fees and profit) accounts for 15 percent of payments to MA plans, yet we have no data about their use nor information about their value. From 2018 to 2021, the share of eligible Medicare beneficiaries enrolled in MA rose by 3 percentage points per year, from 37 percent to 46 percent. If the trend continues, a majority of eligible Medicare beneficiaries will be enrolled in MA by 2023.

MA plans continue to capitalize on their administrative flexibility and reduce their relative growth in health care costs year over year. For 2022, the average plan bid to provide Medicare Part A and Part B benefits was 15 percent less

than FFS Medicare would spend for those enrollees, and nearly all plan bids are below the cost of FFS Medicare.

However, these efficiencies are shared exclusively by the companies sponsoring MA plans and MA enrollees, in the form of extra benefits. The taxpayers and FFS Medicare beneficiaries who help fund the MA program (nearly all Medicare beneficiaries with Part B coverage pay a Part B premium, although for some that payment is made by a state Medicaid agency) do not realize any savings from MA plan efficiencies. Instead, Medicare spends 4 percent more for MA enrollees than it would spend if those enrollees remained in FFS Medicare. The MA program has been expected to reduce Medicare spending since its inception—under the original incorporation of private plans in Medicare in 1985, payments to private plans were set at 95 percent of FFS payments—but private plans in the aggregate have never produced savings for Medicare, due to policies governing payment rates to MA plans that the Commission has found to be deeply flawed.

In particular, coding intensity inflates payments to MA plans and undermines the goal of plans competing to improve quality and reduce health care costs; the quality bonus program boosts plan payments for nearly all enrollees but does not meaningfully reflect plan quality, from the perspective of enrollees or the Medicare program; and MA benchmarks are set at an abundantly high level such that the government subsidizes MA plans' substantial and ever-higher levels of extra benefits for MA enrollees. Apart from payments, the Commission finds that the plan-submitted data about beneficiaries' health care encounters are incomplete, preventing policymakers from understanding plan efficiencies or implementing program oversight. These policy flaws diminish the integrity of the program and generate waste from beneficiary premiums and taxpayer funds. A major overhaul of MA policies is therefore urgently needed.

Over the past few years, the Commission has made recommendations to address coding intensity, improve the completeness of encounter data, replace the quality bonus program, and establish more equitable benchmarks. The Commission remains committed to including private plans in the Medicare program and allowing beneficiaries to choose among Medicare coverage options, including the alternative delivery systems that private plans can provide. Beneficiaries clearly find Medicare Advantage to be an attractive option through which to receive their Medicare benefits, as evidenced by robust trends in year-over-year enrollment growth. However, this does not

mean that Medicare should continue to overpay MA plans; in fact, under current policies, as MA enrollment continues to grow, it will further worsen Medicare's fiscal sustainability. It is imperative that the Congress and the Secretary make policy improvements. To encourage efficiency and innovation, MA plans need to face appropriate financial pressure similar to what the Commission recommends for providers in the traditional FFS program.

Enrollment—For the third consecutive year, enrollment in MA plans grew by 10 percent. Between July 2020 and July 2021, MA enrollment grew by 2.5 million enrollees—to 26.9 million enrollees. In 2021, about 46 percent of MA-eligible beneficiaries (i.e., Medicare beneficiaries with both Part A and Part B coverage) were enrolled in MA plans, up from 43 percent in 2020. Among plan types, health maintenance organizations (HMOs) continued to enroll the most beneficiaries (16 million, or 60 percent of MA enrollees and 28 percent of MA-eligible beneficiaries). Compared with 2020, enrollment in local preferred provider organizations (PPOs) grew by 19 percent, regional PPO enrollment fell by 19 percent, and private fee-for-service enrollment dropped by 29 percent. Special needs plan enrollment grew by 17 percent, and employer group enrollment grew by 6 percent.

Plan availability—In 2022, access to MA plans remains high, with 99 percent of Medicare beneficiaries having access to at least one plan. Almost all eligible beneficiaries have had access to some MA plan type since 2006, and HMOs and local PPOs have become more widely available in the past few years. Nearly all MA-eligible beneficiaries (99 percent) have an HMO or local PPO plan operating in their county of residence. Regional PPOs are available to 74 percent of beneficiaries. The average beneficiary has 36 available plans sponsored by 8 different parent organizations, both of which are increases relative to 2021.

Plan rebates—In 2022, rebates that are used to provide additional benefits to enrollees are at a historic high of \$164 per enrollee per month. The average total rebates are 17 percent higher than in 2020 (\$24 higher per enrollee per month). Plans can devote the rebate (including plans' allocation of administrative costs and profit) to lower cost sharing, lower premiums, or supplemental benefits. In 2022, 43 percent of projected plan rebates were allocated for lower cost sharing, down from 46 percent in 2021.

Plan payments—In 2022, plan payments remain higher than FFS spending levels. Total Medicare payments to MA plans (including rebates that finance extra benefits) average an estimated 104 percent of FFS spending, similar

to the percentage of FFS spending in 2021. The 2022 estimate incorporates about 3.6 percentage points of uncorrected coding intensity. Relative to FFS spending for Part A and Part B benefits, quality bonuses in MA account for 3 percentage points of MA payments. Using plan bid data for 2022, and ignoring the impact of coding intensity, we estimate that MA payments are 100 percent of FFS spending. In addition, MA benchmarks—the maximum amount Medicare will pay an MA plan to provide Part A and Part B benefits—continue to be well above FFS spending levels. In 2022, MA benchmarks averaged an estimated 108 percent of FFS spending (including quality bonuses), about the same level as in 2021. Bids fell to 85 percent of FFS, a record low.

Risk adjustment and coding intensity—Medicare payments to MA plans are enrollee specific, based on a plan’s payment rate and an enrollee’s risk score. Risk scores account for differences in expected medical expenditures and are based in part on diagnoses that providers code. Most claims in FFS Medicare are paid using procedure codes, which offer little incentive for providers to record more diagnosis codes than necessary to justify providing a service. In contrast, MA plans have a financial incentive to ensure that their providers record all possible diagnoses: Each diagnosis documented raises an enrollee’s risk score, and enrollees’ higher risk scores result in higher payments to the plan.

A Commission analysis of 2020 data shows that higher diagnosis coding intensity resulted in MA risk scores that were about 9.5 percent higher than scores for similar FFS beneficiaries. By law, CMS makes an across-the-board reduction to MA risk scores to make them more consistent with FFS coding, and although CMS has the authority to impose a larger reduction than the minimum required by law, the agency has never done so. In 2020, the adjustment reduced MA risk scores by 5.9 percent, resulting in MA risk scores that were about 3.6 percent higher than they would have been if MA enrollees had been treated in FFS Medicare, translating to \$12 billion in excess payments to MA plans. We continue to find that coding intensity varies significantly across MA plans and that increasing diagnostic coding allows some plans to offer more extra benefits, thereby attracting more enrollees and undermining the goal of plans competing on the basis of quality and costs.

The Commission previously recommended changes to MA risk adjustment that exclude diagnoses collected from health risk assessments (which rely on unverified enrollee-reported data), use two years of diagnostic data, and apply an adjustment to eliminate any residual impact of coding intensity. These changes were intended to improve equity across plans and eliminate the

impact of differences between MA and FFS coding intensity. Recent reports from the Office of Inspector General highlight the impact of MA plans' use of medical chart reviews (a coding practice that does not exist in FFS Medicare) and of health risk assessments to increase risk scores. We find that nearly two-thirds of MA coding intensity could be due to chart reviews and health risk assessments, and that these two mechanisms are a primary factor driving coding differences among MA plans.

Quality in MA—The current state of quality reporting in MA is such that the Commission can no longer provide an accurate description of the quality of care in MA. With 46 percent of eligible Medicare beneficiaries enrolled in MA plans, good information on the quality of care that MA enrollees receive and how that quality compares with quality in FFS Medicare is necessary for beneficiaries and policymakers to compare MA and FFS quality and to compare quality among MA plans. In its June 2020 report, the Commission, recognizing that the current quality program is not achieving its intended purposes and is costly to Medicare, recommended a new value incentive program for MA that would replace the current quality bonus program.

Mandated report: Comparing the performance of D-SNPs and other plans that serve dual-eligible beneficiaries

Dual-eligible special needs plans (D-SNPs) are specialized MA plans that limit their enrollment to beneficiaries who receive both Medicare and Medicaid. The Bipartisan Budget Act (BBA) of 2018 permanently authorized D-SNPs and, starting in 2021, requires them to meet new standards for integrating the delivery of Medicare and Medicaid services. The BBA of 2018 mandated that the Commission periodically compare the performance of different types of D-SNPs and other plans that serve dual-eligible beneficiaries. This chapter includes our first report under the mandate, which we are required to submit to the Congress by March 15, 2022. We find that the performance data that MA plans report as part of the Healthcare Effectiveness Data and Information Set[®] provide limited insight on the relative performance of D-SNPs.¹ This finding is consistent with previous Commission analyses that have examined the difficulties of assessing the quality and performance of MA plans. ■

Background

The Medicare Advantage (MA) program allows Medicare beneficiaries enrolled in both Part A and Part B to receive benefits from private plans rather than from the traditional fee-for-service (FFS) program. In 2021, the MA program included 4,778 plan options offered by 186 organizations, enrolled nearly 27 million beneficiaries (46 percent of Medicare beneficiaries with Part A and Part B coverage), and paid MA plans an estimated \$350 billion (not including Part D drug plan payments). The Commission strongly supports including private plans in the Medicare program because they allow beneficiaries to choose between FFS Medicare and the alternative delivery systems that private plans can provide. Unlike traditional FFS Medicare, MA plans typically have flexibility in payment methods, including the ability to negotiate with individual providers, use care-management techniques that fill potential gaps in care delivery (e.g., programs focused on preventing avoidable hospital readmissions), and develop robust information systems that provide timely feedback to providers. In addition to a mandatory out-of-pocket spending limit, plans can provide incentives for beneficiaries to seek care from more efficient providers, offer integrated Part D benefits, and give beneficiaries more predictable cost sharing; one trade-off is that the choice of providers in plan networks is more limited than in FFS Medicare.

By contrast, traditional FFS Medicare has lower administrative costs and offers beneficiaries an unconstrained choice of health care providers, but it often lacks incentives to coordinate care and is limited in its ability to make care delivery more efficient.² Because private plans and traditional FFS Medicare have structural aspects that appeal to different segments of the Medicare population, we favor providing a choice between private MA plans and traditional FFS Medicare that does not unduly favor one program component over the other.

Each year, the Commission provides a status report on the MA program. To monitor program performance, we examine MA enrollment trends, plan availability for the coming year, and payments for MA plan enrollees relative to spending for FFS Medicare beneficiaries. We

also provide updates on risk adjustment, risk coding practices, and the current state of quality in MA.

For the past two years, the coronavirus public health emergency has had a significant and tragic impact on beneficiaries. Policymakers have been concerned that the disruption in service utilization and plan administrative activities could impact payments in unexpected ways. Because Medicare payments to MA plans are established before the start of each calendar year based on prior years' data, overall plan revenues in 2020 remained at prepandemic levels while service use declined, resulting in increased profitability for most MA plans. Although utilization remained below prepandemic levels and most publicly traded insurers reported profitability in 2021, plans are concerned that lower utilization in 2020 limited their ability to document diagnoses, resulting in smaller risk adjustments and lower plan revenues in 2021. The effect of risk adjustments on 2021 revenues likely varies across the industry. In 2022, Medicare payments to MA plans are increased because of the expectation that deferred care would raise utilization above prepandemic levels. We do not anticipate that the pandemic will have a deleterious impact on overall plan revenues. (See the text box about the effect of the coronavirus pandemic on our 2022 estimates, p. 416.)

Many indicators point to an increasingly robust MA program, including growth in enrollment, increased plan offerings, and, for the sixth straight year, a historically high level of extra benefits. The average Medicare beneficiary has a choice of 36 plans, and the average MA plan enrollee has access to nearly \$2,000 in extra benefits annually that Medicare FFS enrollees cannot access without purchasing additional coverage. Medicare spending for these extra benefits accounts for 15 percent of payments to MA plans, but we have no data about their use nor information about their value. From 2018 to 2021, the share of eligible Medicare beneficiaries enrolled in MA rose by 3 percentage points per year, from 37 percent to 46 percent. If the trend continues, a majority of eligible Medicare beneficiaries will be enrolled in MA by 2023.

For 2022, the average plan is expected to provide the Medicare Part A and Part B benefits for 15 percent less than FFS Medicare would spend for those enrollees, and nearly all plans are expected to provide Medicare benefits for less than the cost of FFS Medicare. MA

The impact of the coronavirus pandemic on 2022 benchmarks, bids, and payments relative to FFS spending

Since early 2020, the ongoing coronavirus pandemic and associated public health emergency have had tragic effects on beneficiaries. They have also affected providers' patient volume and costs. Overall utilization of health care services dropped sharply beginning in March 2020 but by summer had returned to near-normal levels for many types of services. Despite the pandemic's varied impact on utilization by type of service and geographic region, aggregate utilization was reduced through 2020 due to delaying or forgoing elective treatments and was only partially offset by use of health care services related to treatment of COVID-19. For Medicare Advantage (MA) plans and other payers of medical services, the pandemic temporarily lowered overall medical expenditures. In financial reports, public MA insurers reported medical expenses as a share of revenue (or medical loss ratios) at or near record lows during the second quarter of 2020 (April through June). Meanwhile, because Medicare payments to MA plans are established before the start of each calendar year based on prior years' data, plan revenues in 2020 remained at normal levels, resulting in higher profitability for many plans during the pandemic (McDermott et al. 2020).

Preliminary Medicare fee-for-service (FFS) data indicate that in 2021, utilization in many sectors returned much closer to prepandemic levels but was still below what would have likely been assumed when 2021 MA payment rates were prospectively set (using data through 2019). However, plans are concerned that lower utilization in 2020 limited plans' ability to document diagnoses, resulting in smaller risk adjustments and lower plan revenues in 2021. The effect of risk adjustments on 2021 revenues

likely varies across the industry. Insurers are also concerned about delayed care rebounding as the pandemic ebbs, boosting future medical expenses above normal levels; that scenario had not been borne out in the aggregate as of December 2021. In addition, beginning in 2021, MA plans are no longer subject to the Affordable Care Act of 2010 (ACA) insurer fee, which was equivalent to 1.4 percent of plan revenues in 2020. The repeal of the ACA insurer fee combined with preliminary FFS utilization data suggest that most MA plans could maintain their prepandemic profitability in 2021.

We do not anticipate the pandemic having a substantial impact on MA payments in 2022. In our analysis, we use CMS's estimate of 2022 FFS spending, which uses data through 2020 as the basis for 2022 MA benchmarks, bids, and payments. This estimate also represents the FFS spending levels that were increased by the Office of the Actuary to account for the expectation that deferred care due to the pandemic would increase FFS spending in 2022. These higher FFS spending estimates are the basis for 2022 MA plan bids submitted in June 2021. We do not yet know the full effect of the pandemic on beneficiary spending in 2022 and on 2022 risk scores based on service use in 2021. However, the record level of plan rebates in 2022 and the wider availability of zero-premium plans indicate that plans anticipate continued ability to offer bids far below payment benchmarks. We also note that MA coding intensity raised 2020 MA risk scores and payments by about 3.6 percentage points and continues to raise MA risk scores and payments each year. We will continue to monitor the impact of the coronavirus pandemic on plan availability and MA payments. ■

plans continue to capitalize on their administrative flexibility and reduce health care costs year over year.

However, these efficiencies are shared exclusively by the companies sponsoring MA plans and MA enrollees, in the form of extra benefits. In a time of increasing

financial stress for Medicare and its beneficiaries, the taxpayers and beneficiaries who fund the MA program (all Medicare beneficiaries pay a Part B premium) do not realize any savings from MA plan efficiencies. Instead, Medicare spends 4 percent more on MA than it would spend on FFS Medicare, a program with

spending levels that are already inflated by the volume-inducing incentives of FFS reimbursement, Medigap's effect of insulating beneficiaries from the financial impact of their service utilization, and inappropriate spending owing to fraud and waste. The MA program has been expected to reduce Medicare spending since its inception: Under the original incorporation of private plans in Medicare in 1985, payments to private plans were set at 95 percent of FFS payments. However, private plans in the aggregate have never reduced Medicare spending.

MA payments do not align with the level of plan efficiencies. In some parts of the country, payments to MA plans are low enough to produce savings for the Medicare program but high enough, given plan efficiencies, to allow plans to offer a relatively high level of extra benefits to plan enrollees residing in those areas. In other parts of the country, payments to MA plans are far more than what Medicare would pay if enrollees remained in FFS and result in greater subsidies for MA plans to offer more extra benefits. These inconsistencies, along with the misalignment of MA payment with plan efficiencies, demonstrate that the policies governing payment rates to MA plans are deeply flawed.

In particular, the Commission has found that (1) coding intensity inflates payments to MA plans and undermines the goal of plans competing to improve quality and reduce health care costs; (2) the quality bonus program boosts plan payments for nearly all enrollees but does not provide beneficiaries with the necessary information to evaluate local quality; and (3) plan benchmarks are set so high that the Medicare program (rather than plans) subsidizes extra benefits for MA enrollees. Apart from payment policies, the Commission finds that plan-submitted data about beneficiaries' health care encounters are incomplete. If these data were complete and accurate, they could be used to understand MA plan efficiencies, improve quality measurement, and provide oversight of the MA program. These policy flaws diminish the integrity of the program and generate waste from beneficiary premiums and taxpayer funds. The rapid growth of MA enrollment and spending elevates the urgency and need for a major overhaul of MA policies.

Over the past few years, the Commission has developed four recommendations, incorporating and updating

prior recommendations where appropriate, that would eliminate or reduce the effects of the most significant current policy flaws in the MA program. Table 12-1 (p. 418) summarizes the Commission's standing recommendations to (1) account for continued coding differences between MA and FFS and address those differences in a complete and equitable way (Medicare Payment Advisory Commission 2016); (2) ensure the completeness and accuracy of encounter data to improve the MA payment system, serve as a source of quality data, and facilitate comparisons with FFS Medicare (Medicare Payment Advisory Commission 2019a); (3) replace the quality bonus program with a market-based, plan-financed reward program (Medicare Payment Advisory Commission 2020a); and (4) establish more equitable MA benchmarks for the Medicare program (Medicare Payment Advisory Commission 2021b). Through reforms to the MA payment system, the Commission aims to better focus the program on the beneficiaries it serves and to harness plan efficiency to improve Medicare's long-term financial sustainability.

The Commission remains committed to including private plans in the Medicare program and allowing beneficiaries to choose among Medicare coverage options, including the alternative delivery systems that private plans can provide. Beneficiaries clearly find MA an attractive option through which to receive their Medicare benefits, as evidenced by robust trends in year-over-year enrollment growth. However, the potential appeal of MA does not mean that Medicare should continue to overpay MA plans; in fact, as MA enrollment continues to grow, it will further worsen Medicare's fiscal sustainability. It is imperative that the Congress and the Secretary make policy improvements. A decade ago, the Affordable Care Act of 2010 (ACA) enacted payment reforms that reduced MA program payments, causing some concern about whether MA would continue to grow and attract Medicare beneficiaries. However, those reforms did not have the negative effect that some had predicted. Instead, MA enrollment has grown and per capita costs in relation to FFS spending have fallen across the country. To encourage efficiency and innovation, MA plans need to face appropriate financial pressure similar to what the Commission recommends for providers in the traditional FFS program.

**TABLE
12-1**

Commission recommendations for changes to MA payment policy that have not been implemented and the approximate impact on MA payments

Recommendation	Approximate impact on MA payments
<p>Fully account for MA coding intensity—<i>March 2016</i></p> <p>The Congress should direct the Secretary to develop a risk-adjustment model that uses two years of FFS and MA diagnostic data and does not include diagnoses from health risk assessments from either FFS or MA, and then apply a coding adjustment that fully accounts for the remaining differences in coding between FFS Medicare and MA plans.</p>	-2%
<p>Improve encounter data accuracy and completeness—<i>June 2019</i></p> <p>The Congress should direct the Secretary to establish thresholds for the completeness and accuracy of MA encounter data and rigorously evaluate MA organizations' submitted data and provide robust feedback; concurrently apply a payment withhold and provide refunds to MA organizations that meet thresholds; and institute a mechanism for direct submission of provider claims to Medicare administrative contractors as a voluntary option for all MA organizations that prefer this method starting in 2024, for MA organizations that fail to meet thresholds, or for all MA organizations if program-wide thresholds are not achieved.</p>	0
<p>Replace the quality bonus program—<i>June 2020*</i></p> <p>The Congress should replace the current MA quality bonus program with a new MA value incentive program that scores a small set of population-based measures, evaluates quality at the local market level, uses a peer-grouping mechanism to account for differences in enrollees' social risk factors, establishes a system for distributing rewards with no "cliff" effects, and distributes plan-financed rewards and penalties at a local market level.</p>	-2
<p>Establish benchmarks that align with MA efficiencies—<i>June 2021**</i></p> <p>The Congress should replace the current MA benchmark policy with a new MA benchmark policy that applies a relatively equal blend of per capita local area FFS spending with price-standardized per capita national FFS spending; a rebate of at least 75 percent; a discount rate of at least 2 percent; and the Commission's prior MA benchmark recommendations—using geographic markets as payment areas, using the FFS population with both Part A and Part B in benchmarks, and eliminating the current pre-Affordable Care Act cap on benchmarks.</p>	-2

Note: MA (Medicare Advantage), FFS (fee-for-service). The approximate impact on MA payments was estimated at the time of the recommendation and may be subject to behavioral responses.

*The June 2020 quality recommendation incorporates the Commission's prior recommendations eliminating the doubling of the quality increases in specified counties (recommended in March 2016) and establishing a geographic basis for MA quality reporting that reflects health care market areas (June 2005, March 2010, and March 2018).

**The June 2021 benchmark recommendation incorporates the Commission's prior recommendations eliminating the cap on benchmark amounts implemented by the Affordable Care Act of 2010 (recommended in March 2016), basing benchmarks on FFS spending data only for beneficiaries with both Part A and Part B (recommended in March 2017), and establishing a geographic basis for MA payments that reflects health care market areas (recommended in June 2005, March 2010, and March 2018).

Source: Medicare Payment Advisory Commission 2021b, 2020a, 2019a, 2016.

Types of MA plans

Our analysis of the MA program uses the most recent data available and reports results by plan type. The analysis does not cover non-MA private plan options that may be available to some beneficiaries, such as cost plans. The MA plan types are:

- **HMOs and local preferred provider organizations (PPOs)**—These plans have provider networks and, if they choose, can use tools such as selective contracting and utilization management to coordinate and manage care and control service use. They can choose individual counties to serve

and can vary their premiums and benefits across counties. These two plan types are classified as coordinated care plans (CCPs).

- **Regional PPOs**—These plans are required to offer a uniform benefit package and premium across CMS-designated regions made up of one or more states. Regional PPOs have more flexible provider network requirements than local PPOs. Regional PPOs are also classified as CCPs.
- **Private FFS (PFFS) plans**—These plans may or may not use provider networks, depending on where they operate. The Medicare Improvements for Patients and Providers Act of 2008 mandated that, in areas with two or more network MA plans, PFFS plans have provider networks. Therefore, PFFS plans have to either locate in areas with fewer than two network plans or operate as network-based PFFS plans. The Congress anticipated that the legislation would reduce the availability of and enrollment in these plans that did not manage care as efficiently as their HMO and PPO competitors. In 2021, only about 57,000 beneficiaries were enrolled in PFFS plans.
- **Medicare Savings Account (MSA) plans**—MSA plans are a combination of a high-deductible plan and a medical savings account. The plan is paid the full MA benchmark and places a deposit into the member's account that the member can use to help meet the plan deductible on Medicare services. In 2021, MSAs were available in 30 states with a total enrollment of about 10,000 beneficiaries. However, we do not include MSA plans in our analyses because their enrollment has been limited, beneficiaries dually eligible for Medicare and Medicaid are not eligible to enroll in MSA plans, and these plans do not bid on their enrollees' expected costs.

Two additional plan classifications cut across plan types: special needs plans (SNPs) and employer group plans. SNPs offer benefit packages tailored to specific populations (those beneficiaries who are dually eligible for Medicare and Medicaid, are institutionalized, or have certain chronic conditions). SNPs must be CCPs. Employer group plans are available only to Medicare beneficiaries who are members of employer or union groups that contract with those plans. SNPs are

included in our plan data, with the exception of plan availability figures because these plans are not available to all beneficiaries. (See the Commission's March 2013 report to the Congress, available at <http://www.medpac.gov>, for more detailed information on SNPs.) As we recommended in an earlier report, employer plans no longer submit bids (since 2017). Therefore, they are not included in our access analyses. In contrast to prior years, we estimate payments for employer group plans and include them in our overall comparison of MA payments relative to FFS spending. (See the Commission's March 2015 report to the Congress for more detailed information on employer plans.)

How Medicare pays MA plans

In contrast to traditional FFS Medicare's fixed rates per service paid to providers, Medicare pays MA plans a fixed rate for each enrolled beneficiary. Plan payment rates are determined by the MA plan bid—which is intended to represent the dollar amount that the plan estimates will cover the Part A and Part B benefit package for a beneficiary of average health status—and the benchmark for the county in which the beneficiary resides, which is the maximum amount of Medicare payment set by law for an MA plan to provide Part A and Part B benefits.³ (Medicare also pays plans for providing the Part D drug benefit, but Medicare's Part D payments are determined through the Part D bidding process, and not all plans include the Part D benefit.) Plans with higher quality ratings are rewarded with a higher benchmark. If a plan's normalized bid is above the normalized benchmark (that is, a benchmark for a person of average risk), the plan's MA base payment rate is set at the benchmark and enrollees have to pay a premium (in addition to the usual Part B premium) equal to the difference. If a plan's bid is below the benchmark, its payment rate is its bid plus a share (as low as 50 percent but typically either 65 percent or 70 percent, depending on a plan's quality ratings) of the difference between the plan's bid and the benchmark. For this computation, the comparison is between an individual plan's actual bid for its expected enrolled population and a plan-specific risk-adjusted average benchmark, weighted by the plan's projected enrollment from counties in its service area. The beneficiary pays no additional premium to the plan for Part A and Part B benefits (but continues to be responsible for paying the Medicare

**TABLE
12-2****MA plan enrollment continued rapid growth in 2021**

	MA enrollment (in millions)		Percent change in enrollment	2021 MA enrollment as a share of total Medicare
	July 2020	July 2021		
Total	24.4	26.9	10%	46%
Plan type				
CCP	24.3	26.8	10	46
HMO	15.0	16.2	8	28
Local PPO	8.1	9.7	19	17
Regional PPO	1.1	0.9	-19	2
PFFS	0.1	0.1	-29	<1
Restricted availability plans included in totals above				
SNPs*	3.5	4.1	17	7
Employer group*	4.7	5.0	6	9
Urban/rural				Share of Medicare population in MA
Urban	21.2	23.2	9	48
Rural	3.2	3.7	16	36

Note: MA (Medicare Advantage), CCP (coordinated care plan), HMO (health maintenance organization), PPO (preferred provider organization), PFFS (private fee-for-service), SNP (special needs plan). CCPs include HMO, local PPO, and regional PPO plans. Unlike prior years, the total Medicare population used to calculate enrollment shares in this table excludes the 9 percent of beneficiaries who are not eligible to enroll in an MA plan because they do not have both Part A and Part B coverage. Urban/rural designations have been updated from prior years and use the core-based statistical area codes delineated by the Office of Management and Budget (OMB) in 2020. Urban areas are those designated as metropolitan by OMB. Rural areas include counties designated as micropolitan and counties that are neither metropolitan nor micropolitan. The sum of column components may not equal the stated total due to rounding.

*SNPs and employer group plans have restricted availability. Their enrollment is included in the statistics by plan type and location. We present them separately to provide a more complete picture of the MA program.

Source: MedPAC analysis of CMS enrollment files.

Part B premium and may pay premiums to the plan for additional benefits). The added payment based on the difference between the bid and the benchmark is referred to as the rebate. Plans must use the rebate to provide additional benefits to enrollees in the form of lower cost sharing, lower premiums, or supplemental benefits. Plans can also devote some of the rebate to administration costs and margins. Plans may also choose to include additional supplemental benefits that are not financed by the rebate in their benefit packages

and charge premiums to cover those additional benefits.⁴ (A more detailed description of the MA program payment system can be found in our Payment Basics series at <https://www.medpac.gov/document-type/payment-basic/>.)

How Medicare calculates MA benchmarks

Under the ACA, each county's benchmark, excluding quality bonuses, equals a certain share (ranging from 95 percent to 115 percent, subject to caps)

of the projected average per capita FFS Medicare spending for the county's beneficiaries.⁵ Each county's benchmark is determined by organizing the counties into quartiles based on their FFS spending. Each quartile contains 785 or 786 counties. Low-FFS-spending counties have benchmarks higher than their county's FFS spending level to help attract plans, and high-FFS-spending counties have benchmarks lower than FFS to generate Medicare savings, given the history of very low bids in such counties that reflect high FFS service use. Counties (excluding the territories) are assigned to quartiles based on average FFS spending; the highest spending quartile of counties has benchmarks set at 95 percent of local FFS spending. The next highest spending quartile of counties has benchmarks set at 100 percent of FFS spending, followed by the third-highest quartile set at 107.5 percent of FFS spending. The lowest spending quartile has benchmarks set at 115 percent of local FFS spending. (U.S. territories are treated like counties in this low-spending quartile.) Counties can move among quartiles from year to year and in doing so receive a blended quartile factor; for example, a county moving from the 100 percent quartile in 2021 to the 107.5 percent quartile in 2022 would have a blended rate of 103.75 percent.

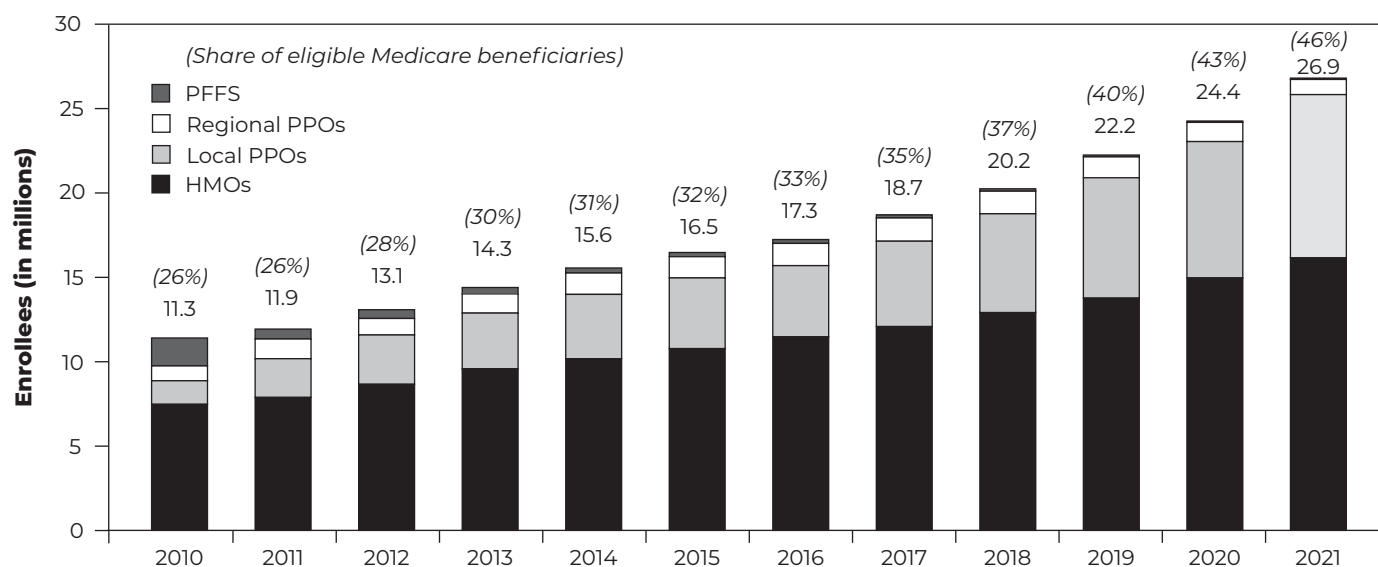
By statute, plans awarded quality bonuses have benchmarks that are 5 percent higher than the standard county benchmarks (subject to benchmark growth caps); in certain counties, plans can receive a double bonus, and the benchmarks for plans awarded quality bonuses are 10 percent higher than the standard benchmarks.⁶ Unlike nearly all of Medicare's FFS quality incentive programs, these quality bonuses are not budget neutral but are instead financed by added program dollars. The Commission's original conception of a quality incentive program for MA plans was a system that would be budget neutral and financed with a small share of plan payments (Medicare Payment Advisory Commission 2012b, Medicare Payment Advisory Commission 2004). A budget-neutral system is consistent with the Commission's principle of providing a level playing field between private MA plans and traditional FFS Medicare and reflects the Commission's recommendation to the Congress in June 2020 (Medicare Payment Advisory Commission 2020a, Medicare Payment Advisory Commission 2019a).

Increasingly robust MA enrollment, plan availability, and rebates financed by higher payments relative to FFS spending

Substantial growth in MA plan enrollment, availability, and rebates indicates an increasingly robust MA program, financed by MA payments that continue to be above FFS levels. In 2021, for the third consecutive year, MA plan enrollment grew by 10 percent; 46 percent of eligible Medicare beneficiaries are now in MA plans, compared with 43 percent in 2020. The increasing share of MA enrollees in some geographic areas raises questions about the long-term feasibility of using the local FFS population to calculate MA payment benchmarks. For 2022, the average beneficiary now has access to 36 plans sponsored by 8 organizations, and rebates that finance extra benefits are the highest in the program's history. At the same time, however, the robust growth and availability of MA plans has occurred without overall savings to the Medicare program. In 2022, MA bids average 85 percent of FFS spending, but payment benchmarks average 108 percent of FFS—resulting in MA payments that are 100 percent of FFS and an estimated 104 percent of FFS spending after accounting for differences in coding practices between MA and FFS.⁷

In 2021, 10 percent growth in MA plan enrollment; MA enrollment now 46 percent of eligible Medicare beneficiaries

Between July 2020 and July 2021, enrollment in MA plans grew by 10 percent—or 2.5 million enrollees—to 26.9 million enrollees (compared with a 2 percent growth in the same period for the total eligible Medicare population (“eligible” meaning beneficiaries with both Part A and Part B coverage) and about a 4 percent decline in eligible FFS enrollment). The 10 percent growth is among the highest in the last 10 years, equaling growth in 2012, 2019, and 2020. During this period, MA enrollment rose from 43 percent (data not shown) to 46 percent of eligible Medicare beneficiaries (Table 12-2).⁸ Enrollment in MA has more than doubled since 2010 (Figure 12-1, p. 422).⁹ MA has increasingly become attractive to beneficiaries because of MA plans' coverage of cost-sharing reductions at little to no premium and a mandatory cap on out-of-pocket expenses. Many beneficiaries with average

**FIGURE
12-1****Enrollment in Medicare Advantage has more than doubled over the last 10 years**

Note: PFFS (private fee-for-service), PPO (preferred provider organization), HMO (health maintenance organization). Beneficiaries must have both Part A and Part B coverage to be eligible for enrollment in a Medicare Advantage plan; therefore, beneficiaries who have Part A only or Part B only are not included in this figure.

Source: MedPAC analysis of CMS enrollment files, July 2011–2021.

care needs that are met within plan networks will likely have lower financial liability (premiums and cost sharing) compared with beneficiaries who stay in FFS and purchase the most comprehensive supplemental coverage.¹⁰ In addition, while some MA enrollees with high care needs may experience greater cost liabilities compared with beneficiaries in FFS, most of these MA enrollees would likely have difficulty switching to FFS coverage because they may be denied a Medigap policy due to a preexisting condition.^{11,12}

Among plan types, although enrollment grew more slowly in HMOs (8 percent) than in local PPOs (19 percent), HMOs continued to enroll the most beneficiaries (16 million) in 2021, with 28 percent of eligible Medicare beneficiaries in HMOs (Table 12-2, p. 420). Between 2020 and 2021, enrollment in regional PPOs and PFFS plans dropped by 19 percent and 29 percent, respectively. In 2021, SNP enrollment grew by 17 percent, and employer group enrollment grew by 6 percent.

Enrollment patterns differ in urban and rural areas. Over 48 percent of eligible urban beneficiaries are enrolled in MA compared with 36 percent of eligible beneficiaries residing in rural counties (Table 12-2, p. 420). In 2021, 39 percent of rural MA enrollees were in HMO plans compared with about 63 percent of urban enrollees (data not shown). By contrast, 51 percent of rural enrollees were in local PPOs compared with 35 percent of urban enrollees.

In many areas of the country, a majority of eligible Medicare beneficiaries are now enrolled in MA.¹³ In 15 states (including California, New York, Florida, Michigan, and Pennsylvania) and Puerto Rico, more than half of the eligible population is enrolled in an MA plan in 2021. In some metropolitan areas (e.g., Miami, FL; Pittsburgh, PA; Rochester, NY; Grand Rapids, MI; Portland, OR; El Paso, TX; New Orleans, LA), more than two-thirds of eligible Medicare beneficiaries enrolled in MA plans. MA benchmarks are computed at the county level, and an increasing number of counties had most Medicare

beneficiaries enrolled in MA plans. In all counties in Puerto Rico and an additional 621 counties across 36 states, more than half of eligible Medicare beneficiaries enrolled in MA plans. The increasing share of MA enrollees in some geographic areas raises questions about the long-term feasibility of using the local FFS population to calculate MA payment benchmarks. As the share of FFS beneficiaries in these counties decreases, benchmarks can become biased if the FFS population is not representative of Medicare beneficiaries overall. When this disparity arises, the risk-adjustment model is less likely to capture differences between the local FFS and MA populations. For example, in some counties, a disproportionate number of a county's FFS beneficiaries have comprehensive supplemental coverage, which is unavailable in MA and induces higher demand for service use. In addition, a larger share of beneficiaries remaining in FFS may rely on care from volume-inducing providers who are outside of most MA plan networks.¹⁴

Access to MA plans remains high in 2022

Every year, we assess plan availability and projected enrollment for the coming year based on the bid data that plans submit to CMS. We find that access to MA plans remains high in 2022, with most Medicare beneficiaries having access to many plans. Some measures of availability have improved for 2022. While almost all beneficiaries have had access to some type of MA plan since 2006, local CCPs have become more widely available in the past few years (Table 12-3, p. 424). In 2022, 99 percent of Medicare beneficiaries have an HMO or local PPO plan (both are considered local CCPs) operating in their county of residence, nearly the same as in 2021. Regional PPOs are available to 74 percent of eligible beneficiaries, similar to 2021. PFFS plans are available to 35 percent of beneficiaries, nearly the same as in 2021.

The availability of SNPs improved across types of special needs populations served (Table 12-3, p. 424). In 2022, 94 percent of beneficiaries reside in areas where SNPs serve beneficiaries who are dually eligible for Medicare and Medicaid (up from 92 percent in 2021), 59 percent live where SNPs serve beneficiaries with chronic conditions (up from 57 percent in 2021), and 74 percent live where SNPs serve institutionalized beneficiaries (up from 72 percent in 2021). Overall, 98 percent of beneficiaries reside in counties served by at least one type of SNP (data not shown).

In 2022, 98 percent of eligible Medicare beneficiaries (compared with 96 percent in 2021) have access to at least one nonemployer, non-SNP MA plan that includes Part D drug coverage and charges no Part C or Part D premium (beyond the Medicare Part B premium) (Table 12-3, p. 424). About 69 percent of nonemployer, non-SNP MA enrollment is projected to be in these zero-premium plans (data not shown). Also in 2022, 97 percent of beneficiaries (compared with 89 percent in 2021) have access to plans that offer some reduction in the Part B premium, but only 7 percent of 2022 enrollment was projected to be in these premium-reduction plans (data not shown). Given the increasing number of plan choices, beneficiaries may find it difficult to discern differences in plan benefit packages and make an optimal choice.

In most counties, many MA plans sponsored by a robust number of organizations are available to beneficiaries. In 2022, the average number of plans available in a county increased. On average, in 2022, 22 plans (vs. 18 plans in 2021) are available in each county (Table 12-3, p. 424). Plan availability can also be calculated by weighting the number of a county's eligible beneficiaries to give a sense of the number of plan choices available to the average beneficiary. Under that calculation, the average beneficiary in 2022 has 36 available plans, an increase from 32 plans in 2021, and can choose from plans sponsored by 8 organizations (organization data not shown); 96 percent of beneficiaries have available MA plans sponsored by at least three different organizations.¹⁵ Beneficiaries in 126 counties can choose from at least 20 plans offered by at least 10 distinct organizations. These counties include the major markets of Atlanta, Chicago, Cincinnati, Cleveland, Dallas, Houston, Los Angeles, Miami, New York City, and Phoenix. At the other end of the spectrum, 152 counties, representing 1 percent of beneficiaries, have no MA plans available (medical savings account plans and SNPs are not included in general availability measures); however, some of these beneficiaries have the option of joining cost plans (another managed care option under Medicare).¹⁶

Largest organizations slightly increase MA market share

In 2021, the national MA market continued to grow slightly more concentrated. The top 2 organizations

**TABLE
12-3****Access to Medicare Advantage plans remains high****Share of Medicare beneficiaries with access to at least one MA plan, by type**

Type of plan	2018	2019	2020	2021	2022
Any MA plan	99%	99%	99%	99%	99%
Local CCP	96	97	98	98	99
Regional PPO	74	74	73	72	74
PFFS	41	38	36	34	35
Special needs plans					
Dual eligible	86	89	90	92	94
Chronic condition	47	47	52	57	59
Institutional	56	63	67	72	74
Zero-premium plan with drug coverage	84	90	93	96	98
Average number of choices					
County weighted	10	13	15	18	22
Beneficiary weighted	20	23	27	32	36
Average monthly rebate for nonemployer, non-SNP plans	\$95	\$107	\$122	\$140	\$164

Note: MA (Medicare Advantage), CCP (coordinated care plan), PPO (preferred provider organization), PFFS (private fee-for-service), SNP (special needs plan). "Local CCPs" includes HMO and local PPO plans. These figures exclude employer-only plans. Special needs plans are included in the three special needs plan rows but excluded from all other rows. For 2018 through 2021, "share of Medicare beneficiaries" includes beneficiaries who do not have both Part A and Part B coverage (i.e., includes all Medicare beneficiaries). For 2022, the share of Medicare beneficiaries only includes beneficiaries with both Part A and Part B coverage (i.e., includes MA-eligible beneficiaries). A "zero-premium plan with drug coverage" includes Part D coverage and has no premium beyond the Part B premium (including the Part D premium). "County weighted" means that each county is weighted the same and the measure is the average number of choices per county. "Beneficiary weighted" means that each county is weighted by the number of beneficiaries in the county. The plan rebate is the per beneficiary per month amount that the plan is offering as premium-free extra benefits and excludes plans that do not offer Part D coverage.

Source: MedPAC analysis of CMS bid and enrollment data.

had 46 percent of enrollment (Table 12-4) (vs. 45 percent in 2020; data not shown), and the top 10 organizations had 79 percent of enrollment (vs. 78 percent in 2020; data not shown). Market concentration differed between urban areas (23.2 million MA enrollees) and rural areas (3.7 million enrollees). In urban areas, the top two organizations had 44 percent of the MA enrollees residing in these areas (Table 12-4) (vs. 43 percent in 2020; 2020 data not shown). In rural areas, the top two organizations accounted for 54 percent of the MA enrollees residing in these areas (unchanged from 2020; 2020 data not shown).

Another way of looking at the MA program's market structure is to examine market competition at the county level. Excluding employer plans and SNPs, in 2021, 66 percent of MA enrollees (down from 69 percent in 2020) resided in a highly concentrated county as measured by the Herfindahl-Hirschman Index.¹⁷ In 2021, enrollment in the top organization in each county accounted for 44 percent of all MA enrollment (down from 45 percent in 2020). Enrollment in the top two organizations in each county accounted for 68 percent of all MA enrollment (down from 69 percent in 2020). Thus, although the MA market is

**TABLE
12-4****Share of Medicare Advantage enrollment by parent organization, July 2021**

Urban areas		Rural areas	
Parent organization	Share of total MA enrollment in urban counties	Parent organization	Share of total MA enrollment in rural counties
UnitedHealth Group Inc.	27%	UnitedHealth Group Inc.	28%
Humana Inc.	17	Humana Inc.	26
CVS Health Corporation	11	CVS Health Corporation	10
Kaiser Foundation Health Plan Inc.	8	Anthem Inc.	6
Anthem Inc.	6	Centene Corporation	4
Centene Corporation	4	Blue Cross Blue Shield of Michigan	4
CIGNA	2	Spectrum Health System	2
Blue Cross Blue Shield of Michigan	2	BlueCross BlueShield of Tennessee	1
Summit Master Company LLC	1	Highmark Health	1
Highmark Health	1	CIGNA	1
Total, top 10 organizations	79	Total, top 10 organizations	84

Note: MA (Medicare Advantage). Includes only Medicare Advantage plans (coordinated care, private fee-for-service, and medical savings account plans). Excluded are cost-reimbursed plans and Medicare-Medicaid demonstration plans. Urban/rural designations use the 2020 delineations by the Office of Management and Budget (OMB). Urban areas are those designated as metropolitan by OMB. Rural areas include counties designated as micropolitan and counties that are neither metropolitan nor micropolitan. Totals may not sum due to rounding.

Source: MedPAC analysis of CMS July 2021 enrollment data and OMB 2020 delineations.

highly concentrated, the level of concentration is not increasing locally. In tandem, national MA market concentration modestly rose, but local MA market concentration modestly fell, suggesting that the largest national plans continue to gain MA market share in areas where they do not have a large presence. Nevertheless, as illustrated in the section entitled “Access to MA plans remains high in 2022” (p. 423), the average beneficiary has access to many MA plans offered by a robust number of organizations.

MA rebates in 2022 are a record high \$164 per enrollee per month

We assess plan rebates based on projected rebate allocations included in plans’ bids, but we have no data about enrollees’ actual use of extra benefits. For 2022, rebates for MA plans (excluding employer plans and SNPs) average \$164 per enrollee per month (nearly

\$2,000 annually per enrollee) and are the highest in the program’s history (accounting for 15 percent of plan payment). The average total rebates are 17 percent higher than in 2021 (\$24 higher per enrollee per month) (Table 12-5, p. 426). MA rebates have increased by 53 percent since 2019. Plans can devote the rebate (which includes plan allocations for administrative costs and profit) to lower cost sharing, lower premiums, or supplemental benefits. In 2022, the share of plan rebates allocated toward cost-sharing reductions is projected to fall. Plans project that \$70 per enrollee per month in rebates (43 percent of rebate dollars) goes toward reductions in cost sharing for Medicare services, 10 percent higher relative to 2021 but a drop in the share of rebate dollars (46 percent in 2021).^{18,19} The growth rate of cost-sharing reductions is above but relatively similar to CMS’s projected growth rate of all Part A and Part B expenditures (8.5 percent; data not

**TABLE
12-5****A smaller share of plan rebates is allocated to cost sharing in 2022**

	Rebate (per member per month)		2022 percent change	Share of total rebate	
	2021	2022		2021	2022
Total	\$140	\$164	17%	100%	100%
Extra benefit type					
Cost sharing	64	70	10	46	43
Non-Medicare supplemental	29	36	24	21	22
Part D supplemental	24	30	23	17	18
Part D premium	20	25	21	15	15
Part B premium	2	4	55	2	2

Note: Employer group plans, special needs plans, and plans that do not offer Part D coverage are not included. Amounts for cost sharing and non-Medicare supplemental benefits include plan costs for administration and profit. Totals, differences, and rebate shares may not sum due to rounding.

Source: MedPAC analysis of data from CMS on plan bids.

shown), suggesting that many MA plans do not need or want to devote additional rebate dollars to this benefit beyond medical inflation. Indeed, plans may find that additional rebate allocations toward reductions in cost sharing may induce greater service use, such as the induced service use that occurs in FFS for beneficiaries with first-dollar Medigap coverage (Medicare Payment Advisory Commission 2012a).²⁰ Plans project that \$36 per enrollee per month (22 percent) of rebates will be used for non-Medicare-covered supplemental benefits. The Commission recently reported that while these benefits often include coverage for vision, hearing, or dental services, the non-Medicare supplemental benefits that plans most commonly offer appear to be tailored toward relatively healthy beneficiaries rather than populations that have the greatest social or medical needs (Medicare Payment Advisory Commission 2021b).^{21,22} For example, in 2021, the five most commonly offered benefits—worldwide emergency care, routine eye exam, worldwide urgent care, fitness benefits, and an annual physical exam—were offered to more than 90 percent of plan enrollees, while most enrollees were not in plans that offer benefits targeted to individuals who are high needs

or who have certain chronic illnesses. In addition, utilization of these benefits lacks transparency—making it unclear whether Medicare payments for these supplemental benefits better address social determinants of health compared with direct financial assistance.²³ Three other uses of rebate dollars are for Part D supplemental benefits (18 percent of projected rebates), reductions in Part D premiums (15 percent of projected rebates), and reductions in Part B premiums (2 percent of projected rebates). MA plans cannot allocate administrative expenses or margin to these three categories of benefits.²⁴

Plans bid at record low levels in 2022, but payments remain above FFS spending

In 2022, MA plan payments (including rebates that finance extra benefits) remained above what Medicare would have paid for similar beneficiaries in FFS, continuing the trend of higher levels of payment throughout the history of Medicare managed care (see text box on Medicare payments to MA plans, p. 431). Payments to MA plans are determined using a plan's bid—which is intended to represent the dollar amount that the plan estimates it will need to cover

**TABLE
12-6****Overall plan bids at record low levels in 2022, but plan payments remain above FFS spending due to coding****Share of FFS spending in 2022**

Plan type	Benchmarks	Bids	Payments
All MA plans (after coding estimate)	112%	88%	104%*
All MA plans (before coding estimate)	108	85	100*
HMO	108	84	100
Local PPO	109	89	102
Regional PPO	97	84	92
PFFS	106	98	103
Restricted availability plans (SNPs) included in totals above	107	87	100

***Values include employer plans.**

Note: FFS (fee-for-service), MA (Medicare Advantage), PPO (preferred provider organization), PFFS (private fee-for-service), SNP (special needs plan). Benchmarks are the maximum Medicare program payments for MA plans and incorporate plan quality bonuses. We estimate FFS spending by county using the 2022 MA rate book. We removed spending related to the remaining double payment for indirect medical education payments made to teaching hospitals. To account for our most recent coding estimate of 3.6 percent, we estimated overall benchmarks, bids, and payments if coding differences between MA and FFS were fully reflected (i.e., if the risk-adjusted differences between MA and FFS did not include coding differences). We assume, conservatively, that the coding differences for 2022 are the same as for 2020 (the most recent year of data available). We did not estimate coding differences between MA and FFS by plan type. Although MA enrollees must be enrolled in both Part A and Part B, the FFS spending denominator used in the table includes all Part A and Part B spending. MA benchmarks, bids, and payments assume this level of FFS spending. Using data from 2017 to 2019 and adjusting spending for risk scores and beneficiaries with Medicare as a secondary payer, the Commission estimated that FFS spending for enrollees with both Part A and Part B was about 1 percent higher than spending for all FFS enrollees. Comparing payments with spending for FFS enrollees with both Part A and Part B would decrease the overall MA payments relative to FFS in the table by about 1 percentage point.

