

C H A P T E R

1

Context for Medicare payment policy

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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).

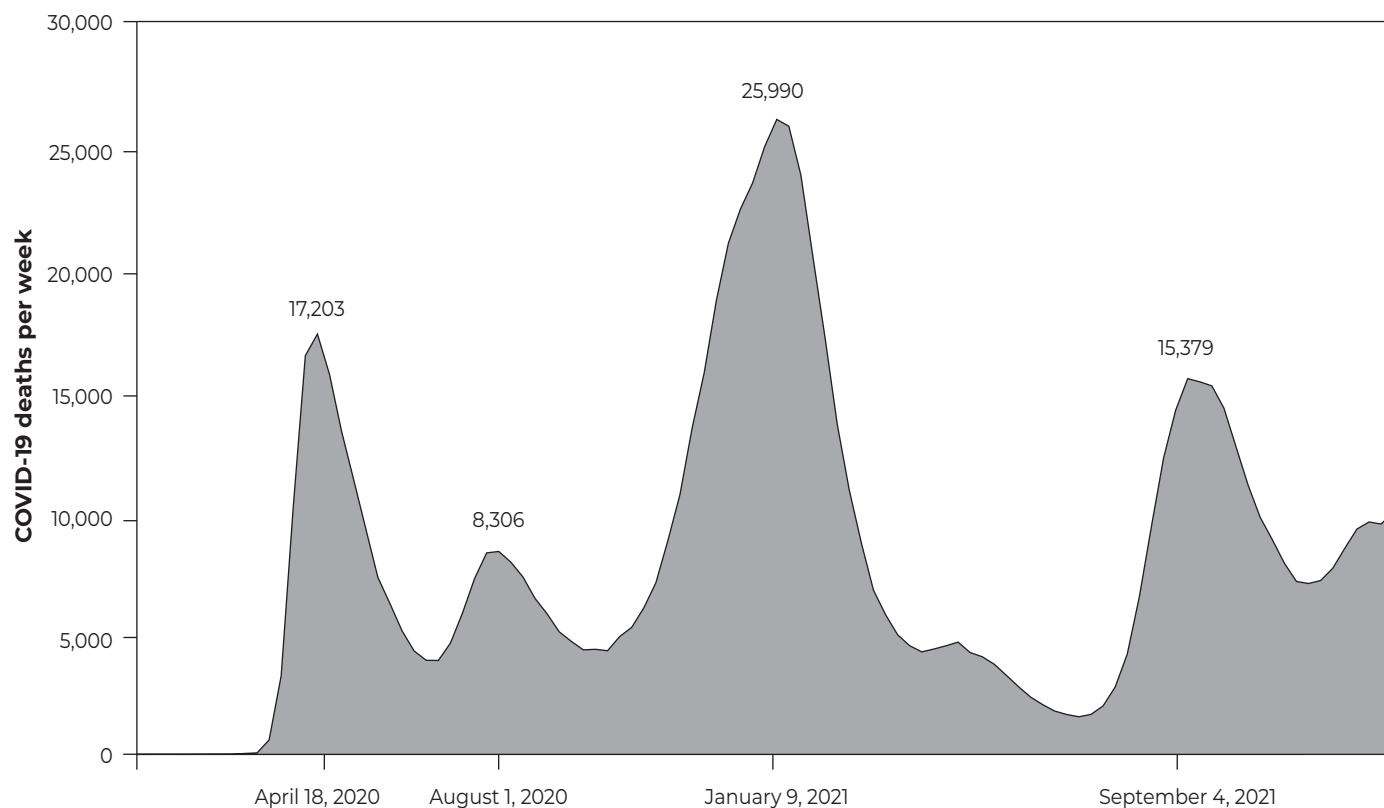
Beneficiaries have been hospitalized and died at high rates