All numbers in this table have been risk adjusted and reflect quality bonuses, but they have not been adjusted for coding intensity differences between MA and FFS that exceed the statutory minimum adjustment.

Source: MedPAC analysis of data from CMS on plan bids, enrollment, benchmarks, and fee-for-service expenditures.

the Medicare benefit package for a beneficiary—and the benchmark for the county in which the beneficiary resides. The benchmark is based on local FFS spending and is the maximum Medicare payment amount set by law for an MA plan to provide Part A and Part B benefits for beneficiaries in that county. In the early years of MA, benchmarks were set high in order to attract plan participation. In 2010, MA benchmarks averaged 112 percent of FFS spending, bids averaged 100 percent of FFS, and payments averaged 109 percent of FFS. After implementation of the ACA, reductions in benchmarks began lowering Medicare payments to plans. However, with ACA policies fully implemented and in place since 2017, benchmarks and payments

remain above FFS spending levels. We estimate that in 2022, MA benchmarks (including quality bonuses) average 108 percent of FFS spending (before adjusting fully for coding intensity; see Table 12-6). Similarly, benchmarks in 2021 averaged 108 percent of FFS (data not shown), while MA plans bid at record low levels. Overall plan bids average an estimated 85 percent of FFS spending in 2022, down from 87 percent of FFS in 2021 (latter data not shown).²⁵ When a plan bids below the benchmark, its payment rate is its bid plus a share of the difference between its bid and the benchmark. Overall, we estimate that Medicare payments to MA plans would average 100 percent of FFS spending in 2022; however, uncorrected coding intensity increases

**TABLE
12-7****Distribution of 2022 MA bids relative to FFS**

Bids as a percent of FFS spending	Share of bids	Share of projected MA enrollment
Less than 70%	8%	7%
At least 70%, less than 80%	19	22
At least 80%, less than 90%	38	43
At least 90%, less than 100%	27	23
At least 100%, less than 110%	7	4
110% or more	1	1

Note: MA (Medicare Advantage), FFS (fee-for-service). Employer group plans and special needs plans are not included. Percentages do not account for unaddressed coding intensity differences. Totals may not sum to 100 percent due to rounding.

Source: MedPAC analysis of data from CMS on plan bids, enrollment, benchmarks, and FFS expenditures.

payments to 104 percent of FFS spending. The 2022 estimate incorporates about 3.6 percentage points of uncorrected coding intensity. Relative to FFS spending for Part A and Part B benefits, quality bonuses in MA account for 3 percentage points of MA payments. MA payments also averaged 104 percent relative to similar beneficiaries in FFS in 2021.

Our estimates of the benchmarks relative to projected FFS spending, the bids relative to projected FFS spending, and the resulting payments to MA plans relative to projected FFS spending are calculated using plans' bid projections to compare projected MA spending with projected FFS spending on a like set of FFS beneficiaries. Benchmarks are set each April for the following year. Plans submit their bids in June and incorporate the recently released benchmarks. Benchmarks reflect FFS spending estimates for 2022 made by CMS actuaries at the time the benchmarks were published in April 2021. The bid data mask the impact of differences in MA and FFS diagnostic coding. Accounting for these differences would increase overall bids, benchmarks, and payments to MA plans by about 3.6 percentage points. However, using the bid data allows for subgroup comparisons, such as by MA plan type, shown in Table 12-6 (p. 427).

The ratio of MA plan payments to FFS spending for 2022 varies by plan type, excluding employer plans,

which do not submit bids but are separately discussed in a subsequent paragraph (Table 12-6, p. 427). For example, HMOs as a group bid an average of 84 percent of FFS spending, yet payments for HMO enrollees are estimated to average 100 percent of FFS spending because of benchmarks averaging 108 percent of FFS spending. Local PPOs' bids average 89 percent of FFS spending, and PFFS plans have average bids of 98 percent of FFS spending. As a result, payments for local PPO and PFFS enrollees are estimated to be 102 percent and 103 percent of FFS spending, respectively. Payments for beneficiaries enrolled in regional PPOs average 92 percent of FFS because of the regional PPOs' relatively low benchmarks (which are a blend of regional plans' bids and FFS spending).

We analyzed bids and payments to SNPs separately because these plans are available only to subpopulations of Medicare beneficiaries, and bidding behavior can differ from that of other plan types. In the past, SNPs' bids and payments tended to be slightly higher (relative to FFS spending) than payments to the other nonemployer MA plans. In the four most recent years in aggregate, although SNP bids are slightly higher than other MA plans' bids, their payments are similar to the average plan.

In 2014, we recommended that CMS pay employer plans differently because the employer bids were not

usually submitted for a competitive purpose, while the bids for other plans are submitted to compete for enrollment. (For more details on employer plans and our recommendation, see our March 2014 report to the Congress, available at <http://www.medpac.gov>.) As we recommended, CMS no longer pays the employer plans based on their bids. In 2017 and 2018, CMS began paying employer plans based on a blend of the 2016 bidding behavior of nonemployer plans and employer plans. Starting in 2019, CMS began paying employer plans based on the prior year's bidding behavior of nonemployer plans by plan type and payment quartile.²⁶ Because employer plans are mostly PPOs, their payment in 2022 largely reflects the average bidding behavior of nonemployer PPOs in 2021. Using 2022 employer plan payment rates and recent employer plan enrollment trends, we estimate that MA payments to employer plans will average 102 percent of FFS spending in 2022. After including payments to employer plans, overall MA payments remained at 100 percent of FFS spending before accounting for coding differences.

Variation in 2022 MA bids and payments

About 92 percent of plans bid to provide Part A and Part B benefits for less than what the FFS Medicare program would spend to provide these benefits (Table 12-7), an increase from 87 percent in 2021. These plans are projected to enroll about 96 percent of MA enrollees, excluding those in employer group and special needs plans. About 7 percent of MA enrollees are projected to enroll in plans that bid lower than 70 percent of FFS spending (nearly double the share relative to 2021); 1 percent are projected to enroll in plans that bid more than 110 percent of FFS spending.

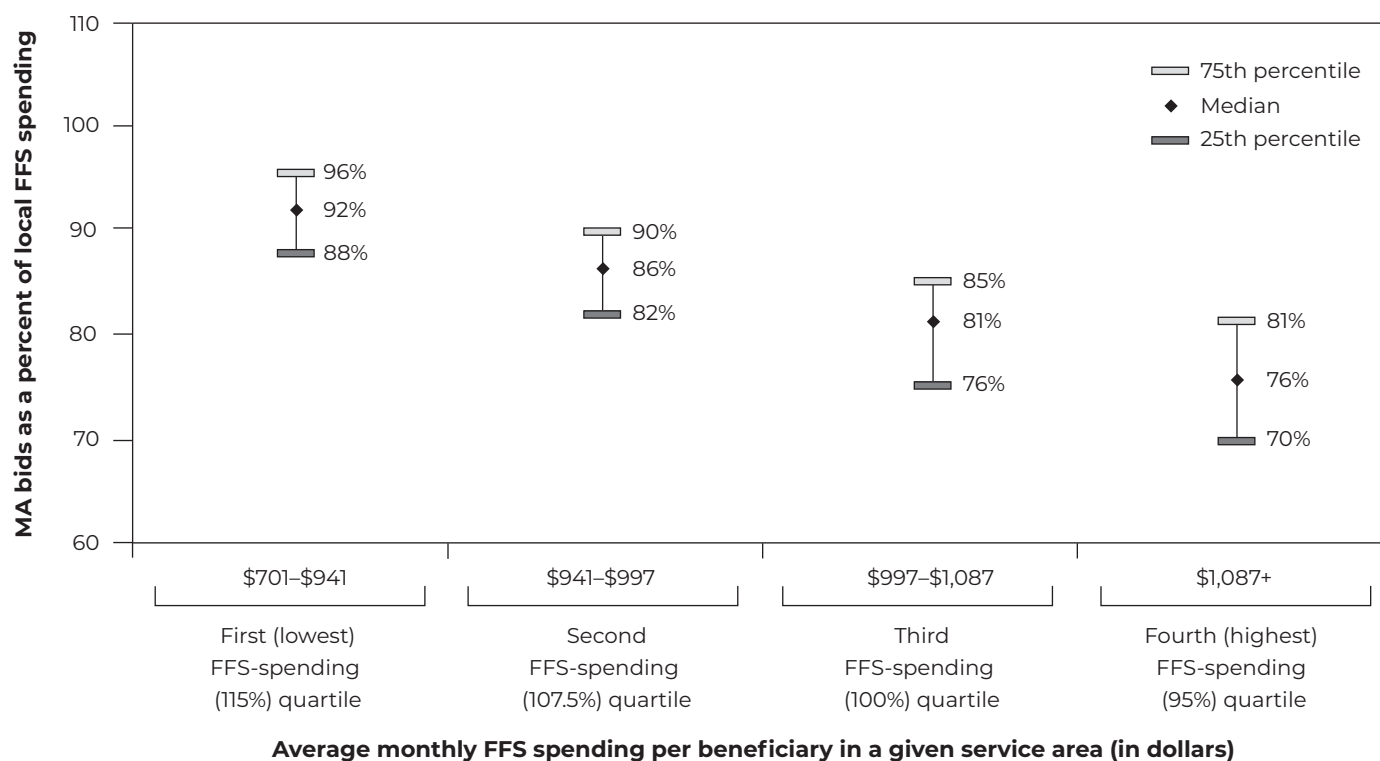
Although plan bids average less than FFS spending, payments for these plans' enrollees can exceed FFS spending because the benchmarks (including the quality bonuses) can be high relative to their area's FFS spending. Figure 12-2 (p. 430) shows how plans bid relative to FFS for service areas with different ranges of FFS spending. Each of the four FFS ranges covers the bids of at least 601 plans that include at least 3.8 million projected enrollees. As expected, plans bid higher (relative to FFS) in areas with relatively low FFS spending and bid lower (relative to FFS) where FFS spending is relatively high. However, even in service areas within the lowest quartile of FFS spending, less

than \$940.76 per month on average, most plans bid less than the FFS spending level for 2022 (Figure 12-2). In plan service areas averaging \$940.90 or more per month in FFS spending, most plans are likely to bid far below the FFS level. This finding suggests that, geographically, plan costs do not vary as much as FFS spending. After the ACA began lowering benchmarks in 2012, plans serving areas with benchmarks set at 115 percent of FFS spending (the lowest spending quartile, corresponding to areas with benchmarks below \$940.76 per month in 2022) began bidding below FFS far more frequently. The median bid for areas in this quartile declined between 2013 and 2022 from 111 percent to 92 percent of FFS. However, the increasing efficiency demonstrated by plan bids in these areas, which were presumed to be the most challenging for MA plans to compete in, have not translated to Medicare savings. For 2022, Medicare is still paying an average of 109 percent of FFS spending in these areas because the benchmarks average 118 percent of FFS when quality bonuses are included.

MA margins

The continued growth in MA enrollment, the ability of MA plans to bid well below FFS expenditure levels, and plans' ability to provide generous extra benefits point to continued strong financial health in the MA sector. Margins for MA sponsors have remained stable. The most recent data available, from 2020, show that MA plans reported margins that averaged 6.5 percent.^{28,29} This figure excludes Part D—for which we do not have 2020 data—and the following plan categories that do not submit bids: employer group plans, the Medicare-Medicaid demonstration plans, cost-reimbursed plans, Program of All-Inclusive Care for the Elderly, and medical savings account plans. In addition, the ownership of plans and providers under the same organization may overestimate plan medical expenses and underestimate plan margins. The degree to which provider revenues are shared with plans under these arrangements is unclear.

Our estimate does not include Part D drug margins, and if employer plan data were available, the margin levels might be higher. The absence of data on employer plans—19 percent of MA enrollment in 2020—limits our ability to determine the average margin in the MA sector. In prior years, when employer plan bids

**FIGURE
12-2****Medicare Advantage bids in relation to FFS spending levels, 2022**

Note: FFS (fee-for-service), MA (Medicare Advantage). This figure is based on 4,087 plan bids and excludes employer group plans, special needs plans, and plans in the territories. Percentages do not account for unaddressed coding intensity differences. The FFS spending denominator used in the figure includes all Part A and Part B spending. MA enrollees must be enrolled in both Part A and Part B. Comparing bids with spending for FFS enrollees with both Part A and Part B would decrease overall MA bids relative to FFS spending by about 1 percentage point.

Source: MedPAC analysis of data from CMS on plan bids and FFS expenditures.

were included in the bid data, we found that employer plan margins were higher than the margins of other MA plans (Medicare Payment Advisory Commission 2016).

Margins vary by plan tax status. In the 2020 data, nonprofit plans reported a margin of 4.6 percent; for-profit entities reported a pretax margin of 6.9 percent, both reflecting robust increases relative to 2019. As noted in our March 2018 report to the Congress, the large difference in margins (2.3 percentage points) between for-profit and nonprofit entities could be because the bid data do not include employer group plans (Medicare Payment Advisory Commission 2018c). Given the relatively high margins of employer group plans in prior years, including these plans would at

least modestly increase MA margins for nonprofit plans whose overall MA business is disproportionately more reliant on employer group plans. In addition, many nonprofit plans are sponsored by providers, and this relationship can obscure plan margins. Further, for-profit entities' MA plan margins were substantially higher in 2020 despite MA plans being subject to payment of the ACA insurer fees in 2020 but not 2019.³⁰ In 2020, the insurer fees represented about 1.4 percent of total revenue.

In 2020, all categories of SNPs had overall positive margins. Dual-eligible SNPs (D-SNPs), for beneficiaries dually eligible for Medicare and Medicaid benefits, had margins of 10.7 percent. SNPs for enrollees with

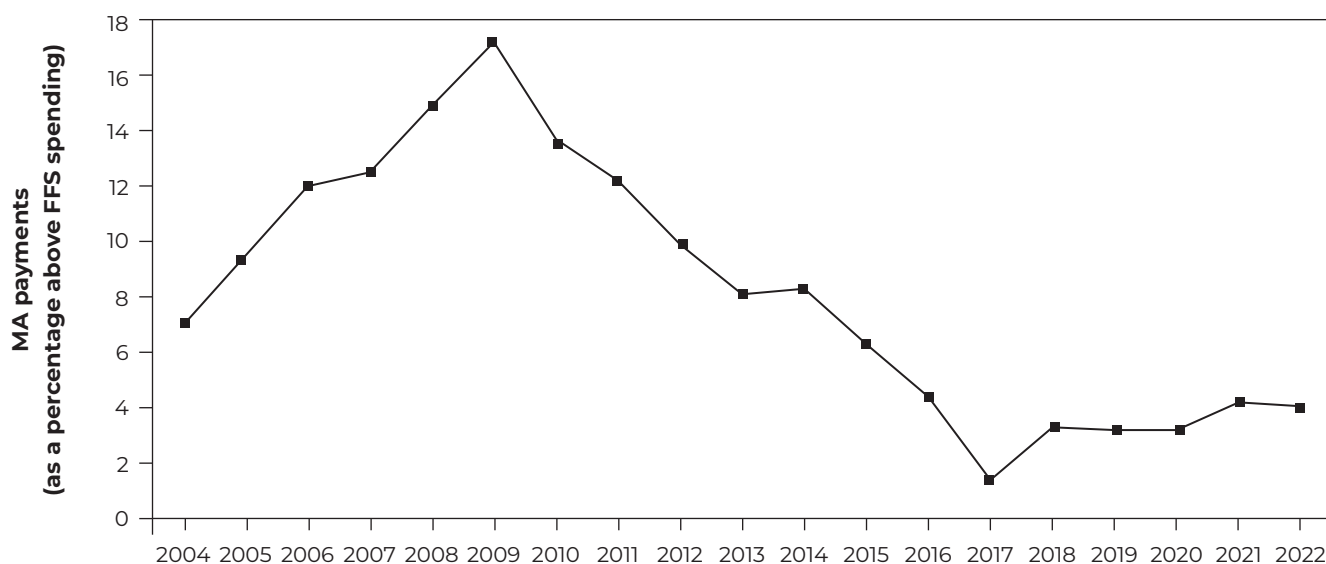
Aggregate Medicare payments to Medicare Advantage plans have never been lower than FFS Medicare spending

Our review of private plan payments suggests that over a 37-year history, the many iterations of full-risk contracting with private plans have never yielded aggregate savings for the Medicare program.²⁷ Throughout the history of Medicare managed care, the program has paid more—sometimes much more—than it would have paid for beneficiaries to have remained in fee-for-service (FFS) Medicare. Evaluations of private plan payment rates under Medicare demonstrations occurring before 1985 found that payment rates were 15 percent to 33 percent higher than FFS

Medicare spending (Langwell and Hadley 1990). Between 1985 and 2004, risk adjustment was inadequate and led to private plan payments that were, in the late 1980s and through the mid-1990s, 5 percent to 7 percent higher than FFS Medicare spending (Brown et al. 1993, Medicare Payment Advisory Commission 1998, Newhouse 2002, Riley et al. 1996). Figure 12-3 shows that since 2004, payments to MA plans continue to be above the amount FFS Medicare would have spent for the same beneficiaries. ■

FIGURE 12-3

Medicare has paid more to MA plans than FFS Medicare spending would have been for the same enrollees, 2004–2022



Note: MA (Medicare Advantage), FFS (fee-for-service). Benchmark increases under the quality bonus demonstration applied from 2012 through 2014 and under the quality bonus program applied starting in 2015. The figure reflects the Commission's estimates of the impact of coding intensity, beginning in 2007. Estimates are updated from prior years to reflect payments to employer plans after 2016 and adjustments for MA enrollees with Medicare as a secondary payer. We assume, conservatively, that the coding intensity impact for 2021 and 2022 is the same as for 2020 (the most recent year of data available). The Commission uses the figures for FFS per beneficiary spending that CMS's Office of the Actuary generates to determine the MA benchmarks that plans use when submitting bids. Those FFS spending figures are calculated by summing (1) risk-standardized Part A FFS monthly spending for all Part A enrollees and (2) risk-standardized Part B FFS monthly spending for all Part B enrollees. This method for calculating FFS spending includes all FFS beneficiaries, including those who are enrolled only in Part A or only in Part B, and thus is not perfectly comparable with the MA population. Although MA enrollees must be enrolled in both Part A and Part B, the FFS spending denominator used in the table includes all Part A and Part B spending. MA benchmarks, bids, and payments assume this level of FFS spending. We estimated that calculating FFS spending only for enrollees with both Part A and Part B would yield a result that is about 1 percentage point higher than the estimate of spending for all FFS enrollees. Assuming that an increase to FFS spending (and benchmarks) would not increase plan bids, comparing MA payments with spending for FFS enrollees with both Part A and Part B would lower the spending estimate about 1 percentage point.

Source: MedPAC reports to the Congress 2006 through 2021, MedPAC analysis of 2022 data from CMS on plan bids and FFS expenditures.

certain chronic conditions (C-SNPs) had margins of 11.2 percent. Institutional SNPs (I-SNPs) had margins of 2.8 percent, which was notably lower than the 12.1 percent margins of I-SNPs in 2019 and may have resulted from the pandemic's disproportionate impact on institutionalized beneficiaries. The 2020 profit margin among nonprofit D-SNPs was 6.4 percent.

Risk adjustment: Coding intensity inflates payments to MA plans

Medicare payments to MA plans are adjusted to account for differences in expected beneficiary medical costs. The purpose of risk adjustment is to ensure that plans are adequately and fairly compensated for treating all categories of enrollees—those with high medical costs as well as those with less health care utilization. If the risk-adjustment system is flawed, misaligned incentives could result in “favorable selection,” in which plans have an incentive to attract certain types of beneficiaries and avoid enrolling others. Plans can achieve unwarranted profits if the risk-adjustment system overpays for some enrollees and underpays for others.

Medicare payments to private plans in the early years of the program were not sufficiently risk adjusted. By avoiding counties with high hospital spending and by marketing to healthy beneficiaries, plans were able to disproportionately attract profitable enrollees. Other factors contributed to favorable selection for plans: Beneficiaries could choose to enroll in or disenroll from a plan on a monthly basis, and sicker beneficiaries preferred FFS Medicare (Medicare Payment Advisory Commission 2000, Newhouse et al. 1989). Research demonstrated that favorable selection of enrollees led to Medicare spending on private plans that was 5.7 percent higher in 1989 and 7 percent higher in the mid-1990s than spending would have been under FFS Medicare (Brown et al. 1993, Medicare Payment Advisory Commission 1998, Newhouse 2002, Riley et al. 1996).

The Balanced Budget Act of 1997 required Medicare to improve risk adjustment for private plan payments and mandated the collection of diagnoses from inpatient claims. Initially, a small share of payment to plans was based on a new risk-adjustment model

using principal inpatient diagnoses. The Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 expanded risk adjustment to include the use of diagnoses from ambulatory settings. From 2004 through 2006, Medicare phased in the CMS hierarchical condition category (CMS-HCC) model, which uses diagnoses collected from hospital visits (both inpatient and outpatient) and physician office visits in addition to beneficiary demographic information.

The CMS-HCC risk-adjustment model, coupled with policies requiring plans to enroll all eligible Medicare beneficiaries who elect a plan and locking in MA enrollees for the calendar year (with limited exceptions), has generally reduced favorable selection for MA plans. However, some favorable selection likely persists as beneficiaries who use more services could be wary of plans' limits on provider choice and thus less likely to enroll in MA; those high service users who enroll in MA could be more likely to disenroll and return to FFS than beneficiaries who use fewer services (Jacobson et al. 2019, McWilliams et al. 2012, Newhouse et al. 2012). In particular, Medicare beneficiaries who are eligible for Medicaid have multiple opportunities to change coverage options during the calendar year. Although policies have reduced favorable selection, the CMS-HCC model's reliance on diagnosis codes creates a financial incentive for MA plans to document diagnosis codes more thoroughly than in FFS Medicare, so as to boost monthly payments to plans and increase extra benefits for enrollees. In 2020, differences in diagnostic coding caused Medicare to pay MA plans \$12 billion more than it would have spent if the same beneficiaries had been enrolled in FFS Medicare.

The CMS-HCC risk-adjustment model

The risk-adjustment model uses demographic information (e.g., age, sex, Medicaid enrollment, and disability status) and certain diagnoses grouped into HCCs to calculate a risk score for each enrollee. HCCs are medical conditions or groups of related conditions with similar treatment costs. Higher risk scores generate higher payments because beneficiaries with high risk scores are expected to have higher expenditures and vice versa. CMS designed this risk-adjustment model to maximize its ability to predict annual medical expenditures for Medicare beneficiaries, with some constraints. In developing

the model, CMS used statistical analyses to select certain HCCs for inclusion in the model based on an HCC's ability to predict annual Medicare expenditures, ensuring that the model's diagnostic categories were clinically meaningful and specific enough to minimize opportunities for gaming or discretionary coding (Pope et al. 2004). CMS applies additional criteria to ensure the validity and reliability of the model's diagnostic data. To be used in determining payment to MA plans, diagnoses must (1) appear on a claim from a hospital inpatient stay, a hospital outpatient visit, or a face-to-face visit with a physician or other health care professional (including real-time audio and video telehealth visits), and (2) be supported by evidence in the patient's medical record.³¹ Diagnoses resulting from telehealth services meet the face-to-face requirement when the services are provided using interactive audio and video telecommunication that enables real-time communication with the beneficiary.

Diagnostic data in the CMS-HCC model are used prospectively, meaning that diagnoses collected during one calendar year are used to predict Medicare costs for the following calendar year. HCCs are counted toward an enrollee's risk score if any of the underlying diagnosis codes are submitted on a hospital or physician claim at any time during the data collection year. Multiple submissions of the same diagnosis code and submissions of different diagnosis codes that are grouped in the same HCC do not affect an enrollee's risk score.

MA plans submit diagnostic information to CMS in two ways: (1) through the Risk Adjustment Processing System (RAPS), to which plans submit the minimum information necessary to identify which HCCs apply to each enrollee, and (2) through the encounter data system (EDS), to which MA plans submit detailed information about each Medicare-covered encounter an enrollee has with a health care provider and each Medicare-covered item provided to the enrollee. CMS initially used only RAPS to calculate risk scores, but from 2016 through 2021, CMS phased in the use of encounters as the source of diagnostic information by generating two risk scores, one based on RAPS data and one based on EDS data.³² Figure 12-4 (p. 434) shows the use of encounter data for risk adjustment since 2016. In that year, payment was based on a blend of the RAPS risk score (90 percent) and the EDS risk score

(10 percent). In 2017, CMS increased the portion of the payment based on EDS risk scores to 25 percent. Facing opposition from plans, CMS reduced the portion of the payment based on EDS risk scores to 15 percent in 2018, and in 2019 began pooling EDS data with inpatient RAPS data and basing the remainder of risk scores on RAPS data alone.³³

In 2020, the share of risk scores based on pooled EDS and inpatient RAPS data increased to 50 percent and to 75 percent in 2021; for 2022, CMS will base risk scores entirely on encounter data with no use of RAPS data.³⁴ The Commission has strongly supported basing MA risk scores entirely on encounter data and urges CMS to increase incentives for plans to submit complete encounter data, which could serve multiple purposes.³⁵ For example, using encounter data as the basis for measuring MA plan quality would allow for more consistent quality measurement between MA and FFS and would provide an additional incentive for MA plans to submit complete encounter data.

The incentive to code diagnoses more thoroughly in MA

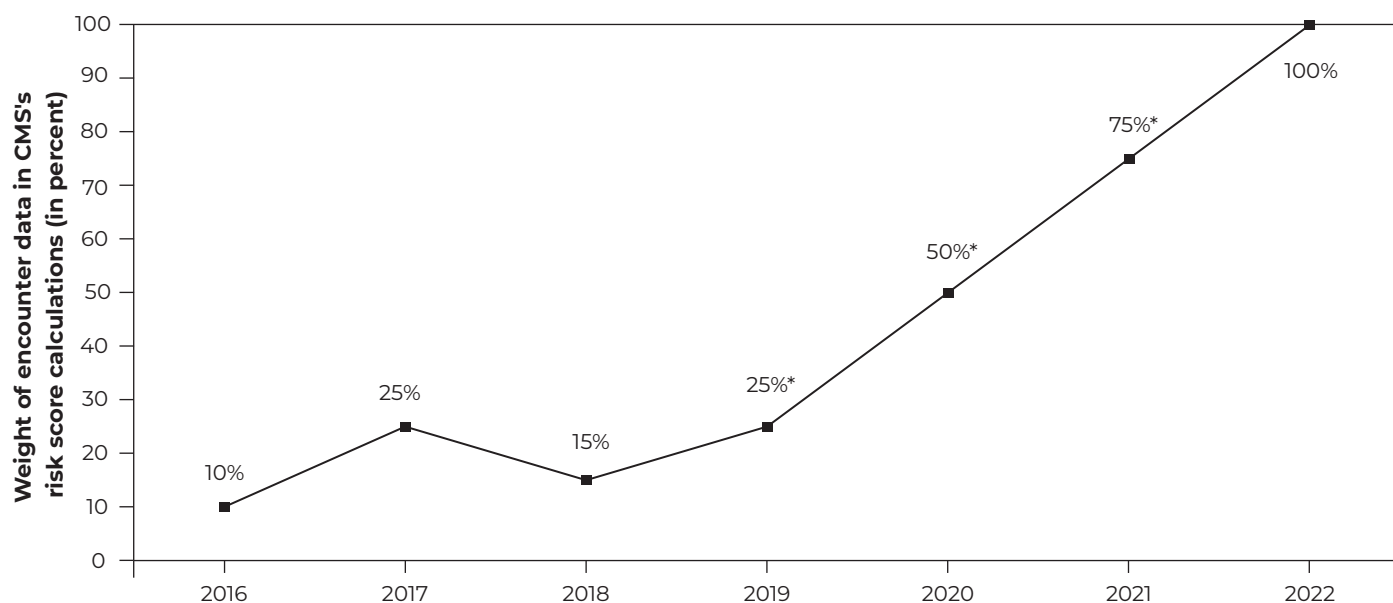
Documenting additional diagnosis codes raises enrollees' risk scores, generating two distinct benefits for MA plans: (1) It boosts the monthly payment amount a plan receives, and (2) it increases the rebate amount a plan uses to provide extra benefits to enrollees, thereby giving plans that document relatively more diagnosis codes a competitive advantage over other plans.

Documenting more diagnosis codes increases payments to plans

Each demographic and HCC component in the risk-adjustment model has a coefficient that represents the expected medical expenditures associated with that component. These coefficients are estimated using FFS Medicare claims data such that all Medicare spending in a year is distributed among the model components. Medicare payment for an MA enrollee is approximately equal to the sum of the dollar-value coefficients for all components identified for that enrollee. Although the actual dollar amount a plan will receive for newly identifying an HCC depends on several additional factors, we consider a simplified example using average FFS Medicare spending to show how coding additional HCCs increases payment to a plan.³⁶ To illustrate, in 2018, the annual Medicare payment to an

**FIGURE
12-4**

Risk scores were based partially on encounter data beginning in 2016 and by 2022 were 100 percent based on encounter data



Note: MA (Medicare Advantage). MA plans are required to submit to CMS detailed information about each Medicare-covered encounter an enrollee has with a health care provider and each Medicare-covered item provided to the enrollee. From 2016 through 2021, CMS phased in the use of this encounter data as the source of the diagnostic information used to calculate MA enrollee risk scores.

*For 2019, 2020, and 2021, CMS added inpatient Risk Adjustment Processing System data to encounter data, making the true proportion of risk scores based on encounter data less than the percentage noted in the figure.

Source: CMS announcement of MA rates for 2016 through 2022.

MA organization for an 84-year-old male who was not eligible for Medicaid (demographic component valued at \$5,707) with diabetes without complication (HCC 19, valued at \$1,058) would have been \$6,765, the sum of the two model components.

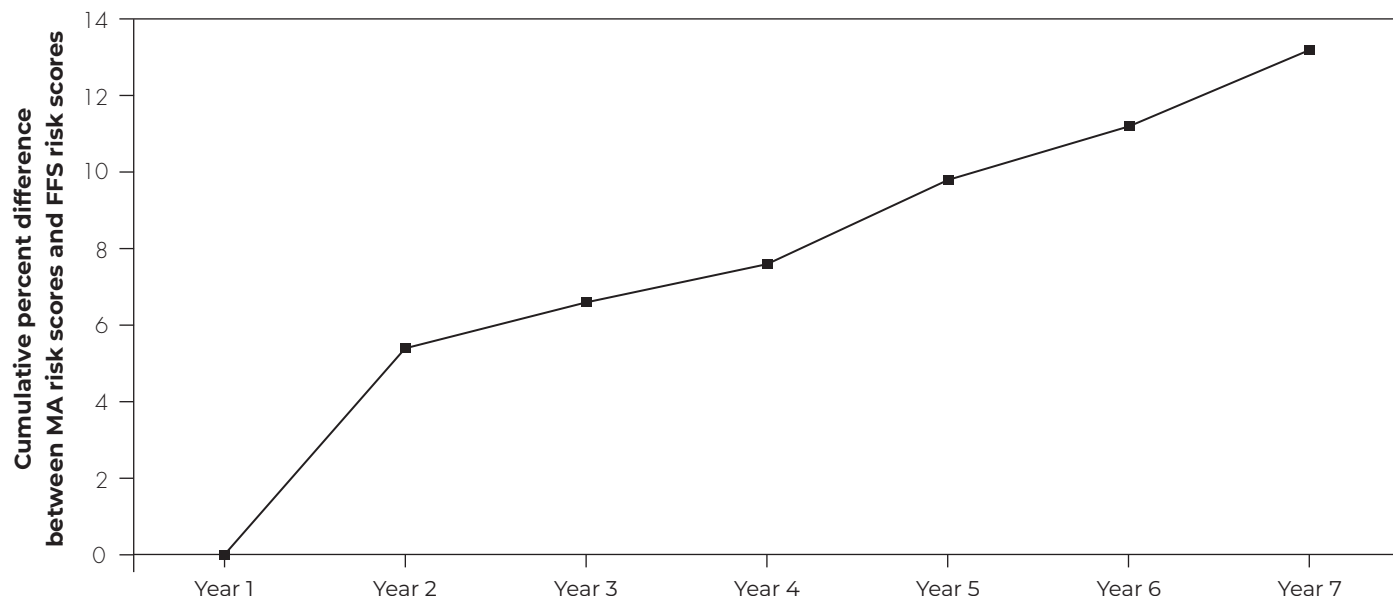
Documenting each additional HCC for an enrollee can significantly increase the Medicare payment. If the same 84-year-old male with diabetes were also found to have vascular disease (HCC 108, valued at \$3,031), the Medicare annual payment to the MA organization would increase from \$6,765 to \$9,796. The payment per MA enrollee for most HCCs is between \$1,000 and \$5,000 per year, although some HCCs increase payment by \$10,000 or more.

Because the CMS-HCC model uses FFS Medicare claims data to estimate the size of the model coefficients, the model calculates an expected spending

amount based on FFS Medicare costs and diagnostic coding patterns. Most diagnoses are reported on physician and outpatient claims, which in FFS Medicare tend to be paid based on procedure codes, thus providing little financial incentive to document diagnoses for FFS beneficiaries. If certain diagnoses are not reported on FFS claims, the cost of treating those conditions is attributed to other components in the model, causing the coefficients overall to be inflated above the value they would have been if the diagnoses had been reported. For MA payments to be accurate, diagnoses must be coded with the same intensity in FFS Medicare and MA. However, when MA plans submit more diagnoses for a beneficiary than would have been documented in FFS Medicare, the program spends more for that beneficiary in MA than it would have if the beneficiary were in FFS. Because of the financial incentives for MA plans to code as many diagnoses as possible, coding intensity is higher in MA than in FFS

**FIGURE
12-5**

Average MA risk scores grew fastest relative to average FFS risk scores in the first cohort year, for all enrollment cohorts 2007 through 2013



Note: MA (Medicare Advantage), FFS (fee-for-service). Analysis includes six MA and FFS cohort pairs ending in 2013 and starting in 2007 through 2012.

Source: MedPAC analysis of CMS enrollment and risk score files.

Medicare, whose structure lacks such incentives, and payments to MA plans are thus higher than intended. Notably, the Next Gen accountable care organization (ACO) program and some alternative payment models (APMs) offer incentives to increase diagnostic coding intensity in FFS Medicare. Although the share of FFS Medicare payments that flow through ACOs and APMs is growing, we have yet to see a significant effect on FFS coding intensity overall.

We used data from 2007 through 2013 to test whether beneficiary risk scores grew faster in MA than in FFS. We built cohorts of beneficiaries who spent their first full calendar year of Medicare enrollment and subsequent years through 2013 in the same program, either FFS or MA. For example, one cohort pair consisted of beneficiaries who joined FFS Medicare in 2006 and then either (1) remained exclusively in FFS through 2013 or (2) switched into MA in January 2007 and remained in MA through 2013. We also examined

five similar pairs of cohorts for beneficiaries whose first full years in Medicare were 2008 through 2012. Beneficiaries were assessed starting with their first full year of Medicare enrollment, so that the subsequent differences in the risk score growth between the cohort pairs could be attributed to differences in coding.

From year 1 to year 2, average MA risk scores increased by about 6 percent more than FFS scores across all cohorts (Figure 12-5). For each subsequent year, average MA risk scores continued to increase more than FFS scores by about 1.5 percent across all cohorts.

Higher payments to MA plans due to differences in coding intensity between MA and FFS Medicare are the result of a failure in risk-adjustment policy, violating the assumption that diagnoses are documented with the same intensity in FFS Medicare (where less incentive exists) and in MA (where significant incentive

**TABLE
12-8****Illustrative example: Differences in plan risk scores affect the level of extra benefits**

Plan	Bid: Monthly cost of care for expected population	Risk score of expected population	Monthly MA benchmark for the county for an average-risk population (+5% for bonus plan)	Risk-adjusted monthly benchmark (benchmark multiplied by risk score)	Difference in risk-adjusted benchmark and plan bid	Monthly value of extra benefits (rebate amount)*
Nonbonus plans						
Plan A (3.5 stars)	\$900	0.97	\$952	\$923	\$23	\$15
Plan B (3.5 stars)	900	1.03	952	981	81	52
Bonus plan						
Plan Z (4 stars)	900	0.97	1,000	970	70	46

Note: MA (Medicare Advantage). An average-risk population has a risk score of 1.0. This example assumes that the actual cost of care for the expected population is \$900 monthly for each of the three plans and that Plan B's risk score of 1.03 is inflated due to greater diagnostic coding effort.

*All plans in this table have a rebate percentage of 65 percent based on their star ratings.

exists). MA plans that document an enrollee's additional diagnoses are reacting to financial incentives to document all of an enrollee's diagnoses that are accurate and properly supported by medical evidence. MA plans that report inaccurate diagnoses for the purpose of receiving unwarranted payments risk financial penalty if inaccurate diagnoses are discovered during risk-adjustment data validation audits. (See "Risk-Adjustment Data Validation" section on pp. 443–444.)

Documenting more diagnosis codes increases plan rebates and can undermine competition among plans

Documenting as many diagnostic codes as possible results in bigger rebates for MA plans, which in turn allows a plan to offer their enrollees more extra benefits than if fewer diagnostic codes had been documented for the same set of enrollees. Plans offering more extra benefits than their competitor plans gain a competitive advantage in attracting enrollees.

For a plan submitting a bid below its benchmark (nearly all plans in 2022), the plan's rebate is based on the difference between the plan's bid for its expected enrollee population and the plan's risk-adjusted

benchmark, which is the standard benchmark (for a beneficiary of average risk, with a 1.0 risk score) multiplied by the plan's expected average risk score. Raising a plan's average risk score raises the plan's risk-adjusted benchmark, thereby widening the difference between the plan's bid and risk-adjusted benchmark, increasing the plan's rebate amount and ability to offer more extra benefits. In sum, plans can translate greater coding effort into a competitive advantage over other plans.

MA payment policies strive to create incentives for plans to lower spending and improve quality by offering more extra benefits and the potential to attract additional enrollees. By reducing health care costs, plans can reduce their bids, thereby increasing their rebate and extra benefit value. By improving quality scores, plans can be rewarded with a 5 percent or 10 percent increase to their benchmark or with an increase in the rebate percentage (the percentage of the bid and benchmark difference that determines the rebate amount). These policies benefit beneficiaries through improved quality, more extra benefits, and reduced premiums and lower taxpayer funding for the Medicare program. However, these policies are undermined by diagnostic coding intensity, which

allows plans to offer more extra benefits without reducing health care costs or improving quality.

Table 12-8 illustrates the relationship between coding intensity and rebate amounts using a hypothetical example of three plans covering the same set of enrollees for whom the expected cost of care is the same, at \$900 per member per month. Plans A and Z have an expected risk score below 1.0 (at 0.97), and Plan B has an expected risk score of 1.03 due to more aggressive diagnostic coding. All three plans have bids below the risk-adjusted benchmark and must provide extra benefits funded by rebates. However, because Plan B has a higher risk score, its rebate is larger than Plan A's rebate (\$52 per month vs. \$15 per month), so it can offer enrollees more extra benefits. Plan B's aggressive diagnostic coding effort has therefore given it an unfair competitive advantage over Plan A.

In addition, differences in coding can more than offset the effect of MA quality bonuses on the total value of extra benefits plans can offer and directly increase payment rates to plans, as described in the previous section. The higher risk score of Plan B, which has only 3.5 stars, gives it an advantage over bonus-level Plan Z, which has 4 stars: Plan B's rebate amount is higher than Plan Z's (\$52 per month vs. \$46 per month). Thus, by inflating its risk score from 0.97 to 1.03, Plan B can offer a level of extra benefits that is of more value than that provided through quality bonuses.

The plans illustrated in Table 12-8 have a risk score difference of 6 percentage points that reflects only coding practices. The Commission's analysis of MA coding practices suggests that there is a far wider range of coding variation, with several contracts having risk scores inflated by 15 percent or 20 percent above FFS due to coding practices (see Figure 12-7, p. 442).

Mechanisms of coding more diagnoses in MA

MA plans use several mechanisms that do not exist in FFS Medicare to document diagnoses for their enrollees. Diagnoses documented through these mechanisms generate higher coding intensity compared with FFS Medicare, resulting in excess payments to MA plans.

MA plans often identify enrollees with additional HCCs by using an enrollee's historical information (e.g., electronic health records, claims, or risk score data),

when it is available, or by identifying likely diagnoses in data that are not used in MA risk adjustment, such as prescription drug data (e.g., a prescription for insulin likely indicates a diabetes diagnosis). Plans then need to ensure that all diagnoses are appropriately documented in the current year to count toward MA payment. This documentation can be facilitated by greater sharing of diagnostic information. For example, providers can give plans access to electronic medical records and, under capitated arrangements, pay physicians a risk-adjusted sum per enrollee, thereby passing the financial incentives to document more diagnoses on to physicians with direct access to medical records and diagnostic information. In addition, plans actively collect diagnoses through health risk assessments, chart reviews of earlier provider encounters, and pay-for-coding programs. In some pay-for-coding programs, plans send physicians a patient assessment form that includes diagnosis codes that the plan identifies for a beneficiary. Plans ask physicians to confirm the existence of plan-identified diagnoses on the form and document those diagnoses on subsequent claims. Payment to the physician may be based on completing the form or paid as a dollar amount per diagnosis code submitted, and may include a bonus payment for submitting every code that the plan identifies for a beneficiary. While these efforts can be used to improve care management, some companies offering services to help plans collect diagnostic information use language that targets enrollees based on lack of documentation rather than clinical need.

Of all mechanisms to document more diagnosis codes, evidence continues to highlight MA plans' use of health risk assessments and chart reviews. In a recent study, the Office of Inspector General (OIG) found that in 2017, health risk assessments and chart reviews accounted for \$9.6 billion in payments to MA plans (Office of Inspector General 2021f). Based on their findings, we estimate that health risk assessments and chart reviews generated 4.6 percent of total payments to plans and were responsible for 64 percent of MA coding intensity in 2017. (For 2017, we estimated that MA risk scores were about 7.1 percent higher than FFS risk scores before applying the mandatory coding adjustment.)

MA plans' use of health risk assessments to increase diagnosis coding

Our prior work closely examined MA plans' use of health risk assessments to document additional

diagnosis codes (Medicare Payment Advisory Commission 2016). Some MA plans spend significant resources calling enrollees, offering incentives to have them participate in health risk assessments, and sending nurses to enrollees' homes to conduct health risk assessments. We calculated that diagnoses supported only by a health risk assessment—where no treatment was provided during the year—accounted for about 1 percentage point to 2 percentage points of overall MA coding intensity impact. OIG found that in 2017, diagnoses supported only by a health risk assessment—80 percent of which were the result of in-home health risk assessments—accounted for payments to MA plans of \$2.6 billion (Office of Inspector General 2020). We note that this amount is about 1.2 percent of payments to MA plans in 2017. Medicare should not reimburse MA plans for medical conditions that were not treated. At least one plan sponsor is alleged to have used its health risk assessment program to submit invalid and unsupported diagnosis codes to CMS with the knowledge of plan officials (United States of America ex rel. Robert A. Cutler v. Cigna Corp. 2020).

MA plans' use of chart reviews to increase diagnosis coding

Some MA plans devote significant effort to chart reviews to increase MA payments. Because chart reviews are not used in FFS Medicare, all diagnoses newly documented through chart reviews contribute to differences in FFS and MA diagnostic coding and contribute to excess payments to MA plans. Chart reviews document the diagnoses made during hospital and physician encounters in which medical services were provided. MA plans use chart reviews to identify diagnoses not captured through the usual means of reporting diagnoses (e.g., claims data and encounter data): Sometimes the diagnoses are not reported on the provider's claim that is sent to the MA plan, and sometimes the MA plan does not submit a record of the encounter to CMS. Because Medicare requires each HCC to be supported by diagnostic evidence in a patient's medical record, medical record reviews are a logical way for plans to identify diagnoses not captured through provider claims or on plan encounter data. However, chart review programs are used exclusively in MA (there is no incentive to undertake chart reviews in FFS Medicare) and thereby exacerbate Medicare's

failure to sufficiently account for differences in MA and FFS diagnostic coding.

Some MA plans treat chart review programs as an independent revenue stream that yields a positive return on investment (ROI) by generating additional Medicare payments from newly documented diagnoses that exceed the costs of paying nurses and medical assistants to review medical charts.³⁷ Ongoing lawsuits allege that MA plans use chart reviews to identify new diagnosis codes but not to verify the accuracy of already submitted codes, even when the plan sponsor is aware that some diagnoses that have been submitted are not supported by the medical chart (violating Medicare's rules governing the reporting of diagnoses). Documentation from these whistleblower lawsuits sheds light on the profitability of chart reviews. In 2005 and 2006, just one year after the CMS-HCC model began to be phased in, one plan sponsor contracted with a chart review vendor to conduct three batches of chart reviews, yielding ROIs ranging from 22:1 to 30:1 (United States of America ex rel. James M. Swoben v. Secure Horizons 2017). Between 2010 and 2015, a large insurer obtained over \$3 billion in additional MA payments from its chart review program (United States of America ex rel. Benjamin Poehling v. UnitedHealth Group 2016). In 2015, a different MA plan sponsor spent about \$19 million conducting over 500,000 chart reviews and was able to net over \$94 million in profits, yielding an ROI of 6:1 (United States of America v. Anthem 2020). Some plans and vendors appear to selectively review charts with a higher likelihood of increasing revenue and use artificial intelligence to more accurately identify likely revenue-producing charts (Optum 2020). One vendor claims that its clients have received ROIs between 6:1 and 12:1 (Blue Health Intelligence 2020). Although the financial return is clearly worth plan sponsors' effort and financial investment, chart review programs offer questionable benefits for plan enrollees and are detrimental for the taxpayers and the beneficiaries funding the Medicare program.

Medicare accepts chart reviews as evidence of a diagnosis for risk adjustment. In RAPS data, plans do not identify the source of the information—provider claims or chart reviews—submitted for risk adjustment. For encounter data, plans submit records of chart reviews along with records of encounters with health

care providers. Some chart review records are linked to a specific provider encounter, but CMS also allows plans to submit “unlinked chart review records” in which the provider encounter that is the subject of the chart review is not specified. Some chart review records provide evidence of provider encounters for which the plan has not submitted an encounter record. For use in risk adjustment, CMS uses both encounter records and chart review records from hospital and physician visits as the source of diagnostic data.

OIG analyzed 2016 encounter data and found that 80 percent of MA contracts submitted at least one chart review and that plans submitted a total of 52.6 million chart reviews during the year (Office of Inspector General 2019). Of those chart reviews, 17 million contained diagnoses that were not documented on any health care encounter record. Although plans can use chart reviews to add or delete diagnoses from encounters, OIG found that less than 1 percent of chart reviews were used to delete diagnoses, lowering payments by \$196.5 million. Chart reviews adding diagnoses raised payments to MA plans by \$6.9 billion (resulting in a net payment increase of \$6.7 billion). We note that this amount is about 3.2 percent of payments to MA plans in 2017. Chart reviews that were not linked to a specific provider encounter accounted for \$2.7 billion of the increased payments. Although chart reviews are common in MA, the use of chart reviews varied across contracts or plan sponsors. OIG found that 10 MA contracts accounted for one-third of the additional payments, and that 10 of 137 parent organizations accounted for 79 percent of the increased payments to MA plans.

Policies to address the impact of coding differences

A series of congressional mandates has required CMS to reduce MA risk scores to address the impact of MA and FFS coding differences on payments to MA plans. Because of these mandates, CMS reduced MA risk scores by 3.41 percent in each year from 2010 through 2013. Starting in 2014, legislation specified a minimum reduction of about 4.9 percent, which rose gradually to about 5.9 percent in 2018, where it will remain until the Secretary implements risk adjustment using MA diagnostic, cost, and use data. Although larger reductions are allowed under the legislation, CMS reduced MA risk scores by the minimum amount

required by law for 2014 through 2022. CMS took an additional step to help control MA’s increased coding intensity by phasing in a new CMS–HCC model that removed some diagnoses suspected of being more aggressively coded by MA plans (e.g., lower-severity kidney disease and polyneuropathy). Our analysis suggests that the new CMS–HCC model made MA risk scores more similar to FFS scores by reducing them 2 percentage points to 2.5 percentage points relative to the old model. The new model was phased in during 2014 and 2015, and MA payments were based entirely on the new model starting in 2016.

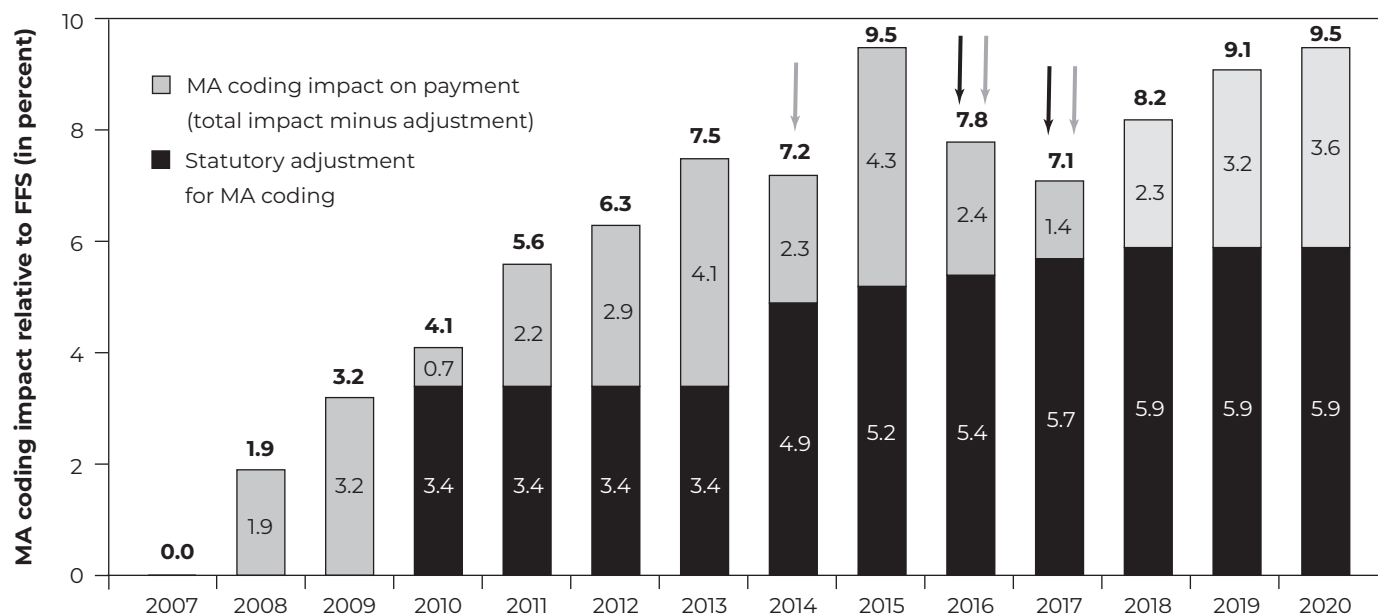
Before 2017, the HCC model accounted for dual enrollment in Medicare and Medicaid with a set of variables that increased payment for such enrollees. This approach treated MA enrollees who qualify for full Medicaid benefits and those who qualify for partial Medicaid benefits as a single group, even though enrollees with full Medicaid benefits have significantly higher Medicare spending than enrollees with partial Medicaid benefits. As a result, risk scores under the old model were systematically too low for full-benefit dual enrollees and too high for partial-benefit dual enrollees.³⁸ Partial-benefit dual enrollees make up a larger share of MA dual enrollees compared with the share in FFS Medicare, causing the risk scores for MA enrollees with Medicaid benefits to be inflated under the old model. CMS began differentiating between MA enrollees with full Medicaid and partial Medicaid benefits in 2017 by using separate models that more accurately determine the risk scores of these two groups.³⁹ We found that the model introduced in 2017 reduced MA risk scores by almost 1 percentage point by more accurately determining risk scores for full-benefit and partial-benefit dual enrollees, among other subgroups.

Coding differences increased payments to MA plans by \$12 billion in 2020

To assess the overall impact of coding differences on payments to MA plans, we built retrospective cohorts of beneficiaries enrolled in either FFS or MA for all of 2020. We tracked each beneficiary backward for as long as they were continuously enrolled in the same program (FFS or MA) or as far back as 2007, the first year that payment to MA plans was based entirely on CMS–HCC risk scores. Our analysis calculated differences in risk score growth by comparing FFS and

**FIGURE
12-6**

**Impact of coding intensity on MA risk scores
was larger than coding adjustment, 2007-2020**



MA coding intensity increased MA risk scores by 1 percentage point annually but was offset by new risk-adjustment model versions in 2014, 2016, and 2017 (gray arrows) and by increased FFS coding in 2016 and 2017 (black arrows).

Note: MA (Medicare Advantage), FFS (fee-for-service). All estimates account for any differences in age and sex between MA and FFS populations. Annual adjustment for MA coding began in 2010.

Source: MedPAC analysis of CMS enrollment and risk score files.

MA cohorts with the same years of enrollment (e.g., 2007 through 2020, 2008 through 2020), adjusting for differences in age and sex.

Figure 12-6 shows, for payment years 2007 through 2020, the impact of differences in coding intensity on MA risk scores relative to FFS and the size of the coding intensity adjustment (the amount by which CMS reduced MA risk scores to account for coding intensity). During that period, coding intensity consistently increased MA risk scores by about 1 percentage point or more annually; however, the underlying trend was offset in 2014, 2016, and 2017 by the introduction of new versions of the risk-adjustment model and more intensive FFS coding. The coding intensity adjustment has never fully accounted for

the impact of coding intensity, resulting in continued excess payments to MA plans relative to FFS spending for similar enrollees.

For 2020, MA risk scores were 9.5 percent above FFS risk scores, and this difference was only partially offset by the coding intensity adjustment that reduced MA risk scores by 5.9 percent. The net effect was a 3.6 percent increase in MA risk scores, leading to nearly \$12 billion in excess payments to MA plans. The magnitude of these findings is consistent with most other research showing that the impact of coding differences on MA risk scores is larger than CMS's adjustment for coding (Congressional Budget Office 2017, Geruso and Layton 2015, Government Accountability Office 2013, Hayford

and Burns 2018, Kronick and Welch 2014). One recent analysis using a unique method has found that coding intensity could increase MA risk scores by much more than our estimate (Kronick and Chua 2021).

Expressed as a trend, MA coding intensity results in an increase in MA risk scores of about 1 percentage point per year relative to the FFS risk score trend (the trend was about 1.25 percentage points per year higher from 2004 through 2013 and about 1 percentage point per year higher from 2017 through 2019). However, Figure 12-6 shows deviations from this trend in 2014, 2016, and 2017, which we attribute to two factors:

- **Changes in the risk-adjustment model:** MA coding intensity fell in 2014, 2016, and 2017 due to the introduction of model versions that were less susceptible to MA and FFS diagnostic coding differences.
- **Changes in the relative growth rates of FFS and MA risk scores:** In 2016 and 2017, MA risk scores grew at about the same rate as in prior years, but FFS risk scores grew at a faster rate, likely caused by Medicare's transition from using International Classification of Diseases (ICD)-9 to ICD-10 diagnosis codes in October 2015.⁴⁰

See our March 2021 MA chapter for a more detailed explanation of these two factors (Medicare Payment Advisory Commission 2021c).⁴¹

Between 2019 and 2020, the somewhat smaller increase in MA coding intensity (a 0.4 percentage point increase) was due to slower MA risk score growth, while FFS risk score growth remained about the same between the 2017 to 2019 period and the 2019 to 2020 period.

Variation in coding intensity across MA contracts

For 2020, we continued to find that nearly all MA contracts had risk scores that were higher than FFS scores and that the impact of coding intensity across MA contracts varied widely. This finding is based on a similar analysis we conducted of average coding differences (using retrospective cohorts of 2020 enrollees, tracked backward for as long as they were continuously enrolled in the same program (FFS or MA) or as far back as 2007, the first year that payment to MA plans was based entirely on CMS-HCC-model risk scores), but the change in risk score for each MA

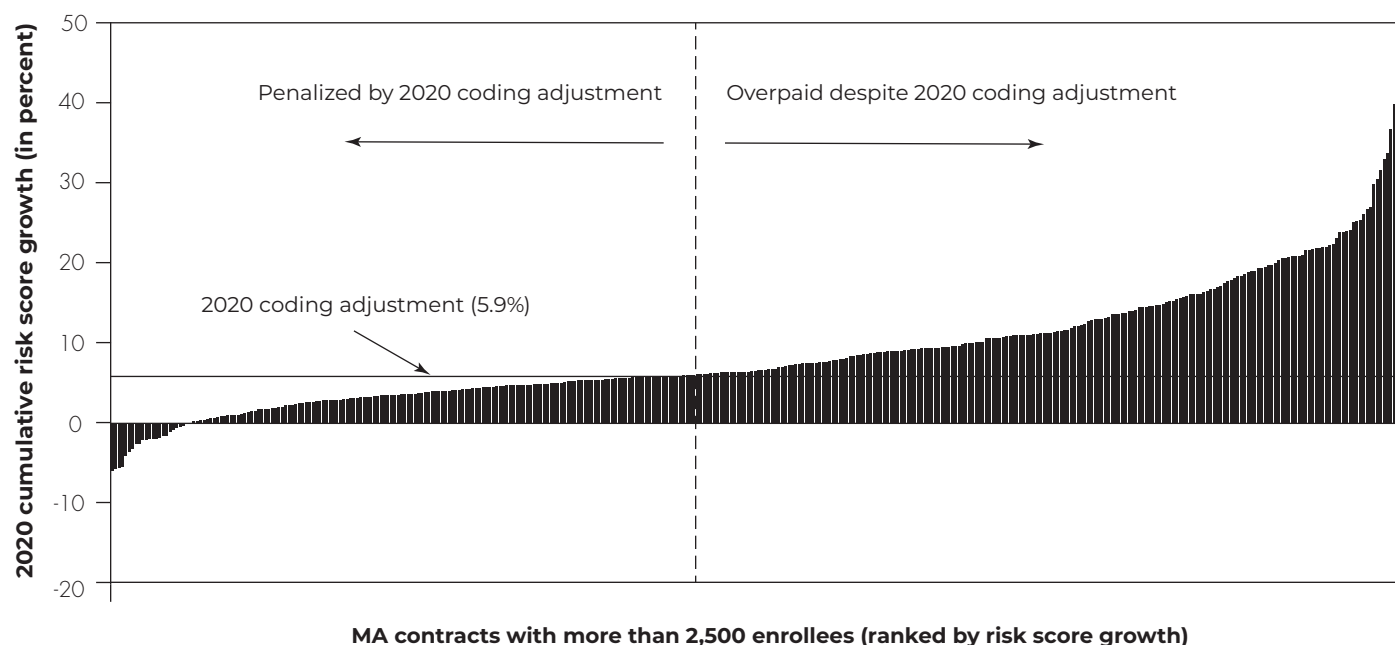
beneficiary was attributed to the contract (excluding contracts in the Program of All-Inclusive Care for the Elderly and SNPs) in which the beneficiary was enrolled in 2020, thereby capturing the coding impact for each contract's 2020 payments. Figure 12-7 (p. 442) illustrates the variation across contracts with more than 2,500 enrollees in 2020 (less than 1 percent of MA enrollees were in contracts with fewer than 2,500 enrollees) relative to risk scores for FFS in their local service area.

Our finding that coding intensity varies across MA contracts is consistent with other research and is consistent with OIG's findings that use of chart reviews and health risk assessments—accounting for nearly two-thirds of MA coding intensity by our estimate—varies widely across MA plan sponsors (Geruso and Layton 2015, Kronick and Welch 2014, Office of Inspector General 2021f). Given this variation, CMS's across-the-board adjustment for coding intensity, which reduces all MA risk scores by the same amount, generates inequity across contracts by (1) reducing net coding intensity revenue (coding intensity-based payments minus CMS's coding intensity adjustment) for plans with lower coding intensity and allowing other plans to retain a significant amount of revenue from higher coding intensity; and (2) undermining the competition-driven incentives for plans to lower costs and improve quality.

The Commission's prior recommendation on coding intensity

The Commission's long-standing position is that Medicare payment policies should not unduly favor MA or FFS Medicare. Excess payments to MA plans may benefit enrollees in the MA program (when used to increase the value of extra benefits offered rather than increase profits) but cost taxpayers more than if these enrollees were covered in FFS Medicare. Further, excess payments to MA plans increase fiscal pressure on the Hospital Insurance (Part A) Trust Fund as well as on the taxpayers, beneficiaries, and state Medicaid programs that pay premiums to finance the Part B program.

In our March 2016 report to the Congress, the Commission recommended a multipronged approach that would fully account for the impact of coding differences, would improve the equity of the adjustment across MA contracts, and would increase the competitively driven incentives to reduce costs

**FIGURE
12-7****Cumulative MA risk score growth varied across contracts relative to local FFS, 2020**

Note: MA (Medicare Advantage), FFS (fee-for-service). Excludes MA contracts with enrollment below 2,500 (representing less than 1 percent of total MA enrollment), contracts for the Program of All-Inclusive Care for the Elderly, and special needs plans. Analysis is based on retrospective cohorts of 2020 enrollees, tracked backward for as long as they were continuously enrolled in the same program (FFS or MA) or as far back as 2007.

Source: MedPAC analysis of CMS enrollment and risk score files.

and improve quality. The recommendation, which would replace the existing mandatory minimum coding intensity adjustment (which was 5.9 percent beginning in 2018), has three parts:

- Develop a risk-adjustment model that uses two years of FFS and MA diagnostic data,
- Exclude diagnoses that are documented only on health risk assessments from either FFS or MA, and then
- Apply a coding adjustment that fully accounts for the remaining differences in coding between FFS Medicare and MA plans.

Using two years of diagnostic data would improve the accuracy of both FFS and MA diagnostic information and would reduce year-to-year variation in documentation. The 21st Century Cures Act (the

Cures Act) codifies the Secretary's authority to use two years of diagnostic data in MA risk adjustment, stating that, for 2019 and subsequent years, "the Secretary may use at least two years of diagnosis data." However, CMS did not take this step in any of the rulemaking that implemented the Cures Act provisions. Removing diagnoses documented through only health risk assessments would mean that a diagnosis, to be counted in risk-adjustment calculations, would have to have been the subject of medical treatment. Diagnoses that were both documented on an assessment and associated with medical treatment would continue to count toward risk adjustment. However, about 30 percent of the HCCs documented through health risk assessments for MA enrollees were not treated during the year, compared with about 6 percent of diagnoses that were documented through these assessments for FFS enrollees.

Implementing the first two policies—using two years of diagnostic data and excluding diagnoses documented through health risk assessments alone—would result in a more equitable, targeted adjustment to MA contracts than the current across-the-board adjustment. We estimated that these policies’ combined effect would reduce MA risk scores by roughly 3 percentage points to 5 percentage points relative to FFS Medicare and thus would address roughly half of the impact of coding differences.

Adjusting for any remaining coding intensity differences could also improve equity across MA contracts. Under one approach, contracts would be grouped into tiers of high, medium, and low coding intensity, and a coding intensity adjustment would be applied based on each tier’s average level of coding intensity. CMS has used a similar approach to select MA contracts for risk-adjustment data validation (RADV) audits.⁴² While this policy would leave some unevenness within each group of contracts, overall inequity would be reduced relative to an across-the-board adjustment. CMS could consider using a greater number of tiers to further refine the equity of the overall adjustment.

The Commission’s recommendation does not address the use of chart reviews to increase MA risk scores and payments since data were not available in 2016. Recent analysis from OIG indicates that chart reviews are a significant driver of both MA coding intensity and the variation in coding intensity across MA contracts. The Commission’s approach to addressing MA coding intensity has been to tackle the underlying causes (e.g., remove health risk assessments and reduce year-to-year coding variations) and then address remaining differences with either an across-the-board or tiered adjustment. Eliminating chart reviews as a source of diagnoses for risk adjustment is consistent with the Commission’s approach and would reduce the need for an across-the-board or tiered adjustment.

Risk-adjustment data validation

Medicare payments to MA plans are based, in part, on diagnostic data that plans submit to CMS. Program rules state that, to be used for payment, diagnoses submitted for risk adjustment must result from a hospital inpatient stay, hospital outpatient visit, or face-to-face visit with a physician or other health

care professional; diagnoses also must be supported by evidence in the patient’s medical record. MA plan leadership signs an attestation covering both RAPS and encounter data that risk-adjustment criteria are applied correctly and submitted data are accurate, but only for encounter data is a more thorough review conducted in which CMS independently verifies that diagnoses are generated in the appropriate health care setting (hospital inpatient stay, hospital outpatient visit, or a face-to-face visit with a physician or other health care professional). The use of encounter data significantly improves oversight of payment data and offers the opportunity to ensure their validity before payments are made to MA plans. CMS must conduct RADV audits of both encounter and RAPS data to ensure that diagnoses are supported by the medical record, but RADV audits of RAPS data must also check whether diagnoses are made during an encounter with an appropriate type of provider.

RADV audits determine whether an MA plan was overpaid due to invalid data and are the basis for calculating an overpayment amount to recover from the plan.⁴³ CMS audits roughly 5 percent of MA contracts per year (about 30 contracts in early audit years) and, for each contract, uses a sample of 201 enrollees who had at least 1 HCC reported and met certain other criteria.⁴⁴ The sample includes 67 randomly selected enrollees from each of three strata of beneficiaries’ risk scores (low, medium, and high). For each beneficiary, the audit calculates a payment error rate, defined as the portion of the beneficiary’s HCC-based payment that was not based on valid data. Beneficiary payment error rates can be offset if any additional HCCs are found that were not submitted for payment but were supported by the beneficiary’s medical record.⁴⁵ For the initial round of audits of 2007 data, CMS recovered overpayments only for beneficiaries in the sample of 201 enrollees. For subsequent audits, in 2018 CMS proposed recovering overpayments for the entire contract (of eligible enrollees) by extrapolating from the payment error rates for the sampled enrollees.⁴⁶

RADV audits of MA contracts have been limited and their results are largely unreported. Audits of 2007 RAPS data identified diagnoses that did not meet risk-adjustment criteria and determined that average overpayment rates were well over 10 percent for most

**TABLE
12-9****Risk-adjustment data validation audits have been limited, and results are largely unreported**

Audit status	2007 ^a	2011 ^b	2012 ^b	2013 ^b	2014	2015	2016	2017	2018	2019
Recovery complete	\$13.7 million									
Audit complete, no results		X	X	X						
Audits in progress					X	X				
Audits not started							X	X	X	X

Note: No audits were conducted from 2008 through 2010.

^aThe RADV audits conducted in 2007 attempted to recoup payments for only the beneficiaries and diagnoses associated with the overpayments identified in the audit data, a small fraction of all plan payment data.

^bCMS has completed audits of 2011, 2012, and 2013 data and stated that it expects to recoup \$650 million in overpayments through an overpayment recovery method that extrapolates sampled audit data to all plan payments, but the agency will not release results of those audits until the extrapolation method is finalized.

Source: Department of Health and Human Services financial annual reports and CMS MA risk-adjustment data validation audits fact sheet, June 1, 2017.

contracts under audit (Schulte 2016). CMS recovered \$13.7 million in overpayments from audits of 37 contracts, based on overpayments only for the 7,437 beneficiaries included in the audit sample (Centers for Medicare & Medicaid Services 2017). No audits were conducted for payment years 2008 through 2010. For audits of 2011, 2012, and 2013 payment years, CMS stated that it expects to recoup about \$650 million in overpayments based on the extrapolation method (Centers for Medicare & Medicaid Services 2018). However, CMS will not release the results of those audits until its extrapolation method is finalized (Centers for Medicare & Medicaid Services 2019). CMS has proposed additional RADV audits focused on certain HCCs rather than on whole contracts; however, CMS has not identified the scope of such audits or stated when they would begin. Audits of 2014 and 2015 data are still in progress due to delays related to the public health emergency. Table 12-9 summarizes the history of RADV audits and results.

In reviewing the RADV audit process, the Government Accountability Office noted that RADV audits are

tasked with recouping billions of dollars in improper payments to MA plans based on RAPS data but found a number of shortcomings with the audits and recommended targeting them at contracts with a higher likelihood of overpayments (Government Accountability Office 2016). Although CMS has released only the results of the RADV audits of 2007 data, OIG recently released the results of compliance audits for six MA contracts (see text box).

Quality in MA is difficult to evaluate

By statute, since 2012, Medicare uses a quality bonus program (QBP) that rates MA plans based on a 5-star system and provides bonuses to plans rated 4 stars or higher. The 5-star system, which predates the QBP, is also the basis of information that beneficiaries receive about MA plan quality through the Medicare.gov Plan Finder website. Over the years, the Commission has discussed the flaws in the 5-star system and the QBP and the continuing erosion in reliability of data used

OIG's compliance audits of specific diagnosis codes

Over the past year, the Office of Inspector General (OIG) reported its findings from audits of specific diagnosis codes for six Medicare Advantage (MA) contracts. These audits check whether diagnosis codes are supported by an enrollee's medical record as required by Medicare program rules. One of the audits found that \$584,852 of the \$701,593 that Medicare paid to one contract for certain diagnosis codes from 2014 through 2016 was not properly documented and recommended that the plan sponsor return the overpayment of \$584,852 (Office of Inspector General 2021d). For

the other five audits, OIG sampled beneficiaries with one or more hierarchical condition categories (HCCs) for the diagnosis codes under audit and extrapolated the error rate to the total payments to the plan for those HCCs. Using this method, OIG concluded that the MA organizations sponsoring these five contracts should return net overpayments of \$3.5 million, \$5.2 million, \$6.4 million, \$14.5 million, and \$197.7 million (Office of Inspector General 2022, Office of Inspector General 2021a, Office of Inspector General 2021b, Office of Inspector General 2021c, Office of Inspector General 2021e). ■

to assess the quality of MA plans (Medicare Payment Advisory Commission 2019a, Medicare Payment Advisory Commission 2018a). The current state of quality reporting is such that the Commission's yearly updates can no longer provide an accurate description of the quality of care in MA. The Commission's March 2019 report to the Congress contains a detailed discussion of the difficulty of evaluating the quality of care within the MA sector and changes in MA quality from one year to the next (Medicare Payment Advisory Commission 2019b). During the coronavirus public health emergency, CMS has relaxed quality reporting rules, boosting star ratings for many plans and generating a windfall for plans in 2023 (see text box on quality bonuses, p. 446).

Good information on the quality of care that MA enrollees (46 percent of eligible Medicare beneficiaries) receive and how that quality compares with quality in FFS Medicare, including in ACOs, is necessary for beneficiaries and policymakers to properly evaluate the program and plan options. MA plans have a number of management tools that are not available in FFS but permit plans to improve the quality of care for their enrollees—tools such as selective contracting, care management, information systems shared across providers, and utilization management that can prevent

overuse of potentially harmful care. These tools give MA the potential to improve quality relative to FFS, but a lack of sufficient data severely limits any definitive comparisons between MA and FFS Medicare.

Comparative assessments could help in evaluating MA performance and changes in performance over time, in evaluating payment policy in MA, and in determining the adequacy and appropriateness of the standards applied to MA plans (for example, by using quality results as an indirect measure of network adequacy in MA plans). The ability to compare MA and FFS quality, and to compare quality across MA plans, is important for beneficiaries. Choosing between MA and FFS is a threshold choice that beneficiaries make before getting to the step of deciding among available MA plans. Unfortunately, star ratings for most plans are based on data from geographically dispersed areas and therefore do not provide meaningful information about the quality of care providers furnish in beneficiaries' local area.

One recent study assessed plan performance on nine claims-based measures and compared changes for MA plans before and after the introduction of the QBP to changes for commercial plans (plans covering the employer group and non-group markets that are not eligible to participate in the Medicare QBP).

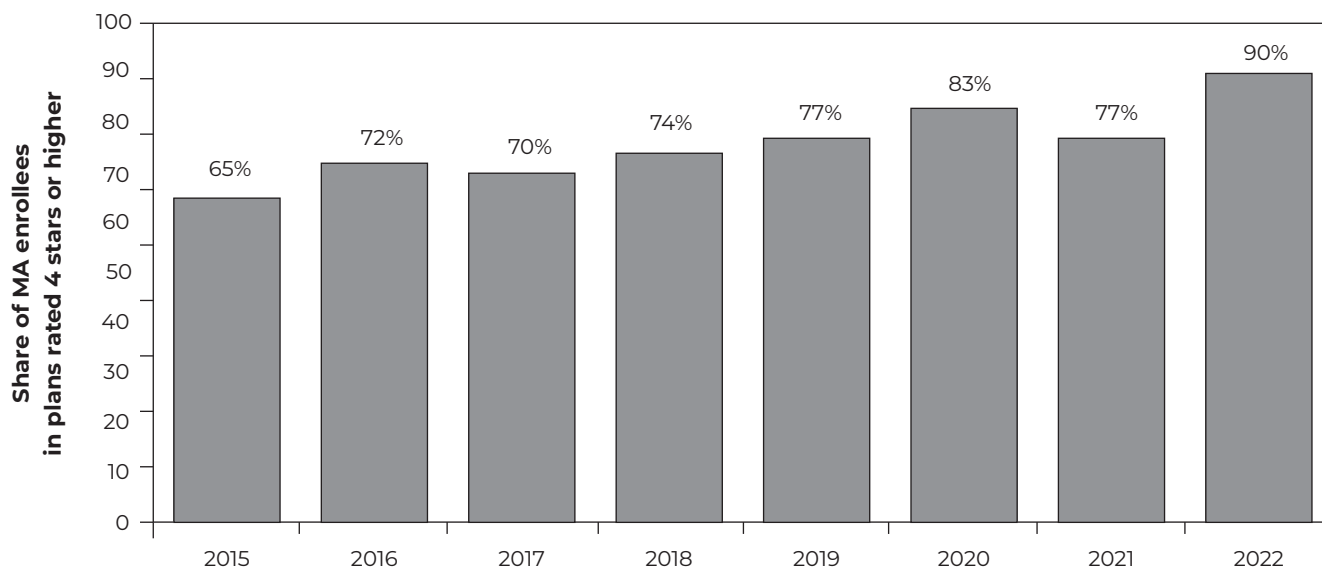
Quality bonuses under the coronavirus public health emergency

Despite the substantial flaws in the quality bonus program, the program significantly boosts payments to Medicare Advantage (MA) plans each year. Our prior analyses showed that these increases in plan revenue did not result in dollar-for-dollar increases in extra benefits. In fact, most of the extra dollars from quality bonus payments were not used to provide extra benefits to MA enrollees (Medicare Payment Advisory Commission 2020a). Figure 12-8 shows that the share of MA enrollees in plans receiving a bonus benchmark has increased (by achieving a star rating of 4 stars or higher) since the start of the program in 2015. Although the Congress limited plans' incentive to use contract consolidations to artificially increase star ratings, the Commission has reported that contract consolidations are responsible for many of the star rating increases over the period shown in Figure 12-8 (Medicare

Payment Advisory Commission 2020a). Under the coronavirus public health emergency (PHE), CMS relaxed quality reporting rules, essentially allowing plans to apply the higher of 2019 or 2020 quality measure results for measures making up about 40 percent of 2022 star ratings (Health Management Associates 2021). The 2022 star ratings are used by Medicare beneficiaries to make their coverage decisions for 2022 and are used in the calculation of 2023 payment rates. The reporting flexibility during the PHE resulted in an unprecedented 90 percent of MA enrollees being enrolled in an MA plan that received a bonus benchmark increase. Although many of these plans would have received a quality bonus without the reporting flexibility, a number of plans appear to have achieved a quality bonus only because of the relaxed reporting rules, and these plans will receive a windfall in 2023. ■

**FIGURE
12-8**

In 2022, the share of MA enrollees in plans rated 4 stars or higher to reach about 90 percent with reporting flexibility due to the PHE



Note: MA (Medicare Advantage), PHE (public health emergency). Before 2020, many MA plans used contract consolidations to artificially increase star ratings. For 2022 star ratings, flexible reporting rules were allowed under the PHE.

Source: MedPAC analysis of CMS enrollment and star rating reports for 2015 through 2022.

The authors found no overall differences in quality between the MA and commercial plans and observed little evidence that the QBP was associated with improvements in quality performance for MA enrollees (Markovitz et al. 2021).

A new MA value incentive program

In our June 2019 report to the Congress, the Commission discussed ways to apply the Commission's quality principles to the MA program through a value incentive program (Medicare Payment Advisory Commission 2019a). In the June 2020 report to the Congress, the Commission recommended replacing the quality bonus program with a value incentive program that incorporates the following key features:

- Use of a small set of population-based outcome and patient/enrollee experience measures that, where practical, align across all Medicare-accountable entities and providers, including MA plans and ACOs. To avoid undue burden on providers, measures should be calculated or administered largely by CMS, preferably with data that are already reported, such as claims and encounter data.
- Evaluation of health care quality at the local market level to provide beneficiaries with information about quality in their local area and provide MA plans with incentives to improve quality in every geographic area.
- Quality measurement against a continuous scale of performance that clearly provides the incentive to improve quality at every level.
- Accounting for differences in enrollees' social risk factors by stratifying plan enrollment into groups of beneficiaries with similar social risk profiles so that plans with higher shares of these enrollees are not disadvantaged in their ability to receive quality-based payments, while actual differences in the quality of care are not masked.
- Application of budget-neutral financing so that the MA quality system is more consistent with Medicare's FFS quality payment programs, which are either budget neutral (financed by reducing payments per unit of service) or produce program savings because they involve penalties (Medicare Payment Advisory Commission 2020a).

Mandated report: Comparing the performance of D-SNPs and other plans that serve dual-eligible beneficiaries

Dual-eligible special needs plans (D-SNPs) are specialized MA plans that limit their enrollment to beneficiaries who receive both Medicare and Medicaid. The Bipartisan Budget Act (BBA) of 2018 permanently authorized D-SNPs and, starting in 2021, required them to meet new standards for integrating the delivery of Medicare and Medicaid services. The BBA of 2018 mandated that the Commission periodically compare the performance of different types of D-SNPs and other plans that serve dual-eligible beneficiaries. This analysis constitutes our first report under the mandate, which we are required to submit to the Congress by March 15, 2022. We find that the performance data that MA plans report as part of the Healthcare Effectiveness Data and Information Set® (HEDIS®) provide limited insight on the relative performance of D-SNPs. This finding is consistent with previous Commission analyses that have examined the difficulties of assessing the quality and performance of MA plans.

D-SNP integration requirements

Dual-eligible beneficiaries, as a group, are often in poor health and may have trouble obtaining well-coordinated care because they receive services from two separate programs. D-SNPs are based on the rationale that this population will receive better care from a specialized MA plan that is tailored to meet their distinct care needs than they would from a traditional MA plan.

The extent to which D-SNPs must integrate the delivery of Medicare and Medicaid services has evolved over time. When D-SNPs were first authorized in 2003, they did not have to meet any specific requirements for integration. The Congress enacted the first requirements in the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA). Since 2010, MIPPA has required D-SNPs to have Medicaid contracts that meet certain minimum requirements, such as specifying the plan's service area, the Medicaid services the plan provides (if any), and its responsibility to coordinate the delivery of Medicaid services for its enrollees. Later in 2010, with the Affordable Care Act of 2010, the Congress added requirements for plans to qualify as a *fully integrated dual-eligible* SNP (FIDE-SNP). These plans must be offered by an entity

**TABLE
12-10****In 2021, most D-SNP enrollees were in plans with a low level of integration**

Type of plan	Plans		Enrollment (in thousands)	
	Number	Share	Number	Share
Coordination-only D-SNP	338	59%	1,904	57%
HIDE-SNP or FIDE-SNP without exclusively aligned enrollment	164	28	1,150	35
HIDE-SNP or FIDE-SNP with exclusively aligned enrollment	72	13	260	8
Total, all D-SNPs	573*	100	3,313	100

Note: D-SNP (dual-eligible special needs plan), HIDE-SNP (highly integrated dual-eligible special needs plan), FIDE-SNP (fully integrated dual-eligible special needs plan). We counted the number of plans using unique combinations of contract number and plan number. Figures are based on July 2021 enrollment and do not include plans in the U.S. territories. Components may not sum to totals because of rounding.

*In 2021, one D-SNP operated in both North Carolina and Virginia but met different integration standards in the two states (coordination-only in North Carolina and HIDE-SNP without exclusively aligned enrollment in Virginia). We included that plan in the plan count for each integration standard, so the unduplicated number of D-SNPs was 573 rather than 574.

Source: MedPAC analysis of CMS enrollment and D-SNP integration data.

that has a capitated Medicaid contract to provide both institutional and community-based long-term services and supports (LTSS) and can receive higher Medicare payments if their enrollees have high levels of functional impairment.

The BBA of 2018 made the authorization for D-SNPs permanent—previously, it had been temporary—and built on the MIPPA standards by requiring D-SNPs, starting in 2021, to meet one of three additional criteria for integration:

- The plan meets a minimum set of requirements, determined by the Secretary, to coordinate the delivery of LTSS, behavioral health, or both for plan enrollees. CMS specified through regulation that these plans must notify the state about admissions to inpatient hospitals and skilled nursing facilities for at least one group of “high-risk” full-benefit dual eligibles, which is defined by the state. CMS refers to these plans as *coordination-only D-SNPs*; they have the lowest level of integration because they do not have to provide any Medicaid services (plan enrollees instead receive those services through a Medicaid FFS program or a separate Medicaid managed care plan).
- The plan qualifies as a FIDE-SNP or as a *highly integrated dual-eligible SNP* (HIDE-SNP) by having a capitated Medicaid contract to provide LTSS, behavioral health, or both. FIDE-SNPs have the highest level of integration because they provide a broad range of Medicaid services, including substantial LTSS coverage. HIDE-SNPs fall somewhere in the middle: They are more integrated than coordination-only plans because they provide some Medicaid services, but less integrated than FIDE-SNPs because their Medicaid contracts are not as extensive and they can use a wider variety of contracting arrangements with states.
- The plan assumes “clinical and financial responsibility” for both Medicare and Medicaid benefits provided to its enrollees. CMS has defined these plans as HIDE-SNPs or FIDE-SNPs that have exclusively aligned enrollment, which means that enrollment in the D-SNP is limited to dual eligibles who receive their Medicare and Medicaid benefits from the same parent company. Under a separate BBA of 2018 provision, these plans must have a unified process for handling appeals and grievances

Legislative language for mandated report

Section 50311(b)(1) of the Bipartisan Budget Act of 2018 reads (in part):

(E) STUDY AND REPORT TO CONGRESS.—

(i) **IN GENERAL.**—Not later than March 15, 2022, and, subject to clause (iii), biennially thereafter through 2032, the Medicare Payment Advisory Commission established under section 1805 ... shall conduct (and submit to the Secretary and the Committees on Ways and Means and Energy and Commerce of the House of Representatives and the Committee on Finance of the Senate a report on) a study to determine how specialized MA plans for special needs individuals described in subsection (b)(6)(B)(ii) perform among each other based on data from Healthcare Effectiveness Data and Information Set (HEDIS) quality measures, reported on the plan level, as required under section 1852(e)(3) (or such other measures or data sources that are available and appropriate, such as encounter data and Consumer Assessment of Healthcare Providers and Systems data, as specified . . . as enabling an accurate evaluation under this subparagraph). Such study shall include, as feasible, the following comparison groups of specialized MA plans for special needs individuals described in subsection (b)(6)(B)(ii):

(I) A comparison group of such plans that are described in subparagraph (D)(i)(I).

(II) A comparison group of such plans that are described in subparagraph (D)(i)(II).

(III) A comparison group of such plans operating within the Financial Alignment Initiative demonstration for the period for which such plan is so operating and the demonstration is in effect, and, in the case that an integration option that is not with respect to specialized MA plans for special needs individuals is established after the conclusion of the demonstration involved.

(IV) A comparison group of such plans that are described in subparagraph (D)(i)(III).

(V) A comparison group of MA plans, as feasible, not described in a previous subclause of this clause, with respect to the performance of such plans for enrollees who are special needs individuals described in subsection (b)(6)(B)(ii).

(ii) **ADDITIONAL REPORTS.**—Beginning with 2033 and every five years thereafter, the Medicare Payment Advisory Commission ... shall conduct a study described in clause (i). ■

(instead of separate processes for Medicare-covered and Medicaid-covered services).

This year, D-SNPs are available in 45 states and the District of Columbia (including South Dakota and Wyoming, which had never had D-SNPs before). The only states without them are Alaska, Illinois, New Hampshire, North Dakota, and Vermont.

In 2021, about 3.3 million dual-eligible beneficiaries were enrolled in D-SNPs (Table 12-10). More than half of those beneficiaries (57 percent) were enrolled in coordination-only D-SNPs, which have the lowest level of integration. Another 35 percent were enrolled in HIDE-SNPs or FIDE-SNPs that did not have aligned enrollment, and 8 percent were enrolled in HIDE-

SNPs or FIDE-SNPs with aligned enrollment. Although HIDE-SNPs and FIDE-SNPs may meet either the second or third integration criteria, depending on their use of aligned enrollment, HIDE-SNPs account for 95 percent of the enrollment for plans meeting the second criterion and FIDE-SNPs account for 87 percent of the enrollment for plans meeting the third criterion (figures not shown in table).

Mandated report

The BBA of 2018 directs the Commission to periodically examine how D-SNPs “perform among each other” using HEDIS quality measures or other data sources, such as plan encounter data or the Consumer Assessment of Healthcare Providers and Systems beneficiary survey, as appropriate (see text box for the

legislative language of the mandate, p. 449). The first mandated report is due by March 15, 2022, and must be updated every two years through 2032. After that, the schedule changes, with another report due in 2033 and updates required every five years.

To the extent feasible, these reports must compare five types of plans that serve dual-eligible beneficiaries: three types of D-SNPs (divided based on the BBA of 2018's integration criteria), Medicare-Medicaid Plans (MMPs) (which operate under CMS's financial alignment demonstration), and other MA plans (but looking only at the dual eligibles enrolled in those plans).

For this report, we analyzed person-level HEDIS data for measurement year 2020, the most recent available. HEDIS is a set of quality measures that has been developed by the National Committee for Quality Assurance to evaluate health plans. CMS requires both MA plans and MMPs to collect and report data annually for a subset of HEDIS measures.

The person-level HEDIS data have both beneficiary and plan identifiers, which we used to identify beneficiaries enrolled in D-SNPs, MMPs, and other MA plans and to determine which beneficiaries in other MA plans were dual-eligible beneficiaries. In 2020, about 53 percent of all dual eligibles were enrolled in Medicare's FFS program, 24 percent were enrolled in a D-SNP, 19 percent were enrolled in some other type of MA plan, and 3 percent were enrolled in an MMP. We divided the D-SNP enrollees into three groups based on the BBA of 2018's integration criteria that each plan met in 2021.

CMS typically requires plan sponsors to collect and report HEDIS data at the contract level, but the BBA of 2018 mandate directs the Commission to use data reported at the plan level. The distinction between contract-level and plan-level data is important for certain measures. Plan sponsors rely exclusively on administrative data (such as encounter data) as the source for many measures, but there are some "hybrid" measures for which sponsors can or must use both administrative data and data collected from a sample of enrollee medical records. When sponsors rely entirely on administrative data for a measure, they report HEDIS data for every enrollee under a given contract, which makes it feasible to calculate scores for either the entire contract or any individual plan offered under that contract.

In contrast, when sponsors report data for hybrid measures, they collect data for a random sample of 411 enrollees, which is chosen at the contract level. Since most contracts have multiple plans, this sample is too small to generate reliable plan-level estimates. CMS requires MA plan sponsors to report plan-level data for a subset of HEDIS measures for all types of special needs plans, including D-SNPs. That subset includes some hybrid measures, but sponsors are not required to collect any additional data for them, so the plan-level scores for them are not reliable. As a result, our analysis excludes four hybrid measures—colorectal cancer screening, controlling high blood pressure, comprehensive diabetes care, and transitions of care. CMS may want to consider requiring plan sponsors that collect data from medical records to use large enough samples (411 enrollees at the plan level) to generate reliable estimates for SNPs.

For each comparison group, we calculated scores for 22 HEDIS measures that had a total of 35 associated rates (Table 12-11, pp. 452–453). Some measures have more than one associated rate: For example, the measure on follow-up after an emergency department visit for mental illness has two rates, one for 7-day follow-up and one for 30-day follow-up.

The results from this analysis are mixed—each plan type performed relatively well on some measures and relatively poorly on others—and do not clearly favor one plan type over the others. Drawing broader conclusions from this analysis is challenging due to underlying differences in the five comparison groups. Although each comparison group represents a plan type that serves dual-eligible beneficiaries, they nonetheless differ in ways that make it difficult to compare their HEDIS scores. For example, the groups differ in the following three areas:

- **Geographic distribution of enrollment.** Most beneficiaries have access to MA plans—this year, 99 percent live in counties where at least one plan is available and 94 percent live in counties where at least one D-SNP is available—but the share who are enrolled in plans nonetheless varies geographically. This variation is particularly pronounced for the more highly integrated plans, which are not as widely available. For example, in 2021, FIDE-SNPs and MMPs were available in only 12 states and 9 states, respectively, and about 85 percent of the

enrollment in each plan type was in just 5 states. This variation means that differences in HEDIS scores across the five comparison groups could be influenced by factors such as regional differences in disease prevalence, access to care, and physician practice patterns.

- **Type of dual-eligible beneficiaries enrolled.**

Depending on their circumstances, dual eligibles may qualify for full benefits, which can include important wraparound services such as LTSS and behavioral health, or partial benefits, which are limited to assistance with Medicare premiums and cost sharing. As a group, partial-benefit dual eligibles tend to have somewhat better health and lower costs than full-benefit dual eligibles (Medicare Payment Advisory Commission 2019a, Medicare Payment Advisory Commission and the Medicaid and CHIP Payment and Access Commission 2018). The share of enrollees who qualify for full or partial benefits varies significantly across the five plan types. For example, in 2020, partial-benefit dual eligibles accounted for 55 percent of the dual-eligible beneficiaries enrolled in other MA plans and 28 percent of D-SNP enrollees, but only 2 percent of FIDE-SNP enrollees and less than 1 percent of MMP enrollees. Even if the analysis were limited to full-benefit dual eligibles, the differences in HEDIS scores could be partly due to differences in the geographic distribution of enrollment across the comparison groups and variation in state Medicaid eligibility requirements.

- **Structural differences between MMPs and MA plans.** MMPs are demonstration plans and thus distinct from MA plans. The two plan types differ in many ways, and differences in their enrollment models and quality incentives could affect their relative performance on HEDIS measures. In MA, almost all beneficiaries enroll voluntarily, while in MMPs, many beneficiaries have been passively enrolled by states. MMPs might have more difficulty engaging with passive enrollees, which could contribute to their poor performance on some measures. Both types of plans have quality incentives, but the incentive for MA plans is structured as a bonus (higher payments for plans with a rating of 4 stars or better) while the incentive for MMPs is structured as a quality

withhold (lower payments for plans that do not meet performance thresholds), and they are not evaluated on the same measures. Three HEDIS measures (statin therapy for cardiovascular patients, osteoporosis management in women who had a fracture, and breast cancer screening) are used in the MA star ratings but not the MMP quality withhold, and MA plans performed better than MMPs on all three. Conversely, one measure (follow-up after hospitalization for mental illness) is used in the MMP quality withhold but not the MA star ratings, and MMPs performed better on that measure. Some of the differences in HEDIS scores may thus reflect differences in the financial incentives that plans have to focus on certain measures over others.

The challenges of using HEDIS measures to assess performance also reflect larger difficulties in assessing the quality and performance of MA plans (both in terms of how well individual plans perform compared with each other and how well MA plans perform compared with the FFS program). Most HEDIS measures are process measures that are not tied to clinical outcomes, but the Commission holds that measures tied to clinical outcomes and patient experience are more suitable for assessing quality (Medicare Payment Advisory Commission 2018b). CMS includes some process measures in the calculation of the MA star ratings, accounting for about 30 percent of a plan's overall star rating, but gives more weight to outcomes and patient experience measures (Medicare Payment Advisory Commission 2020a).

In 2020, the Commission recommended replacing the MA quality bonus program with a new MA value incentive program (MA-VIP) that uses a small set of measures tied to clinical outcomes and patient experience to evaluate plan performance (Medicare Payment Advisory Commission 2020a). We developed a set of potential MA-VIP measures to illustrate how our recommendation would work, but it included just four HEDIS measures—breast cancer screening, colorectal cancer screening, controlling high blood pressure, and hemoglobin A1c control for diabetics. Although we consider these four to be among the more meaningful HEDIS measures, we had to exclude three of them from our analysis because they are hybrid measures that may be based on data that plan sponsors collect by sampling medical records, and those samples do not produce reliable plan-level estimates.

**TABLE
12-11****HEDIS® scores for measurement year 2020, by plan type**

Measure	Coordination- only D-SNPs	Unaligned HIDE-SNPs and FIDE-SNPs	Aligned HIDE-SNPs and FIDE-SNPs	MMPs	Other MA plans
Access/availability of care					
Adults' access to preventive/ambulatory health services	95.7%	95.6%	96.8%	90.3%	95.4%
Initiation and engagement of alcohol and other drug abuse or dependence treatment					
Initiation	37.8	27.0	32.7	37.1	33.1
Engagement	6.8	4.3	5.5	7.1	5.0
Effectiveness of care: Behavioral health					
Antidepressant medication management					
Effective acute phase treatment	73.8	76.2	80.6	74.4	78.5
Effective continuation phase treatment	57.2	58.6	67.4	59.1	62.7
Follow-up after emergency department visit for alcohol and other drug abuse or dependence					
7-day follow-up	10.5	9.7	11.5	14.1	10.6
30-day follow-up	15.2	13.9	17.8	21.0	15.5
Follow-up after hospitalization for mental illness					
7-day follow-up	28.3	31.2	31.3	42.0	26.2
30-day follow-up	48.9	50.6	53.0	62.5	44.9
Follow-up after emergency department visit for mental illness					
7-day follow-up	32.8	32.3	51.9	52.8	31.0
30-day follow-up	48.7	50.1	65.4	68.0	46.2
Adherence to antipsychotic medications for individuals with schizophrenia	74.3	77.4	82.2	79.5	77.0
Effectiveness of care: Cardiovascular conditions					
Persistence of beta-blocker treatment after a heart attack	88.2	88.2	90.4	90.7	90.1
Statin therapy for patients with cardiovascular disease					
Received statin therapy	83.9	84.2	83.9	83.2	84.6
Statin adherence 80%	82.9	83.9	86.5	82.2	84.5
Effectiveness of care: Diabetes					
Kidney health evaluation for patients with diabetes	40.0	50.3	40.4	39.7	44.4
Statin therapy for patients with diabetes					
Received statin therapy	78.9	79.7	82.0	77.1	79.2
Statin adherence 80%	82.2	82.6	86.2	81.6	82.9

**TABLE
12-11****HEDIS® scores for measurement year 2020, by plan type (cont.)**

Measure	Coordination- only D-SNPs	Unaligned HIDE-SNPs and FIDE-SNPs	Aligned HIDE-SNPs and FIDE-SNPs	MMPs	Other MA plans
Effectiveness of care: Medication management and care coordination					
Follow-up after emergency department visit for people with multiple high-risk chronic conditions	55.8	57.9	60.6	58.2	55.2
Effectiveness of care: Musculoskeletal conditions					
Disease-modifying antirheumatic drug therapy for rheumatoid arthritis	76.8	77.8	79.3	76.9	78.6
Osteoporosis management in women who had a fracture	41.1	42.0	30.5	19.3	39.7
Effectiveness of care: Overuse/appropriateness (lower scores indicate better performance)					
Use of high-risk medications in older adults					
At least 1 dispensing event	17.5	17.3	18.0	14.5	15.0
At least 2 dispensing events	5.3	6.4	6.7	4.7	6.6
Potentially harmful drug-disease interactions in older adults					
History of falls	40.8	39.9	39.3	36.3	39.4
Dementia	42.9	46.7	42.8	41.5	42.2
Chronic kidney disease	13.5	15.5	12.8	13.9	10.6
Use of opioids at high dosage	6.0	8.6	7.0	4.5	6.9
Nonrecommended PSA-based screening in older men	24.7	29.5	21.8	22.3	25.9
Use of opioids from multiple providers					
Multiple pharmacies	2.5	2.2	2.5	2.4	1.9
Multiple prescribers	15.8	13.1	14.3	15.2	13.6
Multiple prescribers and pharmacies	1.2	1.0	1.0	1.3	0.9
Effectiveness of care: Prevention and screening					
Breast cancer screening	71.5	72.9	69.9	60.1	69.8
Effectiveness of care: Respiratory conditions					
Pharmacotherapy management of COPD exacerbation					
Systemic corticosteroid	72.4	70.1	71.5	73.5	71.7
Bronchodilator	85.4	85.1	88.8	88.3	83.6
Use of spirometry testing in the assessment and diagnosis of COPD	29.9	31.0	29.1	21.7	26.4

Note: HEDIS® (Healthcare Effectiveness Data and Information Set®), D-SNP (dual-eligible special needs plan), HIDE-SNP (highly integrated dual-eligible special needs plan), FIDE-SNP (fully integrated dual-eligible special needs plan), MMP (Medicare-Medicaid Plan), MA (Medicare Advantage), PSA (prostate-specific antigen), COPD (chronic obstructive pulmonary disease). Figures do not include plans in the U.S. territories.

Source: MedPAC analysis of HEDIS person-level data for measurement year 2020 and D-SNP integration data for 2021.

In 2019, the Commission examined the completeness and accuracy of MA encounter data. We believe that encounter data could be a rich source of information about the services that MA enrollees use, but we found

that the encounter data that have been collected to date are not complete enough to accurately compare utilization among different MA plans or between MA and FFS (Medicare Payment Advisory Commission 2019a). ■

Endnotes

- 1 HEDIS® is a registered trademark of the National Committee for Quality Assurance.
- 2 CMS includes FFS-claim administrative costs in MA benchmarks, which account for about 0.1 percent of FFS spending (Centers for Medicare & Medicaid Services 2021a). FFS-claim administrative expenses are included in our comparison of FFS spending with MA payments and differ from those reported in Medicare's Trustees report, which include the administration and oversight of the MA program and the enrollment of all Medicare providers (which is required for contracting with MA plans). The Medicare Trustees reported that administrative expenses (including those for MA enrollees) accounted for 1.04 percent of CMS's total Medicare benefit costs in 2020 (Boards of Trustees 2021).
- 3 Payments described here are for enrollees without end-stage renal disease (ESRD), representing the vast majority of MA enrollees. How Medicare pays MA plans for enrollees with ESRD is described in the Commission's March 2021 report under "Medicare payments to MA plans differ for ESRD and non-ESRD enrollees" (Medicare Payment Advisory Commission 2021c).
- 4 Plans' benefits may include a premium for mandatory supplemental benefits that cover all enrollees. Additionally, plans may offer optional supplemental benefits. Plans are not permitted to apply rebate dollars toward optional supplemental benefits. In addition, optional supplemental benefits cannot include reduced cost sharing for Medicare Part A and Part B services.
- 5 Benchmarks are calculated using FFS spending for all Medicare beneficiaries, including those with both Part A and Part B coverage and those with only Part A or Part B. In our March 2017 report to the Congress, we recommended that CMS change the calculation to include FFS spending for only those beneficiaries with both Part A and Part B (that is, expenditures for only those beneficiaries eligible to enroll in MA plans) (Medicare Payment Advisory Commission 2017). This change would make the assumptions about FFS spending in the calculation of MA benchmarks and payments more reflective of the MA-eligible population.
- 6 ACA payment formulations include an administratively determined cap on each county's benchmark. The law included a provision that caps any county's benchmark at the higher of (1) its pre-ACA level, projected into the future with a legislatively modified national growth factor, or (2) 100 percent of its estimated FFS spending in the current year. Our March 2016 report to the Congress provides more detail on double-bonus counties and benchmark growth caps. In that report, we recommended eliminating the double bonuses as well as the benchmark growth caps, which limited the benchmarks in many counties (Medicare Payment Advisory Commission 2016).
- 7 To account for coding differences in 2022, we conservatively assume that the impact of coding intensity in 2022 is the same as in 2020. The coding intensity trend from 2017 to 2020 suggests that the impact in 2022 may be higher than in 2020. We will continue to evaluate this trend. Our estimate of MA payments relative to FFS spending does not account for other potential factors that we cannot measure with certainty, including how benchmark quartiles and plan bids and payments would have changed if calculating FFS spending using only beneficiaries with both Part A and Part B, potential favorable selection of beneficiaries who choose to either switch from FFS to MA or exit MA, potential spillover of provider behavior that can occur from large increases in MA market share into FFS or potential spillover from FFS alternative payment models into MA, and any effect of MA and FFS improper payments found retrospectively.
- 8 The Commission's previous work suggests that, although some beneficiaries enroll in MA immediately upon becoming eligible, most MA enrollees initially enroll in FFS Medicare and subsequently move to MA. For more on enrollment patterns, see our March 2015 report (Medicare Payment Advisory Commission 2015).
- 9 As of June 2020, Medicare beneficiaries with Medicaid benefits who have full dual eligibility—that is, those who have Medicaid coverage for their Medicare out-of-pocket costs (premiums and cost sharing) as well as coverage for services such as long-term care services and supports—are less likely to enroll in MA plans than beneficiaries with "partial" dual eligibility.
- 10 In 2018, most beneficiaries who purchased Medigap supplemental insurance chose the most comprehensive supplemental coverage options, which generally have the highest premiums. For more information on Medigap enrollment, see our July 2021 data book (Medicare Payment Advisory Commission 2021a).
- 11 MA enrollees with hospital stays greater than five days typically have greater cost sharing for those stays compared with beneficiaries in FFS with no supplemental coverage (Freed et al. 2020).