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

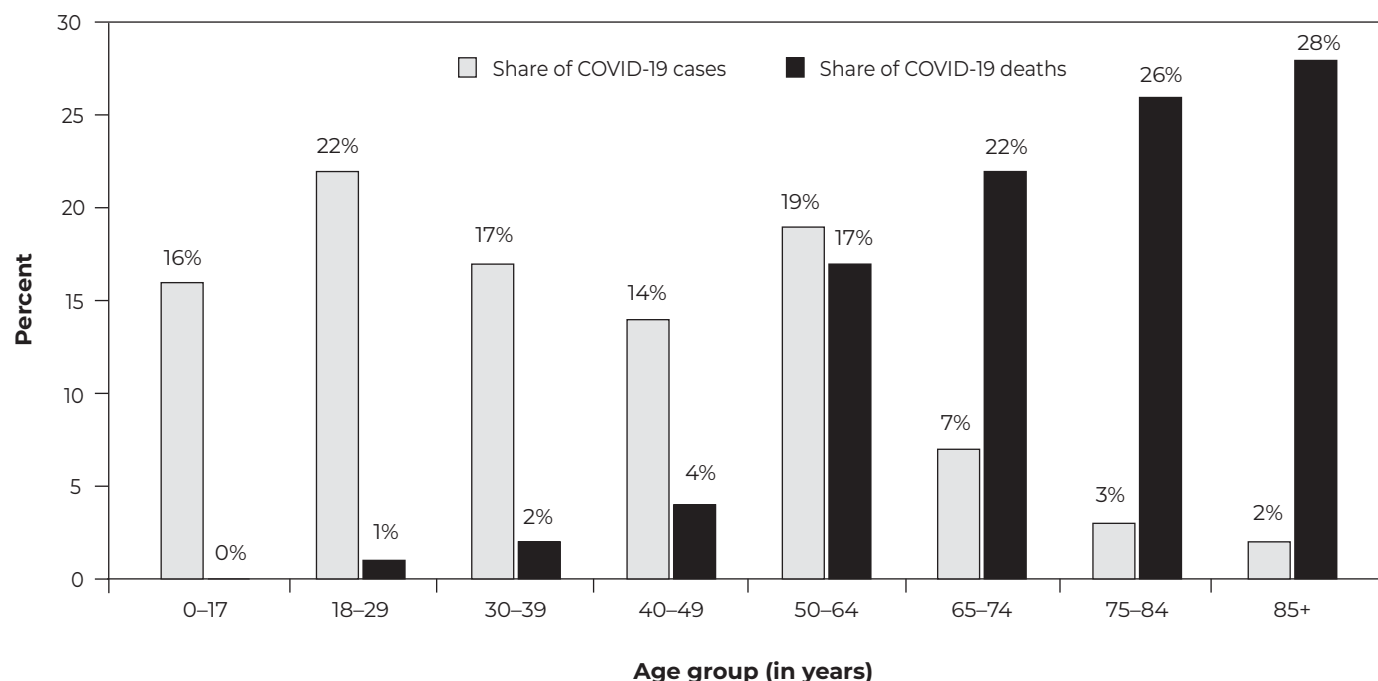
for Disease Control and Prevention 2022b). Although “breakthrough” cases of symptomatic COVID-19 have emerged, the majority of COVID-19 deaths have been among the unvaccinated. As of the end of 2021, unvaccinated adults were 14 times more likely to die from COVID-19 than fully vaccinated adults and 20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