- 12 Beneficiaries are guaranteed access to a Medigap supplemental insurance policy with no underwriting, even if they have a preexisting condition, if they purchase it during the 6-month Medigap open-enrollment period that begins on the first day a beneficiary is both 65 years old and enrolled in Medicare Part B. Beneficiaries have only one Medigap open enrollment period. Except for in limited circumstances, access to a Medigap policy is not guaranteed in most states after the Medigap open-enrollment period ends. Only four states require guaranteed-issue protections for aged (65 and over) beneficiaries in traditional Medicare, regardless of medical history. Under these protections, insurers cannot deny a Medigap policy to applicants based on preexisting conditions (Boccuti et al. 2018).
- 13 By contrast, in some metropolitan areas, less than 1 percent of Medicare beneficiaries were enrolled in MA plans. For example, in Anchorage, AK, where only employer group plans are available, 1 percent of beneficiaries were enrolled in MA in 2021.
- 14 The Commission has also found that the risk-adjustment model tends to underpredict spending for beneficiaries with no medical conditions (Medicare Payment Advisory Commission 2020a). If a disproportionate share of a county's FFS beneficiaries had no medical conditions, the risk-adjusted average FFS spending estimate would be too high.
- 15 Despite the large availability of MA plans, concerns have been raised about whether beneficiaries understand or are aware of their array of choices. One analysis of online plan insurance agents across five markets found that, on average, agents offered less than half of available MA plans to beneficiaries (Ali et al. 2021).
- 16 Beneficiaries in some parts of the country have access to Section 1876 cost-reimbursed HMOs. Such plans arrange for the full range of Medicare services. They receive reasonable cost reimbursement for Part B physician and supplier services, but the Medicare program pays providers directly for inpatient and outpatient institutional services. Enrollees of cost plans are not locked into the plan and can receive any out-of-network services, which Medicare pays for. The statute calls for the phasing out of cost plans in areas in which there are at least two competing MA CCPs that meet a minimum enrollment requirement. The cost plans are expected to transition to MA plans, and some have already begun the transition.
- 17 Market concentration is traditionally computed using the Herfindahl-Hirschman Index. The index is calculated by squaring the market share of each entity competing in the market and summing the results. The index approaches zero when a market is occupied by a large number of firms of relatively equal size and reaches its maximum of 10,000 points when a market is controlled by a single firm. The index rises both as the number of firms in the market drops and as the disparity in size among those firms increases. Using Department of Justice guidelines, markets with an index below 1,500 are considered unconcentrated; those with an index between 1,500 and 2,500 are considered moderately concentrated; and those above 2,500 are considered highly concentrated (Department of Justice and the Federal Trade Commission 2010).
- 18 Plans estimate administrative expenses and margins separately for cost-sharing reductions. The allocated \$70 per enrollee per month for cost sharing includes administrative expenses of 10 percent and a margin of 1 percent.
- 19 CMS estimates that the 2021 monthly actuarial value of Medicare deductibles and coinsurance for a beneficiary without end-stage renal disease is \$178.37 (Centers for Medicare & Medicaid Services 2021a). The Commission has previously summarized the evidence on the effects of cost sharing on Medicare spending, recommended an additional charge on supplemental insurance (Medicare Payment Advisory Commission 2012a), and found (in a commissioned study) higher Medicare spending for beneficiaries with Medigap coverage (Hogan 2009).
- 20 In 2019, 77 percent of Medigap enrollees had either first-dollar coverage or first-dollar coverage after the \$185 Part B deductible.
- 21 Plans estimate administrative expenses and margins separately for supplemental benefits. The allocated \$36 per enrollee per month for supplemental benefits includes administrative expenses of 11 percent and a margin of 3 percent.
- 22 Beginning in 2019, CMS relaxed one of the criteria for eligible supplemental benefits—that the benefit be primarily health related—to include items and services that are used to diagnose, compensate for physical impairments, ameliorate the functional and psychological impact of injuries or health conditions, and reduce avoidable emergency and health care utilization. A supplemental benefit is not primarily health related if it is an item or service that is solely or primarily used for cosmetic, comfort, or general use purposes or to address social determinants of health. The degree of projected spending for new types of supplemental benefits is not available in plan bid data.
- 23 One study of the 2018 Medicare Current Beneficiary Survey found that Medicare beneficiaries enrolled in MA plans were somewhat more likely to experience cost-related problems with accessing health care (Fuglesten Biniek et al. 2021b).

- 24 When submitting Part D bids, plans may allocate administrative expenses and margin toward the Part D revenue that results from projected Part C (i.e., MA) rebates.
- 25 Apart from plan efficiencies relative to expected FFS spending, part of the drop in bids relative to FFS spending reflects MA's higher coding of diagnoses. In addition, as MA plans enroll a greater share of new enrollees, these beneficiaries could have lower expected spending relative to their risk score. Furthermore, FFS alternative payment model incentive payments are a very small but increasing part of benchmarks. For example, 2022 MA benchmarks use shared savings payments to accountable care organizations through 2019. From 2018 to 2019, these payments rose from \$1.2 to \$1.9 billion (a 60 percent increase). Although Medicare's financial targets for accountable care organizations do not include shared savings payments, these payments are included in MA benchmarks. The Medicare program effectively pays shared savings to both accountable care organizations and MA plans (through higher benchmarks).
- 26 Payment rates for employer plans are calculated based on the bid to benchmark ratios of MA plans in the prior year. CMS separately calculates the bid to benchmark ratios for each plan type (i.e., PPO, HMO) and quartile. The final county payment rates for employer plans are calculated by weighting each plan type within each quartile by the employer plan enrollment in each of those respective plan types and quartiles.
- 27 An analysis comparing 2019 MA payments with FFS spending for MA-eligible beneficiaries (those with both Part A and Part B coverage) found that MA payments were approximately 103 percent of spending per person for comparable beneficiaries in FFS (Fuglesten Biniek et al. 2021a). This finding is similar in magnitude to the Commission's 2019 estimate of MA payments relative to FFS spending for MA-eligible beneficiaries.
- 28 Margins are calculated as the remainder of payments to the plan after accounting for all other costs, including all medical expenses, salaries, bonuses, beneficiary incentive payments, and all administrative costs. As in prior years, we removed outliers (13 contracts accounting for 5 percent of reported plan revenues) that reported medical expenses equal to or greater than their stated plan revenues for that year (i.e., contracts reporting insufficient revenue to cover benefits and any administrative expenses). We identified outliers at the contract level to account for plans that other MA plans could be subsidizing (i.e., product pairing) within the same service area. Most of the outlier contracts we identified reported negative margins in the bid data for consecutive years—indicating that these contracts are reporting unreliable data. Specifically, CMS requires MA plans with negative margins to submit a business plan to achieve profitability and expects MA plans to meet or exceed the year-by-year margin targets in the business plan.
- 29 MA plans annually report their medical loss ratios (MLRs) to CMS, which differs from our MLR estimate because plans can include quality improvement and fraud reduction activities as medical expenses when submitting their MLRs. Plans are subject to financial and other penalties for failure to meet the statutory requirement that they have an MLR of at least 85 percent. For contract year 2020, plans submitted MLRs to CMS in December 2021, and CMS will begin subtracting amounts from regular monthly plan payments in July 2022 to recoup any revenue difference between a plan's actual MLR and the 85 percent minimum MLR.
- 30 The ACA insurer fee was in effect in 2020 but is entirely repealed in all subsequent years.
- 31 Other possible sources of diagnostic information—such as encounters for home health services, skilled nursing, ambulatory surgery, durable medical equipment, lab and imaging tests, and hospice services—are not used to determine payment through the risk-adjustment model for several reasons: (1) adding diagnoses from these sources does not improve the model's ability to predict medical expenditures; (2) concerns exist about the reliability of diagnoses from providers with less clinical training (e.g., home health and durable medical equipment providers); and (3) a high proportion of reported diagnoses from certain settings (e.g., lab and imaging tests) are used to rule out having the diagnosis.
- 32 In 2015, CMS combined RAPS data and encounter data for risk adjustment, meaning that plans were paid for HCCs identified through at least one of the two data sources submitted to CMS.
- 33 CMS pooled inpatient RAPS data with encounter data because the agency found that inpatient encounter record submissions were low relative to inpatient RAPS submissions, implying that some inpatient encounter records were missing and inpatient RAPS data were needed in their place. Our analysis concluded that the RAPS data were faulty (specifically, the provider type was indicated to be inpatient hospital when the provider was likely an outpatient hospital or physician), and in comment letters we stated that RAPS inpatient data should not be pooled with encounter data. Our analysis leading to this conclusion is more thoroughly described in the March 2019 report to the Congress (Medicare Payment Advisory Commission 2019b).
- 34 Program of All-Inclusive Care for the Elderly contracts are an exception, which will continue to use pooled RAPS and encounter data as the basis for risk scores.

- 35 The Commission previously assessed the completeness of encounter data by comparing the data with other sources of MA utilization information. The Commission recommended that the Secretary establish thresholds for encounter data completeness, evaluate plans' submitted data, apply a payment withhold based on data completeness, and allow providers to submit records through the Medicare administrative contractors (Medicare Payment Advisory Commission 2019a). The Commission's most recent evaluation is summarized in our March 2020 report to the Congress (Medicare Payment Advisory Commission 2020b).
- 36 The actual dollar amount a plan will receive for coding a new HCC depends on several additional factors, including the version of the HCC model applied for a beneficiary and factors that affect a plan's base rate. Dollar-value coefficients are standardized relative to average FFS spending before being applied to each plan's base rate. CMS maintains separate HCC models for enrollees who lack a full calendar year of diagnostic data or have end-stage renal disease. A plan's base rate varies according to the plan's bid and the local area's benchmark.
- 37 This statement is supported by the legal complaints cited in this section. One complaint includes exhibits of plan documents that detail the financial performance of the plan's chart review program (United States of America v. Anthem 2020).
- 38 Partial Medicaid enrollment generally provides coverage of Medicare premiums and, for some categories, cost-sharing assistance for Medicare benefits, while full Medicaid enrollment includes premium and cost-sharing assistance and covers additional services not covered in the Medicare benefit.
- 39 The 2017 model also determines Medicaid enrollment status on a monthly basis during the payment year, which improves the accuracy of payment for these enrollees. The model has separate segments based on aged or disabled status, combined with no, partial, or full Medicaid enrollment status.
- 40 FFS risk score growth matched MA risk score growth between 2015 and 2016 for the first time since the full implementation of the HCC model in 2007. Between 2016 and 2017, FFS risk score growth slowed somewhat relative to MA risk score growth, and after 2017, the FFS rate was roughly equivalent to pre-2015 growth rates.
- 41 We also considered the impact of encounter data as a source of diagnostic information, but we do not think encounter data had a significant impact on MA risk scores or payments to plans due to the blending of RAPS and encounter data, a process completed in 2021 (see Figure 12-4, p. 434), and the shrinking difference between encounter-based and RAPS-based risk scores over time. Our analysis found that encounter-based and RAPS-based risk scores were the same for about 92 percent of MA enrollees in 2016, 93 percent in 2017, and 95 percent in 2018, and that average encounter-based risk scores were about 2 percent lower than RAPS-based risk scores in 2016 and about 1 percent lower in 2018.
- 42 For RADV audits in 2011, CMS grouped all contracts into high, medium, and low levels of coding intensity and selected 20 high-level, 5 medium-level, and 5 low-level contracts at random.
- 43 While MA plans are required to report and return self-identified overpayments, MA plans remit a relatively small and decreasing share of estimated MA overpayments. In 2019, MA plans self-reported and returned only \$44.6 million (0.5 percent of CMS's estimated MA overpayments that year) (Department of Health and Human Services 2019).
- 44 Other criteria include Part B enrollment for the full data collection year, continuous enrollment in the contract for the full data collection year and January of the payment year, and no end-stage renal disease or hospice status.
- 45 Additional HCCs that were not submitted for payment but were supported in one of up to five medical records submitted through the audit can offset beneficiary payment error rates but will not result in additional payments to the MA plan. MA plans are required to submit diagnoses for payment.
- 46 CMS proposed this method of determining overpayment recovery amounts in 2018 but has not yet issued a final rule (Centers for Medicare & Medicaid Services 2021b, Centers for Medicare & Medicaid Services 2018). For extrapolation, a contract's payment error rate would be set at the lower 99th percent confidence interval of beneficiary-level error rates in the sample. For contract payment error rates greater than zero, the overpayment recovery amount would be the payment error rate at that confidence interval multiplied by the total payment for eligible enrollees in the contract.

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CHAPTER 13

The Medicare prescription drug program (Part D): Status report

The Medicare prescription drug program (Part D): Status report

Chapter summary

In 2021, Part D paid for outpatient prescription drug coverage on behalf of more than 49 million Medicare beneficiaries. For Part D plan enrollees, Medicare subsidizes about three-quarters of the cost of basic benefits. Part D also includes a low-income subsidy (LIS) that provides assistance with premiums and cost sharing to about 13 million individuals with low income and assets. The 2020 and 2021 benefit years were extraordinary due to the coronavirus pandemic and its toll on Medicare beneficiaries and health care providers. However, Medicare beneficiaries experienced comparatively less disruption in access to medicines than in access to other types of health care services. One snapshot survey found that during the winter of 2020 to 2021, among the 7 percent of beneficiaries who reported forgoing care in the past few months, 29 percent of this subset had missed a regular check-up and 32 percent had missed treatment for an ongoing condition due to the pandemic, but only 9 percent had forgone prescription drugs or medications.

In 2020, Part D program expenditures totaled \$105.3 billion, accounting for about 11 percent of Medicare spending. Of that amount, enrollees paid \$13.6 billion in plan premiums for basic benefits. Above and beyond program spending, Part D plan enrollees paid \$17.6 billion in cost sharing plus additional amounts in premiums for enhanced benefits.

In this chapter

- Enrollment, plan choices in 2021, and benefit offerings for 2022
- Plan sponsors and their tools for managing benefits and spending
- Drug pricing
- Program costs
- Beneficiaries' access to prescription drugs
- Quality in Part D

Since its inception in 2006, Part D has changed in important ways. Enrollment has moved gradually toward Medicare Advantage–Prescription Drug plans (MA–PDs) that provide combined medical and drug coverage. In absolute numbers, enrollment in stand-alone prescription drug plans (PDPs) began to decline in 2019; in 2021, Part D enrollees were split evenly between PDPs and MA–PDs. Prescription drug use and spending have also changed dramatically. Part D enrollees have greatly expanded their use of generics, while a relatively small percentage of prescriptions for high-cost biological products (referred to as *biologics* hereafter) and specialty medications accounts for a mounting share of spending. Medicare’s payments to Part D plans have changed as well. Whereas fixed-dollar payments per enrollee used to make up most of Part D’s subsidies, over time, a growing share has taken the form of cost-based reimbursements to plans through Medicare’s reinsurance. The financial risk that plans bear, as well as their incentives to control costs, has declined markedly. In 2020, the Commission recommended major changes to the Part D benefit design and Medicare’s subsidies to restore the role of risk-based, capitated payments that was present at the start of the program and to provide some drag on drug price increases.

Nearly 300 organizations sponsor Part D plans, but most beneficiaries are enrolled in plans sponsored by a handful of large health insurers. Most large sponsors are vertically integrated with their own pharmacy benefit manager (PBM), and many also operate mail-order and specialty pharmacies. Formularies remain plan sponsors’ most important tool for managing drug benefits. Generally, pharmaceutical manufacturers pay larger rebates when a sponsor positions a drug on its formulary in a way that increases the likelihood of winning market share over competing drugs. Plan sponsors also use provisions in network contracts with pharmacies that require postsale recoupments or payments for meeting performance metrics. Plan sponsors and PBMs have negotiated rebates and pharmacy fees that have grown as a share of Part D spending.

Enrollment in 2021 and benefit offerings for 2022—In 2021, about 76 percent of Medicare beneficiaries were enrolled in Part D plans. An additional 2 percent obtained drug coverage through employer-sponsored plans that received Medicare’s retiree drug subsidy. We estimate that the remaining 22 percent of beneficiaries were divided equally between those who had drug coverage from other sources and those with no coverage or coverage less generous than Part D.

Between 2020 and 2021, enrollment in PDPs declined from 25.5 million to 24.0 million, while enrollment in MA-PDs grew from 21.9 million to 24.3 million. As a result, in 2021, just over 50 percent of enrollees were in MA-PDs compared with 30 percent in 2007. The number of enrollees who receive the LIS has grown more slowly than the broader Part D population. In 2021, LIS enrollees made up 27 percent of total enrollment compared with 39 percent in 2007.

For 2022, beneficiaries continue to have a broad choice of plans, with growth in MA-PDs more than offsetting a contraction in the number of PDPs. Compared with 2021, sponsors are offering 7 percent more MA-PDs open to all beneficiaries and 19 percent more MA-PDs tailored to specific populations (special needs plans) but 23 percent fewer PDPs, due primarily to mergers among plan sponsors. In 2022, 2,159 plans (about one-third) are participating in the Center for Medicare and Medicaid Innovation's Part D Senior Savings Model that covers certain insulins at cost sharing of no more than \$35 per one-month supply. Most Part D plans use a five-tier formulary with differential cost sharing between preferred and nonpreferred drugs, as well as a specialty tier for high-cost drugs. For 2022, the base beneficiary premium rose by less than 1 percent over 2021 to \$33.37, reflecting the relatively small increase in the total average estimated cost for basic benefits after taking postsale rebates and discounts into account. However, individual plans' premiums vary substantially. In 2022, 198 premium-free PDPs are available to enrollees who receive the LIS, or roughly one-quarter of all PDPs. Although that total is a 24 percent drop from 2021, all regions have at least four premium-free PDPs for LIS enrollees.

Part D program costs—Between 2007 and 2020, Part D program spending increased from \$46.2 billion to \$91.7 billion (average annual growth of 5.5 percent). Medicare's reinsurance (which covers 80 percent of spending in the catastrophic phase of the benefit after rebates) continues to be both the largest and fastest-growing component of program spending, at an annual average rate of about 15 percent since 2007. As a result, between 2007 and 2020, the portion of the average basic benefits paid to plans through the capitated direct subsidy plummeted from 54.7 percent to 13.5 percent. In 2020, fewer enrollees reached the benefit's catastrophic phase, due in large part to a statutory increase in the out-of-pocket threshold. High-cost enrollees (those whose spending reaches the benefit's catastrophic phase) accounted for 62 percent of Part D spending, up from about 40 percent before 2011. In 2020, average prices continued to grow more slowly than

in prior years, owing to the decline in prices of generic drugs. However, generics' share of prescriptions has plateaued at about 90 percent since 2017, and further opportunities for generic substitution may be limited because a significant portion of brand products are protected from competition through longer periods of market exclusivity, extensive patent protection, or both. Inflation in prices for brand-name drugs and biologics will likely continue to drive spending upward. In 2020, over 443,000 enrollees (11.6 percent of high-cost enrollees) filled a prescription for which a single claim was sufficient to meet the out-of-pocket threshold, up from just 33,000 in 2010.

Beneficiary access and quality in Part D—The quality of prescription drug care requires a balance between beneficiary access and medication management. For many conditions, effective treatment may hinge primarily on access and adherence to prescription drugs. For this reason, Medicare evaluates Part D plan formularies and network pharmacies. Data from CMS audits and Part D appeals processes suggest that beneficiaries are less likely to encounter access issues for most drugs than in previous years. However, among beneficiaries without the LIS, high cost sharing for expensive therapies can be a barrier to access. At the same time, Medicare beneficiaries take an average of nearly five prescription drugs daily and are at higher risk for adverse drug events associated with polypharmacy. Thus, it is also critically important that Part D plans help to manage medication therapies.

CMS collects quality and performance data to monitor plan sponsors' operations and to evaluate access to medicines, enrollee experience, and patient safety. A subset of these data form part of a 5-star rating system to help beneficiaries evaluate their plan options. For 2022, average star ratings for Part D plans increased substantially, but much of that increase reflects changes CMS made in how it calculated the ratings to address the coronavirus pandemic. While average star ratings for MA-PDs continue to exceed those of PDPs, the trend among MA-PD sponsors of consolidating contracts leads us to question the validity of MA-PD ratings.

By law, Part D plans are required to carry out medication therapy management (MTM) programs and programs to manage opioid use. In 2017, CMS began testing an Enhanced MTM model to see if new payment incentives and regulatory flexibilities would spur PDPs to improve their MTM interventions and reduce Medicare spending. Although the entire five-year demonstration is not yet complete, over the first three years, CMS found no significant

reductions in Medicare spending for Part A and Part B services, a net increase in Medicare spending after accounting for model payments, and mixed effects on quality measures. ■

Background

Each year, the Commission provides a status report on Part D that examines several performance indicators: enrollment, plan benefit offerings, market structure, drug pricing, program costs, beneficiaries' access to medications, and quality. In 2021, the Part D program paid for outpatient prescription drug coverage on behalf of more than 49 million Medicare beneficiaries. Private Part D plans are available broadly: Dozens of stand-alone prescription drug plans (PDPs) and Medicare Advantage–Prescription Drug plans (MA–PDs) are offered in every region of the country. Nearly 9 in 10 elderly Part D enrollees report that they are satisfied with the program and with their plan (*Medicare Today* 2021).

For Part D plan enrollees, Medicare subsidizes about three-quarters of the cost of basic benefits, defined as Part D's standard benefit or benefits with the same average value. Separately, Part D includes a low-income subsidy (LIS) that pays for much of the cost sharing and premiums on behalf of nearly 13 million individuals with low income and assets. In 2020, Part D expenditures totaled \$105.3 billion on an incurred basis, accounting for about 11 percent of Medicare spending (Boards of Trustees 2021). Of that amount, Medicare spending for the LIS totaled \$33.1 billion: \$29.3 billion for cost sharing and \$3.8 billion for premiums. Of the \$105.3 billion spending total, Part D enrollees paid \$13.6 billion in plan premiums for basic benefits. Above and beyond program spending, enrollees paid \$17.6 billion in cost sharing plus additional amounts in premiums for enhanced benefits.

In 2020 and 2021, the coronavirus pandemic profoundly affected the health of Medicare beneficiaries and their use of health care services. However, the pandemic's effects on prescription drug use and spending under Part D have been less pronounced than its effects on other health care services (see text box on the effects of the pandemic, p. 473).

Part D's approach

Medicare's payment system for Part D is different from payment systems under Part A and Part B. In Part D, Medicare pays competing private plans to deliver outpatient drug benefits to beneficiaries, whether they

enroll in a PDP or MA–PD. Instead of setting prices administratively, Medicare bases payments on bids submitted by plan sponsors. Plan sponsors establish networks of pharmacies and apply formularies—lists of drugs the plan will cover that use differential cost-sharing tiers—to manage enrollees' use of and spending for prescription drugs. For drug classes that have competing therapies, plan sponsors negotiate with biopharmaceutical manufacturers to place brand-name drugs on the plan's formulary, potentially on a preferred (lower) cost-sharing tier, in return for postsale rebates.

Benefit design

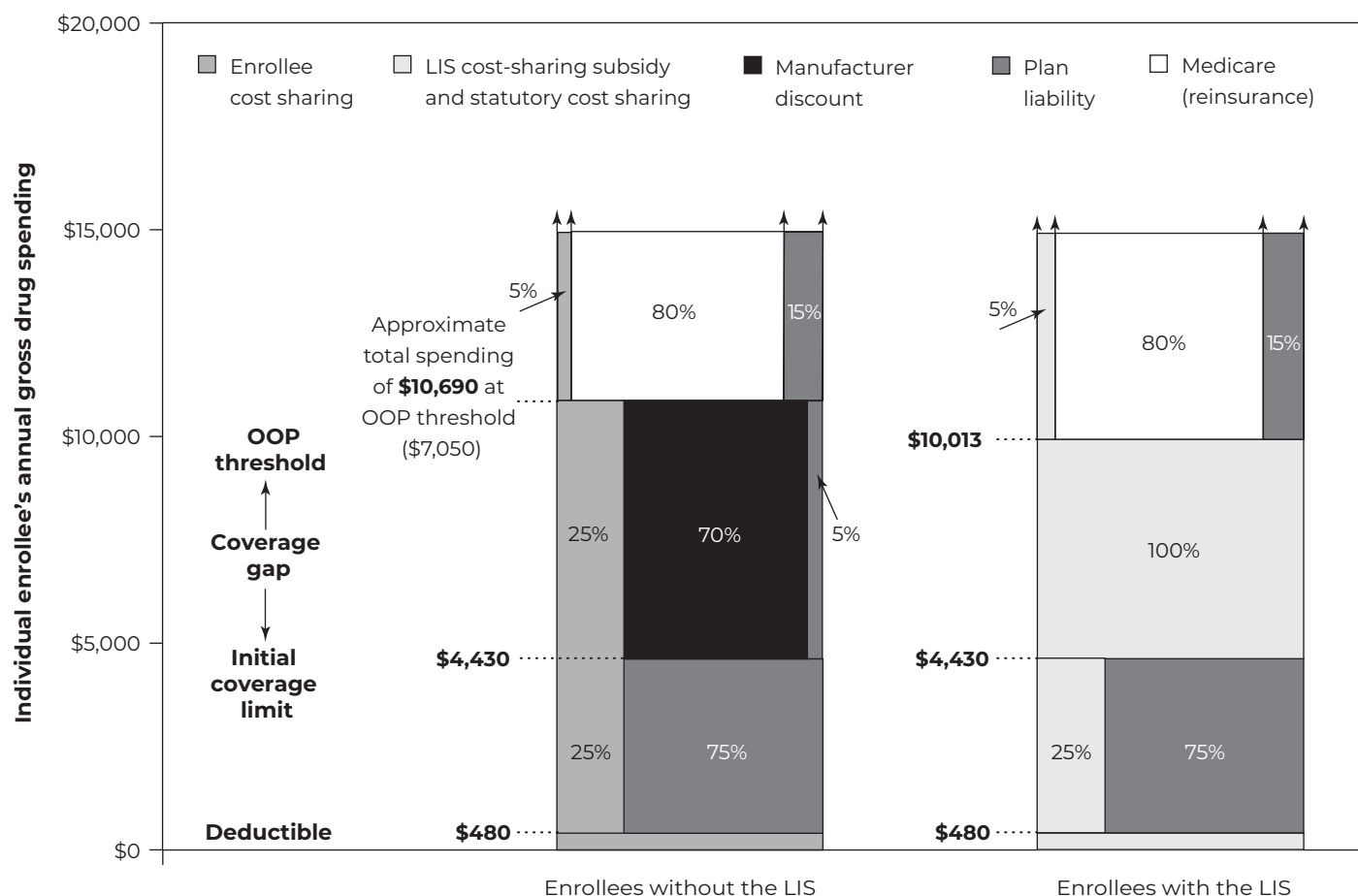
Medicare law defines a standard Part D basic benefit, but in practice, plan sponsors offer alternative benefit designs with equivalent or more generous coverage. Most LIS enrollees pay nominal copayments throughout the benefit; Part D's LIS pays for the remainder of plans' cost-sharing requirements on their behalf. Changes in law have altered the design of the standard benefit for most Part D enrollees (those without the LIS, 73 percent in 2021), but those changes did not apply to those who receive the LIS. As a result, there are two distinct standard Part D benefit designs.

Part D's defined standard benefit For the majority of Part D enrollees (those without the LIS), Part D's defined standard benefit covers 75 percent of drug spending above a deductible and all but 5 percent coinsurance once an enrollee reaches an out-of-pocket (OOP) threshold (Figure 13-1, p. 472). Each year, the standard benefit's parameters change at the same rate as the annual change in beneficiaries' average drug expenses. For 2022, the deductible in Part D's standard benefit is \$480 and enrollees pay 25 percent coinsurance until reaching an OOP threshold of \$7,050. That threshold is based on “true OOP” costs because it excludes beneficiary cost sharing paid by most sources of supplemental coverage, such as employer-sponsored policies and more generous (enhanced) benefits from the beneficiary's Part D plan.

In the past, enrollees without the LIS whose spending exceeded an initial coverage limit were responsible for paying each subsequent prescription's full price at the pharmacy (i.e., 100 percent cost sharing) until they reached an OOP threshold. This range of spending is known as the coverage gap or donut hole.¹ Under

FIGURE
13-1

Part D has two distinct benefit structures, for enrollees with and without the LIS, 2022



Note: LIS (low-income subsidy), OOP (out-of-pocket). For enrollees without the LIS, the coverage gap is depicted as it would apply to brand-name drugs, which are eligible for a 70 percent manufacturers' discount in the coverage gap. There is no discount for generic prescriptions, and thus cost sharing in the coverage gap is 25 percent and plans are responsible for 75 percent. Because of this difference, total covered drug spending at the OOP threshold depends on the mix of brand and generic prescriptions each individual fills while in the coverage gap. The dollar amount shown (\$10,690) was estimated by CMS for an individual with an average mix of drugs who does not receive Part D's LIS and has no other supplemental coverage. The bar depicting LIS enrollees reflects full rather than partial LIS coverage. LIS enrollees do not receive brand discounts from manufacturers. Beneficiaries who receive full Medicaid and Medicare benefits and have incomes less than or equal to 100 percent of the federal poverty level pay no deductible, copayments of no more than \$1.35 per generic prescription, \$4.00 per prescription for other drugs, and no copayments above the OOP threshold. Other beneficiaries who receive full Medicaid and Medicare benefits pay no deductible, copayments of no more than \$3.95 per generic prescription, \$9.85 per prescription for other drugs, and no copayments above the OOP threshold. Institutionalized enrollees pay no cost sharing. Beneficiaries who receive partial LIS assistance pay a deductible of \$99.00, 15 percent coinsurance up to the OOP threshold, and thereafter copayments of \$3.95 per generic prescription and \$9.85 per prescription for other drugs.

Source: MedPAC depiction of Part D benefit structure for 2022.

recent program changes, enrollees no longer face higher cost sharing in the coverage gap; however, plans continue to identify whether a prescription is filled in that benefit phase because, under changes in law, enrollees without the LIS are eligible for a 70

percent discount from manufacturers on brand-name prescriptions in the coverage gap. No discount is applied to prescriptions for any generic drugs or for brand-name prescriptions filled by LIS enrollees. In 2022, brand discounts begin when an enrollee without

Effects of the coronavirus pandemic on Part D

Although the coronavirus pandemic has had tragic and disproportionate effects on Medicare beneficiaries, enrollees in Medicare Part D experienced relatively less disruption of access to medicines compared with access to other types of health care services. A nationally representative survey of community-dwelling Medicare beneficiaries found that during the winter of 2020 to 2021, among the 7 percent of beneficiaries who reported forgoing care in the past few months, 29 percent of this subset had missed a regular check-up and 32 percent had missed treatment for an ongoing condition due to the pandemic, but only 9 percent had forgone prescription drugs or medications (Centers for Medicare & Medicaid Services 2021g).

In March 2020, as state and local governments placed restrictions on the operation of many businesses, most grocery stores and retail pharmacies were permitted to stay open, which helped to maintain access to medicines. With CMS's encouragement, Part D plan sponsors expanded access to 90-day supplies of prescriptions, which enrollees filled through both mail and retail pharmacies. Due to restrictions on in-person office visits and hospital stays, the pandemic had a larger effect on initiation of new drug therapies than on prescription refills for chronic conditions. Nevertheless, across all payers, the number of U.S. prescriptions dispensed in 2020 (adjusted to standardize their days' supply) rose by 1.9 percent and sales grew by 4.3 percent (Long 2021). Among Medicare Part D enrollees, in 2020, the average number of prescriptions dispensed per member

per month (adjusted for days' supply) rose by 0.5 percent, slightly lower than growth rates in 2018 and 2019. In 2020, per member Part D spending (before rebates and discounts) increased by 4.8 percent—about the same as growth observed in the previous two years.

The coronavirus pandemic affected Part D plans differently from its effects on Medicare fee-for-service providers. Much of plans' revenues do not depend on how frequently enrollees seek health care services because Medicare pays Part D plans monthly capitated amounts. Those payments are based on plan sponsors' bids for the cost of providing prescription drugs rather than updates to administered prices. Plans submitted their bids for 2020 benefits in June 2019, well before the pandemic began. Ultimately, plans' 2020 bids ended up being significantly lower than actual costs, and because of Part D's symmetric risk corridors around plan bids, Medicare shared in plans' losses and made \$1.5 billion in risk-corridor payments to plans (Liu 2021).

For the 2021 and 2022 benefit years, sponsors submitted Part D bids to CMS amid the public health emergency. It is unclear what specific assumptions about use and spending plans incorporated into their bids. However, nationwide, the average bid for basic benefits in each of those years was 1 percent higher than that for the previous year. Because Part D's risk corridors are symmetric, they provide protection for plans that underbid relative to actual costs and allow the program to recoup a portion of profits if actual drug spending is lower than expected. ■

the LIS has reached \$4,430 in cumulative drug spending and continue until the individual reaches \$7,050 in combined OOP spending plus brand discounts. Above this OOP threshold, enrollees pay the greater of 5 percent coinsurance or \$3.95 to \$9.85 per prescription.

Benefit for LIS enrollees For low-income beneficiaries, Medicare's LIS pays for the difference between cost-sharing amounts set by each plan and nominal copayments set by law (Figure 13-1). In 2022, most individuals receiving the full LIS pay between \$0 and

\$3.95 per prescription for generics and between \$0 and \$9.85 per prescription for brand-name drugs. A small share of LIS enrollees (about 3 percent) with slightly higher levels of income or assets receives a partial subsidy.² If, for example, a plan normally charges a \$40 copayment to fill a brand prescription, a full LIS enrollee would pay up to \$9.85 and Medicare's LIS would pay \$30.15. Because 100 percent of the costs in the coverage gap count toward the OOP threshold, LIS beneficiaries reach the catastrophic phase at a lower level of spending than other enrollees do. Above the OOP threshold, LIS enrollees pay no cost sharing.

Plan sponsors typically use alternative benefit designs

In practice, the defined standard benefit is used primarily to set the average value of basic benefits that plan sponsors must offer under alternative benefit designs. Most sponsors structure basic benefits in ways that differ from the defined standard benefit, such as setting the deductible lower than \$480 or using tiered copayments rather than coinsurance. Some plans encourage use of lower-cost medicines by not applying a deductible when a prescription is filled with certain preferred generics. However, alternative designs must demonstrate that they have the same average value as the defined standard benefit for an enrollee of average health. CMS also sets maximum cost-sharing amounts for drug tiers to ensure that a sponsor's plan design is not discriminatory.³ Once a sponsor offers a PDP with basic benefits in a region, it can also offer up to two "enhanced" PDPs that combine basic with supplemental coverage. For 2022, estimated OOP costs in a sponsor's basic and enhanced plans must differ by at least \$22 per month.

Two avenues for premium competition

The hallmark of Part D is that private plans compete for enrollees based on premiums, formularies, pharmacy networks, and quality of services. There are two pathways through which premium competition takes place: rivalry to attract members and competition to keep premiums at or below benchmarks that reflect the maximum amount Medicare will contribute toward LIS enrollee premiums.

General premium competition Part D plan sponsors compete to attract enrollees through low premiums, but sponsors do not set their premiums directly. Instead, sponsors submit bids to CMS that represent

their revenue requirements (including administrative costs and profit) for delivering basic benefits to an enrollee of average health. CMS then calculates a nationwide enrollment-weighted average bid from all the bid submissions. From this average, enrollees pay a portion as a base beneficiary premium (\$33.37 per month in 2022) plus (or minus) any difference between their plan's bid and the nationwide average bid (Medicare Payment Advisory Commission 2021b). If enrollees pick an enhanced plan, the enrollee must pay the full price for the supplemental coverage (i.e., Medicare does not subsidize it). This approach is designed to give sponsors the incentive to control enrollees' spending so that they can bid low and keep premiums attractive. At the same time, sponsors must balance this incentive with beneficiaries' desire to have access to medications. A plan with a very limited number of covered drugs might not attract enrollees.

Competition to keep premiums below LIS benchmarks

Sponsors also compete to keep the premiums for some plans at or below regional LIS benchmarks. When policymakers developed the premium subsidy for LIS enrollees, they wanted to encourage enrollment in less expensive plans while ensuring that low-income beneficiaries had access to coverage. Policymakers balanced these goals by creating a subsidy with two key features: (1) a benchmark that limits how much Medicare contributes toward a beneficiary's premium and (2) automatic enrollment of LIS enrollees in PDPs with premiums at or below the benchmark. CMS calculates separate LIS benchmarks for each of Part D's 34 regions and updates them annually. Each LIS benchmark equals a region's average premium for basic coverage; plans that offer basic coverage and have premiums at or below the benchmark are premium free to LIS enrollees.^{4,5}

This approach to setting Part D's LIS premium subsidy was intended to provide incentives for plan sponsors to control drug spending and bid low. LIS enrollees who have not selected a plan themselves are automatically enrolled in a benchmark PDP to which CMS assigns them randomly. Once LIS enrollees select a plan themselves, CMS no longer reassigns them to a new plan. Instead, the agency sends them letters about premium-free plan options. Many plans offered by larger sponsors have kept their benchmark status from year to year or have opted to forgo a

de minimis amount of their premium in order to retain LIS enrollees.⁶ Nevertheless, each year there is some turnover in benchmark plans. If LIS enrollees are in a PDP with a premium that will exceed the benchmark and have not chosen a plan other than their assigned PDP, CMS reassigns them randomly to a new benchmark PDP.⁷ If sponsors bid at or near the benchmark, they can gain or maintain market share for LIS enrollees without having to incur marketing expenses. Some aspects of how CMS calculates benchmarks and auto-enrolls beneficiaries temper premium competition (Medicare Payment Advisory Commission 2021c).

For plan sponsors, auto-enrollees make up an important component of the PDP market. In contrast, MA-PDs cannot receive auto-enrollees. In 2019, 62 percent of the 7.3 million LIS beneficiaries in PDPs had been placed in their plans through the auto-enrollment and reassignment processes. As of December 2021, CMS expected to reassign randomly about 248,000 LIS beneficiaries for benefit year 2022 (Liu 2021).⁸ However, CMS also auto-enrolls LIS beneficiaries who are new to Part D among plans with premiums below regional benchmarks. Between 2015 and 2019, an average of 875,000 beneficiaries were randomly assigned to a benchmark PDP annually; roughly 85 percent were new Part D enrollees who had not yet selected a plan. As LIS enrollees remain in Part D, an increasing share choose a PDP themselves or enroll in an MA-PD and become ineligible for CMS reassignment.

Concerns about Part D and recommended changes

Over time, changes to Part D's benefit design combined with trends in prescription drug pricing and spending have led to concerns about whether plan sponsors have incentives for cost control that are as strong as they were at the start of the program. In 2020, the Commission recommended major changes to the Part D program that would restructure its defined standard benefit and restore stronger incentives.

Brand discounts in the coverage gap distort relative prices

Changes in law phased out the coverage gap for enrollees who do not receive the LIS. Much of this benefit expansion was financed by requiring manufacturers of brand-name drugs or biological

products including biosimilars (referred to as *biologics* hereafter) to discount prices in the coverage gap. While those steps lowered OOP costs for some beneficiaries, the manufacturer discount artificially lowers prices for brand-name drugs relative to generics, reducing incentives to use generics. Those incentives are further undermined because the 70 percent discount is treated as though it were the enrollee's own OOP spending. As a result, enrollees without the LIS reach Part D's catastrophic phase more quickly when they use brand-name drugs than when they use generics. Brand and biologic manufacturers benefit when enrollees reach the catastrophic phase because they no longer need to provide the 70 percent discount.

Reduced plan liability undermines plans' formulary incentives

Plan sponsors bear little liability for spending in the coverage gap and catastrophic phases under either of Part D's two distinct benefit structures. In the coverage gap, sponsors are responsible for just 5 percent of brand spending for enrollees without the LIS and bear no liability for LIS enrollees. Sponsors cover 15 percent of spending in the catastrophic phase. Meanwhile, sponsors receive postsale rebates and discounts that, according to CMS's Office of the Actuary, are projected to average about 31 percent of total drug costs in 2022 (Boards of Trustees 2021). For some brand prescriptions filled in the coverage gap and catastrophic phases, the value of rebates and discounts can exceed plan liability. As a result, plan sponsors may reduce their plan liability by including certain brand-name drugs on their formulary and giving those drugs preferred status. However, those formulary placement decisions can also increase costs for enrollees and Medicare (Dusetzina et al. 2021b, Dusetzina et al. 2019).

Marked decline in plan risk over time

The share of benefit spending for which plan sponsors are at risk has declined markedly over time. We estimate that between 2007 and 2020, the share of payments for which plan sponsors were at risk (made up of capitated direct subsidy payments and enrollee premiums) declined from 75 percent to 37 percent (see Figure 13-5, p. 495), while cost-based reimbursement through reinsurance rose from 25 percent to 63 percent. This decrease in plans' liability undermines

incentives for plan sponsors to manage benefits and negotiate lower drug prices.

Expanded role of high-priced drugs has driven growth in reinsurance

At the start of Part D in 2006, most spending was attributable to brand prescriptions for widely prevalent conditions such as high cholesterol and depression. Blockbuster drugs for such conditions lost patent protection toward the end of that decade and many Part D enrollees switched to generic versions of their medicines. As those brand revenues fell, manufacturers turned to developing orphan drugs, biologics, and other high-priced specialty drugs for smaller patient populations. These trends have changed the distribution of Part D spending. Between 2007 and 2020, the share of gross Part D spending attributable to specialty-tier drugs grew from less than 6 percent to nearly 28 percent.⁹ At the same time, increased generic use kept growth in average Part D drug prices to about 3 percent per year while prices of brand-name drugs and biologics grew by 14 percent annually. (Based on analysis by Commission staff, even after accounting for manufacturer rebates, the average prices of brand-name drugs and biologics grew by an annual 13 percent during this period.) As a result, an increasing share of Part D spending is in the benefit's catastrophic phase, in which Medicare pays 80 percent of costs through reinsurance. Between 2010 and 2020, the share of Part D spending attributable to the catastrophic phase jumped from 20 percent to 42 percent. Higher prices, reflecting both price increases for existing products and the use of new expensive drugs, have been the primary driver of the growth in catastrophic spending.

Some enrollees have high OOP spending

In Part D, CMS permits plan sponsors to use up to two specialty tiers with coinsurance of 25 percent to 33 percent for expensive therapies. Enrollees without the LIS who fill prescriptions for specialty-tier drugs often must pay thousands of dollars at the start of each benefit year before reaching the OOP threshold. Above that threshold, enrollees without the LIS pay 5 percent coinsurance with no OOP maximum. Because some specialty-tier drugs have extremely high prices, in 2020, about 443,000 beneficiaries reached that threshold with a single prescription fill. At the same time, the gap between brand prices charged at the pharmacy and prices net of manufacturers' rebates has widened. Brand-name drugs that do not have direct

competitors in their therapeutic class or that are required to be on formulary, including many specialty drugs, tend to have lower rebates (Hwang et al. 2021). However, when patients use rebated drugs, they pay coinsurance that is effectively higher (as a percentage of a drug's price net of all price concessions) than the stated coinsurance rate. The higher effective coinsurance results from manufacturers providing rebates to plans after patients fill their prescriptions; plans charge enrollees coinsurance based on the higher "gross" price they pay at the pharmacy. High patient cost sharing can pose a financial hurdle to treatment, potentially affecting certain beneficiaries' decisions to fill their prescriptions. Yet because prices for certain drugs are so high, even coinsurance applied to net-of-rebate prices would remain unaffordable to many beneficiaries.

Weak incentives for LIS enrollees to select lower-cost medicines

Although the LIS helps to ensure access to medicines for low-income beneficiaries, its limits on cost sharing also give LIS enrollees weaker incentives to use lower-cost drugs and make it more difficult for plan sponsors to manage drug spending. For enrollees without the LIS, plan sponsors set tiered cost sharing to provide strong incentives to select lower-cost drugs: for example, a \$5 copayment for generics compared with \$40 to fill a prescription for a preferred brand-name drug (or higher amounts for nonpreferred drugs). In this example, for an enrollee without the LIS, the savings associated with choosing a generic would be \$35 (\$40 minus \$5). By comparison, because an LIS enrollee pays a maximum of \$3.95 for a generic prescription and up to \$9.85 for any brand-name drug, their OOP savings from taking a generic over a brand would be just \$5.90 (\$9.85 minus \$3.95). Similarly, LIS enrollees have no incentive to use a plan's preferred brand-name drug rather than nonpreferred ones (or nonformulary ones obtained through an exceptions process) because they would pay the same \$9.85 copayment regardless.

The Commission's recommendations for improving Part D

In its June 2020 report to the Congress, the Commission recommended major changes to the Part D program that would restructure its defined standard benefit as follows:¹⁰

- For spending below the catastrophic threshold, eliminate the manufacturers' coverage-gap discount that currently applies to enrollees without the LIS and remove the coverage gap for LIS enrollees. These changes would create a standard benefit for all enrollees in which plans would become responsible for 75 percent of spending for benefits between the deductible and the catastrophic threshold, with enrollees responsible for the remaining 25 percent through cost sharing.
- For catastrophic spending, reduce Medicare's reinsurance by shifting insurance risk to plan sponsors and drug manufacturers. Medicare would provide 20 percent reinsurance rather than the current 80 percent. Manufacturers would become responsible for at least 30 percent of catastrophic spending on high-priced medicines, while plan sponsors would be liable for the remaining 50 percent. The policy would also provide enrollees with greater financial protection by adding an annual cap on beneficiaries' OOP costs.

The Commission recommended phasing in the reduction in Medicare's reinsurance payments and increased plan liability for catastrophic spending. Sponsors would incorporate lower expected Medicare reinsurance subsidies and higher expected benefit liability into plan bids. In turn, Medicare's capitated payments to plans would increase to incorporate their new, higher share of spending below and above the catastrophic threshold.

To help plan sponsors manage overall drug spending more effectively, the Commission recommended that the Congress establish a higher copayment amount under the LIS for nonpreferred and nonformulary drugs. In addition, plan sponsors would be provided with greater formulary flexibility for drugs in the protected classes. The Commission also recommended that plans be allowed to establish preferred and nonpreferred tiers for specialty-tier drugs to encourage their enrollees to use lower-priced therapies. CMS began permitting sponsors to use two specialty tiers in 2022.

The Commission's recommended reforms would result in higher capitated payments for all enrollees, with a larger impact, in dollar terms, for LIS beneficiaries. However, given the structure of the risk-adjustment

model, CMS would need to recalibrate its model to ensure that, on average, capitation rates were adequate for both LIS enrollees and other Part D beneficiaries.

Given plans' greater insurance risk associated with catastrophic spending under these reforms, policymakers could consider modifying the Part D risk corridors to temporarily provide plan sponsors with greater protection during a transition to the new benefit structure. While the enhanced protection would be available to all plans, in practice, the protection would be particularly valuable for smaller plans and plan sponsors that do not have the scale to spread the insurance risk or the capital to reinsure themselves.

Enrollment, plan choices in 2021, and benefit offerings for 2022

A growing proportion of Medicare beneficiaries has enrolled in MA-PDs while the share in stand-alone PDPs has declined. Over the program's first decade, a portion of enrollment shifted from retiree drug plans outside of Medicare to Part D plans set up for employer groups.

In 2021, over three-quarters of Medicare beneficiaries were in Part D plans or employer plans that received the retiree drug subsidy

In 2021, 48.3 million individuals—about 76 percent of Medicare's total enrollment—were enrolled in Part D plans (Table 13-1, p. 478). That share is up from 54 percent in 2007 but has plateaued in recent years. Another 2 percent of beneficiaries obtained drug coverage through non-Medicare employer-sponsored plans that received Medicare's retiree drug subsidy (RDS) for serving as the primary provider. (The RDS is paid from the Part D program.) Based on Medicare data from 2018, we estimate that the remaining 22 percent of Medicare beneficiaries were divided roughly equally between those who had creditable drug coverage from other sources and those with no coverage or coverage less generous than Part D (data not shown).

The distribution of Part D enrollment has moved gradually toward MA-PDs (including special needs plans (SNPs)). The number of enrollees in PDPs began

**TABLE
13-1****Part D enrollment trends by plan type, 2007–2021**

	2007	2013	2020	2021	Average annual growth rate 2007–2021
Total Medicare enrollment (in millions)	44.4	52.5	62.6	63.7	3%
Part D enrollment (in millions)					
Part D plans	24.2	35.4	47.0	48.3	5
Non-Medicare employer plans under the RDS*	<u>7.1</u>	<u>3.3</u>	<u>1.2</u>	<u>1.1</u>	–12
Total Part D	31.3	38.7	48.2	49.4	3
<i>Part D plans' share of total Medicare enrollment</i>	<i>54%</i>	<i>67%</i>	<i>75%</i>	<i>76%</i>	<i>N/A</i>
<i>Total Part D share of total Medicare enrollment</i>	<i>70%</i>	<i>74%</i>	<i>77%</i>	<i>78%**</i>	<i>N/A</i>
Part D plan enrollment by plan type (in millions)					
PDP	16.9	22.5	25.1	24.0	3
MA–PD	7.2	12.9	21.9	24.3	9
<i>Share of plan enrollees in MA–PD</i>	<i>30%</i>	<i>36%</i>	<i>47%</i>	<i>50%</i>	<i>N/A</i>
EGWP (PDP and MA–PD, in millions)	1.8	6.0	7.2	7.4	11
<i>Share of plan enrollees in EGWP</i>	<i>7%</i>	<i>17%</i>	<i>15%</i>	<i>15%</i>	<i>N/A</i>
Full LIS enrollment (in millions)					
PDP	8.0	8.3	6.7	6.0	–2
MA–PD	<u>1.3</u>	<u>2.8</u>	<u>6.1</u>	<u>6.8</u>	12
Subtotal	9.4	11.2	12.8	12.8	2
<i>Share of LIS enrollees in MA–PDs</i>	<i>14%</i>	<i>25%</i>	<i>48%</i>	<i>53%</i>	<i>N/A</i>
<i>LIS enrollees as a share of all Part D plan enrollees</i>	<i>39%</i>	<i>32%</i>	<i>27%</i>	<i>27%</i>	<i>N/A</i>

Note: RDS (retiree drug subsidy), N/A (not applicable), PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), EGWP (employer group waiver plan), LIS (low-income subsidy). Figures based on enrollment as of April 1 of each year with the exception of 2007 (as of July 1, 2007). In addition to beneficiaries who receive full LIS assistance, a small number receive partial assistance (0.2 million in 2021). See endnote 2. Totals may not sum due to rounding.

*Excludes federal government and military retirees covered by either the Federal Employees Health Benefit Program or the TRICARE for Life program.

**Based on distributional information from CMS's 2018 Part D denominator file, we estimate that the remaining 22.4 percent of beneficiaries not enrolled in Part D are divided roughly equally between those who receive comparable drug coverage through other sources (such as the Federal Employees Health Benefits Program, TRICARE for Life, and the Department of Veterans Affairs) and those who had no drug coverage or had coverage less generous than Part D.

Source: MedPAC based on Table IV.B7 and Table V.B3 of the 2021 annual report of the Boards of Trustees of the Medicare trust funds and CMS Part D enrollment data as of April 1, 2021.

to decline in 2019, and by 2021, Part D enrollees were split evenly between PDPs and MA–PDs. This move toward MA–PDs is consistent generally with more rapid growth in MA enrollment compared with traditional fee-for-service (FFS) Medicare. Between 2007 and

2021, enrollment in MA–PDs grew an average 9 percent annually compared with 3 percent in PDPs.

Membership in employer group waiver plans (EGWPs)—Part D plans established for Medicare-eligible retirees of certain employers—grew quickly over the program's

first decade but has slowed subsequently.¹¹ EGWPs can take the form of PDPs or MA-PDs. Between 2007 and 2021, enrollment in EGWPs grew by an annual average of 11 percent, reflecting the shift from employers operating plans that receive the RDS to Part D plans established for their retirees.

In 2021, 12.8 million beneficiaries (27 percent of Part D enrollees) received the full LIS. Of these individuals, 8.1 million were eligible for both Medicare and full Medicaid benefits (data not shown) (Boards of Trustees 2021). The remainder qualified either because they received benefits through the Medicare Savings Programs or Supplemental Security Income program or because they were eligible after they applied directly to the Social Security Administration. Compared with other Part D enrollees, LIS enrollees are more likely to be female; more than twice as likely to be Black, Hispanic, or Asian or Pacific Islander; and over seven times more likely to be under age 65 (Medicare Payment Advisory Commission 2021a).

Between 2007 and 2021, LIS enrollment grew at a comparatively slow average of 2 percent per year, and the share of Part D enrollees who received the LIS fell from 39 percent to 27 percent (Table 13-1). For the first time, in 2021, a majority of LIS enrollees (53 percent) were in MA-PDs; the rest were in PDPs. In past years, most individuals receiving the LIS were enrolled in traditional FFS Medicare rather than MA. However, LIS enrollment in MA-PDs has grown rapidly—especially in SNPs—while LIS enrollment in PDPs has declined (Boards of Trustees 2021).

Beneficiaries' enrollment decisions in 2021

Most enrollees are in plans that are actuarially equivalent to Part D's defined standard benefit or are enhanced in some way, rather than in plans that follow the defined standard benefit.

MA-PD enrollees were more likely to be in enhanced plans than PDP enrollees

Enrollees in MA-PDs tend to have more generous benefits than enrollees in PDPs. The key reason is that MA-PD plan sponsors are permitted to use a portion of their Medicare Advantage (MA) (Part C) payments to supplement their Part D benefits (e.g., by lowering deductibles) or lower Part D premiums.¹²

In 2021, about half of PDP enrollees had basic coverage that was actuarially equivalent to the defined standard benefit, most with tiered copayments, while the other half had enhanced benefits (Table 13-2, p. 480). No PDPs used the defined standard benefit. Enrollees in MA-PDs, excluding SNPs, were overwhelmingly in enhanced plans. Typically, enhanced plans reduce or eliminate the deductible used in the defined standard benefit. In MA-PDs, 54 percent of enrollees had no deductible in their plan's benefit design. By comparison, only 14 percent of PDP enrollees and 6 percent of SNP enrollees were in plans with no deductible.

Although many PDP and SNP enrollees were in plans with less generous benefit structures, other plan features and the LIS reduced cost sharing for some enrollees. For example, 61 percent of PDP enrollees and 36 percent of SNP enrollees were in plans that do not apply a deductible to prescriptions filled from certain cost-sharing tiers, such as preferred generic drugs (data not shown). Additionally, most SNP enrollees are dual-eligible beneficiaries who automatically receive the LIS, which covers most of their cost sharing. Plans that enroll larger shares of LIS enrollees are more likely to use the standard benefit's deductible because the LIS largely covers those costs, and SNPs are more likely to use the defined standard benefit because LIS enrollees have nominal copayments, which limits the effectiveness of a formulary with tiered cost sharing.

Average enrollee premiums fell in 2021

Despite significant growth in spending on catastrophic benefits, premiums for basic Part D benefits have remained low, staying within a few dollars of \$30 per month since 2010. Many factors explain this stability, including growth in manufacturer rebates and postsale pharmacy fees, a higher coverage-gap discount for brand-name drugs, and the entry into Part D of relatively large cohorts of younger enrollees who typically have lower prescription drug costs. Additionally, growth in Part C payments used to offset Part D premiums and supplemental drug benefits offsets what enrollees would otherwise pay themselves through premiums. Finally, in most years, actual reinsurance costs have exceeded the amount plan sponsors estimated in their bids.¹³ Because enrollee premiums are based on plans' expected amounts, that discrepancy lowers enrollee premiums. As a result,

**TABLE
13-2**

MA-PD enrollees were much more likely to be in enhanced plans, 2021

	PDP		General MA-PD		SNP	
	Number of enrollees (in millions)	Percent	Number of enrollees (in millions)	Percent	Number of enrollees (in millions)	Percent
Total	19.7	100%	16.9	100%	3.5	100%
Type of benefit						
Defined standard	0.0	0	0.1	1	1.9	53
Actuarially equivalent*	9.8	50	0.1	1	0.4	11
Enhanced	10.0	50	16.6	99	1.3	37
Type of deductible						
Zero	2.7	14	9.1	54	0.2	6
Reduced	4.5	23	7.2	43	0.4	10
Defined standard**	12.5	63	0.5	3	3.0	84

Note: MA-PD (Medicare Advantage–Prescription Drug [plan]), PDP (prescription drug plan), SNP (special needs plan). “General MA-PD” enrollment excludes employer-only plans, plans offered in U.S. territories, 1876 cost plans, demonstrations, and Part B–only plans. In 2021, 87 percent of SNP enrollees were in plans for dual-eligible (Medicare and Medicaid) beneficiaries, 11 percent in plans for beneficiaries with certain chronic conditions, and 2 percent in plans for institutionalized individuals. Totals may not sum due to rounding.

*Includes “actuarially equivalent standard” and “basic alternative” benefits.

**Deductible of \$445 in 2021.

Source: MedPAC analysis of CMS landscape, plan report, and enrollment data.

the growth in Medicare’s reinsurance subsidy has also contributed to the slower growth in enrollee premiums.

In 2021, monthly beneficiary premiums averaged about \$26 across all types of plans (basic and enhanced, stand-alone PDP and MA-PD), a 3 percent decline from the prior year. The premiums for individual plans vary widely around that average, from \$0 for many MA-PDs to \$205 for the most expensive enhanced PDP. The \$26 average reflects plan sponsors’ extensive use of Part C rebate dollars to offset premium costs that MA-PD enrollees would otherwise pay themselves. In 2021, MA-PD enrollees paid an average of just \$15 per month but received an additional \$40 of basic and supplemental drug benefits through Part C rebates (Medicare Payment Advisory Commission 2021a). PDP enrollees paid an average of \$38 per month.

The average premiums described above omit two other factors that can affect the premium amounts enrollees

pay. First, higher-income individuals have a lower federal subsidy of their Part D benefits.¹⁴ In 2021, about 8 percent of enrollees were subject to the income-related premium, compared with less than 3 percent in 2011 (Liu 2021). Second, individuals enrolling outside their initial enrollment period must have proof that they had drug coverage as generous as the standard benefit to avoid the late enrollment penalty (LEP) that would be added to their premiums for the duration of their Part D enrollment.¹⁵ In 2021, nearly 5 percent paid the LEP, up from about 1 percent in 2007 (Liu 2021).

Large cost-sharing differences between preferred generics and other drugs

PDPs with the largest enrollment tend to use formularies with five tiers: preferred generic, other generic, preferred brand, nonpreferred drug, and a specialty tier for high-cost drugs. The cost-sharing

amounts for those tiers differ. For 2021, PDPs that were available nationwide generally kept generic copayments very low: Median copayments were zero for preferred generics and \$5 for prescriptions filled from other-generics tiers (Cubanski and Damico 2020). Although cost sharing varied significantly by plan, in 2021, the top 10 PDPs with the largest enrollment generally used copayments on the order of \$40 for preferred brand-name drugs and a median coinsurance rate of 40 percent for nonpreferred drugs. Those plans tended to charge 25 percent coinsurance for specialty-tier drugs.

Benefit offerings for 2022

For 2022, beneficiaries continue to have a wide choice of plans, with growth in MA-PD offerings more than offsetting a reduction in the number of PDPs. For 2022, plan sponsors offered 3,365 general MA-PDs and 1,130 SNPs—7 percent and 19 percent more plans, respectively, than in 2021. That rapid growth reflects interest among plan sponsors in gaining a share of MA's expanding enrollment. By contrast, in 2022, plan sponsors are offering 766 PDPs, 23 percent fewer than the previous year, due primarily to mergers among plan sponsors.¹⁶

In each of the nation's 34 PDP regions, beneficiaries continue to have broad choice. Options range from 19 PDPs in New York to 27 PDPs in Arizona, along with dozens of MA-PDs in most areas. The number of MA plans available to a beneficiary varies by the county of residence, with the average beneficiary having 36 MA plans available.¹⁷

As in previous years, MA-PDs are much more likely than PDPs to offer more generous coverage in the form of enhanced benefits due largely to the ability of MA-PDs to apply Part C rebates to drug benefits. Among MA-PDs, SNPs continue to be an exception to this overall trend: They are much more likely to use the defined standard benefit or the same deductible amount as the standard benefit. However, most SNP enrollees receive cost-sharing assistance through the LIS.

For 2022, CMS calculated that Part D's base beneficiary premium—enrollees' share of the monthly national average expected cost for basic benefits—is \$33.37, less than a 1 percent increase (31 cents) from 2021. However, premiums for individual Part D plans can vary substantially from the base beneficiary premium

because they reflect any difference between the sponsor's bid and the national average bid, as well as any enhanced (supplemental) benefits the plan offers. In addition, in 2022, MA-PD sponsors are applying an average of \$47 per month of Part C rebate dollars to lower their Part D premiums compared with \$40 per month the prior year (an 18 percent increase).

Sixteen stand-alone products are marketed nationally under the same plan name in all or most of Part D's 34 PDP regions that offer a variety of benefit structures to appeal to different segments of the market. Combined, these plans account for nearly 90 percent of PDP enrollment. If enrollees remained in those plans, most (but not all) saw an increase in their 2022 premiums averaging \$5 to \$6 per month, or nearly 14 percent (Cubanski and Damico 2021).

In 2022, the benchmarks that reflect the maximum amount Medicare will pay for premiums on behalf of LIS beneficiaries range from \$25 in Texas to nearly \$43 in the Idaho-Utah region. Compared with 2021 levels, the number of zero-premium PDPs available to LIS enrollees in 2022 dropped by 24 percent to 198 plans—consistent with the overall decline in numbers of PDPs offered. That total equals about one-quarter of all PDPs. All regions have at least four zero-premium PDPs available, while Arizona has a high of nine such PDPs.

Plan sponsors and their tools for managing benefits and spending

Nearly 300 organizations sponsor Part D plans, but most beneficiaries are enrolled in plans sponsored by a handful of large health insurers. In addition to their role as insurers, plan sponsors carry out marketing, enrollment, customer support, claims processing, coverage determinations, and exceptions and appeals processes. Other key functions are performed by plans' pharmacy benefit managers (PBMs): developing formularies, establishing pharmacy networks, and negotiating with manufacturers and pharmacies for postsale rebates and discounts. Most large plan sponsors are vertically integrated with their own PBMs and many also operate mail-order and specialty pharmacies. Smaller plan sponsors typically contract for PBM services. By law, the Medicare program is

prohibited from becoming involved in negotiations among sponsors, drug manufacturers, and pharmacies.

For the delivery of outpatient drug benefits, PBMs do not take physical possession of prescription medicines; pharmacies do. Pharmacies typically buy drugs from wholesalers and specialty drug distributors, dispense prescriptions to plan members, and are paid by PBMs for the difference between a negotiated amount and the member's cost sharing. In Part D, plan sponsors use additional contract provisions that require postsale recoupments from or payments to a pharmacy or group of pharmacies based on various performance metrics.

Final prices that plan sponsors pay for prescription drugs are usually lower than manufacturers' list prices, and the size of the discount sponsors obtain varies depending on negotiations for postsale rebates. Sponsors and their PBMs gain bargaining leverage with manufacturers through the relative size of their market shares of enrollees and by influencing market shares of drug products through their formularies. In drug classes that have competing therapies, PBMs negotiate with brand manufacturers for rebates that the manufacturers pay after each prescription has been filled. In this way, final prices that manufacturers obtain for their drugs are individualized by payer. The Congressional Budget Office estimates that in 2017, rebates and discounts in Part D averaged 12 percent for brand-name specialty drugs and 47 percent for brand-name nonspecialty drugs, which often have larger numbers of competing therapies (Congressional Budget Office 2021). PBMs (and manufacturers) consider rebates highly confidential because broader knowledge about the magnitude of discount could affect what competitors demand in their own negotiations with manufacturers, compressing (and for some payers reducing) rebates.

Formulary management and manufacturer rebates

Formularies remain plan sponsors' most important tool for managing drug benefits. Sponsors and their PBMs decide which drugs to include and exclude, which cost-sharing tier is appropriate for each drug, and whether a drug will be subject to utilization management—quantity limits, step therapy, and prior authorization. Those decisions require that plan sponsors strike a

balance between providing access to medications and encouraging enrollees to use preferred therapies.

CMS requires plan sponsors to cover the types of drugs commonly needed by Part D enrollees as recognized in national treatment guidelines, and the agency reviews each plan's formulary as part of the process of deciding whether to approve its bid. For most drug classes, plans must cover at least two distinct drugs that are not therapeutically equivalent or bioequivalent, as well as “all or substantially all drugs” in six protected classes—anticonvulsants, antidepressants, antipsychotics, immunosuppressants, antiretrovirals, and antineoplastics.

Generally, manufacturers pay larger rebates when a sponsor positions a drug on its formulary in a way that increases the likelihood of winning market share over competing drugs. For example, a manufacturer might pay a base rebate for including the product on a plan's formulary but might pay larger rebates if the drug is on a preferred tier or if prior authorization requirements are waived. Producers of brand-name drugs with no therapeutic substitutes or drugs that are required to be on formulary might provide no rebates or small rebates. An analysis of 2016 data provided by a group of Part D plan sponsors found that only about a third of brand-name drugs had more than nominal manufacturer rebates (Johnson et al. 2018). Rebates were largest in drug classes in which brand-name drugs competed directly with one another or when the brand drug faced competition from three or more generics. A separate analysis of 2019 Part D spending on 78 brand-name cancer drugs (a protected class) found that 40 percent likely had no rebates (Hwang et al. 2021). Payers and PBMs also negotiate “price-protection” provisions under which manufacturers rebate a drug's midyear price increases above a specified threshold.

Medicare policy can affect rebates. The Part D requirement to cover all protected-class drugs likely reduces plan sponsors' bargaining leverage with manufacturers; rebates are less easily obtained and smaller, on average, for brand-name drugs in protected classes. In the study described above, of 124 brand-name drugs in protected classes, only 16 received rebates, and among those drugs, rebates averaged 14 percent of point-of-sale prices compared with 30 percent for all brand-name drugs (Johnson et al. 2018).

Pharmacy networks and postsale fees

In commercial plans, sponsors often try to encourage enrollees to use pharmacies that dispense prescriptions at lower cost. For example, enrollees in some (non-Medicare) employer plans are required to fill prescriptions within an exclusive network of retail pharmacies, refill prescriptions by mail, and fill prescriptions with a 90-day supply.

Part D law and CMS guidance limit plan sponsors' ability to use those approaches. Most notably, plan sponsors must permit within their networks any pharmacy that is willing to accept the sponsors' terms and conditions; that is, plan sponsors cannot use exclusive pharmacy contracts.¹⁸ Plan sponsors must also demonstrate that their network of pharmacies meets access standards. Similarly, plan sponsors may not set up a narrower network of specialty pharmacies.¹⁹ However, traditional access standards may be less applicable to specialty pharmacies because typically they fill prescriptions primarily through home delivery.

Sponsors can, however, designate a subset of network pharmacies that offer preferred (lower) cost sharing. In 2022, 98 percent of PDPs use preferred cost-sharing pharmacies (Fein 2021a). The strategy of designating certain pharmacies as preferred has the potential to lower costs for Medicare and enrollees if it encourages enrollees to fill prescriptions at pharmacies that, for example, may be more effective at encouraging generic drug use. Researchers found that over the period from 2011 to 2014, Part D enrollees without the LIS were highly sensitive to preferred cost sharing, and the approach reduced overall drug spending by about 2 percent (Starc and Swanson 2021a, Starc and Swanson 2021b). However, tiered pharmacy networks have been controversial because of concerns that some members have less access to preferred pharmacies. If LIS enrollees have less opportunity to use preferred pharmacy networks, the tiered network strategy could lead to higher Medicare spending because Medicare pays for most or all of LIS enrollees' cost sharing.

Although Part D sponsors cannot set up exclusive pharmacy networks, they can include other network contract terms that try to achieve the same aims—terms that have largely led to postsale payments from pharmacies to plans. The terms can include fees

that are periodic payment reconciliations related to drug reimbursement rates, performance-based fees that are assessed on quality measures, or fees that are a condition for participating as a preferred cost-sharing pharmacy (Fein 2016). While participants in preferred networks gain more prescription volume, the pharmacies are essentially agreeing to lower and less predictable reimbursements from plans, which for some pharmacies has made participation in preferred networks much less desirable. In 2022 and in some previous years, many independent pharmacies have chosen not to participate (Fein 2021c).

According to CMS, between 2013 and 2017, pharmacies' net postsale payments (one component of what is referred to in Part D as direct and indirect remuneration, or DIR) to Part D plan sponsors soared from \$229 million in 2013 to over \$9.5 billion by 2020 (Centers for Medicare & Medicaid Services 2022, Centers for Medicare & Medicaid Services 2018). Some pharmacies argue that plan sponsors base these "pharmacy DIR" payments on metrics that are hard to anticipate or are unobtainable.²⁰ CMS initially stated that it would require plan sponsors to report the measures they use to evaluate pharmacy quality, but the agency did not include such measures within its final reporting requirements for plans (Centers for Medicare & Medicaid Services 2021j, Centers for Medicare & Medicaid Services 2021l).

Large plan sponsors are vertically integrated

Vertical integration between health plans and major PBMs—including large PBM-owned mail-order and specialty pharmacies—has been a central piece of many company strategies. The strategy offers the combined companies a number of advantages. Different from a vertically integrated company, a PBM operating under contract to a health plan could have an incentive to design formularies that reduce or minimize drug spending, even when prescriptions could prevent or forestall other health care spending. Health plans may find it beneficial to purchase a PBM and internalize trade-offs between drug and medical expenses (Garthwaite 2019).

Vertical mergers with PBMs also give health plans access to large amounts of prescription claims that, unlike most other provider claims, are typically adjudicated in real time. These data can be used to

monitor patient adherence, predict enrollees' use of services, encourage service use at lower-cost sites of care, and potentially coordinate care among prescribers.

Through vertical mergers, health plans can also gain access to PBM information about net prices for drugs—both for generics (because PBM mail-order pharmacies obtain steep discounts from manufacturers) and brand-name medications (through PBM data about manufacturer rebates). Because of the complexity of drug pricing, the highly proprietary nature of rebates, and imperfect competition among PBMs, information about net prices for drugs has been difficult to obtain through contracts (Lieberman et al. 2017, Scott Morton and Boller 2017). Some employers and payers argue that when they draw up contracts with PBMs to act as agents on their behalf, the asymmetric information held by large PBMs and their market power have made contracts hard to monitor and costly to enforce (Hargrave 2017). A health plan may find it less expensive to overcome the information asymmetry by purchasing the PBM (Garthwaite 2019).

However, it remains unclear whether vertical integration will ultimately benefit plan enrollees and payers such as Medicare. For example, one concern raised in the premerger review of CVS Health's purchase of Aetna (although not addressed by the Department of Justice) was that the combined firm would attempt to decrease access to or raise prices at CVS's retail pharmacies or CVS Caremark's PBM services against competing health plans that do not own a PBM (Greaney 2019).²¹ Inflated transfer prices between a PBM and its mail and specialty pharmacies could be a mechanism for raising rivals' costs.

Even if vertical mergers between health plans and PBMs made those companies more efficient or improved care coordination, enrollees and Medicare would not necessarily experience lower spending and premiums. Such a result would depend on the degree of competition among plans in MA and Part D markets—both of which have enrollment that is fairly concentrated (Schwartz et al. 2020).

Health plans' vertical mergers do not necessarily overcome poor incentives inherent in Medicare's Part D program. Currently, Part D's structure provides incentives for plan sponsors to include high-cost,

high-rebate drugs on formularies because plans bear relatively little liability in the coverage gap and catastrophic phase (Dusetzina et al. 2021b, Fein 2020b). Those incentives remain whether a plan sponsor writes a contract with an outside PBM or acquires the PBM as a subsidiary.

In addition, in 2020, 75 percent of U.S. specialty product spending was dispensed by four specialty pharmacies fully or partially owned by the largest PBMs (Fein 2021b). According to one estimate, specialty pharmacy dispensing accounted for 32 percent of PBMs' total gross profits in 2019, up from 17 percent in 2015 (Fein 2020a). CMS and commercial payers have less visibility into the prices established between upstream and downstream entities of vertically integrated organizations.²² For example, the Department of Health and Human Services Office of Inspector General (OIG) recently described one Part D plan sponsor that did not negotiate reimbursement contracts with its wholly owned pharmacies. OIG cautioned that margin amounts included in the sponsor's payments to its pharmacies for ingredient costs accrued to the sponsor but could not be identified and separated from pharmacy costs. In turn, the lack of clarity prevents CMS from being able to evaluate whether the entire margins included in the sponsor's Part D bids are reasonable (Office of Inspector General 2021).

Drug pricing

Growth in prices at the pharmacy counter—referred to here as gross or point-of-sale (POS) prices—has been the focus of much attention. Most Part D enrollees primarily use generic drugs, and many (but not all) generic prices remain low. However, enrollees without the LIS who use brand-name drugs often feel the effects of rising POS prices when they pay a deductible or coinsurance, especially the relatively small share of enrollees who use high-priced specialty drugs. At the same time, drug prices net of postsale rebates and discounts affect the premiums paid by all Part D enrollees and subsidized by the Medicare program.

All levels of the drug supply chain include incentives that drive POS prices higher, particularly when payments are based on a percentage of prices (Fein

**TABLE
13-3****Overall Part D POS prices grew more slowly in 2020 than in previous years**

	Price index as of December			Average annual percent change*		
	2018	2019	2020	Before 2019	2019	2020
All drugs and biologics	1.86	1.91	1.96	4.9%	2.6%	2.6%
Single-source brand-name drugs and biologics	3.36	3.55	3.74	9.8	5.7	5.2
Generic drugs	0.17	0.15	0.14	-12.8	-11.0	-9.3
After accounting for generic substitution	1.14	1.11	1.13	1.0	-2.1	1.3

Note: POS (point of sale). Chain-weighted Fisher price indexes. Prices reflect total amounts paid to pharmacies before rebates or discounts from manufacturers and pharmacies. Indexes are measured at the median of the distribution relative to prices as of January 2006. Price indexes shown are rounded.

*Changes for 2019 and 2020 reflect growth in price index since the December of previous year calculated using unrounded data.

Source: Acumen LLC analysis for MedPAC.

2018, Feldman 2018, Garthwaite and Morton 2017, Sood et al. 2021). Meanwhile, manufacturers now focus on developing drugs and biologics for smaller patient populations that are launched at high prices and may not have direct therapeutic competitors. Over time, these factors, combined with the consolidation of supply-chain participants, have put upward pressure on POS prices (Sood et al. 2020).

In 2007, aggregate postsale rebates and discounts (what is referred to in Part D as DIR) offset less than 10 percent of total Part D drug spending (Boards of Trustees 2015). However, by 2019, DIR had grown to 26.5 percent of the \$183 billion in gross Part D spending, or over \$48 billion (Boards of Trustees 2021).²³ Manufacturer rebates make up the vast majority (more than 80 percent in 2019), with the remainder paid primarily by pharmacies in postsale fees and discounts. The widening gap between prescription prices at the pharmacy and prices net of rebates and discounts raises concerns about the worsening of plans' formulary incentives and a shift in financial risk from plan sponsors to beneficiaries and the Medicare program.

Prices paid at the point of sale

Prices paid at the pharmacy are an important indicator of Part D's costs because POS prices affect beneficiary

cost sharing and the rate at which enrollees reach Part D's catastrophic phase. To examine growth in POS prices, the Commission contracted with Acumen LLC to construct a series of volume-weighted price indexes that reflect total amounts paid to pharmacies for Part D prescriptions, including ingredient costs and dispensing fees. The indexes reflect POS prices before retrospective rebates and discounts and are measured at the median of the distribution.

In 2020, average prices grew more slowly than in prior years

Between 2006 and 2020, prices for all drugs and biologics, measured by individual national drug codes (NDCs), rose by an average of 96 percent (an index value of 1.96) (Table 13-3).²⁴ Overall, drug prices grew more slowly in 2019 and 2020 (2.6 percent each year) than price growth observed before 2019 (averaging 4.9 percent annually).

Because generic drugs account for 90 percent of all prescriptions, decreases in generic prices help moderate overall price growth. Our price index for generic drugs has shown consistent decline in the past and continued to do so in 2020. However, the rate of decrease in generic prices slowed in both 2019 and 2020, from an average annual decrease of nearly 13 percent before 2019 to -11.0 percent and -9.3 percent

**TABLE
13-4****In 2020, the average POS price of brand-name drugs and biologics was nearly 38 times that of generic drugs**

	2007	2010	2015	2017	2019	2020*	Average annual growth rate 2007-2020
Aggregate figures							
Gross spending, billions	\$62	\$78	\$137	\$155	\$183	\$199	9%
Number of prescriptions, millions	1,144	1,406	2,119	2,329	2,537	2,638	7%
Share of aggregate spending							
Brand-name drugs and biologics	79%	76%	76%	77%	79%	80%	
Generic drugs	21%	24%	24%	23%	21%	20%	
Share of aggregate prescriptions							
Brand-name drugs and biologics	39%	26%	13%	11%	10%	10%	
Generic drugs	61%	74%	87%	89%	90%	90%	
Average gross spending per prescription							
Brand-name drugs and biologics	\$111	\$161	\$370	\$468	\$553	\$619	14%
Generic drugs	19	18	18	18	17	16	-1%
Ratio: Average brand price to generic price	5.8	8.8	20.3	26.7	32.9	37.7	

Note: POS (point of sale). "Gross spending" reflects payments from all payers, including beneficiaries (cost sharing), but does not include postsale rebates or discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. "Number of prescriptions" is standardized to a 30-day supply. Calculations are based on unrounded figures rather than the figures in the table.

*Figures based on preliminary Part D prescription drug event data.

Source: MedPAC analysis of Part D prescription drug event data.

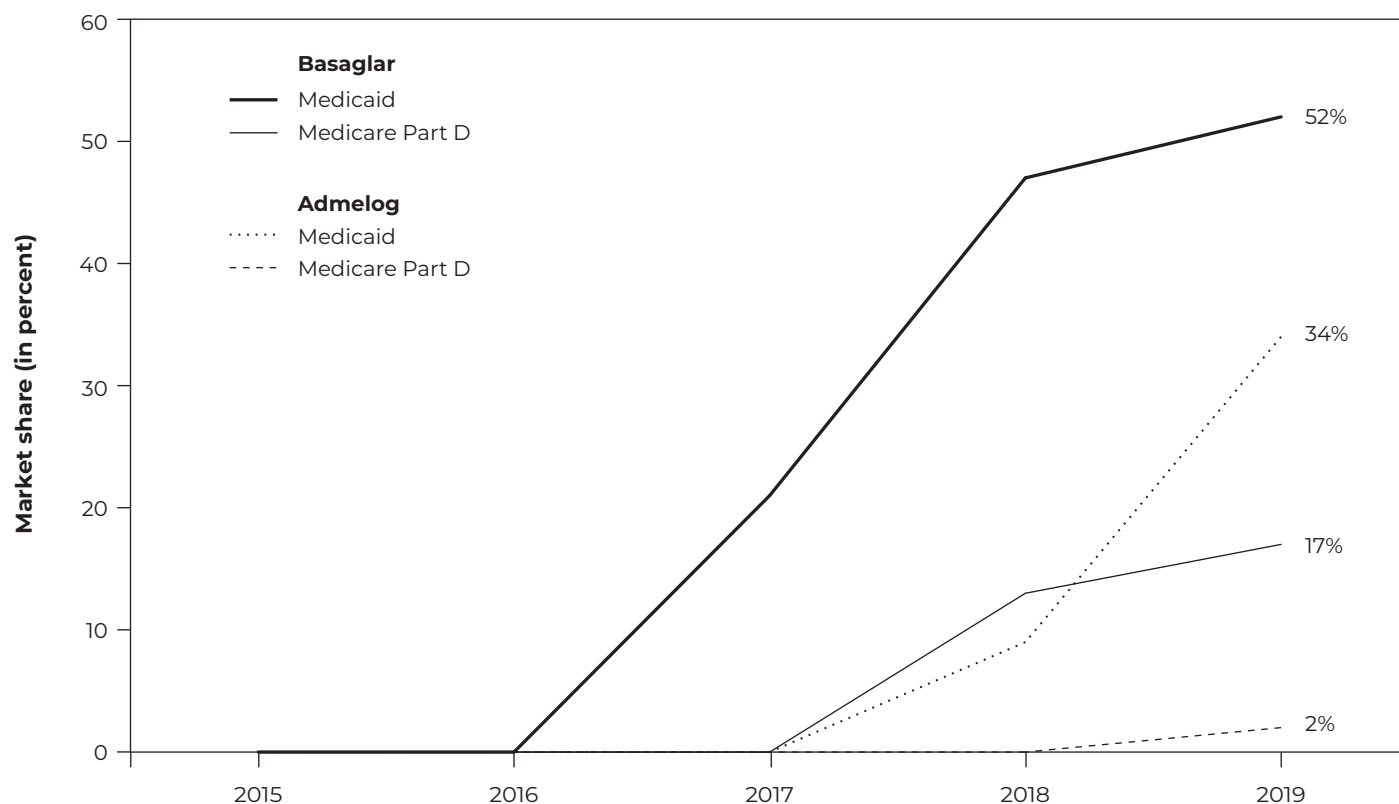
in 2019 and 2020, respectively (Table 13-3, p. 485). As a result, in 2020, our overall price index that takes generic substitution into account rose by 1.3 percent, a change from the 2.1 percent decline observed in 2019.²⁵

Low generic prices may be less effective at restraining future price and spending growth

Prices for generics are often a fraction of the prices for their brand-name counterparts (Government Accountability Office 2016, Schondelmeyer and Purvis 2019). Part D enrollees have embraced their use, with generic dispensing growing from just over 60 percent of all prescriptions in 2007 to nearly 90 percent by 2017 (Table 13-4). Broad acceptance of generic medicines

among prescribers and patients has provided significant savings to beneficiaries and the Medicare program.

However, generics' share of prescriptions has plateaued since 2017, and further opportunities for generic substitution may be limited. As the drug development pipeline has shifted, a significant portion are products for which generic or biosimilar versions are not available either because they are biologics (which are given longer periods of market exclusivity when they are licensed), specialty drugs with extensive patent protection, or both.

**FIGURE
13-2****Medicare Part D lags behind Medicaid in use of follow-on insulin products with lower list prices**

Note: "Market share" is defined as total number of dosage units for the follow-on biologic divided by the total number of dosage units for the same insulin product (insulin glargine for Basaglar and insulin lispro for Admelog) dispensed under the respective program (Medicaid or Medicare Part D) in a given year. The Food and Drug Administration approved follow-on biologics via a new drug application rather than the biosimilar pathway.

Source: MedPAC based on CMS Medicare Part D drug spending and data dashboard.

Meanwhile, rapid growth in prices of single-source brand-name drugs and biologics put upward pressure on Part D prices and program spending. Since 2010, manufacturer rebates received by Part D plan sponsors (excluding pharmacy DIR fees) have grown by nearly 20 percent per year on average. However, their effect on net prices has been modest. Between 2010 and 2019, Part D's spending per brand prescription, net of rebates, has grown by 13 percent per year on average (data not shown), compared with 14 percent per year on average on a gross basis (before rebates) (Table 13-4).

A number of factors have prevented biosimilar competition in Part D

The increasing role of biologics is a particular concern for program spending. Between 2006 and 2020, our price index for biologics grew by a cumulative 282 percent (data not shown).²⁶ As with generics, entry of biosimilar products could help moderate price increases for biologics. In turn, lower POS prices would help reduce the financial burden faced by beneficiaries who pay coinsurance and by Medicare's LIS, as it pays for nearly all of the cost sharing on behalf of beneficiaries with the LIS. However, our index that

takes such substitutions into account revealed almost no effect because biosimilar (including follow-on biologics) entry and use has thus far been very low. Tactics among manufacturers, regulatory hurdles, and the use of exclusionary contracting by payers have so far thwarted entry of and price competition from biosimilars in Part D (Cohen 2021a).

With only a small number of biosimilar products or follow-on biologics currently available in the retail pharmacy segment, it is difficult to know how biosimilar competition will affect prices and spending for biologics covered under the Part D program. Going forward, competitive pressure provided by biosimilar products would be crucial to restraining the prices of biological products, including net-of-rebate prices of reference products. However, Part D's experience with insulin's follow-on biologics and the expected entry of biosimilars for a leading biologic (Humira) highlight some of the potential hurdles.

Plans have been slow to cover follow-on biologic versions of insulin

Follow-on versions of two widely used insulins with lower list prices have entered the market in recent years—Basaglar (insulin glargine) and Admelog (insulin lispro). However, CMS data show that Medicare Part D has lagged behind Medicaid in the use of these products (Figure 13-2, p. 487). The slow adoption in Part D is concerning; it suggests that Basaglar and Admelog were either not covered by many Part D plans or were not the preferred insulin products on their formularies (Dusetzina et al. 2021b, Fein 2021d, Marsh 2021).

Basaglar was approved in 2014 as a follow-on biologic (via a new drug application rather than the biosimilar pathway) and has been available since December 2016.²⁷ Despite their higher list prices, Sanofi's Lantus and its newer high-concentration product, Toujeo, continued to dominate the insulin glargine market through 2019 (Centers for Medicare & Medicaid Services 2019a). In 2019, three years after launch, Basaglar's Part D market share had reached only 17 percent compared with 52 percent under Medicaid (Figure 13-2, p. 487).

A similar situation has occurred with Admelog, a follow-on biologic to Humalog. After its launch in April 2018, Admelog rapidly gained market share under Medicaid, accounting for over one-third of insulin lispro doses dispensed under Medicaid by 2019

(Figure 13-2, p. 487). In comparison, in 2019, Admelog accounted for just 2 percent of Part D's insulin lispro market. With a list price that is 65 percent below that of Humalog, Admelog could have provided significant savings for patients and Medicare even without any postsale rebates or discounts (Marsh 2021).

Medicaid's financial incentives differ from those under Part D in important ways, which may explain much of the difference in the experience of the two programs. First, states have strong incentives to manage Medicaid drug spending to ensure that they stay within their budgets. When states use managed care to deliver services, their payments to Medicaid managed care organizations (MCOs) are fully capitated, and as a result, there is a better alignment of incentives between the states and MCOs (Hinton et al. 2020). Most states also maintain a preferred drug list (PDL) as a way to drive utilization of lower-cost drugs, and an increasing number of states require their MCOs to follow their PDL (Gifford et al. 2020b).²⁸ Second, Medicaid's drug rebate program classifies biosimilar products (including follow-on biologics) as "single-source drugs," meaning that manufacturers of biosimilar products must pay rebates based on the formula for branded drug products, not based on the rebate formula for generic drugs (Centers for Medicare & Medicaid Services 2015).²⁹ This policy means that a biological product with a lower list price will also have a lower net price (net of rebates), which ensures that states and MCOs both prefer to use the lower-cost biosimilar product when clinically appropriate.

In contrast, under Part D, plan sponsors face limited financial risk and misaligned formulary incentives. Today, payments to plans consist mostly of cost-based reinsurance rather than capitated (direct subsidy) payments. In particular, plan sponsors bear little liability for benefit spending above the initial coverage limit. These unique features of the program undermine incentives for cost control and, in some cases, distort formulary incentives for plan sponsors to prefer higher-priced products with rebates over lower-priced products.³⁰

In 2021, the Food and Drug Administration (FDA) approved the first insulin biosimilar with an interchangeable designation. The designation is significant as it allows for automatic substitution at pharmacies, similar to the traditional generic drug

market (subject to state laws regarding interchangeable biosimilar substitution) (Cardinal Health 2021, National Conference of State Legislatures 2019).

Strategies used to limit the impact of the launch of Humira biosimilars

While the current biosimilars landscape is dominated by oncology therapies that primarily affect biologics covered under Part B, the next wave of biosimilars is expected to include those covered under Part D, including seven Humira biosimilars that already have FDA approval (Baldetti 2021, Hagen 2021c, McGowan 2021). Biosimilar competition has helped bring down prices of certain biologics, including the prices of reference biologics, covered under Part B (Medicare Payment Advisory Commission 2021a). However, the success of biosimilars likely varies across products, depending on factors that are unique to each therapeutic area, including provider acceptance, prevalence of “new start” patients, and competitive dynamics (Baldetti 2021, Frank et al. 2022).

Humira (adalimumab) is a biological product manufactured by AbbVie and is used to treat autoimmune diseases such as rheumatoid arthritis and ulcerative colitis. In 2020, gross Part D spending for Humira totaled more than \$4.1 billion (before rebates and discounts), making it one of the highest-selling products. Because of its substantial cost, Humira’s high price and annual price increases have been scrutinized by researchers and policymakers (House Committee on Oversight and Reform 2021, Rind et al. 2021). In 2021, Humira topped the GoodRx list of 10 most expensive brand-name drugs sold in the United States, with cash prices averaging more than \$9,000 per one-month supply (Wells 2021). Prices at the pharmacy typically track list prices set by the manufacturer. Between 2014 and 2021, Humira’s list price increased by 138 percent (Wells 2021). Of the \$16.1 billion in net U.S. revenue that AbbVie received for Humira in 2020, the Institute for Clinical and Economic Review estimated that \$1.4 billion was attributable to price increases taken between 2019 and 2020 that were not supported by new clinical evidence (Rind et al. 2021).

Humira’s extensive patent protection may have discouraged biosimilar manufacturers from challenging patents in court Humira was first launched in 2003. Although the patent for its active ingredient expired in 2016, AbbVie has extended its market protection in

part by amassing over 250 patents (Higgins-Dunn 2021, Ross 2018). The FDA approved the first of what are now seven biosimilars to Humira in 2016, with one product (Cyltezo) gaining interchangeable designation in late 2021.³¹ However, none of the seven has launched in the United States. Rather than challenge the patents in court, manufacturers of Humira biosimilars reached an agreement with AbbVie to delay their U.S. launches until 2023 (Hagen 2021c, Van de Wiele et al. 2021, Watral 2019).³²

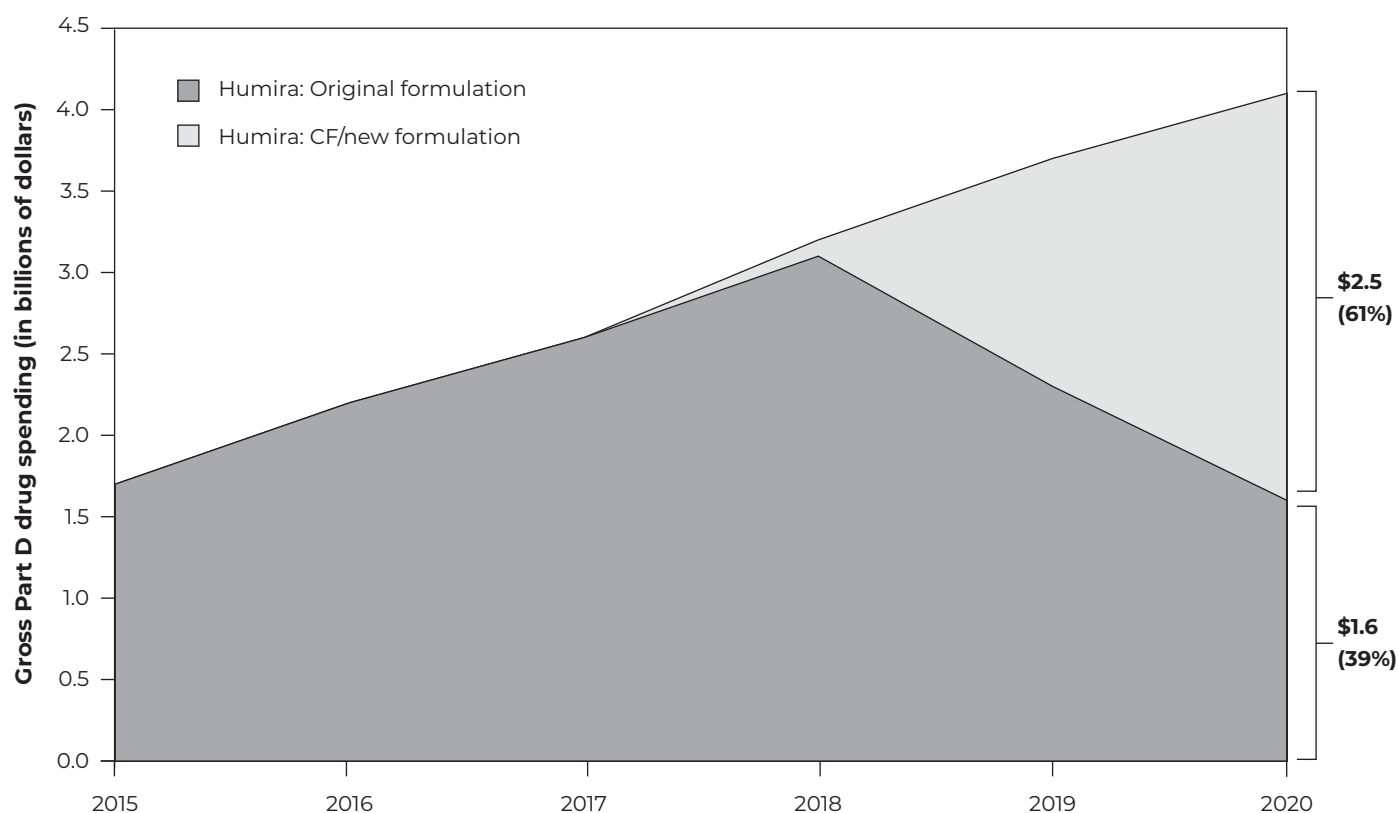
Biosimilars may face a diminishing market as more patients transition to a new high-concentration formulation (“product hopping”) “Product hopping” refers to a situation in which a biopharmaceutical company introduces a modified version of an original drug or a biological product and attempts to switch patients to the new version that is protected by additional patents (Rome et al. 2020). In July 2018, AbbVie launched a new citrate-free, higher-concentration formulation of Humira (Humira Citrate-free) while discontinuing two dosage forms of the original (lower) concentration versions (Hagen 2021a). One study (sponsored by AbbVie) found that the new formulation was “well tolerated and associated with less injection site-related pain” than the original formulation (Nash et al. 2016). In communications with patients and prescribers, AbbVie has referred to this study, which promotes transitioning patients from the original formulation to the new higher-concentration formulation (AbbVie 2021).

Humira’s new formulation has rapidly gained market share in Part D. Just two and a half years after launch, its share has grown from less than 5 percent of gross Part D spending for Humira products to 61 percent (Figure 13-3, p. 490).³³ Because all seven biosimilar products were approved in the original concentration, the continued transition of patients to products with higher concentration may add to any potential hesitancy prescribers or patients have about switching to a biosimilar product. That, in turn, may significantly limit biosimilar manufacturers’ ability to compete for adalimumab market share (Hagen 2021a).³⁴

The delay in the entry of Humira biosimilars has likely already cost Medicare billions of dollars. One study estimated that, between 2016 and 2019, Medicare could have saved nearly \$2.2 billion on Humira (and its biosimilars) had biosimilars entered the market in a

**FIGURE
13-3**

Humira biosimilars may face a diminishing market as more patients transition to the new higher-concentration formulation



Note: CF (citrate-free).

Source: MedPAC based on Acumen LLC analysis of Part D prescription drug event data.

timely manner (Lee et al. 2021). Humira biosimilars may face additional hurdles after their launch if Part D plan sponsors and their PBMs use exclusionary contracts with AbbVie. Such contracts would, in exchange for financial incentives (typically in the form of rebates or discounts), limit biosimilars' ability to "[gain] preferred access to the formulary, or any access at all" (Cohen 2021b).

Program costs

The costs of providing Part D benefits are shared by Medicare (taxpayers) and Part D enrollees. Medicare

pays plan sponsors two subsidies on behalf of each enrollee in their plans:

- **Direct subsidy**—A monthly prospective amount set as a share of the national average bid for Part D basic benefits, adjusted for the risk of the individual enrollee.
- **Reinsurance**—Reimbursement to plans for 80 percent of drug spending above an enrollee's annual OOP threshold (the catastrophic phase of the benefit). Plans receive prospective payments for reinsurance that are reconciled with actual spending (net of postsale rebates and discounts) for

**TABLE
13-5****Medicare's reimbursement amounts for Part D**

	Calendar year							Average annual growth rate		
	2007	2010	2016	2017	2018	2019	2020	2007–2019	2019–2020	2007–2020
Reimbursement amount (in billions):										
Direct subsidy*	\$17.6	\$19.6	\$17.1	\$14.6	\$13.5	\$11.8	\$10.2	–3.3%	–13.6%	–4.1%
Reinsurance	<u>8.0</u>	<u>11.2</u>	<u>35.5</u>	<u>37.6</u>	<u>40.6</u>	<u>46.1</u>	<u>47.8</u>	15.7	3.7	14.7
Subtotal, basic benefits	25.6	30.8	52.6	52.2	54.1	57.9	58.0	7.0	0.2	6.5
Low-income subsidy	16.7	21.1	26.4	27.3	28.5	29.7	33.1	4.9	11.4	5.4
Retiree drug subsidy	<u>3.9</u>	<u>3.9</u>	<u>1.0</u>	<u>0.8</u>	<u>0.7</u>	<u>0.6</u>	<u>0.6</u>	–14.4	0.0	–13.4
Total Part D	46.2	55.8	80.0	80.3	83.3	88.2	91.7	5.5	4.0	5.4
Enrollee premiums**	4.1	6.7	12.7	14.0	14.2	13.8	13.6	10.6	–1.4	9.7

Note: The numbers presented reflect reconciliation. Components may not sum to stated totals due to rounding.

*Net of risk-sharing payments resulting from Part D's risk corridors.

**For basic benefits, excluding low-income premium subsidies.

Source: MedPAC analysis based on Table IV.B10 of 2021 annual report of the Boards of Trustees of the Medicare trust funds.

each enrollee who reached the OOP threshold after the end of the benefit year.

Combined, the direct subsidy and expected reinsurance payments aim to cover 74.5 percent of the expected cost of basic benefits. Today, a much larger share of Medicare's payments takes the form of reinsurance (cost-based reimbursement) rather than the direct subsidy (capitated payments). To put this in perspective, in 2022, direct subsidy payments to plans average less than \$5 per member per month, compared with payments of nearly \$93 per member per month for expected levels of reinsurance.³⁵ In addition to reinsurance, Medicare shares financial risk with plan sponsors by risk adjusting direct subsidy payments to reflect the expected costliness of a plan's enrollees and by limiting each plan's overall losses or profits through risk corridors if actual benefit spending, excluding reinsurance, is much higher or lower than the plan sponsor anticipated in its bid.

Beneficiary premiums are designed to cover the remaining 25.5 percent of the expected cost of basic benefits. In addition to monthly premiums, Part D enrollees also pay any cost sharing required by plan sponsors or, in the case of LIS enrollees, cost-sharing amounts set in law.

Trends in program subsidies and costs

Between 2007 and 2020, program spending (including expenditures for the RDS) rose from \$46.2 billion to \$91.7 billion (Table 13-5), or an average 5.4 percent per year. In 2020, Medicare paid \$10.2 billion for direct subsidies, \$47.8 billion for individual reinsurance, \$33.1 billion for the LIS, and \$0.6 billion for the RDS. Medicare payments for individual reinsurance have grown faster than other components of Part D spending. Between 2007 and 2020, reinsurance payments rose by nearly 15 percent annually, compared with a decline of 4.1 percent for the capitated direct subsidy payments (see text box, p. 492).