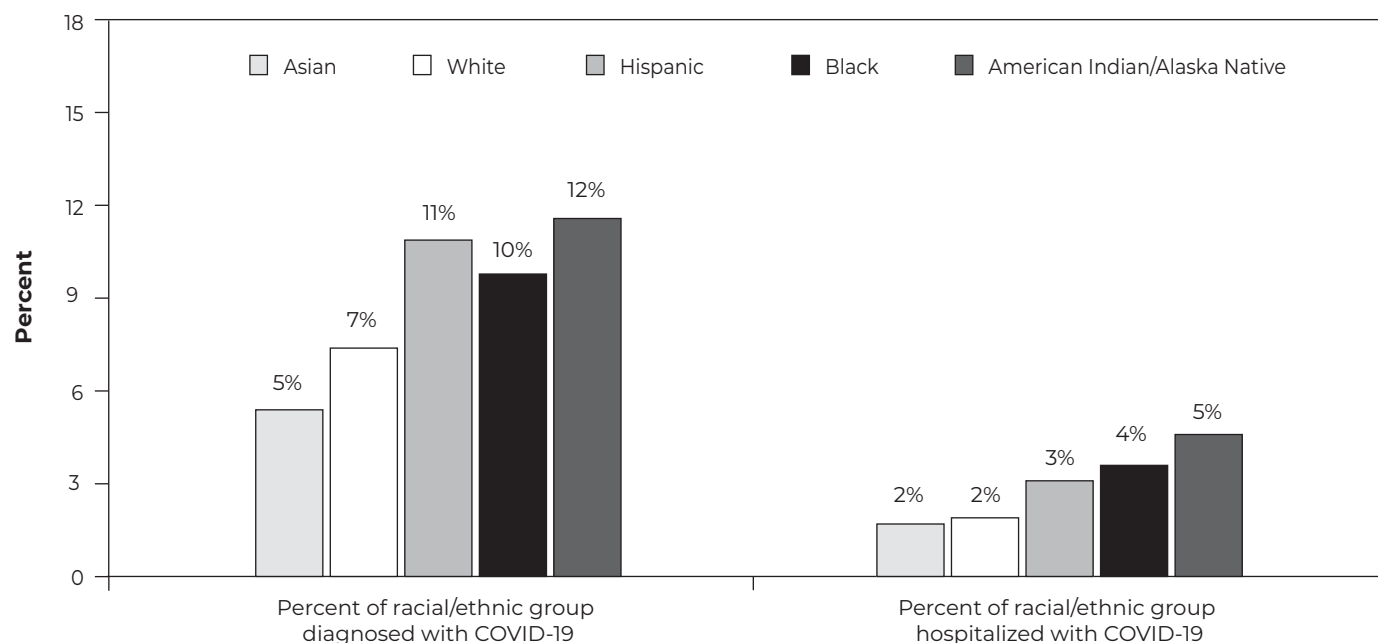
Despite the availability of telehealth, some services could not be provided through this medium and needed to be postponed in the early months of the pandemic. According to special fieldings of CMS's

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

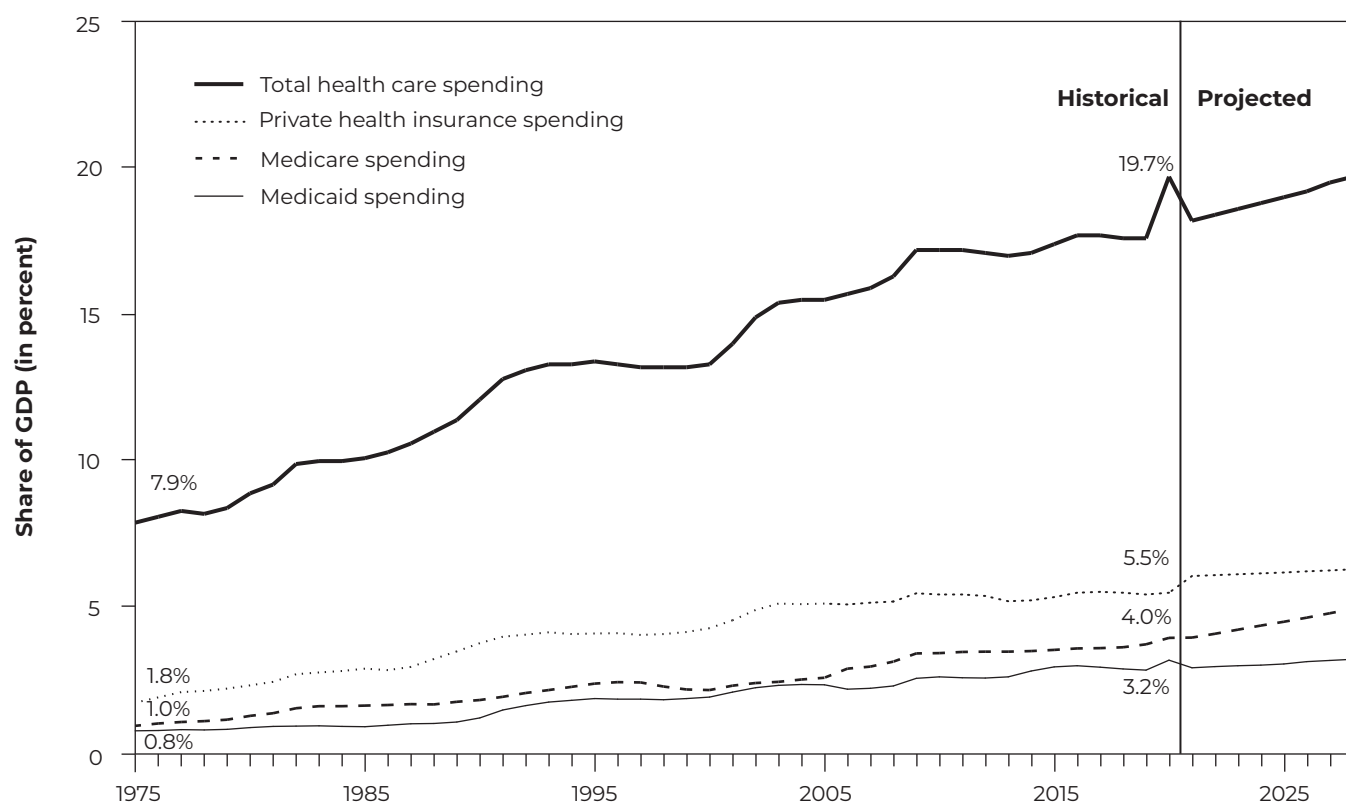
As the virus that causes COVID-19 continues to circulate and mutate, new variants are emerging that put patients at increased risk and extend the burden on clinicians and staff of providing health care during a pandemic. Two years into the pandemic, hospitals still periodically need to halt elective 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