Multiple factors have contributed to the decline in aggregate direct subsidy payments

Aggregate direct subsidy payments have declined consistently since 2012, reflecting moderate growth in gross plan liability (for basic benefits), in large part due to the increased use of generic drugs by Part D enrollees. In contrast, catastrophic spending, which is mostly paid by Medicare's reinsurance, has grown aggressively, driven by high and increasing prices of brand-name drugs and biologics. At the same time, postsale rebates and discounts, referred to collectively as direct and indirect remunerations (DIR), grew rapidly, quintupling between 2012 and 2020 to over \$50 billion. DIR is used to offset basic benefit costs paid by plans (plan liability) and Medicare (reinsurance). However, CMS's formula allocates

a disproportionate share of the DIR to offset plans' benefit liability (Centers for Medicare & Medicaid Services 2017, Medicare Payment Advisory Commission 2017b). For example, in 2020, plan liability accounted for less than half of total basic benefit costs (plan liability plus reinsurance costs), but CMS's formula allocated, on average, two-thirds of all DIR to plans to offset plans' benefit liability. Finally, because enrollee premiums are set by law at 25.5 percent of the expected average cost of basic benefits, those premiums have offset a growing share of plan liability net of DIR. In turn, Medicare's capitated direct subsidies have covered a diminishing share of basic benefit costs. ■

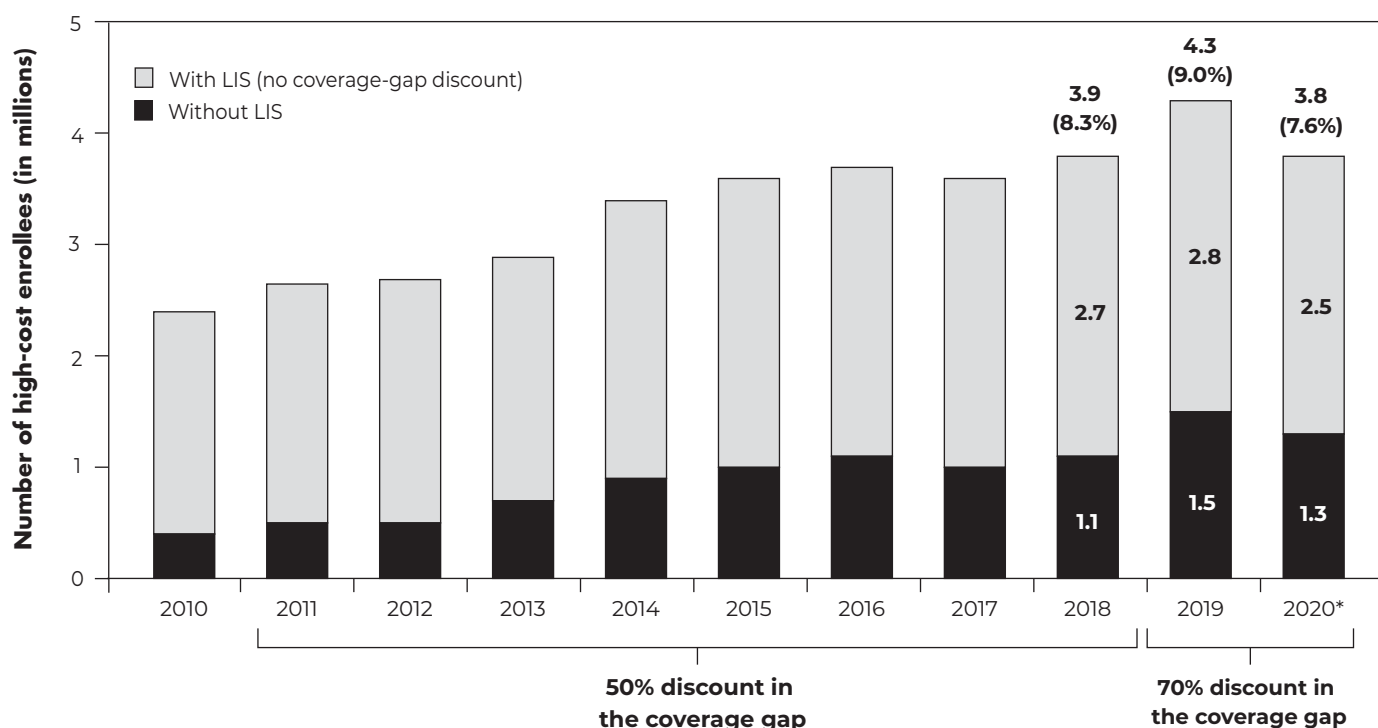
In 2020, aggregate premiums paid by Part D enrollees for basic benefits (not including the premiums paid by Medicare on behalf of LIS enrollees) totaled \$13.6 billion, down 1.4 percent from payments in 2019. Before 2020, aggregate premiums paid by enrollees grew by an average of 10.6 percent per year, reflecting primarily growth in enrollment of beneficiaries without the LIS and some increase in benefit costs.³⁶

In 2020, as the OOP threshold rose by \$1,250, half a million fewer beneficiaries reached the catastrophic phase

In 2020, the number of Part D high-cost enrollees—those with spending high enough to reach the catastrophic phase of the benefit—fell by more than 11 percent from 4.3 million in 2019 (Figure 13-4). Much of the decline was likely driven by the 25 percent jump (\$1,250) in the OOP threshold between 2019 and 2020, from \$5,100 to \$6,350.³⁷ (As a point of comparison, the OOP threshold grew by just \$100 in 2019.) Although the large threshold increase made it much more difficult to reach the catastrophic phase, in 2020, the number of high-cost enrollees without the LIS (1.3 million) was nonetheless higher than in all years before 2019.

The financial implications of the higher OOP threshold differ for Part D enrollees with the LIS than for the other Part D enrollees. Because the LIS pays for nearly all costs in the coverage gap (above any nominal copayments required by law), the effects of the higher OOP threshold fall almost entirely on Medicare (see Figure 13-1, p. 472). In 2020, Medicare's payments for low-income cost-sharing subsidies rose by about \$3.4 billion, accounting for nearly all of the increase in LIS costs between 2019 and 2020 (Table 13-5, p. 491).

In contrast, for enrollees without the LIS, the financial impact of a higher OOP threshold differed depending on whether the prescription was for a generic or a brand-name drug. For brands, the manufacturer's coverage-gap discount is treated as though it were the enrollee's own OOP spending (see Figure 13-1, p. 472). For example, an enrollee who filled only brand-name drugs in the coverage gap was responsible for paying about a quarter of that increase—the rest was covered by manufacturer discounts. Meanwhile, beneficiaries who took only generic drugs were responsible for the full increase.

**FIGURE
13-4****Part D enrollees reaching the benefit's catastrophic phase, 2010–2020**

Note: LIS (low-income subsidy). Percentages shown are high-cost enrollees as a share of all Part D enrollees. Components may not sum to stated totals due to rounding.

*Figure is based on preliminary Part D prescription drug event data.

Source: Enrollee counts for 2010 to 2020 are based on MedPAC analysis of Part D prescription drug event data.

The rise in the annual OOP threshold meant that total (gross) spending at the OOP threshold would also be higher. CMS estimated an average increase of about \$1,400 to \$1,600, depending on the individual's LIS status (Centers for Medicare & Medicaid Services 2021c). Based on those higher spending levels, in 2020, roughly 443,000 enrollees (11.6 percent of high-cost enrollees) filled at least one prescription for a high-priced drug that was sufficient to meet the OOP threshold with a single claim. That figure is lower than the 483,000 with such claims in 2019 but still substantially higher than the 33,000 in 2010.

Continued aggregate growth in drug spending and use in 2020

The full extent to which 2020's higher OOP threshold affected beneficiaries' willingness to fill prescriptions

is unknown, especially in the midst of a pandemic. However, preliminary data for 2020 suggest that in the aggregate, enrollees' prescription use and spending continued to grow. Discounts paid by brand manufacturers in the coverage gap jumped by 25 percent—about \$2.5 billion higher than the \$10 billion paid in 2019. With the steep rise in Part D's OOP threshold, more enrollees remained in the coverage gap and yet, in the aggregate, continued to fill brand prescriptions, in part because brand prices were discounted. Among enrollees without the LIS, per capita use (measured by numbers of standardized 30-day prescriptions) and spending grew at rates comparable to those observed during the previous 5 years.

Taxpayers bear an increasing share of the risk for Part D spending

In 2020, the growth in Medicare's payments for reinsurance slowed to the lowest level since 2007, largely due to the increase in the OOP threshold discussed above. However, Medicare's reinsurance subsidies (for which taxpayers are at risk) were still the largest component of Part D spending, accounting for over 63 percent of payments to plans, up from 25 percent in 2007 (Figure 13-5).

Insurance risk provides an incentive for plan sponsors to offer attractive benefits while managing their enrollees' spending through formularies and other tools. However, data from the Boards of Trustees show that between 2007 and 2020, the portion of the average basic benefit paid to plans through Medicare's capitated direct subsidy fell from 54.7 percent to 13.5 percent (Figure 13-5). Correspondingly, in 2020, the portion for which plans are at risk (direct subsidy payments plus enrollee premiums) accounted for less than 37 percent of benefit costs (23 percent plus 13.5 percent), down from about 75 percent in 2007 (20.4 percent plus 54.7 percent). The Commission has been concerned that the shift of risk from plan sponsors to Medicare has eroded plans' incentives to manage spending.

Beneficiaries' access to prescription drugs

Formulary management is the most important tool used by plan sponsors. Greater flexibility to use formulary tools could help plan sponsors manage spending while ensuring that prescribed medicines are safe and appropriate for the patient, potentially reducing overuse and misuse. However, for some enrollees, those same tools could limit access to needed medications. To ensure access, CMS reviews each plan's formulary to check that it includes medicines in a wide range of therapeutic classes used by the Medicare population and applies utilization management tools in appropriate ways. Further, Part D law requires sponsors to have a transition process to ensure that new enrollees, as well as current members whose drugs are no longer covered or are subject to new restrictions, have access to the medicines they have already been taking.³⁸

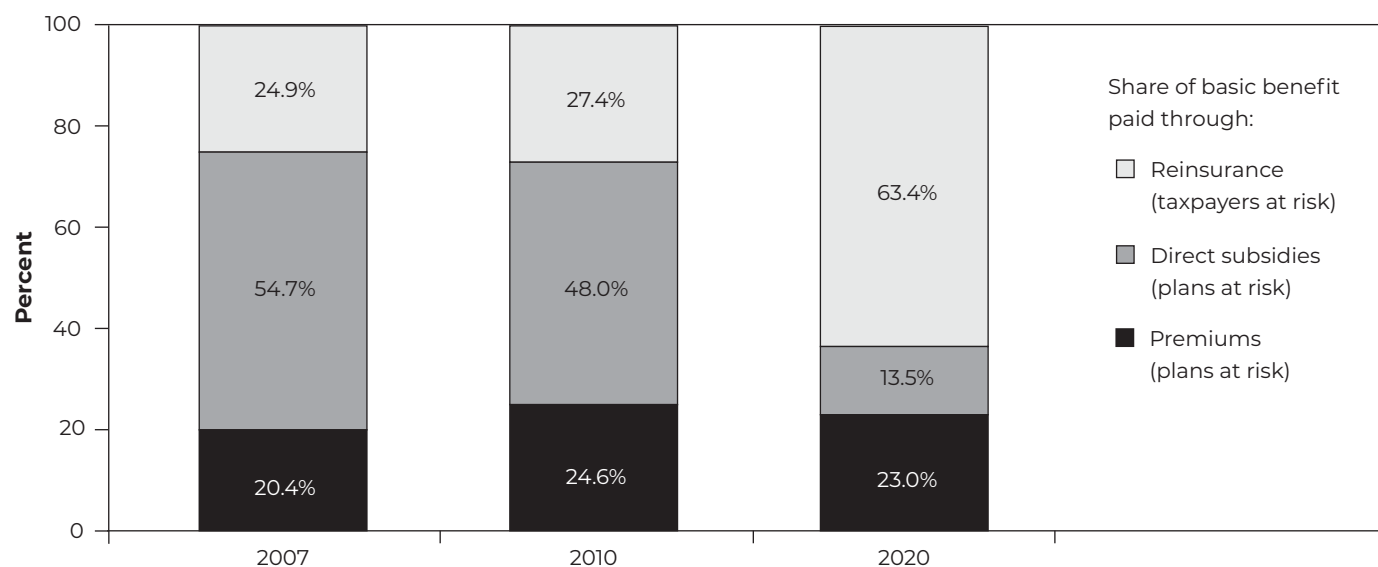
Medicare also requires plan sponsors to establish a process for coverage determination and appeals. Part D requires quicker adjudication times than for most medical benefits covered by MA plans.³⁹ If an enrollee is dissatisfied with plan's final coverage decision (redetermination), the enrollee may appeal the decision to an independent review entity and then to higher levels of appeal.

Measuring access is inherently complicated because clinical appropriateness can vary across patients. General program-wide indicators of access using data from CMS audits and Part D's appeals process suggest that beneficiaries may be less likely to encounter access issues resulting from inappropriate formulary administration or coverage determinations (Medicare Payment Advisory Commission 2021c). However, the slow adoption of electronic communications and tools by prescribers continues to be a concern. For some beneficiaries, high cost sharing can affect access.

Need to improve electronic communication between Part D plans and prescribers

A more constructive approach toward ensuring appropriate access would be to provide enrollees and prescribers with real-time information about formulary coverage and utilization management requirements in ways that fit into providers' workflow at the point of prescribing. Under this approach, questions about coverage could be resolved using electronic tools, such as real-time benefit tools (RTBTs) and electronic prior authorization (ePA).

If built into the prescriber's workflow, standardized approaches to ePA and automated coverage determinations could save patients and providers significant time and resources and speed up delivery of care (American Medical Association-convened workgroup of 17 state and specialty medical societies 2019). In 2019, CMS finalized a rule requiring Part D sponsors to implement one or more RTBTs capable of integrating with at least one prescriber's electronic health record system by January 1, 2021 (Centers for Medicare & Medicaid Services 2019b). However, the extent to which this requirement expands the use of RTBTs in Part D will depend on the degree to which clinicians—who face no requirements under this rule—adopt them when prescribing for their Medicare patients. In 2020, CMS issued a final rule

**FIGURE
13-5****Taxpayers bear increasing share of the risk for Part D benefit spending**

Note: Figures represent aggregate values for incurred basic benefits net of risk corridor payments. Figures for enrollee premiums include amounts paid to Part D plans by enrollees and by Medicare on behalf of enrollees who receive the low-income subsidy. Components may not sum to totals due to rounding.

Source: MedPAC analysis based on Table IV.B10 of 2021 annual report of the Boards of Trustees of the Medicare trust funds.

that requires Part D plan sponsors to implement real-time comparison tools for enrollees by January 1, 2023 (Centers for Medicare & Medicaid Services 2021e). Many details remain about how best to implement RTBTs so that the tools fit into the workflow at a relevant point in the prescribing process and contain accurate formulary and patient-specific information.

For some beneficiaries, high OOP costs may be a barrier to access

More than 80 percent of elderly Part D enrollees report that their Part D plans provide good value and that their OOP costs are reasonable (*Medicare Today* 2021). At the same time, in focus groups convened for the Commission, physicians and beneficiaries were acutely aware of high drug costs and reported having frequent discussions about ways to lower costs (Catterson et al. 2021). These seemingly conflicting results reflect the dichotomy between the majority of beneficiaries who

take generic drugs for common conditions and the relatively small number of beneficiaries who use many brand-name drugs or high-cost specialty drugs.

For an individual enrollee without the LIS, the cost-sharing burden for brand-name drugs and biologics can be substantial (see text box on reducing cost sharing for insulins, pp. 496–497). For high-cost specialty drugs, cost sharing can total thousands of dollars in the catastrophic phase of the benefit alone (Cubanski et al. 2019). (Most enrollees who receive Part D's LIS do not face a large financial hurdle because their cost sharing is limited to nominal copayments.)

For many reasons, beneficiaries have not always benefited from lower-priced alternatives (Dusetzina et al. 2020). For example, the list price differential between a generic and its brand counterpart may be relatively small. As a result, sponsors may continue to prefer the brand version that has lower costs for the

Reducing cost sharing for insulins may improve access, but high prices remain unaddressed

Prices of insulins have increased considerably over the years. A recent congressional report found that, in just five years (from 2014 to 2019), list prices of commonly used insulins rose by between 33 percent and 70 percent without any “significant advances in the efficacy of the drugs” (U.S. Senate Committee on Finance 2021). Another study found that, in 2018, insulin prices in the United States were always higher, and often 5 to 10 times higher, than those in other Organisation for Economic Co-operation and Development (OECD) countries (Mulcahy et al. 2020).⁴⁰

High prices of insulins can have significant financial as well as health implications for individuals with insulin-dependent diabetes. Even if the individual has health insurance, high cost sharing can make insulins unaffordable (Endocrine Society 2021). In Part D, between 2007 and 2017, average out-of-pocket (OOP) spending on insulin for individuals without Part D’s low-income subsidy (LIS) jumped from \$324 to \$580, or by an average increase of 6 percent per year, far exceeding the 1.6 percent average annual rate of inflation over this time period (Cubanski et al. 2020)

In 2020, over 3.3 million Part D enrollees took insulin. Of that total, about 2 million were LIS enrollees who paid nominal copayments or were enrolled in an employer group waiver plan, which may have offered more generous coverage. The remaining 1.3 million beneficiaries typically faced 25 percent coinsurance once they reached the coverage gap. For these beneficiaries, cost sharing in the coverage-gap phase typically exceeded \$100, a substantial increase from the \$47 copayment most plans charged in the initial coverage phase. Before 2021, virtually all plans used 25 percent coinsurance in the coverage gap because lowering cost sharing in this phase of the benefit would lower the amount of manufacturer discounts while raising plans’ benefit costs and enrollee premiums (Cubanski et al. 2020, Verma 2020).

Researchers and policymakers have raised concerns that high cost sharing in the coverage-gap phase makes insulins unaffordable for some beneficiaries (Endocrine Society 2021, Trish et al. 2021). While beneficiaries who use insulin typically fill 10 to 12 prescriptions for insulins in a given year, in 2020, about 22 percent of beneficiaries without the LIS filled fewer than seven prescriptions.⁴¹ That share

(continued next page)

plan owing to the coverage-gap discount or rebates paid by the manufacturer. Even when entries of multiple generic competitors result in substantially lower prices and plan sponsors adjust their formularies to prefer the generic version, beneficiaries can still pay relatively high OOP costs because the coverage-gap discount does not apply to generic drugs (Dusetzina et al. 2020).

High cost sharing can result in beneficiaries not initiating therapy or abandoning prescriptions at the

pharmacy (Doshi et al. 2018, Dusetzina et al. 2020).⁴² For drugs placed on specialty tiers, beneficiaries have little recourse because they may not request a tiering exception to obtain the specialty-tier drugs at lower (preferred) cost sharing.⁴³ It is not possible to measure the extent to which high prices are impeding access to needed medications. However, growth in the number of therapies that command very high prices is likely to raise the number of beneficiaries who face affordability issues (Dusetzina et al. 2020, Park and Look 2020).

Reducing cost sharing for insulins may improve access, but high prices remain unaddressed (cont.)

is higher than the 14 percent among beneficiaries with the LIS. Anecdotal evidence suggests that beneficiaries without the LIS may use a variety of strategies to avoid entering the coverage gap—for example, by obtaining insulins outside of the Part D program (such as cash purchases without using the Part D benefit) (Catterson et al. 2021, Wedell 2021). Part D plans, and therefore the program data, will not capture such prescriptions. However, it is also possible that some beneficiaries without the LIS are taking less than optimal doses of insulins because of high cost sharing (Trish et al. 2021).

In response to concerns about the high cost of insulins and potential access issues, in 2021, CMS's Center for Medicare & Medicaid Innovation began testing a new demonstration model, the Part D Senior Savings Model. The model allows participating enhanced drug plans to lower cost sharing for insulins to no more than \$35 per one-month supply without facing the financial disincentives that discourage plans from reducing cost sharing in the coverage gap (see the text box on the Part D Senior Savings Model for insulin in our March 2021 report to the Congress (Medicare Payment Advisory Commission 2021c)). While it is too soon to know

how this model has performed in improving access to insulins and providing better value for the Medicare program, plan offerings for 2022 suggest that the model is gaining popularity. In 2022, a total of 2,159 plans (33 percent of prescription drug plans and 38 percent of Medicare Advantage–Prescription Drug plans (MA–PDs)) are participating in this model, up from about 1,600 plans in 2021, largely driven by an increase in the number of participating MA–PDs (Cubanski and Damico 2021).

Although the Senior Savings Model may improve access to insulins, high OOP costs affect many other conditions and therapies (Medicare Payment Advisory Commission 2019). The model also will not address the underlying structural issues that may have contributed to the rapid growth in insulin prices (Medicare Payment Advisory Commission 2020a). Finally, focusing only on beneficiary cost sharing may worsen the pricing incentives faced by all participants in the drug supply chain, including manufacturers and pharmacy benefit managers. In turn, that could exacerbate the financial burden on Part D enrollees and taxpayers who finance the program. ■

Quality in Part D

Measuring the quality of enrollees' medication use is critical for assessing Part D's value, but it is a task that requires nuance. On the one hand, for many conditions, effective treatment may hinge primarily on access and adherence to prescription drugs. For this reason, Medicare evaluates how well Part D plans make medicines available through their formularies and network pharmacies. On the other hand, Medicare beneficiaries are likely to have multiple chronic conditions, take an average of nearly five prescription drugs daily, and are at higher risk for adverse drug

events associated with polypharmacy. Thus, the degree to which Part D plans help to manage enrollees' medication therapies is critically important as well.

CMS collects quality and performance data to monitor plan sponsors' operations and evaluate access to medicines, enrollee experience, and patient safety. A subset of these data form part of a 5-star rating system made available through Medicare's Plan Finder at [medicare.gov](https://www.medicare.gov) to help beneficiaries evaluate their plan options. The agency also uses star ratings that are based in part on prescription drug benefits to determine MA quality bonus payments. (Although both

MA-PDs and stand-alone PDPs are evaluated with star ratings, only MA-PDs are eligible for quality bonus payments in the Part C payment system.) The agency displays other Part D quality measures on cms.gov, including some metrics that are transitioning out of or are being evaluated for the star-rating system. In addition, by law, Part D plans are required to carry out medication therapy management (MTM) programs and programs to manage opioid use.

Part D star ratings

The star ratings are composed of metrics that are measured at the contract level and come from several sources—the Consumer Assessment of Healthcare Providers and Systems[®] (CAHPS[®]) survey, agency monitoring of plans, data furnished by plan sponsors, and claims information.⁴⁴ CMS flags the lowest-rated plans on Plan Finder to caution beneficiaries about choosing those plans. The highest-rated plans can enroll beneficiaries outside the annual open enrollment period.

For the 2022 ratings, MA-PDs were evaluated on up to 38 unique measures—26 that focus on Part C services, 10 that focus on Part D, and 2 that are common to both (Centers for Medicare & Medicaid Services 2021i). PDPs are evaluated only on scores for Part D measures. The 12 Part D measures fall under 4 domains: (1) drug plan customer service, (2) member complaints and changes in the drug plan's performance, (3) member experience with the drug plan, and (4) drug safety and accuracy of drug pricing. CMS aggregates individual scores for each measure such that a 5-star rating reflects excellent performance and 1 star reflects poor performance. Overall ratings are calculated as the weighted average of star ratings for each component measure.⁴⁵ Process measures (such as the accuracy of pricing data on the Medicare Plan Finder) receive a weight of 1, measures that capture access or member experience (such as complaints about the drug plan) receive a weight of 2, intermediate outcome measures (such as rates of medication adherence) receive a weight of 3, and drug plan quality improvement (a measure that reflects changes in performance from one year to the next) receives a weight of 5.

For 2022, average star ratings rose substantially, but much of that increase reflects changes CMS made in how it calculated the ratings to address the coronavirus pandemic.⁴⁶ Among PDPs, the average star rating

for 2022 (weighted by 2021 enrollment) increased to 3.70 from 3.58 a year earlier (Centers for Medicare & Medicaid Services 2021b). About 42 percent of PDP enrollees (based on 2021 enrollment) are in 2022 contracts with 4 or more stars, and another 53 percent are in contracts with 3.5 stars. Among MA-PDs offered for 2022, the average star rating jumped to 4.37 from 4.16. Based on 2021 enrollment, CMS estimated that 90 percent of MA-PD enrollees were in contracts rated 4 or more stars for 2022. While on the surface it appears that MA-PDs performed much better than PDPs, as we discuss in our chapter on the MA program, the current state of quality reporting in MA is such that we continue to question the reliability of MA-PD quality ratings. Further, PDP and MA-PD results are not entirely comparable because the latter reflect a much broader set of measures than the 12 metrics specific to Part D services. Among Part D measures only, average ratings of MA-PDs were higher than those of PDPs for 7 of the 12 metrics (Centers for Medicare & Medicaid Services 2021b).

As one window into plans' performance during the pandemic, CMS released nationwide averages of most Part D component measures for the 2022 ratings (collected during 2020 and 2021) without the adjustments made in response to the public health emergency. Compared with national averages from the 2021 ratings, the performance of both MA-PDs and PDPs improved significantly for measures of MTM services and for medication adherence to statin therapy and diabetes medications (Table 13-6). Higher measures of the metric for medication adherence (proportion of days covered (PDC)) may reflect enrollees' move toward 90-day prescription fills from 30-day fills during the pandemic lockdown.⁴⁷ After comparing changes in Part D adherence rates with other literature on average adherence rates for common conditions, some analysts argue that the long-term upward trend observed in Part D metrics may partly reflect improvements in PDC scores rather than true improvements in patient adherence (Farley and Urick 2021).

Programs to manage medication use

CMS expects Part D plan sponsors to ensure quality of medication care through internal programs and drug utilization reviews. In addition, by law, Part D plans are required to carry out medication therapy management

**TABLE
13-6****Changes in Part D measure scores from 2021 to 2022 star ratings**

Part D measure	MA-PD contracts			PDP contracts		
	2021 average	2022 average	Change in performance	2021 average	2022 average	Change in performance
MTM program completion rate for comprehensive medication review	76.89	83.35	Better	44.54	53.74	Better
Medication adherence for cholesterol (statins)	82.35	86.24	Better	84.32	87.08	Better
Medication adherence for diabetes medications	82.61	86.03	Better	84.65	86.68	Better
Statin use in persons with diabetes	80.25	82.86	Better	78.73	80.34	Better
Medication adherence for hypertension (RAS antagonists)	84.58	87.04	Better	86.62	88.45	Better
Rating of drug plan	85.05*	86.43	Better	83.61*	84.15	Better
Getting needed prescriptions	90.06*	91.05	Better	89.97*	90.56	Better
Complaints about the plan	0.19	0.21	Worse	0.04	0.06	Worse
Call center—foreign language interpreter and TTY availability	91.74	91.02	Worse	92.43	88.71	Worse
Members choosing to leave the plan	13.16	14.68	Worse	9.71	10.65	Worse

Note: MA-PD (Medicare Advantage–Prescription Drug [plan]), PDP (prescription drug plan), MTM (medication therapy management), RAS (renin angiotensin system), TTY (teletypewriter). Most measures are in percentages, except for complaints about the plan (number of complaints per 1,000 members). The measure “Medicare Plan Finder price accuracy” is not shown because it had substantive specification changes between the two years. The measure “drug plan quality improvement” is not shown.

*Measures from the Consumer Assessment of Healthcare Providers and Systems® used data from the 2020 star ratings (collected in 2019 and unaffected by the COVID-19 public health emergency).

Source: Centers for Medicare & Medicaid Services 2021b.

programs and drug management programs for enrollees at risk of opioid overuse.

Medication therapy management programs

Medicare requires each Part D plan sponsor to carry out MTM programs that focus on the quality of pharmaceutical care for high-risk beneficiaries by improving their therapeutic outcomes and reducing adverse drug events. CMS reviews and must approve a sponsor’s description of its MTM program as part of the annual Part D bidding process. The programs target two categories of beneficiaries: (1) those who have multiple chronic conditions, take multiple medications,

and are likely to have drug spending that exceeds an annual cost threshold (\$4,696 for 2022), and (2) those who are at risk for opioid misuse or abuse under a plan’s drug management program.

Plan sponsors are required to enroll, with opt-out provisions, all eligible enrollees in their MTM programs and report certain measures annually to CMS about all eligible beneficiaries. MTM programs must offer interventions for both beneficiaries and prescribers. At a minimum, the programs must provide enrolled beneficiaries with a comprehensive medication review (CMR) at least annually and a targeted medication review (TMR) at least quarterly for ongoing monitoring

and follow-up of any medication-related issues.⁴⁸ CMS expects plan sponsors to have a process in place to measure and evaluate the outcomes of their interventions. Sponsors must also provide MTM program enrollees with information about the safe disposal of prescription drugs that are controlled substances.

Early in the Part D program, plan sponsors used a wide variety of eligibility criteria, types of interventions, and levels of effort (Medicare Payment Advisory Commission 2009). Sponsors had the flexibility to set eligibility criteria, and some sponsors targeted beneficiaries with more than three conditions or selected conditions that were somewhat less prevalent, resulting in limited participation (Gray et al. 2019). One reason for doing so may have been that plans must treat the cost of MTM programs as an administrative expense, which they reflect in their Part D bids. Over time, CMS has been more prescriptive with respect to eligibility criteria and MTM interventions to broaden participation and plan accountability.⁴⁹

For years, the Commission has had concerns about the effectiveness of MTM programs, particularly in stand-alone PDPs. Unlike MA-PDs, which bear financial risk for both the medical and drug spending of their enrollees, PDPs are accountable only for drug spending and may not have financial incentives to address medication-related issues or encourage adherence to high-value medications that can reduce medical spending. Past CMS analyses found lower rates of medication reviews among MTM enrollees in PDPs compared with those in MA-PDs. Today, the same pattern is still evident: In the 2022 star ratings (based on 2020 data), an average of 54 percent of enrollees in PDP MTM programs received a comprehensive medication review, compared with an average of 83 percent in MA-PD MTM programs (Table 13-6, p. 499).

In 2017, CMS began testing an Enhanced MTM model to see if new payment incentives and regulatory flexibilities would spur PDPs to improve their medication management interventions and reduce Medicare spending. Participating sponsors are allowed to set their own targeting criteria and tailor their MTM interventions to their enrollees.⁵⁰ CMS makes prospective payments per beneficiary per month and performance-based payments to the sponsors to cover estimated costs of their interventions. Six Part D sponsors operating 22 PDPs in 5 regions of the country

are participating over a 5-year period. In 2019, about 1.4 million PDP enrollees in those plans were targeted for enhanced MTM services and about 30 percent received services (Acumen LLC 2021). Although the entire five-year demonstration is not yet complete, over the first three years, CMS found no statistically significant effects on Medicare spending for Part A and Part B services, and plan payments under the model were larger than observable decreases in spending, resulting in net costs to Medicare (Centers for Medicare & Medicaid Services 2021h). Measures of use of diabetes medications showed modest improvement, but measures of potentially unsafe medication use in the elderly did not improve.

Drug management programs

Because of their higher burden of chronic conditions and disease, Medicare beneficiaries may be more likely to experience significant pain. In 2016, nearly a third of Part D enrollees filled at least one prescription for an opioid, mostly for pain not associated with treatment of cancer or terminal conditions (Medicare Payment Advisory Commission 2018). Among beneficiaries with the highest opioid use, nearly three-quarters used either benzodiazepines or gabapentin concurrently. Adverse events can be associated with opioid use, in part because individuals using opioids tend to take multiple drugs and because opioid use itself can cause serious harm, such as opioid use disorder, overdose, and death. Long-term use of opioids increases risk of falls or fractures, and side effects of opioids can interfere with treatment of comorbid conditions.

Part D plan sponsors have been required to operate drug utilization management, quality assurance, and MTM programs since the program's inception. However, as concern about the nation's opioid epidemic grew, CMS set additional requirements. The agency put in place the Overutilization Monitoring System (OMS) to identify, from claims, enrollees with high use of frequently abused drugs or patterns of obtaining prescriptions from multiple prescribers and pharmacies. In addition, CMS requires plan sponsors to administer safety alerts when high dosages of opioids are prescribed, and it posts display measures about opioid use on [cms.gov](https://www.cms.gov).

In 2019, plan sponsors were permitted to establish drug management programs (DMPs) that identify enrollees at risk of overuse and take steps to manage that

use. Beginning in 2022, all Part D plans are required to carry out DMPs, and enrollees with a history of opioid-related overdose must be included in them. CMS provides plan sponsors with information from the OMS about enrollees identified as potentially at risk. Sponsors must then conduct retrospective reviews of claims and case management—reaching out to the prescribers, making them aware if the patient has sought opioids from multiple prescribers, and determining whether the cumulative dosage was

intended. If the plan sponsor cannot determine that a beneficiary’s high opioid use is medically necessary or if prescribers verify misuse, the sponsor can apply “hard edits” to opioid claims so that the pharmacy will not fill the prescription or limits the quantity dispensed. Under certain circumstances, sponsors can limit access to frequently abused drugs through beneficiary-specific edits and restrictions on which prescribers or pharmacies the enrollee can use. ■

Endnotes

- 1 Even today, when the defined standard benefit has 25 percent coinsurance in both the initial coverage phase and coverage-gap phase, many Part D plans structure their cost sharing differently across the two phases, with copayments for generics and preferred drugs initially but 25 percent coinsurance in the coverage gap.
- 2 In 2022, individuals with the partial LIS pay a \$99 deductible and 15 percent coinsurance on prescriptions up to the OOP threshold. Above the OOP threshold, those LIS enrollees pay \$3.95 for each generic prescription and \$9.85 for brand prescriptions. For more on the magnitude of cost sharing for partial LIS enrollees, see Dusetzina et al. 2021a.
- 3 For example, in 2022, generic tiers cannot have copayments that exceed \$20 per prescription or charge coinsurance of more than 25 percent in the benefit phase between the deductible and the initial coverage limit. Plans may not use copayments of more than \$100 or coinsurance higher than 50 percent for drugs on nonpreferred tiers (Centers for Medicare & Medicaid Services 2021m).
- 4 CMS calculates benchmarks using a weighted average of both PDP and MA-PD premiums. For plans that offer enhanced coverage, CMS uses the portion of the plan's premium that reflects the cost of basic coverage. For MA-PDs, CMS uses plans' premiums for basic coverage before plan sponsors have applied any MA rebates (a portion of the difference between the MA payment rate and plans' bids to provide Part A and Part B services) to reduce or eliminate the premium. The weight for each plan equals its share of LIS enrollment.
- 5 The small share of LIS enrollees who receive a partial subsidy pay a portion of the premium for most PDPs, including those with premiums below the LIS benchmark.
- 6 Under CMS's de minimis policy, plan sponsors may voluntarily waive the portion of the monthly adjusted basic beneficiary premium that is above the LIS benchmark for a subsidy-eligible individual, up to a de minimis amount. The de minimis amount for 2022 is \$2.
- 7 Instead of accepting the new assignment, LIS enrollees may choose a plan themselves. However, if their selected plan has a premium higher than the benchmark, the LIS enrollee must pay the difference between the plan's premium and the benchmark amount.
- 8 Beneficiaries who are current or former Part D enrollees can be auto-enrolled for a variety of reasons, such as losing and then regaining their LIS and Part D coverage, moving out of their plan's service area, asking to disenroll from their current plan without selecting a new plan, or failing to pay the premium for their current plan.
- 9 CMS allows Part D plan sponsors to use up to two specialty tiers that are exempt from its tiering exceptions process. For a drug to be placed on a specialty tier, average price must exceed a dollar-per-month threshold established by CMS. The threshold for 2022 is \$780 per month, an increase from the \$670 per month that was in place through 2021 (Centers for Medicare & Medicaid Services 2021j).
- 10 In 2020, the Congressional Budget Office estimated that the combined package would lead to one-year program savings of more than \$2 billion relative to baseline spending and savings of more than \$10 billion over five years.
- 11 EGWPs are sponsored by employers that contract directly with CMS or on a group basis with an insurer or pharmacy benefit manager to administer the Part D benefit. They differ from employer plans that receive the RDS in that Medicare Part D is the primary payer rather than the employer.
- 12 A portion of the difference between an MA plan's payment benchmark and its bid for providing Part A and Part B services is referred to as "MA rebate dollars." Plan sponsors can use MA rebate dollars to supplement benefits or lower Part D or MA premiums. In 2021, MA-PD sponsors applied on average \$40 per month (28 percent) of their Part C rebate dollars to Part D benefits. Of that amount, 47 percent was used to lower Part D premiums for basic benefits and the rest was used for supplemental drug benefits.
- 13 For 2020, actual aggregate reinsurance costs exceeded the plan sponsors' projections by \$5.4 billion (Liu 2021).
- 14 As with the income-related premium for Part B, higher Part D premiums apply to individuals with an annual adjusted gross income greater than \$91,000 and to couples with an adjusted gross income greater than \$182,000. A beneficiary whose income exceeds these levels pays a monthly adjustment amount in addition to their Part D plan premium. For 2022, adjustments range from \$12.40 to \$77.90 per month, depending on income (Centers for Medicare & Medicaid Services 2021a).
- 15 The LEP amount depends on the length of time an individual goes without coverage as generous as Part D and is calculated by multiplying 1 percent of the base beneficiary premium by the number of full, uncovered months an individual was eligible but was not enrolled in a Part D plan and went without other creditable coverage.

- 16 In 2018, CVS Health completed its acquisition of Aetna, and Cigna completed its acquisition of Express Scripts. To address antitrust concerns and obtain regulatory approval of the CVS Health–Aetna deal, Aetna sold its PDPs to WellCare. Subsequently, WellCare was acquired by Centene. Under CMS guidance, plan sponsors may offer no more than one basic and two enhanced PDPs per Part D region. Following a merger, CMS gives sponsors a transition period before they must comply. Cigna and Centene needed to consolidate their plans by 2022.
- 17 Most MA plans are MA–PDs, offering combined medical and outpatient drug benefits. However, a small share of MA plans (including Medicare Savings Account plans) do not offer prescription drug coverage.
- 18 Some pharmacies choose not to contract with certain plans because they do not like the terms and conditions the plans offer. Plan sponsors are not obligated to cover prescriptions at an out-of-network pharmacy, except under certain circumstances.
- 19 Plan sponsors cannot restrict access to a subset of network pharmacies unless dispensing a drug requires “extraordinary specialty handling, provider coordination, or patient education that cannot be met by a network pharmacy” (Centers for Medicare & Medicaid Services 2011). An exception is made if a manufacturer uses a limited distribution network. In this situation, the Part D enrollee would be able to fill that prescription only at one of the designated specialty pharmacies.
- 20 For example, independent specialty pharmacies have said they are evaluated on rates of statin dispensing—a drug class they typically do not dispense. Some community pharmacies are evaluated on rates of dispensing generics measured at the level of the pharmacy services administrative organization they use rather than that of their individual pharmacy.
- 21 The Department of Justice focused on the merger’s horizontal dimensions but did not challenge vertical aspects of the merger (Greaney 2019). As a condition of approval, Aetna divested its Medicare Part D prescription drug plan business to WellCare (now owned by Centene).
- 22 In interviews we conducted in 2017, we found that there is little transparency of transfer prices between PBMs and their pharmacies. CMS requires Part D plan sponsors to report PBM-negotiated rebates so that Medicare can appropriately pay the program’s share of net-of-rebate drug spending rather than list-price spending. However, postsale rebates and discounts received by PBM subsidiaries such as mail-order and specialty pharmacies are not reported (Medicare Payment Advisory Commission 2017a). In our interviews, PBM auditors and consultants voiced concerns that there is less visibility into the transfer prices PBMs pay to their mail-order and specialty pharmacies, which affects what payers are subsequently charged (Hargrave 2017). PBMs we spoke with noted that they have corporate firewalls to keep transactions between subsidiaries at arm’s length. However, information firewalls are difficult to enforce.
- 23 Total drug costs include spending for brand-name drugs as well as generics, on which manufacturers do not typically pay rebates.
- 24 An individual NDC uniquely identifies the drug’s labeler, drug, dosage form, strength, and package size.
- 25 For this index, Acumen groups NDCs that are pharmaceutically identical, aggregating prices across drug trade names, manufacturers, and package sizes. As a result, brand-name drugs are grouped with their generics if they exist, and this price index more closely reflects the degree to which market share has moved between the two.
- 26 Insulins account for a large share of biological products covered under Part D. Between 2006 and 2020, our price index for insulins grew by more than 300 percent, compared with just under 250 percent for other biological products (i.e., excluding insulins) during the same period.
- 27 Semglee is the first official biosimilar insulin glargine approved by the FDA, in July 2021. However, Basaglar has long been considered an unofficial biosimilar because it is considered to be highly similar to Lantus, its reference product (Hagen 2021b).
- 28 For a drug not on the PDL, a state may require prior authorization or attach a higher copayment, creating incentives for providers to prescribe a drug on the PDL when possible (Gifford et al. 2020a).
- 29 CMS encourages state Medicaid programs to “view the launch of biosimilar biological products as a unique opportunity to achieve measurable cost savings and greater beneficiary access to expensive therapeutic treatments for chronic conditions . . . and to provide biologics that achieve desirable, cost-effective clinical outcomes for beneficiaries using the various drug utilization and cost management tools they have available (e.g., step therapy, prior authorization, preferred drug lists)” (Centers for Medicare & Medicaid Services 2015).
- 30 For some products, it is possible for the price net of rebates to be lower than an alternative product with lower list price. However, even for products with lower net prices, the financial benefit of postsale rebates disproportionately

- accrues to plans; patients who pay cost sharing on the higher price and Medicare's low-income cost-sharing subsidy do not benefit from lower net prices.
- 31 Biosimilar products may not be approved for all indications approved for the originator product. For example, Cyltezo is approved for six indications in adult patients compared with eight for Humira (Food and Drug Administration 2021). An interchangeable biosimilar product may be substituted for the reference product without the prescriber having to change the prescription, subject to state pharmacy laws, which vary by state.
 - 32 The Biologics Price Competition and Innovation Act (BPCIA) passed in 2010 created an abbreviated approval pathway for biosimilars that involves patent litigations. Based on a review of lawsuits related to the BPCIA, a study found that both "the complex litigation process established by the BPCIA and large numbers of patents enforced by originator manufacturers" have contributed to "frequent confidential settlements between originator and biosimilar manufacturers that have delayed the availability of biosimilars" (Stern et al. 2021).
 - 33 CMS dashboard data show that list prices for original and new formulations of Humira products (including the citrate-free version) are comparable on a per dosage basis (Centers for Medicare & Medicaid Services 2021k). For this reason, market shares measured by gross sales are likely to track very closely to market shares measured by volume.
 - 34 Boehringer Ingelheim, the manufacturer of Cyltezo, has filed a citizen petition with the FDA to change its interpretation of how the strength of a biosimilar is determined. The FDA has provided an interim response stating it has not yet resolved the issue (Stanton 2021).
 - 35 Calculated from information in CMS's announcement of the 2022 Part D national average monthly bid amount and base beneficiary premium (Centers for Medicare & Medicaid Services 2021d).
 - 36 Between 2007 and 2020, the number of Part D beneficiaries without the LIS grew, on average, by just over 7 percent annually.
 - 37 Changes in law required Medicare to temporarily apply slower growth rates to the OOP threshold over the period from 2014 through 2019. However, for 2020 and thereafter, the OOP threshold reverted to levels that would have been in place had the slower growth rates never applied.
 - 38 The transition fill is a temporary one-month supply provided within the first 90 days of coverage in a new plan or the new contract year for existing enrollees.
 - 39 Plan sponsors must make coverage determination and exception decisions within 72 hours of a request or within 24 hours for expedited requests. If the initial exceptions request does not include the necessary supporting statement, the plan has up to 14 calendar days to obtain the information. See our March 2020 report to the Congress for more details (Medicare Payment Advisory Commission 2020b).
 - 40 The study compared wholesale acquisition cost (WAC) to manufacturer prices in other OECD countries. The authors acknowledged that the net prices paid for insulins in the United States are likely to be lower than WAC but noted that U.S. insulin prices would still have been considerably higher (about four times higher) than in other OECD countries even if prices net of postsale rebates and discounts were used (Centers for Medicare & Medicaid Services 2013).
 - 41 We found similar results using the 2019 prescription drug event data (before the current public health emergency related to COVID-19).
 - 42 The relationship between higher cost sharing and adherence, treatment initiation, or the rate of prescription abandonment is likely to vary widely across therapeutic classes. For example, patients may be less sensitive to higher cost sharing for certain cancer treatments compared with therapies for chronic conditions such as rheumatoid arthritis (Medicare Payment Advisory Commission 2019).
 - 43 Part D enrollees can apply to bona fide independent charity patient assistance programs (PAPs) for help with cost sharing. Pharmaceutical manufacturers can provide cash donations to independent charity PAPs without invoking anti-kickback concerns if the charity is structured properly. However, recent enforcement actions regarding manufacturer donations to charities suggest that some PAPs are in violation of the anti-kickback statute (Office of Inspector General 2018, Sagonowsky 2017).
 - 44 Due to the COVID-19 public health emergency, CMS did not require sponsors to submit CAHPS survey data (or, for Part C measures, Healthcare Effectiveness Data and Information Set® (HEDIS®) data) for the 2021 star ratings. The components of 2021 Part D star ratings that were based on CAHPS data were replaced with earlier values from the 2020 star ratings (Centers for Medicare & Medicaid Services 2020). For 2022 ratings, CMS resumed use of the most recent CAHPS and HEDIS data (Centers for Medicare & Medicaid Services 2021i).
 - 45 For five clinically oriented Part D measures, CMS applies a categorical adjustment index to account for average within-contract differences between the performance of enrollees with the LIS or disabled status and other enrollees.

- 46 For example, CMS delayed implementation of bidirectional caps on the amount of allowable upward or downward movement in the cut points for star ratings in the event that national performance declined as a result of the pandemic. CMS also expanded a hold-harmless provision so that changes in a contract's quality improvement score could not cause the contract's summary star rating to decrease (Centers for Medicare & Medicaid Services 2021b).
- 47 Greater use of 90-day fills reduces the number of times uncovered days can be observed in the PDC measure.
- 48 CMRs must include a person-to-person or telehealth consultation performed by a pharmacist or other qualified provider and a written summary of the review that includes a medication list and action plan, if any, provided to beneficiaries in CMS's standardized format. A TMR is distinct from a CMR because it is focused on specific medication-related problems, actual or potential. A TMR can be conducted person to person or be system generated, and interventions can be delivered by mail or faxed to the beneficiary or the prescriber, as appropriate (Centers for Medicare & Medicaid Services 2021f).
- 49 Today, plan sponsors can no longer set eligibility criteria narrower than requiring beneficiaries to have more than three chronic conditions or use more than eight medications. If plan sponsors target beneficiaries with specific chronic conditions for their MTM programs, CMS requires them to include at least five out of nine core conditions: Alzheimer's disease, chronic heart failure, diabetes, dyslipidemia, end-stage renal disease, hypertension, respiratory disease, bone disease–arthritis, or mental health conditions.
- 50 For example, a sponsor might choose to provide more counseling services on medication adherence and devote fewer resources to comprehensive medication reviews.

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CHAPTER 14

Mandated report: Designing a value incentive program for post-acute care

Mandated report: Designing a value incentive program for post-acute care

Chapter summary

The Consolidated Appropriations Act, 2021, requires the Commission to report on a prototype value-based payment program under a unified prospective payment system (PPS) for post-acute care (PAC) services and analyze the impacts of the prototype's design. The report is due March 15, 2022. Although this chapter does not make formal recommendations, it has a strong foundation in the Commission's past work and recommendations on value incentive programs.

Building on the Commission's past work, we present key design elements for a PAC value incentive program (VIP). For each of the following elements, policymakers would need to make decisions to develop and implement a PAC VIP.

- **Small set of performance measures.** The PAC VIP would adjust payments based on provider performance on a small set of measures tied to clinical outcomes, patient experience, and resource use. Policymakers would need to decide whether all providers should be scored on the same set of measures and which measures should be scored.
- **Strategies to ensure reliable measure results.** The PAC VIP's measure results would reflect true differences in performance and not random

In this chapter

- Elements of a value incentive program for post-acute care
- Results of our illustrative model of a PAC VIP design
- Other ways to encourage providers to improve performance
- Implementing a PAC VIP is a complex undertaking

variation. Policymakers would need to define the reliability standard for measure results and determine which strategies will ensure reliable results for as many providers as possible.

- **System to distribute rewards with minimal “cliff” effects.** The PAC VIP would use a simple scoring approach that awards points for every level of performance achieved. Policymakers would need to decide whether a provider should meet some minimum performance standard before it earns performance points that translate into a reward.
- **Approach to account for differences in patients’ social risk factors using a peer-grouping mechanism, if necessary.** If higher social risk is tied to poorer outcomes, the PAC VIP would stratify providers into peer groups based on the social risk of their patient populations. Under this grouping mechanism, providers in peer groups with patient populations at high social risk would receive larger adjustments for attainments in quality compared with other providers. Policymakers would need to decide how to define and measure patient populations’ social risk to establish the peer groups, as well as how many peer groups would be needed to meaningfully differentiate providers.
- **Method to distribute the entire provider-funded pool of dollars.** The PAC VIP would redistribute all withheld funds to providers based on their performance. Policymakers would need to determine the size of rewards and penalties needed to motivate providers to improve performance.

For illustrative purposes, we modeled a PAC VIP design that includes these design elements and adjusts each provider’s payments based on its performance. Approaches taken for four of the elements could be readily incorporated into a design—a starter set of performance measures, the reliability standard, a scoring methodology, and the distribution of incentive payments. However, questions remain about an approach to account for the social risk of a provider’s patient population. Although there is a conceptual relationship between the share of fully dual-eligible beneficiaries (beneficiaries eligible for both Medicare and Medicaid, a proxy for low income) a provider treats and its outcomes, we did not find an empirical association in each of the four settings. More work is needed to define a measure of social risk that considers multiple dimensions before concluding whether adjusting performance results for social risk is always needed.

Implementing a PAC VIP would involve many steps and would be a multiyear endeavor. First, a PAC PPS would need to be implemented so that setting-specific practice patterns (such as length of stay) begin to converge.

Concurrently, CMS would need to begin aligning regulatory requirements for PAC providers. Until this process is completed, providers' performance would likely be compared only within each setting because current practice patterns reflect current regulatory requirements and the payment incentives embedded in the various PPSs. Setting-specific comparisons of performance would be phased out over time, leading up to comparisons of performance regardless of setting.

CMS would need to select a set of performance measures that captures differences across providers. There will be trade-offs between using common measures and using patient population-specific measures. In addition, the measure set should evolve to include accurate measures of the maintenance and improvement in patients' functional status and of patient experience. CMS would need to test a measure of social risk that has both a conceptual relationship and an empirical association with outcomes. CMS should explore the use of geographic area-level measures of social risk and whether they are accurate proxies for the social risk of individual patients.

Finally, CMS would need to design a methodology that scores providers' performance, ensures reliable measure results, distributes rewards with minimal cliff effects, accounts for differences in the social risks of a provider's patient population through peer grouping if necessary, and fully redistributes provider-financed incentive payments to providers. The Commission's PAC VIP model would be a good starting point for CMS's deliberations. ■

Background

Post-acute care (PAC) providers—skilled nursing facilities (SNFs), home health agencies (HHAs), inpatient rehabilitation facilities (IRFs), and long-term care hospitals (LTCHs)—offer Medicare beneficiaries a wide array of services, ranging from recuperation and rehabilitation services to hospital-level services. The Commission and others have documented overlap of the many types of patients treated in the four settings, though the amount of overlap differs by clinical condition (Gage 2012, Medicare Payment Advisory Commission 2019a). For example, the treatment of patients recovering from stroke is relatively broadly distributed across the four settings (though some of this would be explained by differences in the severity of the stroke), whereas the treatment of patients who require ventilator care is concentrated in LTCHs. Several factors account for the overlap in treatment settings: The supply and use of PAC varies across the country; there are no clear criteria identifying which patients need PAC (and how much); and there is a dearth of evidence-based guidelines to direct beneficiaries to the setting with the best outcomes (Medicare Payment Advisory Commission 2014). Reflecting these ambiguities, Medicare per capita spending for PAC varies geographically more than for any other type of service (Institute of Medicine 2013, Medicare Payment Advisory Commission 2017b).

Two recent trends may illustrate the potential overlap in care furnished by PAC providers. First, providers participating in alternative payment models (such as CMS's bundled payment initiatives and accountable care organizations) have shifted patients away from institutional PAC settings (IRF and SNF) and increased the share of patients treated in HHAs, without eroding quality of care (Agarwal et al. 2020, Marrufo et al. 2021, Navathe et al. 2020). Second, during the coronavirus public health emergency (PHE) in 2020, beneficiaries avoided SNFs and were treated elsewhere. Between 2019 and 2020, of the top conditions discharged from hospitals and referred to PAC, the shares treated in SNFs dropped, while the shares going to HHAs and, to a lesser extent, IRFs rose.

A unified payment system for PAC providers

Despite the overlap in patients, Medicare uses separate prospective payment systems (PPSs) for each setting,

which results in considerably different payments for similar patients. To establish site-neutral payments based on patient characteristics rather than setting, the Congress requested that the Commission and the Secretary of Health and Human Services develop prototypes for a unified PAC payment system for all PAC providers. To meet the mandate, in 2016 the Commission recommended design features for a unified PPS for paying PAC providers and concluded that a unified payment system was feasible (Medicare Payment Advisory Commission 2016). The Commission is required to submit a second report once the Secretary has issued its report on a prototype design. The Commission has work underway to update its analyses and currently plans to submit the second mandated report in 2023, assuming the Secretary's report is issued by the end of 2022.

The recommended design elements include a uniform unit of service (a stay), outlier policies for unusually short or unusually high-cost stays, and a common risk-adjustment method that would raise or lower payments depending on the patient's condition, comorbidities, and other factors. The Commission noted one design feature that cannot be uniform: The base payment rate for home health care needs to be lower to reflect this setting's considerably lower cost. Otherwise, HHAs would be substantially overpaid and institution-based care would be substantially underpaid. An adjustment would help ensure that placement decisions are based on a patient's care needs, not payment incentives. Subsequent to the 2016 report, the Commission recommended that a PAC PPS be phased in over multiple years and that aggregate payments be lowered to more closely align payments with costs (Medicare Payment Advisory Commission 2017a). In addition, our analysis of consistency in recording functional assessment data raised questions about the use of this information in establishing payments (Medicare Payment Advisory Commission 2019a).

Because a unified PAC PPS would establish a common payment system, Medicare's existing setting-specific regulations would need to be aligned before the new PPS is fully phased in. Otherwise, PAC providers would continue to face different staffing and licensing requirements—and the associated costs—for treating similar patients. The Commission suggests a two-tiered regulatory approach (Medicare Payment Advisory

Mandate to establish a prototype value-based payment program under a unified prospective payment system for post-acute care services

Consolidated Appropriations Act, 2021

Not later than March 15, 2022, the Medicare Payment Advisory Commission shall submit to Congress a report on establishing a prototype value-based payment program under a unified prospective payment system for post-acute care services under the Medicare program under title XVIII of the Social Security Act (42 U.S.C. 1395 et seq.). Such report—

(1) shall—

(A) consider design elements such as—(i) measures that are important to the Medicare program and to beneficiaries under such program; (ii) methodologies for scoring provider performance and effects on payment; and (iii)

other elements determined appropriate by the Commission; and

(B) analyze the effects of implementing such prototype program; and

(2) may—

(A) discuss the possible effects, with respect to the Medicare program, on program spending, post-acute care providers, patient outcomes, and other effects determined appropriate by the Commission; and

(B) include recommendations with respect to such prototype program, as determined appropriate by the Commission, to Congress and the Secretary of Health and Human Services. ■

Commission 2019a). PAC providers would be required to meet a common set of requirements that would establish the basic provider competencies to treat the average PAC patient. Providers opting to treat patients with specialized or very high care needs—such as those who require ventilator support or high-cost wound care—would need to meet a second tier of requirements that would vary by the specialized care need. The basis of provider requirements would thus shift from the setting of care to the care needs of the patients a provider opts to treat.

Current practice patterns (most notably, lengths of stay) differ considerably across PAC settings, reflecting differences in setting-specific regulations and payment systems. Until requirements are aligned, provider performances under a PAC value incentive program (VIP) would need to be compared within each setting. However, we expect that lengths of stay would begin to converge as providers face the same regulations and payment incentives under a unified PPS. Over time, the PAC VIP could transition from comparing providers within a setting to looking across all PAC providers.

A unified PAC PPS is not the end point for payment reform; rather, it would represent a necessary first step in a longer-term restructuring of how Medicare should pay providers. The Commission believes that, ultimately, Medicare needs to move away from fee-for-service (FFS) payment systems and toward alternative payment models and population-based payments. These arrangements would put providers at risk for all health care spending and outcomes. In the interim, it is essential that Medicare payments are accurate, based on patient (and not setting) characteristics, and tied to provider performance. A VIP would reward providers for achieving good outcomes for their patients and penalize providers with worse performance.

A value incentive program for PAC providers

A VIP is an essential complement to the implementation of a PAC PPS because payments would continue to be paid on an FFS basis. FFS payment does not include incentives to furnish high-quality care (when doing so raises a provider's costs) and

encourages unnecessary utilization. By tying a portion of payments to measures of quality and resource use, a VIP would create incentives for providers to furnish efficient (low-cost, high-quality) care to FFS beneficiaries. When providers are subject to a common payment system and similar regulatory requirements, a single VIP should accompany it. Performance can then be compared across all providers.

Recognizing the importance of a companion VIP for a unified PPS, the Congress, in the Consolidated Appropriations Act, 2021, required the Commission to report on a prototype value-based payment program under a unified PPS for PAC (see text box on the mandate).

Typically, VIPs adjust a provider's Medicare FFS payments based on performance on measures tied to clinical quality, patient experience, and resource use. Providers with good performance receive higher payments, while providers with poor performance receive lower payments. A provider's performance during an assessment period is compared with that of other providers or with some performance scale and then converted to a provider-specific payment adjustment. This adjustment is then applied to all Medicare FFS payments for that provider in a subsequent fiscal year. Because the payment adjustments affect Medicare FFS payments, the measures generally do not consider performance for other patients.

Ideally, in a uniform PAC VIP, performance would be compared across settings using the same measures for at least a core set of measures. However, because the payment systems and regulatory requirements are distinct for each setting, current practice patterns vary considerably across settings. Therefore, at least initially, performances under a PAC VIP would need to be compared within each setting using a uniform set of measures. Once practice patterns (such as length of stay) converge, comparisons across settings could be made.

In this chapter, we discuss design elements of a PAC VIP that are consistent with the Commission's principle that Medicare payments should not be made without considering quality of care (Medicare Payment Advisory Commission 2018). Although this chapter does not make formal recommendations, it

has a strong foundation in the Commission's past work and recommendations on value incentive programs. The Commission has previously applied its principles for Medicare quality incentive programs to the design of programs for hospitals, Medicare Advantage plans, and SNFs (Medicare Payment Advisory Commission 2021b, Medicare Payment Advisory Commission 2020, Medicare Payment Advisory Commission 2019b).

Elements of a value incentive program for post-acute care

Relying on the Commission's principles for quality measurement and our previous work on redesigning Medicare quality incentive programs, we discuss key design elements of a PAC VIP. The design elements include:

- a small set of performance measures;
- strategies to ensure reliable measure results;
- a system to distribute rewards with minimal "cliff" effects;
- an approach to account for differences in patients' social risk factors using a peer-grouping mechanism, if necessary; and
- a method to distribute the entire provider-funded pool of dollars.

For each PAC VIP element, policymakers would need to make development and implementation decisions.

Small set of performance measures

Medicare quality programs should include a small set of performance measures tied to outcomes, patient experience, and resource use. In developing the PAC VIP, policymakers would need to decide whether all providers should be scored on the same set of measures and which measures should be scored.

Should all providers be scored on the same set of measures?

The PAC VIP could score all providers on the same set of performance measures, such as hospitalizations during the stay, successful discharge to the community,

and Medicare spending per beneficiary (MSPB). In our illustrative model, we chose to score PAC providers on these three performance measures.

Alternatively, the PAC VIP could include a combination of common measures and measures tailored to specific patient populations. For example, in addition to the common measures, the performance of providers that treat a sufficient number of patients on ventilators could be gauged using a measure of successful ventilator weaning. Including both broad and patient population-specific measures could capture a more comprehensive view of a provider's care. However, using different measures for different providers would limit the ability to compare performance across providers. Some providers would be scored only on the common measures, while others would be scored on a combination of common measures and measures specific to a subgroup of patients treated by a provider. Measures that evaluate a subgroup of a provider's populations could have sample size and reliability issues. CMS could also choose to score the same common measures in the PAC VIP and publicly report additional patient population-specific measures that are relevant for each provider.

What measures should be used to gauge provider performance?

In our illustrative PAC VIP model, we evaluated performance using three measures: all-condition hospitalizations within stay, successful discharge to the community, and MSPB. These measures are relevant to all PAC providers and are important to beneficiaries, the Medicare program, and entities such as accountable care organizations (ACOs) and health systems interested in establishing networks of high-performing providers. The measures capture different dimensions of PAC: hospitalizations during the PAC stay; admissions and deaths in the period following a PAC stay; and Medicare spending during and after the PAC stay. The measures also hold providers jointly accountable for good outcomes. For example, if a PAC provider refers a beneficiary to another PAC provider for additional care, the successful discharge to the community measure creates incentives for the first provider to refer beneficiaries to subsequent providers that have low hospitalization, mortality, and MSPB rates. These measures capture provider behavior in response to broad environmental factors such as

participation in alternative payment models (e.g., ACOs) and increasing Medicare Advantage (MA) penetration, which may encourage use of lower-cost PAC.

We developed measures that use uniform definitions and risk adjustment across the PAC settings. We can calculate the measures using already reported claims data. All three measures have considerable variation in performance within each setting, suggesting opportunities for providers to improve and the ability to differentiate performance among providers.

We did not include process measures in our illustrative model because of the Commission's established principle that quality payment programs should use measures tied to outcomes, patient experience, and value. Process and other more granular measures may be important for public reporting, but they are not outcome measures that should be tied to payment. CMS should continue to use other quality measures and compliance standards to monitor PAC provider performance and publicly report this information.

CMS needs to fill in gaps in the availability of key performance measures so they can be included in a PAC VIP—most notably, the maintenance or improvement in function and patient experience. Therefore, we expect a PAC VIP measure set would evolve as other data and measures became available. Past work by the Commission raised serious questions about the current state of the functional assessment data. Because this information affects payments for HHAs, SNFs, and IRFs and the calculation of certain quality metrics, providers have an incentive to report the information in ways that raise payments and appear to improve performance (Medicare Payment Advisory Commission 2019a). Evaluations of the home health value-based purchasing (VBP) program also raised questions about the recording of patient assessment information (Pozniak et. al. 2021). In the Commission's June 2019 report to the Congress, we discuss strategies to improve assessment data reporting, the importance of auditing and monitoring the reporting of these data, and alternative measures of function that do not rely on provider-completed assessments (Medicare Payment Advisory Commission 2019a).

Another strategy to gather functional assessment information would be to require hospitals to assess PAC-bound patients at discharge from the hospital.

Measures of patient experience should be developed for post-acute care users

Medicare's quality payment programs should include measures of patient experience. Across the health care system, research finds that improving patient experience translates to better health. Patients who feel heard and have positive care experiences report better health outcomes and are more likely to adhere to treatment plans (Agency for Healthcare Research and Quality 2020a).

Implementation of patient experience surveys across post-acute care (PAC) settings is limited. CMS has implemented a Home Health Consumer Assessment of Healthcare Providers and Systems (CAHPS®) survey to capture the experiences of beneficiaries receiving home health care.¹ The Agency for Healthcare Research and Quality and CMS have developed CAHPS surveys for short-stay skilled nursing facility, inpatient rehabilitation facility, and long-term care hospital patients, but CMS does not require these providers to administer and report survey results from the beneficiaries they treat. CMS could explore using these existing surveys as the basis for a uniform PAC patient experience survey.

A PAC patient experience survey could include core questions concerning all types of PAC providers (such as asking for an overall rating) and separate supplemental questions for institutional providers (such as rating the facility's cleanliness) and home health agencies (such as discussion of home safety). Given the high level of comorbidities and cognitive impairments among PAC patients, collecting patient experience surveys could often require the use of proxies. To implement a PAC patient experience survey, CMS would need to finalize surveys and develop patient experience measures based on survey responses that are adjusted for respondent characteristics (e.g., sex, age, education, whether a proxy completed the survey). CMS would also need to implement a process for third-party survey vendors to collect survey results from patients (or their proxies). Collecting patient experience information would add burden to providers and CMS, but the Commission contends that these are valuable measures to assess a provider's quality of care. ■

While all SNF users and most IRF and LTCH users have a prior hospital stay, the majority of home health users do not, making this a less viable option for a PAC VIP. Alternatively, CMS could gather patient-reported outcomes, although none are currently collected in PAC settings or included in PAC quality reporting programs. Further, many PAC patients have a high severity of illness and cognitive impairments that would affect the ability to collect accurate patient-reported information. The use of proxies to gather this information would need to be an integral part of developing this option.

Another important measure of provider performance is patient experience. However, currently there are no uniform patient experience surveys for PAC users

(see text box). In addition, Medicare does not collect medical record or electronic clinical data (e.g., lab results) that would allow calculation of some clinical outcome measures.

All-condition hospitalizations within stay

Hospitalizations (admissions and readmissions) are outcomes that are disruptive to patients and caregivers, costly to the health care system, and put patients at additional risk of hospital-acquired infections and complications. Hospitalizations are also a major source of patient and family stress and may contribute substantially to the loss of function, particularly in older patients.

For our illustrative PAC VIP model, we calculated uniform, risk-adjusted hospitalization within-stay

rates for PAC providers, using three years of claims data (2015 to 2017). This measure holds providers accountable for hospitalizations that occur during the entire PAC stay. In addition to counting inpatient readmissions, the measure includes returns to the hospital for outpatient observation stays. The risk-adjustment model includes the following information: the beneficiary's primary reason for treatment; severity of illness, comorbidities, age, sex, and original reason for Medicare entitlement; whether the beneficiary received special care (ventilator use or wound care) during the preceding hospital stay or during the PAC stay; the length of the preceding hospital stay and the number of intensive care unit days (if any); and the number of hospitalizations during the past year. Beneficiaries who died during their PAC stay are excluded from the measure calculation, while beneficiaries who are enrolled in hospice are included.

Until there are aligned regulatory requirements and a uniform payment system (with uniform incentives), the hospitalization rates will differ across settings. Not only are IRFs and LTCHs licensed as hospitals (so we would expect them to transfer fewer beneficiaries to acute care hospitals), but lengths of stay (during which a beneficiary could be hospitalized) currently vary more than two-fold across settings. For example, in 2017, the average lengths of stay were 25 days in SNFs and 12.7 day in IRFs.

Successful discharge to the community Discharge to a community setting is an important health care outcome for many patients for whom the overall goals of PAC include optimizing functional status and returning home. However, providers should not discharge patients who are not medically ready to return to the community because doing so may result in hospital events. Also, as noted above, when patients need additional care following a PAC stay, providers should have an incentive to refer them to subsequent providers that have low hospitalization and mortality rates. Unlike the hospitalization within-stay measure, successful discharge to the community captures a patient's outcomes after discharge from the PAC setting.

Building on CMS's specification, we developed a risk-adjusted measure of successful discharge to the community that uses a uniform approach to adjust for differences in the mix of patients treated by a provider.

Successful discharge to the community is defined as having been discharged from the PAC provider to the community and having no unplanned hospitalizations or mortality in the next 30 days. "Community" is defined as home/self-care, with or without home health services, and includes nursing home residents who return to the same facility.² Discharges to hospice or resident stays with a hospice benefit in the postdischarge window are excluded from the calculation.

For our illustrative model, we calculated uniform, risk-adjusted results on the measure of discharge to the community for the four types of PAC providers using three years of claims data (2015 to 2017). The risk-adjustment model included the following factors: the beneficiary's primary diagnosis, comorbidities, age, sex, and original reason for entitlement; the length of the preceding hospital stay (if there was one) and the special care (ventilator or dialysis) provided during it; and the number of acute hospital stays during the past year.

Medicare spending per beneficiary The MSPB for PAC (MSPB-PAC) is a provider-level measure of resource use that captures Part A and Part B Medicare spending during a patient's PAC stay and the following 30 days. Low MSPB-PAC is considered desirable. To keep per beneficiary spending low, the PAC provider has an incentive to furnish high-quality care (e.g., avoid hospitalizations), make referrals for the necessary level and amount of subsequent care, ensure safe transitions between care settings, and discharge beneficiaries to high-quality PAC providers. The measure helps create incentives for providers not participating in broad delivery reforms (such as accountable care organizations and bundled payment programs) to focus on an episode of care that begins with admission and extends for a period after discharge. For beneficiaries who are hospitalized and then use SNF services, the measure overlaps with the MSPB measure for hospitals (which holds hospitals accountable for spending during the hospital stay and 30 days after discharge). By having overlapping measures, PAC providers and hospitals have the same incentive to keep resource use low. Paired with outcome measures, the MSPB-PAC measure could also detect stinting on care by identifying providers with consistently low spending per beneficiary and low quality.

Building on CMS's specification, we developed a risk-adjusted measure of spending that uses a uniform approach to adjust for differences in the mix of patients treated by a provider. Using three years of claims data (2015 to 2017), we calculated the risk-adjusted MSPB for each PAC provider relative to the setting average. The risk-adjustment model includes the following factors: the beneficiary's primary diagnosis, comorbidities, age, sex, and original reason for entitlement; whether the beneficiary had ESRD, was in a long-term care institution, or was enrolled in hospice; the timing of the stay (e.g., whether it immediately followed a prior hospital stay or followed a prior PAC stay); and the length of stay in an intensive care or coronary care unit during a prior hospital stay.

Strategies to ensure reliable measure results

The measure results used in the PAC VIP should be reliable, meaning that they should reflect true differences in performance and not be attributable to random variation. Key decisions for policymakers include defining the reliability standard for measure results and selecting the strategies to ensure reliable measure results for as many providers as possible.

What reliability standard for measure results should be used?

A high reliability standard should be used to determine the minimum number of stays required for a provider's performance to be scored in a PAC VIP. For providers with low patient volume, establishing reliable measure results is problematic because they do not have enough observations to ensure that the measure detects signal (actual performance) rather than noise (random variation). Unreliable measure results can lead to the wrong conclusions about a provider's performance; a low-volume provider can appear to have unusually good or poor performance when in fact its performance is not statistically different from the average (Garrett et al. 2021). Low-volume providers are also more likely to have performance that varies from year to year, which could result in a provider incurring penalties one year and receiving a reward the next.

In our illustrative PAC VIP model, we used a minimum case count that resulted in an acceptable reliability for each measure (i.e., 0.7, meaning that 70 percent of the variance in a measure's results was attributable to

actual performance differences and that providers can be differentiated).³ This level of reliability required a minimum of 60 stays (for each measure). Because there are many small SNFs and HHAs, this requirement had more effect on them than on IRFs and LTCHs, which tend to be larger.⁴

What strategies will ensure reliable measure results for as many providers as possible?

Setting a minimum case count to ensure reliability inevitably means excluding some providers from the quality measurement program. One way to include as many providers as possible is to pool data across years, allowing a performance measure to be calculated for many small providers that would otherwise be excluded. Such pooling is consistent with other quality payment program designs and measures. For example, Medicare's Hospital Readmissions Reduction Program uses three years of performance data to calculate readmission results. In our illustrative PAC VIP model, we pooled three years of claims data to increase the number of observations for each provider. Blending performance across years also encourages sustained high quality. However, pooling data across years could dampen a provider's drive to improve if their recent better results are blended with older, poorer performance. In such a case, the provider's improved performance would not be fully recognized in its payment incentive payment for several years. To counter this disincentive, policymakers could weight the more recent years more heavily. Policymakers could also pool data across years only for low-volume providers, while scoring just the most recent year's performance for providers that meet a minimum count in a single year.

System to distribute rewards with minimal "cliff" effects

Consistent with the Commission's principles, a PAC VIP should reward or penalize a provider using a continuous, prospectively set scale for each measure. By recognizing every level of performance, providers are always better off improving quality to achieve a higher level of quality—thus negating the need to separately score improvement. Further, the approach enables providers with similar performances to earn, all else being equal, similar payment adjustments. In contrast, a scoring approach that includes "cliffs" (preset numeric thresholds) can result in providers

with similar performances receiving markedly different payment adjustments because of where a performance falls in relation to a preset “cut point.” A provider’s performance that is scored just above the cut point could receive a sizably larger payment adjustment compared with the payment adjustment for another provider’s performance that is scored just below the cut point.

The performance scale for each measure should be set nationally, because as a national program, Medicare should apply the same performance scale to all providers. Medicare should not have different expectations for quality based on a provider’s location. The scale should be prospectively set so providers know how their performance on a measure translates to points before the payment year. Knowing the scale ahead of time allows providers to set their improvement goals and activities.

In our illustrative PAC VIP model, we established a continuous, prospectively set scale for each measure. We scored each PAC provider on its performance on each performance measure against national, setting-specific scales. We compared providers within a setting because the considerable variation in performances across settings reflects, in part, setting-specific requirements and payment policies. For example, some providers are licensed as hospitals, so they are less likely to have admissions to acute care hospitals during the PAC stay. Also, CMS criteria for IRFs and LTCHs currently limit the types of patients they admit. After implementation of a unified PAC PPS with consistent payment rates and regulations, we expect differences in practice patterns and costs to narrow. At that point, transitioning to common performance targets could be appropriate.

Should a provider meet some minimum performance standard before it earns a reward?

A key decision for policymakers in developing the PAC VIP is whether a provider should meet some minimum performance standard before it earns performance points that translate into a reward. This criterion would prevent providers with relatively poor performance from earning a reward. One way to accomplish this goal would be to set a performance-to-points scale so that no points are assigned below a minimum threshold. A minimum threshold could be set based on clinical judgment where there is an applicable clinical standard.

For example, clinical definitions of “controlled diabetes” could be used to set a threshold for a measure gauging a provider’s success at managing diabetes. However, for some outcome measures, there may be no clinical standards. For example, even with a goal to keep beneficiaries out of the hospital, some beneficiaries need to be rehospitalized to receive appropriate care. For such measures, policymakers could use a relative minimum threshold—for example, the worst quartile of performers—so that providers in that cohort would not receive points.

Setting a minimum performance threshold would help meet beneficiaries’ and the program’s reasonable expectations that providers furnish some minimum level of quality. It would also prevent the worst-performing providers from earning performance points that could translate into a reward (or, more likely, a smaller penalty).

Although a minimum threshold would, in principle, avoid rewarding the poorest performers, there are several reasons not to include one in a scoring design. First, it would create a cliff, or numeric threshold, between providers whose performance falls just below and those just above the threshold. In addition, a minimum threshold would disproportionately penalize providers who treat a high share of patients at high social risk because they are more likely to have lower performance on quality measures. Under the PAC VIP, the lowest-performing providers would always be penalized, regardless of their share of beneficiaries at high social risk, because the design establishes “winners” and “losers” within each peer group. Finally, a threshold would undercut the purpose of a peer-group strategy that is designed to counter the disadvantages these providers face in achieving good performance. Preventing the lowest-performing providers from earning any points would create even larger disparities between the lowest-performing and other providers. The disparity would result from the dollars withheld from the lowest-performing providers being redistributed to the other providers, raising these other providers’ incentive payments (or reducing their penalties).

In designing a PAC VIP, the Commission aims to increase the equity across providers when tying performance to value incentive payments. Therefore, despite the merits of including a minimum

performance threshold, the Commission comes to a different conclusion and supports an approach that counters the challenges that providers treating high shares of patients at high risk have in achieving good performance. We did not include a minimum standard in our illustrative PAC VIP model.

Approach to account for differences in patients' social risk factors using a peer-grouping mechanism, if necessary

Providers that treat a large share of patients with social risk factors may be relatively disadvantaged in a quality payment program because it may be harder for them to achieve good outcomes for their patients. Thus, a quality payment program should account for differences in the providers' patient populations to counter the disadvantages they could face in achieving good outcomes.

Rather than adjusting performance measures for patients' social risk factors, which can mask disparities in performance, Medicare should make adjustments to payments based on a provider's performance compared with its peers (Medicare Payment Advisory Commission 2018). With peer grouping, each provider's performance is compared with providers with similar mixes of patients at high social risk (that is, its "peers") to determine rewards or penalties based on performance. A provider would earn points based on its performance relative to setting-specific national performance scales, but how those points are converted to incentive payments would vary by peer group, with larger multipliers (i.e., the payment adjustment per point) for peer groups with higher shares of beneficiaries at high social risk. Providers would know the performance scales, their peer-group assignment, and peer-group multipliers before the payment year so that they would have time to set their improvement goals and activities. Key decisions for policymakers when implementing peer grouping include how to define and measure the social risk of patient populations to set the peer groups and how many peer groups would be needed to differentiate providers.

How should the social risk of a provider's patient population be defined and measured?

Social factors such as income, housing, social support, transportation, and nutrition affect access to health services and desired health outcomes (Office of

Disease Prevention and Health Promotion 2021). The National Academies of Sciences, Engineering, and Medicine (NASEM) outlined considerations to determine whether a social risk factor (measure) should be accounted for in a Medicare quality payment program (National Academies of Sciences 2016b). The social risk factor should have a *conceptual relationship* with the outcome of interest (that is, there should be a reasonable hypothesis positing how the social risk factors could affect a Medicare beneficiary's health outcome) and *empirical association* (that is, there should be verifiable evidence of an association between the social risk factor and the outcome of interest). This consideration is consistent with the Commission's principle that the Medicare program should take into account, as necessary, differences in a provider's patient population, including social risk factors. NASEM notes that research and experience would inform whether there is a reasonable conceptual basis for expecting a systematic relationship. It acknowledges that a conceptual relationship may not be consistent over time or across settings. An empirical association confirms the conceptual relationship; policymakers would need to decide how strong the association needs to be before peer grouping is undertaken.

Medicare beneficiaries who are disabled or low income are eligible to enroll in Medicaid. In our illustrative PAC VIP model, we tested a share of a provider's patients who were fully dual eligible for Medicare and Medicaid as a measure of social risk because there is a conceptual relationship between dual eligibility and our outcomes of interest. There is a clear and established relationship between poverty, socioeconomic status, and health outcomes—including increased risk for disease and premature death (Office of Disease Prevention and Health Promotion 2021). Compared with other beneficiaries, dual-eligible beneficiaries are more likely to report being in poor health and having limitations in performing activities of daily living (Medicare Payment Advisory Commission 2021a). Fully dual-eligible beneficiaries are more likely to be readmitted to the hospital, so providers that treat a disproportionate share of fully dual-eligible beneficiaries may have worse results for the measure of hospitalization within the stay (Bennett and Probst 2016). Dual-eligible beneficiaries also have higher mortality rates, so their providers can have worse results on the discharge to community

Area-level measures of social risk

Social factors such as income, housing, social support, transportation, and nutrition can affect access to health services or desired health outcomes. However, such social risk information for individual beneficiaries is not routinely or systematically collected across the health care system or is not currently available to Medicare.

Research indicates that residents of impoverished neighborhoods or communities are at higher risk for mental illness, chronic disease, mortality, and lower life expectancy (Office of Disease Prevention and Health Promotion 2021). Because some health outcomes are tied to communities, there may be potential to use area-level measures to capture a broader range of a patient population's social risks. More development and testing of area-level measures of social risk is needed, and that work is outside of the scope of our mission. Here, we summarize some of the work by others on using area-level measures of social risk, describe some currently available measures, and call for CMS to explore the use of area-level measures of social risk.

As directed by the Congress in the Improving Medicare Post-Acute Care Transformation Act of 2014, the Department of Health and Human Services Assistant Secretary for Planning and Evaluation and

the National Academies of Sciences, Engineering, and Medicare (NASEM) have done extensive research and deliberated on how to account for social risk factors in Medicare quality measurement and payment (Assistant Secretary for Planning and Evaluation 2020a, Assistant Secretary for Planning and Evaluation 2016, National Academies of Sciences 2016a, National Academies of Sciences 2016b). The NASEM committee concluded that a measure of neighborhood deprivation at the census tract level is likely to be a good proxy for a range of both individual and true area-level constructs relevant to performance indicators used in quality payment programs. The committee called for testing composite measures (i.e., a composite measure of neighborhood characteristics such as share of families below the poverty level and unemployment rate) and a simple single-indicator item (such as median household income). One test the committee suggested was to assess the performance of any given variable (single or composite) across multiple geographic areas and, in particular, rural areas.

Several composite area-level deprivation indicators have been developed by researchers and other government agencies. They generally use U.S. Census data from previous years, which are updated every few years. Three such indicators include:

(continued next page)

measure (Wadhera et al. 2020). Moreover, dual-eligible beneficiaries make up disproportionately high shares of Medicare spending, so providers treating a high share of dual-eligible beneficiaries can have higher MSPB rates (Keohane et al. 2018).

In its work on social risk factors and Medicare value-based payment programs, the Department of Health and Human Services' Assistant Secretary for Planning and Evaluation concluded that dual eligibility for Medicare and Medicaid remains a powerful predictor of

poor outcomes in Medicare's value-based purchasing (VBP) programs (Assistant Secretary for Planning and Evaluation 2020b). Beneficiary eligibility for Medicare and Medicaid status is readily available in administrative data. Using a provider's share of fully dual-eligible beneficiaries is consistent with prior Commission work on other VIPs (hospital, Medicare Advantage, and SNF).

Although there are many reasons to use dual eligibility as a proxy for beneficiary social risk, we recognize

Area-level measures of social risk (cont.)

- Area Deprivation Index (ADI):** The ADI ranks neighborhood socioeconomic disadvantages using American Community Survey (ACS) data collected by the U.S. Census (University of Wisconsin School of Medicine and Public Health 2021). Each neighborhood is defined as the census block group.⁵ The ADI combines 17 social risk factors for each geographic unit, including two measures of poverty, unemployment rate, income level, income disparity, educational attainment, percent employed in white-collar occupations, median home value, crowding, housing units without complete plumbing, vehicle access, telephone access, owner-occupied housing, median gross rent, median monthly mortgage, and share of single-parent households.
- Social Vulnerability Index (SVI):** The SVI measures the potential negative effects of external stresses on specific communities' health (Agency for Toxic Substances and Disease Registry 2021). The Centers for Disease Control and Prevention (CDC) reports this measure to help local officials identify communities that may need support before, during, or after disasters. The SVI evaluates each census tract on 15 social factors from the ACS data that fit into 4 categories (socioeconomic status, household composition and disability, minority status and language, and housing type and transportation).
- PLACES:** PLACES is intended to help local health departments and jurisdictions better understand the burden and geographic distribution of health-related outcomes in their areas and help them plan public health interventions (Centers for Disease Control and Prevention 2021). PLACES provides small-area estimates for counties, places, census tracts, and ZIP Code Tabulation Areas to help state and local health officials focus their efforts on improving health. PLACES includes 27 health measures, including unhealthy behaviors (5), health outcomes (13), and prevention practices (9). The 27 measures are based on CDC Behavioral Risk Factor Surveillance System and ACS data.

CMS should test various area-level measures for their potential to account for differences accurately across providers in the social risk of their patient populations. More research is needed to understand the accuracy of any area-level measure for Medicare beneficiaries compared with the gold standard of person-reported information. For example, the reliability of an area-level index should be assessed by comparing individual responses from a patient survey with their associated area-level index. ■

that it is an imperfect measure. One drawback is that Medicaid eligibility requirements and benefits vary across states. Also, dual eligibility may be too narrow because it reflects a beneficiary's income but does not directly reflect other social risks, like food insecurity and limited access to transportation.

One approach to capturing beneficiary social risk more comprehensively would be to use area-level measures of social risk (see text box). Policymakers and researchers should explore what existing or new area-level measures are used and whether the measures

accurately account for the social risk of individual patients.

In our illustrative PAC VIP model, we tested the use of the Area Deprivation Index (ADI), a geographically based measure of various social risk factors (such as the area's poverty rate, average educational attainment, and access to an automobile or telephone) of the communities where a provider's patients live. We chose this measure because it is publicly available at the nine-digit ZIP code level, which may, for any given beneficiary, be more accurate for a broader geographic

**TABLE
14-1**

For each setting, better performance on measures earns more points under illustrative PAC VIP model

	All-condition hospitalization rate within stay (lower is better)	Medicare spending per beneficiary (<1 is better)	Successful discharge to the community rate (higher is better)	All-condition hospitalization rate within stay (lower is better)	Medicare spending per beneficiary (<1 is better)	Successful discharge to the community rate (higher is better)
Points	SNF			IRF		
0	23%	1.4	23%	11%	1.2	54%
2	19	1.2	31	10	1.1	59
4	16	1.1	38	8	1.0	63
6	13	1.0	44	7	1.0	66
8	11	0.8	52	6	0.9	70
10	8	0.7	62	4	0.9	74
Points	LTCH			HHA		
0	11%	1.2	16%	35%	1.2	35%
2	8	1.1	20	26	1.1	52
4	6	1.0	23	22	1.0	64
6	4	1.0	27	19	1.0	73
8	3	0.9	31	16	0.9	82
10	1	0.8	38	12	0.8	91

Note: PAC (post-acute care), VIP (value incentive program), SNF (skilled nursing facility), IRF (inpatient rehabilitation facility), LTCH (long-term care hospital), HHA (home health agency). Each of the three risk-adjusted measures in the PAC VIP model is continuously scored from 0 to 10 points; only a subset of points is displayed here. The performance-to-points scale is set using the range of risk-adjusted performances for all providers in the setting. Because performance on Medicare spending per beneficiary is rounded to the tenth place, some performance values appear to be associated with different points. The SNF performance scores are based on 12,937 providers. The IRF scores are based on 991 providers. The LTCH scores are based on 387 providers. The HHA scores are based on 8,618 providers.

Source: MedPAC analysis of claims data, 2015–2017.

area, such as a county or five-digit ZIP code. Although we present a summary of that modeling (see text box on ADI results, pp. 542–543), we focus discussion of our modeling results on dual eligibility as the measure of social risk because it is the most-tested proxy for patient social risk that we have at this time.

In our illustrative PAC VIP model, we examined the *empirical association* (correlation) between performance and the share of fully dual-eligible beneficiaries treated to determine whether peer grouping is needed to account for differences in providers' patient populations for each setting. When performance was systematically worse for providers treating high shares of patients at high social risk (i.e.,

there was an inverse relationship between the two), peer grouping was used to determine the payment adjustments for that setting. If peer grouping had not been used and a provider's performance was worse due to the high social risk of its patient population, there would be no mechanism to reward the performance it achieved. Conversely, if performance was better for providers treating more patients at high social risk, we concluded that peer grouping was not needed for that setting.

How many peer groups should be used to differentiate providers?

In setting the number of peer groups, policymakers would need to balance two goals. A sufficient number

of groups is needed to differentiate the social risk of patient populations so that the providers within each group are relatively homogeneous in their shares of social risk. At the same time, the number of groups should be small enough that distinctions between providers are meaningful. CMS should evaluate the number of groups that best differentiates providers with similar shares of patients with social risk. For each setting, the number of peer groups will be a function of the number of providers in a setting and the range of social risk across providers. In our model, the average share of fully dual-eligible beneficiaries differed by setting. The lowest share was in IRFs (18 percent) and the highest share was in SNFs (43 percent). The share in HHAs was 33 percent, and the share in LTCHs was 38 percent.

One approach would be to group providers using natural breaks in the distribution of the social risks, if there are any. This approach could result in an unequal number of providers in each peer group, but it could more accurately reflect “like” providers. When the distribution does not have natural breaks, CMS could create groups with equal numbers of providers in each.

In our model, we did not find any natural breaks in the distribution of social risk that would indicate peer groups. Therefore, we used equal-size peer groups and based the number of groups on the number of providers in a setting.

Method to distribute the entire provider-funded pool of dollars

Medicare quality programs should not attempt to achieve Medicare savings but rather should fully distribute the provider-financed pool of incentive payments as rewards and penalties. A PAC VIP would distribute the entire provider-funded pool of dollars within each peer group based on providers’ quality performance during the performance period. A key decision for policymakers is how large potential rewards and penalties need to be to motivate providers to improve performance and avoid poor performance.

How large should the rewards and penalties be?

Policymakers could consider a program that begins with a 2 percent withhold and scales up to a larger withhold amount (e.g., 5 percent) over two or three years. A graduated approach is used in Medicare’s

home health VBP demonstration (run by the Center for Medicare & Medicaid Innovation), which started with a 3 percent withhold but increased to 8 percent in 2022. In 2023, CMS is implementing the home health VBP program nationally using a 5 percent withhold. Alternatively, policymakers could opt to begin immediately with the higher withhold amount (e.g., 5 percent).

We modeled an illustrative PAC VIP that uses 5 percent of provider payments to fund the pool of dollars. Our model includes seven steps to convert performance points to payment adjustments and, within each peer group, entirely distribute the pool of dollars as rewards (see text box describing the process to convert points to a quality-based payment adjustment, pp. 536–537).

Results of our illustrative model of a PAC VIP design

Although a conceptual relationship exists between a provider’s share of fully dual-eligible beneficiaries and its outcomes, we did not find consistent empirical relationships across the four PAC settings. Using a provider’s share of dual-eligible beneficiaries treated as the measure of social risk, we found that adjusting for social risk was needed for SNFs and IRFs, and peer groups would counter the disadvantages they face in earning performance points. In contrast, higher social risk was associated with better performances for HHAs and LTCHs. More work is needed to confirm this finding and to disentangle the various factors that shape provider performance. For example, a broader measure of social risk that captures its multiple dimensions could more uniformly tie social risk to performance.

In our illustrative PAC VIP model, providers gain more points for better performance on the three performance measures. For each measure, points are assigned on a performance-to-points scale from 0 to 10 based on the continuous and setting-specific national distributions of providers’ scores.⁶ Providers earn more points for lower within-stay hospitalization rates, lower MSPB, and higher rates of successful discharge to the community. Table 14-1 illustrates how the three measures are converted into PAC VIP points by PAC setting (only a subset of points is shown).

**TABLE
14-2**

Providers' share of fully dual-eligible beneficiaries was not consistently related to performance under illustrative PAC VIP model

	SNF	IRF	LTCH	HHA
Correlation between share of fully dual-eligible beneficiaries treated and total performance points	-0.60	-0.18	0.11	0.14

Note: PAC (post-acute care), VIP (value incentive program), SNF (skilled nursing facility), IRF (inpatient rehabilitation facility), LTCH (long-term care hospital), HHA (home health agency). Total performance points are the sum of the average points a provider in a setting earns on three measures: hospitalizations within the post-acute care stay, Medicare spending per beneficiary, and successful discharge to the community. This analysis included 12,937 SNFs, 991 IRFs, 387 LTCHs, and 8,618 HHAs.

Source: MedPAC analysis of claims data, 2015–2017.

The best-performing SNFs, with a hospitalization rate of about 8 percent, would earn 10 points for that measure, while the worst-performing SNFs (hospitalization rate of about 23 percent) would not earn points for that measure. SNF and HHA settings had the most variable performances for all three measures, so the 10-point scale spans larger differences in performance compared with the range in points for IRFs and LTCHs. For every PAC provider, after the points for each quality measure are determined, the total PAC VIP points are calculated by averaging the points for each measure (0 to 10 points). This calculation effectively weights each measure equally, although policymakers could weight them differently.

Across PAC settings, the share of fully dual-eligible beneficiaries was not uniformly related to performance

Using a provider's share of fully dual-eligible beneficiaries treated as the measure of social risk, we found that SNFs and IRFs with high shares of fully dual-eligible beneficiaries had worse performance than those with low shares. The association between performance and this measure of social risk was strong for SNFs and relatively weak for IRFs, as indicated by the size of the negative correlations (Table 14-2).⁷ Especially for SNFs, a peer-grouping approach would counter some of the disadvantages that providers with high shares of fully dual-eligible beneficiaries face in achieving good performance. As the average share of fully dual-eligible beneficiaries increased, providers

would have the potential to earn larger rewards for better performance.

In contrast, for HHAs and LTCHs, as a provider's share of fully dual-eligible beneficiaries increased, average performance improved, though the relationships were relatively weak. We confirmed these results with regressions predicting performance based on the share of fully dual-eligible beneficiaries treated and, in separate models, other provider characteristics. Based on these correlations, we modeled VIP payments for LTCHs and HHAs without peer groups. However, more work should be done before policymakers conclude that peer grouping would not be needed for these providers.

The model's results with peer groups for SNFs and IRFs and no peer groups for HHAs and LTCHs are instructive. For SNFs and IRFs, we scaled the number of peer groups by setting so that each group was sufficiently large to calculate the effects of the peer grouping. We used 20 groups for SNFs (about 650 SNFs in each group) and 5 groups for IRFs (about 200 IRFs in each group). We did not use peer groups for HHAs and LTCHs.

Skilled nursing facilities

Across the 20 peer groups, the average share of fully dual-eligible beneficiaries ranged from 3 percent for providers in Peer Group 1 (the providers treating beneficiaries with the lowest social risk) to 91 percent

**TABLE
14-3**

In the illustrative PAC VIP model, rewards for the best-performing SNFs were larger for those with higher shares of fully dual-eligible beneficiaries

Peer group	Average share of fully dual-eligible beneficiaries	Average PAC VIP points earned	Range of performance points (25th–75th percentiles)	Multiplier (converts points to payment)	Net payment adjustment (after 5% withhold)
1 (lowest share)	3%	7.1	6.2 to 8.2	0.70%	–4.9% to 2.0%
2	10	7.1	6.1 to 8.2	0.71	–3.3 to 2.1
3	15	6.8	5.8 to 8.2	0.74	–4.5 to 2.3
4	19	6.6	5.5 to 7.8	0.78	–3.9 to 2.7
5	23	6.3	5.1 to 7.6	0.82	–4.3 to 3.0
6	27	6.1	5.0 to 7.3	0.85	–4.3 to 3.4
7	30	5.9	4.7 to 7.1	0.86	–4.4 to 3.3
8	34	5.7	4.5 to 7.1	0.89	–4.9 to 3.7
9	37	5.5	4.2 to 6.9	0.90	–4.8 to 4.0
10	40	5.2	3.9 to 6.5	0.98	–4.7 to 4.5
11	44	5.1	3.8 to 6.4	1.00	–4.9 to 4.9
12	47	4.9	3.6 to 6.1	1.06	–4.5 to 5.6
13	51	4.5	3.1 to 5.9	1.13	–5.0 to 5.5
14	54	4.3	2.9 to 5.7	1.21	–4.7 to 6.3
15	58	4.0	2.4 to 5.4	1.28	–5.0 to 7.4
16	62	3.9	2.6 to 5.2	1.33	–4.9 to 8.0
17	67	3.7	2.1 to 5.1	1.42	–4.9 to 7.5
18	73	3.3	1.7 to 4.7	1.61	–4.9 to 10.2
19	80	2.9	1.4 to 4.1	1.81	–4.9 to 12.0
20 (highest share)	91	2.6	1.3 to 3.7	2.12	–5.0 to 15.0

Note: PAC (post-acute care), VIP (value incentive program), SNF (skilled nursing facility). Peer groups are based on the share of fully dual-eligible beneficiaries. There are about 650 SNFs in each of the 20 peer groups. Peer groups are assigned based on the share of the SNF's Medicare patients who were fully eligible for Medicare and Medicaid benefits for at least one month of the year. The incentive pool of dollars for each peer group includes 5 percent of Medicare payments for each SNF in the peer group. The multiplier is the percentage adjustment to payments per performance point. Negative payment adjustments are penalties; positive adjustments are rewards. The analysis included 12,937 SNFs.

Source: MedPAC analysis of claims data, 2015–2017.

for providers in Peer Group 20 (the providers treating beneficiaries with the highest social risk) (Table 14-3).⁸ Average performance points earned by providers steadily declined across the peer groups, reflecting the difficulty providers face in achieving good performance for patients at high social risk. To avoid penalizing providers with high shares of beneficiaries at high social risk, the multiplier that converts a SNF's performance points to a payment adjustment increases with each peer group

(see text box on the methodology to convert points to a payment adjustment using SNFs as an example, pp. 536–537). As a result, SNFs in the group with highest social risk (Peer Group 20) had the potential to earn larger rewards for higher quality compared with SNFs in the peer group with lowest social risk (Peer Group 1).

About an equal number of SNFs earned a reward or were assessed a penalty, and the average net adjustment to payments (net of the 5 percent withhold)

**TABLE
14-4****In the illustrative PAC VIP model, payment adjustments varied by SNF characteristics**

SNF characteristics	Number of providers	Average net payment adjustment (after 5% withhold)
All SNFs	12,937	0.13%
Ownership		
Nonprofit	2,741	0.37
For profit	9,359	0.07
Government	828	0.13
Location		
Urban	9,714	0.18
Rural	3,217	0.01
Facility type		
Hospital based	503	1.94
Freestanding	12,425	0.07

Note: PAC (post-acute care), VIP (value incentive program), SNF (skilled nursing facility). The table shows unweighted average net payment adjustments. Although rewards are financed entirely by the pool of withheld payments, net payment adjustments do not necessarily average to 0 percent because larger providers, which contribute more dollars to the pool, have their net payment adjustments weighted the same as smaller providers, which contribute fewer dollars to the pool in the average. The subgroups of providers do not always sum to 12,937 due to missing data on provider characteristics.

Source: MedPAC analysis of claims data, 2015–2017.

was 0.1 percent.⁹ Comparing SNFs across all the peer groups, the largest reward was a 15 percent increase to payments and the largest penalty was a 5 percent reduction. While the differences were small across provider groups, nonprofit, urban, and hospital-based SNFs had higher average net payment adjustments compared with for-profit, rural, and freestanding SNFs (Table 14-4). Regression analysis that included share of dual-eligible beneficiaries, ownership, provider type, and size to explain differences in performance confirmed these results (facility size was not a significant factor).

We examined the performance of hospital-based SNFs because they had notably higher average payment adjustments than freestanding SNFs. This result reflects better performance on all three measures. Compared with freestanding facilities, hospital-based providers on average had hospitalization rates during

the stay that were 45 percent lower, MSPB that was 42 percent lower, and successful discharge to community rates that were 27 percent higher. Hospital-based SNFs typically have lower readmission rates (which affects the results for the measure of hospitalization during the stay and MSPB), which may be due to their higher staffing levels and physician presence as well as more timely lab results for patients. We also examined the relationships between staffing levels (total nurse hours per resident per day) and VIP points; for each quality measure, we found statistically significant relationships. Higher staffing levels were positively related to VIP points, higher rates of successful discharge home, and lower hospitalization rates. These findings are consistent with those of a study of nursing home quality measures, which found that better performance was associated with higher staffing levels and lower shares of Medicaid patients (Saliba et al. 2018). This study also found that hospital-based

**TABLE
14-5**

In the illustrative PAC VIP model, IRFs with higher shares of fully dual-eligible beneficiaries would have the potential to earn higher rewards

Peer group	Average share of fully dual-eligible beneficiaries	Average PAC VIP points earned	Range of performance points (25th–75th percentiles)	Multiplier (converts points to payment)	Net payment adjustment (after 5% withhold)
1 (lowest share)	7%	5.5	4.1 to 6.9	0.98%	–4.7% to 4.3%
2	12	5.0	3.8 to 6.1	1.10	–4.3 to 5.2
3	16	5.2	3.8 to 6.6	1.02	–4.7 to 4.7
4	21	5.0	3.2 to 6.5	1.09	–4.4 to 5.6
5 (highest share)	37	4.5	2.8 to 6.0	1.16	–5.0 to 6.1

Note: PAC (post-acute care), VIP (value incentive program), IRF (inpatient rehabilitation facility). There are about 198 IRFs in each of the 5 peer groups. Peer groups are assigned based on the share of the hospital's Medicare patients who are fully eligible for Medicare and Medicaid benefits for at least one month of the year. The incentive pool of dollars for each peer group includes 5 percent of Medicare payments for each IRF in the peer group. The multiplier is the percentage adjustment to payments per performance point. Negative payment adjustments are penalties; positive adjustments are rewards. The analysis included 991 IRFs.

Source: MedPAC analysis of 2015–2017 fee-for-service claims and payment data.

providers had lower readmission rates and higher rates of discharge to community and that higher Medicaid shares worsened performance on both measures.

Inpatient rehabilitation facilities

The peer-grouping approach may help counteract the disadvantages that IRFs that treat high shares of fully dual-eligible beneficiaries face in achieving high performance, but the effect of peer grouping in our model was small (Table 14-5). Compared with IRFs in the lowest peer group (Peer Group 1), providers with the highest share of fully dual-eligible beneficiaries (Peer Group 5) earned fewer performance points (4.5 points compared with 5.5 points), but under peer grouping, they have the potential to earn larger rewards for higher quality (a point-to-payment adjustment multiplier of 1.16 percent compared with a multiplier of 0.98 percent for IRFs in Peer Group 1). The small effects of peer grouping in IRFs compared with SNFs may be partly due to the narrow range of shares of fully dual-eligible beneficiaries that may adversely affect performance. The average shares ranged from 7 percent for IRFs in Peer Group 1 (the lowest quintile) to 37 percent for IRFs in Peer Group 5 (the top quintile). In contrast, the average shares in SNFs ranged from 12 percent for SNFs in the lowest quintile to 78 percent for SNFs in the top quintile.

It is also possible that Medicare's criteria for payment may restrict the complexity of the beneficiaries treated in IRFs.¹⁰ The criteria reduce the differences in the patients admitted and, in turn, may narrow differences in performances across providers (even after risk adjusting results for clinical factors). There was a single average performance-point difference between the lowest and highest IRF peer groups. In contrast, the range in average performance points between the lowest and highest SNF peer groups was much wider (a spread of 4.5 points).

The results for the middle three peer groups indicate that although the providers' shares of fully dual-eligible beneficiaries steadily increased, their average performance was similar. We contemplated collapsing these middle groups into one group but found that the multiplier would still be around 1 percent, which is not surprising given the weak relationship between duals' share and performance. We opted to retain equal-size peer groups, consistent with the other VIP designs the Commission has proposed.

Across all the peer groups, a slightly larger share of IRFs earned rewards rather than penalties (56 percent compared with 44 percent). The average adjustment to

Using peer groups to convert points in the post-acute care value incentive program to rewards and penalties

The Commission's illustrative model of the post-acute care (PAC) value incentive program (VIP) distributes quality-based payments to providers. A provider's performances on three quality measures are compared with a setting-specific performance scale. For skilled nursing facilities (SNFs) and inpatient rehabilitation facilities (IRFs), we found that providers treating a large share of fully dual-eligible beneficiaries had worse performance (dual-eligible beneficiaries receive both Medicare and Medicaid benefits, and this is used as a proxy for low income). Thus, for SNFs and IRFs, providers are assigned to peer groups based on their share of fully dual-eligible beneficiaries. Each peer group has about the same number of providers and a pool of dollars based on a 5 percent payment withhold from each of the respective group's providers. For long-term care hospitals (LTCHs) and home health agencies (HHAs), we did not find that providers treating a large share of fully dual-eligible beneficiaries had worse performance. For LTCHs and HHAs, there is a pool of dollars based on a 5 percent payment withhold from these settings' providers.

We follow seven steps to convert each provider's quality measure performance to a payment adjustment for calculating rewards and penalties.

Step 1: Calculate each provider's performance on each of the three risk-adjusted quality measures using beneficiary-level administrative data.

Step 2: Convert each provider's performance on each of the three quality measures to points based on a continuous performance-to-points scale (PAC setting-specific scales). With a continuous scale, any difference in performance is translated to a difference in payment.