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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

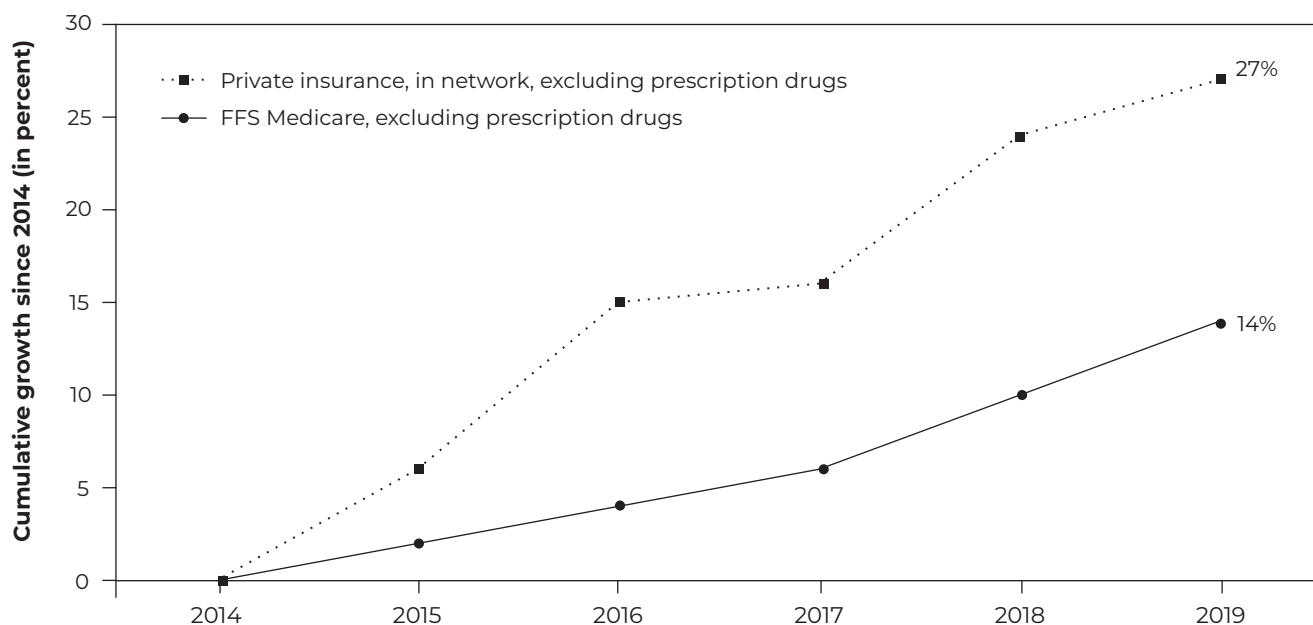
2019). A third study finds higher prices for hospital services in California markets with higher levels of concentration (California Healthcare Foundation 2019). Taken together, the preponderance of evidence suggests that hospital consolidation leads to higher prices (Medicare Payment Advisory Commission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

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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.