Step 3: Average each provider's points on the three measures to determine the provider's PAC VIP total points.

Step 4: For each SNF and IRF, calculate the share of Medicare admissions who are fully eligible for Medicaid. Assign each SNF into 20 equal-size peer groups based on their share of fully dual-eligible patients. Assign each IRF into five equal-size peer groups based on their share of fully dual-eligible patients. LTCHs and HHAs have one peer group.

Step 5: For each group, create a pool of dollars of expected PAC VIP payments based on 5 percent of the peer-group providers' total Medicare payments.

Step 6: For each peer group, calculate the multiplier (the percentage adjustment to payment per PAC VIP point) that converts PAC VIP total points to dollars and results in spending the group's pool of dollars defined in Step 5.

$$\text{multiplier} = \text{PAC VIP pool for peer group} / (\text{sum (each facility's total Medicare payments} \times \text{its total PAC VIP points)})$$

Step 7: Compute each provider's adjustment for the coming year based on past performance and its peer group's multiplier.

$$\text{provider's SNF VIP-based adjustment} = \text{multiplier} \times \text{provider's PAC VIP total points}$$

These steps illustrate the conversion of PAC VIP points to payment adjustments using peer grouping. Table 14-6 considers the example of two SNFs, SNF A and SNF B. For each of the SNFs, we calculate performance results based on administrative data for each of the three quality measures (Step 1). Using the continuous performance-to-points scales, we convert quality performance to points (Step 2). We average each provider's performance on the three measures to determine PAC VIP total points (Step 3). SNF A has higher total VIP performance (10.0) than SNF B (7.5).

Though SNF A is smaller than SNF B, with 2,400 Medicare days per year compared with 4,400 for SNF B, they have similar shares of admissions who

(continued next page)

Using peer groups to convert points in the post-acute care value incentive program to rewards and penalties (cont.)

**TABLE
14-6**

An example of converting points to payment adjustments for two SNFs within a peer group

Step	Peer Group 1 (Step 4)	
	SNF A	SNF B
Medicare days [facility beds x 365 days x occupancy rate x Medicare share of days]	2,400	4,400
PAC VIP total points (Steps 1-3)	10.0	7.5
Total base facility Medicare payments	\$1,000,000	\$2,000,000
5 percent of facility Medicare payments (withhold)	\$50,000	\$100,000
Pool of dollars for peer group (Step 4-5)	\$150,000	
Percentage adjustment to payment per PAC VIP point (the multiplier) for peer group (Step 6) [group's pool / sum of (provider's payments x points)]	0.60 percent adjustment per point	
PAC VIP payment adjustments (Step 7) [points x multiplier]	6.00%	4.50%
PAC VIP payments [PAC VIP payment adjustment x total payments]	\$60,000	\$90,000
Net payments after 5 percent provider contribution to the pool	+ \$10,000	- \$10,000

Note: SNF (skilled nursing facility), PAC (post-acute care), VIP (value incentive program). This example assumes a peer group of two SNFs with a similar share of fully dual-eligible beneficiaries (Step 4).

are fully dual eligible for Medicare and Medicaid, which places them in the same peer group (Step 4). We next determine 5 percent of each facility's total Medicare payments (Step 5). Since SNF A has fewer Medicare days, its contribution to the pool of dollars is less (\$50,000) than SNF B's contribution (\$100,000). The total SNF VIP pool of dollars to be redistributed for this peer group is equivalent to 5 percent of combined payments to the two SNFs (\$150,000). The multiplier for the peer group is then calculated (Step 6), which sets the payment adjustment per point for the peer group. For Peer

Group 1, the multiplier is 0.6 percent; thus, each PAC VIP point earned results in a payment adjustment of 0.6 percent. The peer group multiplier is then applied to each PAC's VIP point total (Step 7). SNF A earns a payment adjustment of 6.0 percent, which is equal to \$60,000 (or a net reward of \$10,000 more than its contribution to the pool). SNF B earns a payment adjustment of 4.5 percent, which is equal to \$90,000 (or a net penalty of \$10,000 less than its contribution to the pool). The entire pool of \$150,000 is distributed among the providers in the peer group. ■

**TABLE
14-7****In the illustrative PAC VIP model, payment adjustments varied by IRF characteristics**

IRF characteristics	Number of providers	Average net payment adjustment (after 5% withhold)
All IRFs	991	0.34%
Ownership		
Nonprofit	554	0.64
For profit	330	0.00
Government	107	-0.19
Location		
Urban	855	0.29
Rural	136	0.63
Facility type		
Hospital based	791	0.52
Freestanding	200	-0.40

Note: PAC (post-acute care), VIP (value incentive program), IRF (inpatient rehabilitation facility). The table shows unweighted average net payment adjustments. Although rewards are financed entirely by the pool of withheld payments, average net payment adjustments do not necessarily average to 0 percent because larger providers, which contribute more dollars to the pool, have their net payment adjustments weighted the same as smaller providers, which contribute fewer dollars to the pool in the average.

Source: MedPAC analysis of claims data, 2015–2017.

payments was a small reward (0.3 percent); the largest reward was a 6 percent adjustment to payments (net of the 5 percent withhold), and the largest penalty was 5 percent reduction to payments. While differences across provider groups were small, hospital-based IRFs, nonprofit IRFs, and rural IRFs had higher average net payment adjustments compared with freestanding, for-profit, and urban IRFs (Table 14-7). Regression analysis that predicted performance points based on the share of fully dual-eligible patients, provider type, ownership, and size confirmed these results (size was not a significant factor). It is possible that certain facilities have specialized units or have better information about potential admissions that could help explain these findings.

HHAs and LTCHs

Because our empirical analysis found that HHAs and LTCHs with higher shares of fully dual-eligible beneficiaries generally had better performance than

providers with lower shares, we modeled a PAC VIP without peer groups. In all other ways, the approach was the same: We compared a provider's performance with a setting-specific continuous performance-to-points scale and fully distributed a provider-funded pool of dollars.

About equal shares of providers gained and lost under a PAC VIP, and the average adjustment was about zero (Table 14-8). Adjustments to payments ranged from -5 percent to 5 percent (after the 5 percent withhold).

There were differences in performance points across provider characteristics. Nonprofit providers received larger rewards on average than other providers, and hospital-based HHAs received much larger rewards on average than freestanding providers (Table 14-9, p. 540). Regression analysis found that the share of fully dual-eligible beneficiaries was not a significant factor in explaining LTCH performance but was for HHAs: Agencies with higher shares of fully dual-eligible

**TABLE
14-8****Impact of illustrative PAC VIP model without
peer groups was similar for HHAs and LTCHs**

	HHAs	LTCHs
Share of providers whose payments would increase	50%	46%
Share of providers whose payments would decrease	50	54
Median net percent change in payments	0.0	0.2
Largest reward (net percent change in payment)	5	4
Largest penalty (net percent change in payment)	-5	-5

Note: PAC (post-acute care), VIP (value incentive program), HHA (home health), LTCH (long-term care hospital). The illustrative VIP used a 5 percent withhold and fully redistributed the pool as incentive payments. Performance was gauged with three outcome measures: hospitalizations within the stay, successful discharge to the community, and Medicare spending per beneficiary. Change in payments is net of the 5 percent withhold. This analysis included 8,618 HHAs and 387 LTCHs.

Source: MedPAC analysis of claims data, 2015–2017.

patients had better performance. HHAs with high shares of beneficiaries admitted from the community had worse performance compared with other HHAs.

The results for HHAs and LTCHs highlight the complexities of measuring social risk and performance

Though a conceptual relationship exists between treating more dual-eligible beneficiaries and providers' poorer performance on the measures, our empirical analysis found that HHAs' and LTCHs' dual-eligible patient shares were positively associated with performance. That is, as the share of fully dual-eligible beneficiaries increased, provider performance improved, though the increases were small. Because the empirical finding conflicts both with the conceptual relationship posited for these settings and with the empirical findings in other PAC settings, more work is needed on the definition of social risk and the measurement of performance. Disentangling these relationships is beyond the scope of this report, but we outline some factors below that may complicate the relationship between the share of fully dual-eligible beneficiaries and provider performance.

Definitions of fully dual eligible vary across states

As noted above, in its work on social risk factors and Medicare value-based payment programs, the

Department of Health and Human Services' Assistant Secretary for Planning and Evaluation concluded that dual eligibility for Medicare and Medicaid was a powerful predictor of poor outcomes in Medicare's VBP programs (Assistant Secretary for Planning and Evaluation 2020b). However, each state has different eligibility requirements for Medicaid. All states are required to provide Medicaid to people who receive Supplemental Security Income (SSI) benefits, but they also have multiple options for providing Medicaid to other populations. For example, 21 states and the District of Columbia cover seniors and disabled individuals who have incomes that are higher than the SSI limit but below the federal poverty level, 31 states and the District of Columbia cover seniors and disabled individuals who have high medical expenses, and 42 states and the District of Columbia cover seniors and disabled individuals who need long-term services and supports and have income below 300 percent of the SSI limit (Musumeci et al. 2019). Thus, some older adults with low incomes and/or functional impairments may qualify for Medicaid in some states but not in others. These eligibility differences contribute to differences in the shares of beneficiaries who are fully dual eligible across states. For example, in 2020, 9 percent of beneficiaries in Maryland were fully dual eligible, compared with 27 percent of beneficiaries in California.

**TABLE
14-9**

In the illustrative PAC VIP model, payment adjustments varied by HHA and LTCH characteristics

Characteristic	HHA		LTCH	
	Number of providers	Average net payment adjustment (after 5% withhold)	Number of providers	Average net payment adjustment (after 5% withhold)
All providers	8,618	0.05%	387	-0.18%
Ownership				
Nonprofit	1,092	1.37	65	0.12
For profit	6,947	-0.24	307	-0.20
Government	398	1.04	N/R	N/R
Location				
Urban	7,085	0.05	N/R	N/R
Rural	1,527	0.05	N/R	N/R
Facility type				
Hospital based	811	1.31	N/A	N/A
Freestanding	7,626	-0.11	N/A	N/A

Note: PAC (post-acute care), VIP (value incentive program), HHA (home health agency), LTCH (long-term care hospital), N/R (not reported), N/A (not applicable). The table shows unweighted average net payment adjustments. Although rewards are financed entirely by the pool of withheld payments, average net payment adjustments do not necessarily average to 0 percent because larger providers, which contribute more dollars to the pool, have their net payment adjustments weighted the same as smaller providers, which contribute fewer dollars to the pool in the average. All LTCHs are considered freestanding. The counts by provider group may not equal the total number due to missing information about the provider. We did not report government-owned, urban, and rural LTCHs because the number of providers in these categories was too small for meaningful comparisons.

Source: MedPAC analysis of claims data, 2015–2017.

Extent of home- and community-based services varies across states States also differ in the shares of Medicaid spending on long-term services and supports (LTSS) that are devoted to home- and community-based services (HCBS).¹¹ HCBS can help beneficiaries remain in their homes—especially relevant for beneficiaries receiving home health care. Some states devote more than 75 percent of their LTSS spending to HCBS, while others spend less than 40 percent (Murray et al. 2021). We found that HHAs in states with higher proportions of their Medicaid LTSS spending devoted to HCBS had, on average, better performance on each of the PAC VIP measures compared with HHAs in other states.

Small number of providers Nationwide, there are fewer than 400 LTCHs—far fewer than the 15,000 SNFs and 11,000 HHAs. These figures suggest that there are not

enough LTCHs to meaningfully identify peer groups that could account for differences in the social risk of LTCH patient populations.

Risk adjustment may not fully capture differences in patient complexity Accurate risk adjustment is always challenging, but developing an accurate model (for each measure) across four settings is especially so. With different coverage and cost-sharing rules and complicated PAC placement decisions, it is likely that quite a bit of “sorting” occurs before patients are admitted to a PAC provider (assuming most markets have at least two types of PAC providers). Furthermore, providers may selectively admit patients they can effectively treat or expect will be profitable. Risk adjustment may not adequately address the patient selection that occurs across the four settings.

Anticipating a unified PAC PPS, we used a single risk-adjustment model for each performance measure—with a common set of risk adjusters and uniform weights—for all PAC providers. While this approach sets the stage for a unified PAC VIP, it may be less accurate for providers in any given setting compared with using risk-adjustment models that are specific to each setting—that is, the factors and their relative importance would vary by setting. In a single risk-adjustment model, all PAC stays are used to establish the risk adjusters and their relative weights. As a result, the single models (one for each outcome measure) are dominated by HHA and SNF stays, which account for the vast majority of PAC use. As a result, because LTCHs account for only 1 percent of PAC stays, the characteristics of their patients will have little influence on the model. Furthermore, Medicare’s qualifying criteria for LTCHs result in a higher average risk score compared with other settings, which may not be fully captured by the single risk-adjustment model.¹² Therefore, LTCH performance may not be fully adjusted for the complexity of the patients they treat. In another example, some IRFs treat highly complex patients (such as those with traumatic brain injury) who may not be fully accounted for in a single risk-adjustment model.

At the same time, risk adjustment may not capture the characteristics of community-admitted patients, who comprise two-thirds of HHA stays. Although community-admitted beneficiaries are more likely to be dual eligible, they are not, on average, clinically complex. They have fewer chronic conditions but higher rates of Alzheimer’s and dementia and are frailer. Our risk-adjustment model does not include measures of frailty and so may not fully capture the differences between community-admitted and other PAC users.

In finalizing the measures of performance, the Secretary will need to ensure, to the extent possible, that the risk adjustment adequately reflects the differences in the clinical risks of the patients each provider treats. Otherwise, a provider may avoid admitting patients whose risks will put the provider at a disadvantage in performance measurement under the PAC VIP.

Community risk factors likely play a bigger role in outcomes for HHAs When beneficiaries are treated with home health care, the social risk factors of the communities they live in are especially relevant. For

example, whether a beneficiary has access to a car or telephone will affect the ease of making follow-up medical appointments or picking up prescribed medications, which could negatively impact an HHA’s hospitalization rate. Thus, communities’ social risk factors can be particularly important in understanding differences in HHA performance, yet these factors are not captured by the dual-eligibility measure (see text box with results of the illustrative PAC VIP model using ADI as a measure of community risk, pp. 542–543).

Other ways to encourage providers to improve performance

A PAC quality payment program is not the only tool CMS has to encourage providers to improve their performance. These various approaches are not mutually exclusive; indeed, a combination of approaches might yield the largest and longest-lasting improvements in quality.

Publicly reporting Medicare quality information has two main objectives. The first is to increase the accountability of health care providers by offering patients, payers, and purchasers a more informed basis on which to hold providers accountable (e.g., directly through purchasing and treatment decisions). The second objective is to maintain standards and stimulate improvements in the quality of care through economic competition (reputation and increased market share) and by appeals to health care professionals’ desire to do a good job (Marshall et al. 2003). Researchers have identified and tested best practices on how to display comparative information to best meet the objectives of public reporting. Many such practices are incorporated in the Care Compare website—for example, using only a small number of data points (or the single data point of an overall star rating), with more detailed information available in a second or even third layer for those who want it (Agency for Healthcare Research and Quality 2020b, Aligning Forces for Quality 2009). The Commission also believes that public reporting should enable comparisons of individual providers with state and national averages to give consumers meaningful reference points.

To stimulate quality improvement, CMS could also incorporate performance standards in conditions

Results of using the Area Deprivation Index in the illustrative post-acute care value incentive program model

Some health outcomes are tied to the characteristics of the communities where patients live, so conceptually, area-level measures may better capture the social risk of a provider's patient population (see text box on area-level measures of social risk, pp. 528–529). We explored the empirical relationship between performance and one area-level measure of social risk, the Area Deprivation Index (ADI). Using a published list of ADIs for each nine-digit ZIP code, we matched each beneficiary's home nine-digit ZIP code to its corresponding ADI. For each post-acute care (PAC) provider, we averaged the ADIs of the beneficiaries they treated over a year for a provider-level index. A provider's index captures the social risk of the communities where its patients live, not the community where the provider is located. We awarded performance points to each provider on three performance measures: hospitalization during the stay, successful discharge to the community, and Medicare spending per beneficiary.

We found that the empirical relationship between a provider's average ADI and its performance was not consistent across the four PAC settings. Skilled

nursing facilities (SNFs) and home health agencies (HHAs) with high average ADIs (more social risk) generally had worse performance compared with providers with low average ADIs. The correlations between average ADI and performance points were -0.24 for SNFs and -0.26 for HHAs. Peer groups would counter the disadvantages that SNFs and HHAs face in achieving good performance. In contrast, inpatient rehabilitation facilities (IRFs) and long-term care hospitals (LTCHs) with high average ADIs generally had better performance compared with providers with low average ADIs (correlations were 0.05 for IRFs and 0.21 for LTCHs). Because ADIs were positively correlated with the performances of IRFs and LTCHs, we modeled these settings without peer groups.

We assigned HHAs and SNFs to peer groups based on the provider's average ADI. As we did with the analyses of the shares of fully dual-eligible beneficiaries, we scaled the number of peer groups (20 groups) for SNFs and HHAs so that each group was sufficiently large to calculate the effects of the peer grouping.

(continued next page)

of participation (referred to as “requirements of participation” for SNFs). Providers that repeatedly deliver the poorest quality of care could be removed from the program. In addition, Medicare could target time-limited technical assistance resources to low-performing providers so they could develop the skills and infrastructure needed for successful quality improvement.

Some observers have noted that interventions such as upfront payments would enable providers to invest in activities that could improve their performance on quality measures (Arling et al. 2013, Assistant Secretary for Planning and Evaluation 2020b, Jaffery and Safran 2021). Upfront payments could take two forms: lump-

sum payments or enhanced payment rates. Lump-sum payments would be akin to technical assistance, with the added condition that qualifying providers would need to treat populations at higher social risk. Enhanced payment rates could be made to providers treating a population at higher social risk, similar to the disproportionate share payments made to acute care hospitals and to IRFs. Enhanced rates would not offer providers a block of dollars to use for quality improvement.

There is little evidence about which interventions improve care for high social risk patient populations. Unless the upfront payments were tied to specific

Results of using the Area Deprivation Index in the illustrative post-acute care value incentive program model (cont.)

In SNFs, a multiplier of 1.4 for SNFs in the highest peer group (the most social risk) would enable the best performers to earn larger rewards compared with SNFs in the peer group with the lowest risk (multiplier of 0.9). Likewise, a multiplier of 1.28 for HHAs in the highest social risk peer group would enable the best performers to earn larger rewards for their outcomes compared with HHAs in the peer group with the lowest social risk (multiplier of 0.75).

Because the results using the ADI as the measure of social risk differed from the results using shares of fully dual-eligible beneficiaries, we examined the relationship between the two measures (share of fully dual-eligible beneficiaries and average ADI). We found that they were inversely related to each other for three of the four PAC settings (IRFs, LTCHs, and HHAs), though the associations were weak (correlations of -0.09 , -0.18 , and -0.12 , respectively). As their shares of fully dual-eligible

beneficiaries increased, their ADI scores dropped. These correlations indicate that the social risk proxies capture different aspects of the social risks associated with a provider's patient population. In SNFs, the two scores were positively correlated (correlation of 0.20).

These results raise questions about whether the ADI is the best area-based measure to account for social risk. CMS should test various area-level measures for their potential use in accurately accounting for differences in the social risk of patient populations. Further, more research is needed to understand the accuracy of any area-level measure compared with the gold standard of person-reported information. For example, the reliability of an area-level index should be assessed by comparing individual responses from a patient survey with their associated area-level index. ■

quality activities, providers would not necessarily use the payments to improve the quality of care they provide. Tying payments to specific activities would have a greater likelihood of raising the quality of care but would require an administrative structure to select projects and ensure accountability. The impact on access, quality, and costs for either of these forms of upfront payments would need to be tested before broad implementation in the Medicare program.

Implementing a PAC VIP is a complex undertaking

Table 14-10 (p. 544) summarizes the key elements of a PAC VIP and the decisions policymakers would need to make when designing such a program. These elements include a small set of performance measures, strategies

to ensure reliable measure results, a system to distribute rewards with minimal cliff effects, a method to account for differences in social risk factors, and a way to fully distribute the incentive payments back to providers.

Steps to implementing a PAC VIP

Implementing a PAC VIP involves many steps and will be a multiyear endeavor. First, a PAC PPS needs to be implemented so that setting-specific practice patterns begin to converge. Concurrently, CMS needs to begin aligning regulatory requirements. Until these two steps are complete, provider performance initially would need to be compared within settings because practice patterns reflect current regulatory requirements and the payment incentives embedded in the various PPSs. Setting-specific comparisons could be phased out over time, leading up to comparisons across settings.

**TABLE
14-10**

Key elements and decisions to consider in designing a PAC VIP

Design element	Decisions
<p>Small set of performance measures. Payments would be adjusted based on provider performance on a small set of outcome, patient experience, and resource use measures.</p>	<ul style="list-style-type: none"> • Should all providers be scored on the same set of measures? • What measures should be used to gauge performance?
<p>Strategies to ensure reliable measure results. Measure results would reflect true differences in performance and not be attributable to random variation.</p>	<ul style="list-style-type: none"> • What reliability standard should be used? • What strategies will ensure reliable measure results for as many providers as possible?
<p>System to distribute rewards with minimal “cliff” effects. A simple scoring approach would award points for every performance, achieved with minimal use of numeric thresholds that create statistical cliffs.</p>	<ul style="list-style-type: none"> • Should a provider meet some minimum performance standard before it earns a reward?
<p>Approach to account for differences in patients’ social risk factors using a peer-grouping mechanism, if necessary. Providers would be stratified into peer groups based on the social risk of their patient populations if higher social risk is tied to poorer outcomes. Providers in peer groups with patient populations at high social risk would receive larger adjustments for attainments in quality compared with other providers.</p>	<ul style="list-style-type: none"> • How should the social risk of a provider’s patient population be defined and measured? • How many peer groups should be used to differentiate providers?
<p>Method to distribute the entire provider-funded pool of dollars. All withheld funds would be distributed back to providers based on their performance.</p>	<ul style="list-style-type: none"> • How large should the rewards and penalties be?
<p>Note: PAC (post-acute care), VIP (value incentive program).</p>	

CMS needs to select a set of performance measures that captures differences across providers. There will be trade-offs between selecting common measures and patient population-specific measures. These measures should eventually align with the quality incentives tied to MA and ACO payment. CMS also needs to choose a measure of social risk that has both a conceptual and an empirical relationship to outcomes.

Finally, CMS needs to design a methodology that scores providers’ performances, ensures reliable measure results, distributes rewards with minimal cliff effects, accounts for differences in the social risks of a provider’s patient population through peer grouping, and fully redistributes provider-financed incentive

payments to providers. Our PAC VIP methodology would be a good starting point for its deliberations.

Multiple measurement issues confront the implementation of a PAC VIP

The mixed results of our illustrative model underscore the many challenges in implementing a PAC VIP. These efforts are complicated by the multiple issues involved in defining and measuring performance. First, we need additional measures, most notably accurate measures of functional status and of patient experience. We urge CMS to make progress on developing these measures. Second, while having common measures across the four settings will facilitate comparisons of all providers, the measures may not be the best ones for any

given setting. CMS could consider a mix of common measures and measures tailored to specific patient populations. However, the resulting performance scores may be harder to compare across settings and could run into reliability issues with population-specific measures. Because a payment incentive program is not the only way to encourage providers to improve, CMS could publicly report measures specific to patient populations. Further, the set of performance measures is likely to evolve over time.

Third, developing accurate risk adjustment is elusive within one setting, let alone across four. There is an inherent trade-off between having a uniform risk-adjustment method—more in keeping with a uniform

payment system—and having setting-specific models that are more likely to be accurate for providers in any given setting but could undermine comparisons across settings.

Our investigation also illustrates that more work needs to be done to define measures of social risk. Ideally, a social risk measure should have both conceptual and empirical associations with outcomes. While the share of dual-eligible beneficiaries as a proxy for income is the best currently available measure of a patient's social risk, it does not capture all dimensions of social risk. CMS should test various area-level measures for their potential use in accurately accounting for differences in the social risk of individual patients. ■

Endnotes

- 1 CAHPS® is a registered trademark of the Agency for Healthcare Research and Quality, a U.S. government agency.
- 2 CMS has a similar measure, but its measure does not consider nursing home residents who return to the same facility as discharged to the community (and excludes them from the measure calculation).
- 3 Literature suggests 0.7 is an acceptable standard for reliability (Adams et al. 2010, Kao et al. 2011, Krell et al. 2014, Mehrotra et al. 2010, Scholle et al. 2008). Reliability values range from 0 to 1.0, where 0 indicates that the measure captures no real differences in performance (it captures only noise, or the random variation unrelated to performance) and 1.0 indicates that the measure captures all differences in real performance (all signal).
- 4 In our illustrative PAC VIP modeling, we excluded providers that did not meet the minimum case counts tied to 0.7 reliability for each measure using three years of claims data (i.e., 60 Medicare discharges over the three-year period that met the measure specifications). As a result, we excluded 7 percent of LTCHs, 23 percent of SNFs, 11 percent of IRFs, and 19 percent of HHAs because they did not have reliable results for all three measures (including providers with missing data needed to calculate a measure). In our modeling, these providers with very low Medicare volume would not be rewarded or penalized for their performance.
- 5 A census block group is the smallest geographical unit for which the United States Census Bureau publishes sample data. Typically, census block groups have a population of 600 to 3,000 people. In contrast, census tracts generally have a population size between 1,200 and 8,000 people, with an optimum size of 4,000 people.
- 6 In our PAC VIP model, we set each measure's continuous performance-to-points scale using a beta distribution, which helps to smooth the extremes of a distribution by providing estimates of a true percentile independent of associated issues such as ceiling effects.
- 7 The correlations between the share of fully dual-eligible beneficiaries and total performance points are consistent with the correlations between the shares of fully dual-eligible beneficiaries and each raw performance measure (i.e., before the performance was converted to points).
- 8 The Commission previously reported its findings on a VIP for SNFs also using fully dual-eligible beneficiaries as the measure of social risk (Medicare Payment Advisory Commission 2021b).
- 9 The shares of providers that gain or lose under the design are not necessarily equal. With each peer group, the incentive pool would be paid out fully each year, with the funds dispersed to providers that gain balancing out funds dispersed to those that lose. A large provider that gains under the VIP may have to be funded by multiple providers that lose.
- 10 To qualify for payment as an IRF, at least 60 percent of a facility's patients must require and benefit from intensive therapy for the treatment of at least 1 of 13 conditions. Beneficiaries must be able to tolerate "intensive" therapy, often interpreted as three hours a day.
- 11 States also vary in the share of their total Medicaid spending devoted to LTSS. In 2018, spending ranged from 18 percent in Arizona to 52 percent in North Dakota (Murray et al. 2021).
- 12 The qualifying criteria are a preceding acute care hospital stay and either at least 3 days in an intensive care unit during the hospital stay or mechanical ventilation services for at least 96 hours during the LTCH stay. The median risk score for LTCH patients was 3.7 compared with 2.6 for SNF patients and 2.1 for IRF patients.

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A P P E N D I X

A

**Commissioners' voting
on recommendations**



Commissioners' voting on recommendations

In the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000, the Congress required MedPAC to call for individual Commissioner votes on each recommendation and to document the voting record in its report. The information below satisfies that mandate.

Chapter 1: Context for Medicare payment policy

No recommendations

Chapter 2: Assessing payment adequacy and updating payments in fee-for-service Medicare

No recommendations

Chapter 3: Hospital inpatient and outpatient services

For fiscal year 2023, the Congress should update the 2022 Medicare base payment rates for acute care hospitals by the amount specified in current law.

Yes: Barr, Casalino, Chernew, DeBusk, Dusetzina, M. Ginsburg, P. Ginsburg, Grabowski, Jaffery, Navathe, Perlin, Pyenson, Rambur, Riley, Ryu, Safran, Wang

Chapter 4: Physician and other health professional services

4-1 For calendar year 2023, the Congress should update the 2022 Medicare base payment rate for physician and other health professional services by the amount determined under current law.

Yes: Barr, Casalino, Chernew, DeBusk, Dusetzina, M. Ginsburg, P. Ginsburg, Grabowski, Jaffery, Navathe, Perlin, Pyenson, Rambur, Riley, Ryu, Safran, Wang

4-2 The Secretary should require that clinicians use a claims modifier to identify audio-only telehealth services.

Yes: Barr, Casalino, Chernew, DeBusk, Dusetzina, M. Ginsburg, P. Ginsburg, Grabowski, Jaffery, Navathe, Perlin, Pyenson, Rambur, Riley, Ryu, Safran, Wang

Chapter 5: Ambulatory surgical center services

5-1 For calendar year 2023, the Congress should eliminate the update to the 2022 Medicare conversion factor for ambulatory surgical centers.

Yes: Barr, Casalino, Chernew, DeBusk, Dusetzina, M. Ginsburg, P. Ginsburg, Grabowski, Jaffery, Navathe, Perlin, Pyenson, Rambur, Riley, Ryu, Safran, Wang

5-2 The Secretary should require ambulatory surgical centers to report cost data.

Yes: Barr, Casalino, Chernew, DeBusk, Dusetzina, M. Ginsburg, P. Ginsburg, Grabowski, Jaffery, Navathe, Perlin, Pyenson, Rambur, Riley, Ryu, Safran, Wang

Chapter 6: Outpatient dialysis services

For calendar year 2023, the Congress should update the 2022 Medicare end-stage renal disease prospective payment system base rate by the amount determined under current law.

Yes: Barr, Casalino, Chernew, DeBusk, Dusetzina, M. Ginsburg, P. Ginsburg, Grabowski, Jaffery, Navathe, Perlin, Pyenson, Rambur, Riley, Ryu, Safran, Wang

Chapter 7: Skilled nursing facility services

For fiscal year 2023, the Congress should reduce the 2022 Medicare base payment rates for skilled nursing facilities by 5 percent.

Yes: Barr, Casalino, Chernew, DeBusk, Dusetzina, M. Ginsburg, P. Ginsburg, Grabowski, Jaffery, Navathe, Perlin, Pyenson, Rambur, Riley, Ryu, Safran, Wang

Chapter 8: Home health care services

8-1 For calendar year 2023, the Congress should reduce the 2022 Medicare base payment rates for home health agencies by 5 percent.

Yes: Barr, Casalino, Chernew, DeBusk, Dusetzina, M. Ginsburg, P. Ginsburg, Grabowski, Jaffery, Navathe, Perlin, Pyenson, Rambur, Riley, Ryu, Safran, Wang

8-2 The Secretary should require that home health agencies report telehealth services provided during a 30-day period.

Yes: Barr, Casalino, Chernew, DeBusk, Dusetzina, M. Ginsburg, P. Ginsburg, Grabowski, Jaffery, Navathe, Perlin, Pyenson, Rambur, Riley, Ryu, Safran, Wang

Chapter 9: Inpatient rehabilitation facility services

For fiscal year 2023, the Congress should reduce the 2022 Medicare base payment rate for inpatient rehabilitation facilities by 5 percent.

Yes: Barr, Casalino, Chernew, DeBusk, Dusetzina, M. Ginsburg, P. Ginsburg, Grabowski, Jaffery, Navathe, Perlin, Pyenson, Rambur, Riley, Ryu, Safran, Wang

Chapter 10: Long-term care hospital services

For fiscal year 2023, the Secretary should increase the 2022 Medicare base payment rate for long-term care hospitals by the estimate of market basket minus the applicable productivity adjustment.

Yes: Barr, Casalino, Chernew, DeBusk, Dusetzina, M. Ginsburg, P. Ginsburg, Grabowski, Jaffery, Navathe, Perlin, Pyenson, Rambur, Riley, Ryu, Safran, Wang

Chapter 11: Hospice services

11-1 For fiscal year 2023, the Congress should eliminate the update to the 2022 Medicare base payment rates for hospice and wage adjust and reduce the hospice aggregate cap by 20 percent.

Yes: Barr, Casalino, Chernew, DeBusk, Dusetzina, M. Ginsburg, P. Ginsburg, Grabowski, Jaffery, Navathe, Perlin, Pyenson, Rambur, Riley, Ryu, Safran, Wang

11-2 The Secretary should require that hospices report telehealth services on Medicare claims.

Yes: Barr, Casalino, Chernew, DeBusk, Dusetzina, M. Ginsburg, P. Ginsburg, Grabowski, Jaffery, Navathe, Perlin, Pyenson, Rambur, Riley, Ryu, Safran, Wang

Chapter 12: The Medicare Advantage program: Status report and mandated report on dual-eligible special needs plans

No recommendations

Chapter 13: The Medicare prescription drug program (Part D): Status report

No recommendations

Chapter 14: Mandated report: Designing a value incentive program for post-acute care

No recommendations

Acronyms

Acronyms

AAGR	average annual growth rate	CMS	Centers for Medicare & Medicaid Services
A-APM	advanced alternative payment model	CMS-HCC	CMS hierarchical condition category
ACA	Affordable Care Act of 2010	CON	certificate of need
ACH	acute care hospital	COPD	chronic obstructive pulmonary disease
ACO	accountable care organization	COVID-19	coronavirus disease 2019
ACS	ambulatory care sensitive	CPI-U	consumer price index for all urban consumers
ACS	American Community Survey	C-SNP	chronic condition special needs plan
ADI	Area Deprivation Index	CT	computed tomography
AHA	American Hospital Association	CY	calendar year
AKI	acute kidney injury	DIR	direct and indirect remuneration
ALOS	average length of stay	DME	durable medical equipment
APC	ambulatory payment classification	DMEPOS	durable medical equipment, prosthetics, orthotics, and supplies
APM	alternative payment model	DMP	drug management program
APRN	advanced practice registered nurse	DPP	discharge payment percentage
ASC	ambulatory surgical center	DRG	diagnosis related group
ASCQR	ASC Quality Reporting	DSH	disproportionate share hospital
ASP	average sales price	D-SNP	dual-eligible special needs plan
BBA	Bipartisan Budget Act	DVP	Drug Value Program
BLS	Bureau of Labor Statistics	E&M	evaluation and management
BPCIA	Biologics Price Competition and Innovation Act of 2010	EBITDA	earnings before interest, taxes, depreciation, and amortization
CAA	Consolidated Appropriations Act, 2021	ECP	endoscopic cyclophotocoagulation
CAH	critical access hospital	ED	emergency department
CAHPS®	Consumer Assessment of Healthcare Providers and Systems®	EDS	Encounter Data System
C-APC	comprehensive ambulatory payment classification	eGFR	estimated glomerular filtration rate
CARES	Coronavirus Aid, Relief, and Economic Security	EGWP	employer group waiver plan
CBO	Congressional Budget Office	EHR	electronic health record
CC	complication or comorbidity	ePA	electronic prior authorization
CCI	chronically critically ill	ESA	erythropoiesis-stimulating agent
CCP	coordinated care plan	ESRD	end-stage renal disease
CDC	Centers for Disease Control and Prevention	ETC	ESRD Treatment Choices
CEC	Comprehensive ESRD Care	FDA	Food and Drug Administration
CED	coverage with evidence development	FFS	fee-for-service
CHC	continuous home care	FIDE-SNP	fully integrated dual-eligible SNP
CHIP	Children's Health Insurance Program	FY	fiscal year
CKD	chronic kidney disease	g/dL	grams per deciliter
CMG	case-mix group	GAO	Government Accountability Office
CMI	case-mix index	GDP	gross domestic product
CMMI	Center for Medicare & Medicaid Innovation	GIP	general inpatient care
CMR	comprehensive medication review	H-CAHPS®	Hospital Consumer Assessment of Healthcare Providers and Systems®

HCBS	home- and community-based services	MA-PD	Medicare Advantage-Prescription Drug [plan]
HCC	hierarchical condition category	MA-VIP	MA value incentive program
HCPCS	Healthcare Common Procedure Coding System	MB	market basket
HEDIS®	Healthcare Effectiveness Data and Information Set®	MCC	major complication or comorbidity
HHA	home health agency	MCCM	Medicare Care Choices Model
HH-CAHPS®	Home Health Care Consumer Assessment of Healthcare Providers and Systems®	MCO	managed care organization
HHS	Department of Health and Human Services	MCP	monthly capitated payment
HI	Hospital Insurance (Medicare Part A)	MedPAC	Medicare Payment Advisory Commission
HIDE-SNP	highly integrated dual-eligible SNP	MedPAR	Medicare Provider Analysis and Review
HMO	health maintenance organization	MEI	Medicare Economic Index
HOPD	hospital outpatient department	MIPPA	Medicare Improvements for Patients and Providers Act of 2008
HOPE	Hospice Outcomes & Patient Evaluation	MIPS	Merit-based Incentive Payment System
HSA	hospital service area	MLR	medical loss ratio
HUD	Department of Housing and Urban Development	MMA	Medicare Modernization Act of 2003
HVBP	hospital value-based purchasing program	MMP	Medicare-Medicaid Plan
HVIP	hospital value incentive program	MMSEA	Medicare, Medicaid, and SCHIP Extension Act of 2007
ICD	International Classification of Diseases	MMTA	medication management, teaching, and assessment
ICU	intensive care unit	MSA	metropolitan statistical area
IPPS	inpatient prospective payment systems	MSA	Medicare Savings Account
IRC	inpatient respite care	MRI	magnetic resonance imaging
IRE	independent review entity	MS-DRG	Medicare severity–diagnosis related group
IRF	inpatient rehabilitation facility	MS-LTC-DRG	Medicare severity long-term care diagnosis related group
I-SNP	institutional special needs plan	MSPB	Medicare spending per beneficiary
KCE	Kidney Care Entity	MSPB-PAC	Medicare spending per beneficiary for post-acute care
KCF	Kidney Care First	MSS	medical social services
KDE	kidney disease education	MTM	medication therapy management
LDO	large dialysis organization	N/A	not applicable
LEP	late enrollment penalty	N/A	not available
LIP	low-income percentage	NA	nursing aide
LIS	low-income [drug] subsidy	NASEM	National Academies of Sciences, Engineering, and Medicine
LOS	length of stay	NCD	national coverage determination
LPN	licensed practical nurse	NCTAP	new COVID-19 treatments add-on payment
LTCH	long-term care hospital	NDA	new drug application
LTSS	long-term services and supports	NDC	national drug code
LUPA	low-use payment adjustment	NIH	National Institutes of Health
LVH	low-volume hospital	NP	nurse practitioner
LVI	low-volume and isolated	NPI	national provider identifier
M&A	mergers and acquisitions	NPP	nonphysician practitioner
MA	Medicare Advantage	N/R	not reported
MAC	Medicare administrative contractor		
MACRA	Medicare Access and CHIP Reauthorization Act of 2015		

NTA	nontherapy ancillary	PPS	prospective payment system
OACT	Office of the Actuary	PRF	Provider Relief Fund
OB/GYN	obstetrics and gynecology	PSA	prostate-specific antigen
OECD	Organisation for Economic Co-operation and Development	QBP	quality bonus program
OIG	Office of Inspector General	QIP	Quality Incentive Program
OMB	Office of Management and Budget	QRP	Quality Reporting Program
OMS	Overutilization Monitoring System	RADV	risk-adjustment data validation
OOP	out of pocket	RAPS	Risk Adjustment Processing System
OPPS	outpatient prospective payment system	RAS	renin angiotensin system
OQR	Outpatient Quality Reporting	RCT	randomized controlled trial
OR	operating room	RDS	retiree drug subsidy
OTP	opioid treatment program	REIT	real estate investment trust
PA	physician assistant	RHC	routine home care
PAC	post-acute care	RIC	rehabilitation impairment category
PACE	Program of All-Inclusive Care for the Elderly	RN	registered nurse
PAMA	Protecting Access to Medicare Act of 2014	ROI	return on investment
PAP	patient assistance program	RTBT	real-time benefit tool
PBM	pharmacy benefit manager	RVU	relative value unit
PCIP	Primary Care Incentive Payment [program]	SMI	Supplementary Medical Insurance
PD	peritoneal dialysis	SNF	skilled nursing facility
PDC	proportion of days covered	SNP	special needs plan
PDE	prescription drug event	SSI	Supplemental Security Income
PDGM	Patient-Driven Groupings Model	SSI	surgical site infection
PDL	preferred drug list	SSO	short-stay outlier
PDP	prescription drug plan	SUD	substance use disorder
PDPM	Patient-Driven Payment Model	SVI	Social Vulnerability Index
PET	positron emission tomography	TDAPA	transitional drug add-on payment adjustment
PFFS	private fee-for-service	TEFRA	Tax Equity and Fiscal Responsibility Act of 1982
PFS	physician fee schedule	TMR	targeted medication review
PHC4	Pennsylvania Health Care Cost Containment Council	TPNIES	transitional add-on payment adjustment for new and innovative equipment and supplies
PHE	public health emergency	TTY	teletypewriter
PLI	professional liability insurance	UIC	Urban Influence Code
POS	point of sale	USRDS	United States Renal Data System
POS	Provider of Services	VA	Department of Veterans Affairs
PPE	personal protective equipment	VBID	value-based insurance design
PPO	preferred provider organization	VBP	value-based purchasing
PPP	Paycheck Protection Program	VIP	value incentive program
		WAC	wholesale acquisition cost

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Lynn Barr, M.P.H., is the founder and executive chairwoman of Caravan Health, which guides and supports more than 200 health facilities and 20,000 clinicians in value-based payment models, such as accountable care organizations (ACOs). With a background as a chief information officer for a rural hospital, she recruited and organized small rural hospitals across three states to form the first National Rural ACO to help rural providers succeed in value-based payment. Before founding Caravan Health, Ms. Barr led multiple start-up companies dedicated to medical innovation, and she holds several patents. Ms. Barr has served on the Government Affairs Committee of the National Rural Health Association. She earned her master of public health degree in health policy and management from the University of California, Berkeley.

Lawrence Casalino, M.D., Ph.D., is the Livingston Farrand Professor of Public Health and chief of the Division of Health Policy and Economics in the Weill Cornell Medical School Department of Population Health Sciences. His research focuses on the intended and unintended effects of public and private policies on the types of provider organizations that exist, on the processes they use to provide care, on the quality and cost of care, and on the impact of policies and organizational processes on socioeconomic and racial/ethnic disparities. Dr. Casalino has served as senior advisor to the director of the U.S. Agency for Healthcare Research and Quality, as chair of the Academy Health Annual Research Meeting, as a member of the Panel of Health Advisors for the Congressional Budget Office, on the Fair Health board of directors, and on many other national committees, technical advisory panels, and nonprofit boards. Prior to academia, Dr. Casalino worked full time as a primary care physician for 20 years. He received his M.D. from the University of California, San Francisco, and his Ph.D. in health services research from the University of California, Berkeley.

Michael E. Chernew, Ph.D., is the Leonard D. Schaeffer Professor of Health Care Policy and the director of the Healthcare Markets and Regulation Lab in the Department of Health Care Policy at Harvard Medical School. Dr. Chernew's research examines several areas

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Brian DeBusk, Ph.D., is chief executive officer of DeRoyal Industries in Powell, TN, which operates in the surgical, orthopedic, wound care, and health care information technology markets. He also serves as vice chairman of the Board of Trustees of Lincoln Memorial University in rural Tennessee, which includes graduate medical education programs for physicians, physician assistants, nurse practitioners, and nurses. Dr. DeBusk's prior employment includes General Electric, Inobis, and Pace Energy Systems. He has served on the faculty of both the University of Tennessee and Lincoln Memorial University, teaching classes in information technology and business strategy. Dr. DeBusk holds a Ph.D. in electrical engineering from Vanderbilt University and a master of business administration from Emory University.

Stacie B. Dusetzina, Ph.D., is an associate professor of health policy at Vanderbilt University School of Medicine and an Ingram Associate Professor of Cancer Research at Vanderbilt University Medical Center in Nashville, TN. She has conducted extensive

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Marjorie Ginsburg, B.S.N., M.P.H., is the founding executive director of the Center for Healthcare Decisions Inc., which she ran from 1994 through mid-2016. In that role, she was responsible for the design, implementation, and evaluation of projects and programs that fostered civic engagement around health policy issues that affected individuals and society at large. Among the policy issues Ms. Ginsburg studied were end-of-life care, health plan benefits design, and strategies to reduce overuse of unnecessary medical care. Ms. Ginsburg currently volunteers as a Medicare counselor with California’s State Health Insurance Assistance Program (called the Health Insurance Counseling and Advocacy Program) in Sacramento, CA, and is a consultant for others working on civic deliberation to advance responsible health policy.

Paul B. Ginsburg, Ph.D., is professor of health policy at the University of Southern California, senior fellow at the USC Schaeffer Center for Health Policy and Economics, and nonresident senior fellow at the Brookings Institution. Prior positions include Leonard Schaeffer Chair in Health Policy Studies at the Brookings Institution, where he founded and directed the USC-Brookings Schaeffer Initiative for Health Policy; founder and president of the Center for Studying Health System Change; founding executive director of the Physician Payment Review Commission; senior economist at RAND; and deputy assistant director at the Congressional Budget Office. Dr. Ginsburg earned his doctorate in economics from Harvard University.

David Grabowski, Ph.D., is a professor in the Department of Health Care Policy at Harvard Medical School in Boston, MA. His research primarily focuses on the economics of aging, with an emphasis on post-

acute and long-term care financing, organization, and delivery of services. He has published over 175 peer-reviewed papers related to these issues. Dr. Grabowski has served as a member of multiple CMS technical expert panels related to post-acute care payment and quality reporting. He also was a member of the CMS Coronavirus Nursing Home Commission. He serves on the editorial board of several journals, including the *American Journal of Health Economics*. Dr. Grabowski received his Ph.D. in public policy from the Irving B. Harris School of Public Policy at the University of Chicago.

Jonathan Jaffery, M.D., M.S., M.M.M., is a faculty member in the Division of Nephrology within the Department of Medicine of the University of Wisconsin–Madison (UW). As chief population health officer at UW Health and president of the UW Health ACO, Dr. Jaffery provides strategic leadership for UW Health’s transformation toward value-based care. Dr. Jaffery works to ensure UW Health provides access to high-quality, affordable, equitable care and contributes to the health of the community. From 2008 to 2010, he served as the chief medical officer for the state of Wisconsin’s Medicaid program. As a 2010–2011 Robert Wood Johnson Foundation Health Policy Fellow, Dr. Jaffery worked for the Senate Committee on Finance on a variety of issues relating to delivery-system and payment reform, and he continues to focus on these areas in his UW Health leadership roles. A board-certified nephrologist, Dr. Jaffery is a member of numerous professional organizations, including the American Association for Physician Leadership and the American Society of Nephrology, and he is a fellow of the American College of Physicians. Dr. Jaffery has graduate degrees from the University of Wisconsin School of Medicine and Public Health and the University of Southern California Marshall School of Business.

Amol Navathe, M.D., Ph.D., is director of the Payment Insights Team, codirector of the Healthcare Transformation Institute, and associate director of the Center for Health Incentives and Behavioral Economics in the Department of Medical Ethics and Health Policy at the University of Pennsylvania’s Perelman School of Medicine. He is also an assistant professor at Penn and staff physician at the Corporal Michael J. Crescenz VA Medical Center in Philadelphia, PA. Dr. Navathe’s research group designs, tests, and evaluates payment

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Jonathan Perlin, M.D., Ph.D., M.S.H.A., is the president of clinical operations and chief medical officer of HCA Healthcare in Nashville, TN. In that role, he has leadership responsibility for clinical services and improving performance at HCA's hospitals and other sites of service. Before joining HCA, Dr. Perlin was Under Secretary for Health in the U.S. Department of Veterans Affairs. Dr. Perlin is a member of the National Academy of Medicine and has faculty appointments at Vanderbilt University and Virginia Commonwealth University. Dr. Perlin received his Ph.D. in pharmacology and his medical degree from the Medical College of Virginia at Virginia Commonwealth University, where he also completed his residency training in internal medicine.

Bruce Pyenson, F.S.A., M.A.A.A., is principal and consulting actuary at Milliman Inc. in New York, NY. His recent work includes studies on Medicare Advantage enrollment, innovative reinsurance arrangements, definitions of value in health care, and financial modeling of therapeutic interventions. He has co-authored publications on such topics as the cost-effectiveness of lung cancer screening, pandemic influenza, alternative payment models for accountable care organizations, and site-of-service cost differences for chemotherapy. Mr. Pyenson is a fellow of the Society of Actuaries and a member of the American Academy of Actuaries. He is adjunct clinical associate professor at New York University's College of Global Public Health.

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Wayne J. Riley, M.D., M.P.H., M.B.A., is president of the State University of New York (SUNY) Downstate Health Sciences University, tenured professor of internal medicine and of health policy and management and the chair of the Board of the New York Academy of Medicine. Immediately prior to joining Downstate, Dr. Riley served as clinical professor of medicine and adjunct professor of health care management at Vanderbilt University and as the 10th president and chief executive officer of Meharry Medical College. He began his career at Baylor College of Medicine, where he completed residency training in internal medicine and held several key administrative posts, including vice president and vice dean for health affairs and governmental relations, assistant dean for education, and assistant chief of medicine at Ben Taub Hospital—a leading public safety-net teaching hospital. Dr. Riley is a member of the National Academy of Medicine of the National Academy of Sciences, where he served as vice chair and chair of the NAM Section on the Administration of Health Services, Education and Research. He is also president emeritus of the American College of Physicians, the nation's largest medical specialty society representing internal medicine, and the president of the Society of Medical Administrators, an organization of 50 of the nation's leading physician-executives. He is an independent director of HCA Healthcare Inc., Compass Pathways PLC, and HeartFlow Group Inc. Dr. Riley earned a B.A. in anthropology from Yale University, an M.P.H. in health systems management from the Tulane University School of Public Health and Tropical Medicine, an M.D. from Morehouse School of Medicine, and an M.B.A. from Rice University's Jesse H. Jones Graduate School of Business.

Jaewon Ryu, M.D., J.D., is the president and CEO for Geisinger, an integrated health care system headquartered in Danville, PA, that comprises hospitals, employed providers, a health plan, a medical school,

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Dana Gelb Safran, Sc.D., is president and CEO of the National Quality Forum. A central feature of her work throughout her career has been combining the science of quality measurement with the art of its use to drive significant change in the quality, outcomes, and affordability of care. Dr. Safran's prior roles include serving for more than a decade as a senior executive at Blue Cross Blue Shield of Massachusetts (BCBSMA), where she was a lead architect of the BCBSMA Alternative Quality Contract (AQC), which is widely credited with having catalyzed the value-based payment movement among public and private payers nationally. She was also a founding member of the executive team at Haven, a joint venture of Amazon, Berkshire Hathaway, and JPMorgan Chase to achieve better health outcomes, care experiences, and costs

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Pat Wang, J.D., is president and chief executive officer of Healthfirst in New York, NY. Healthfirst is a regional not-for-profit health plan, founded by area health care systems, that serves Medicare enrollees, including those who are eligible for low-income subsidies and those who are dually eligible for Medicare and Medicaid. Healthfirst incorporates a value-based payment model that aligns incentives with hospital and physician partners. Ms. Wang is a graduate of Princeton University and received her law degree cum laude from the New York University School of Law.

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