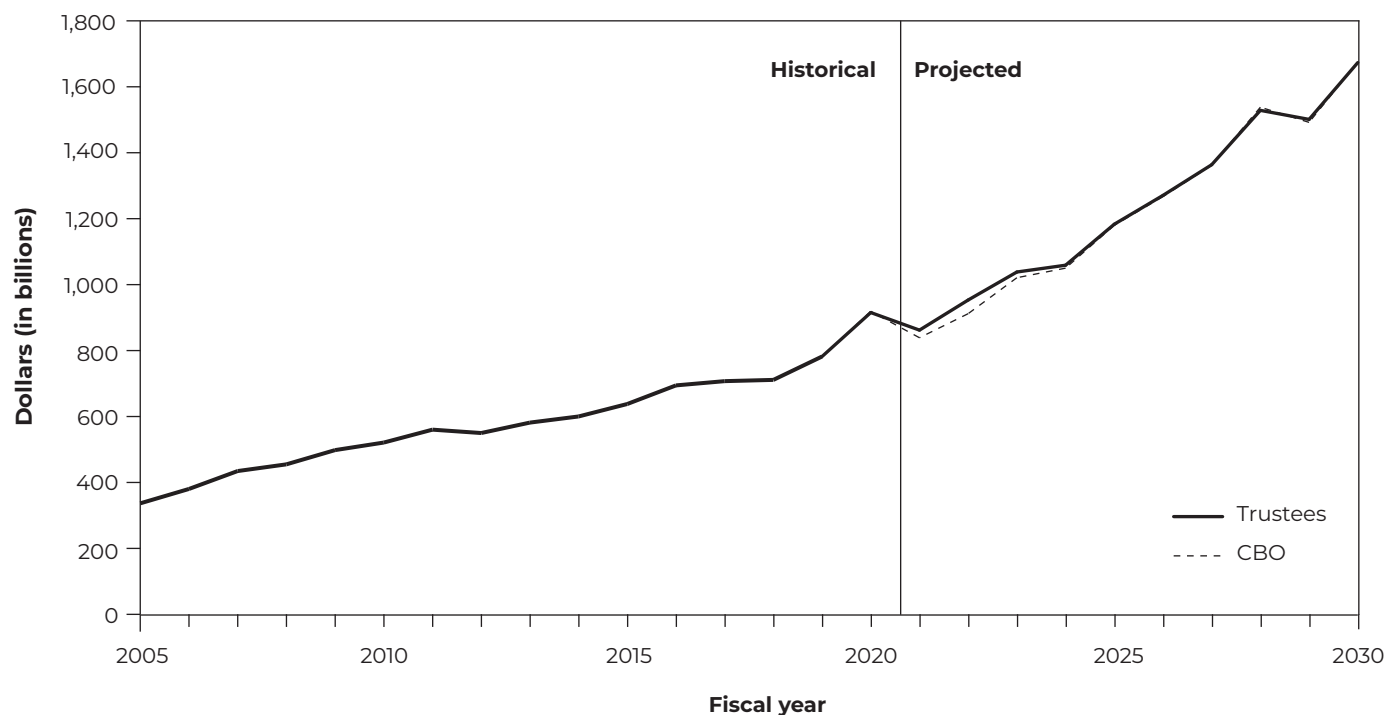
After controlling for the level of horizontal concentration of physician services, three studies found that hospital–physician integration led to commercial price increases ranging from 3 percent to 14 percent (Capps et al. 2018, Medicare Payment Advisory Commission 2017, Neprash et al. 2015). As hospitals 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

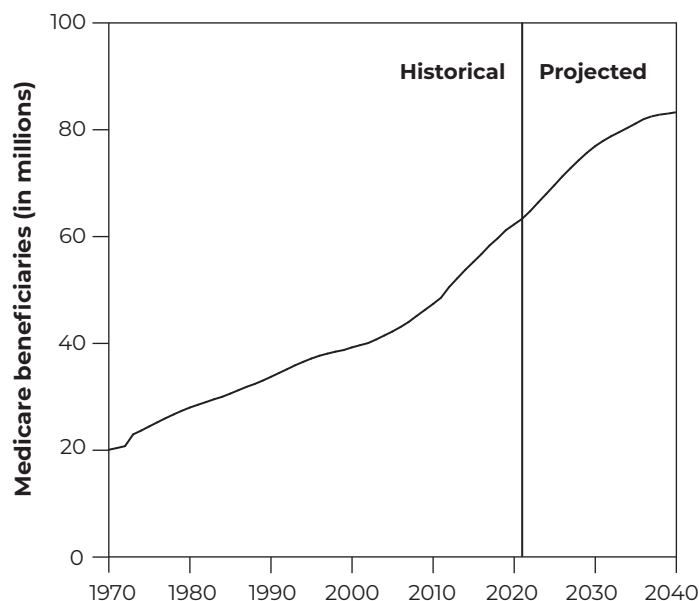
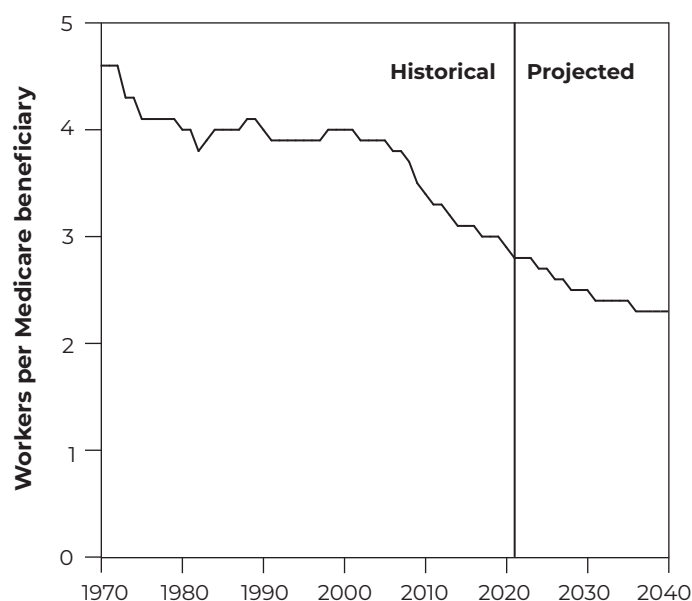


Figure 1-7b. Workers per Medicare beneficiary



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

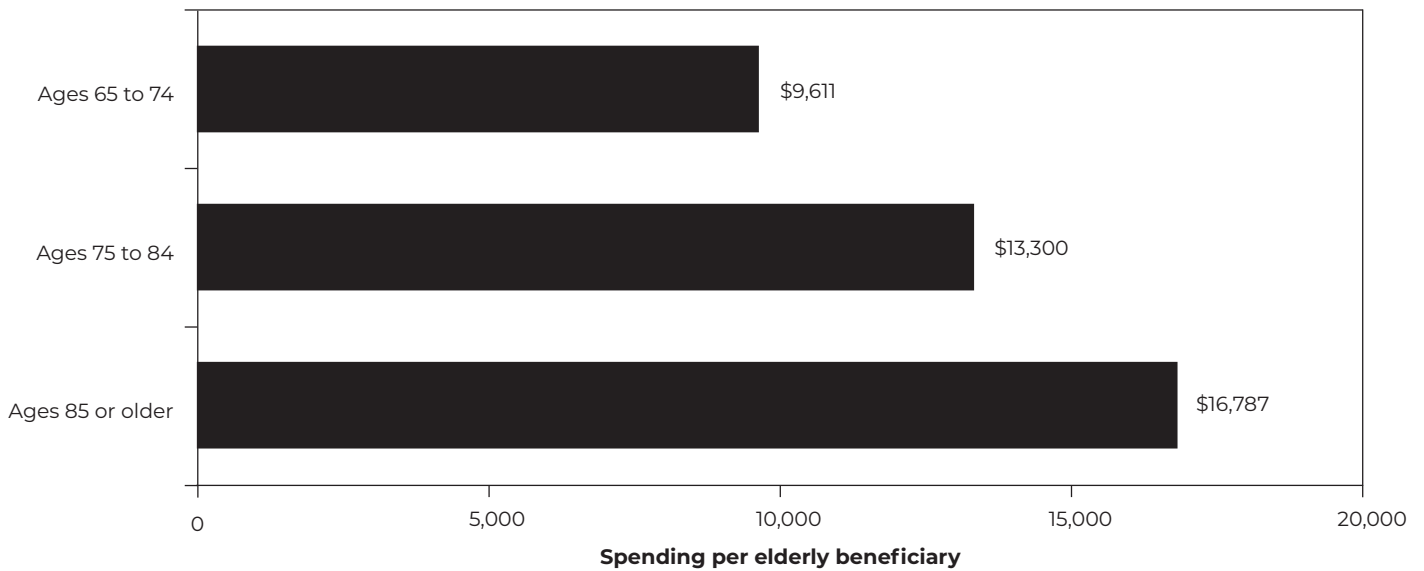
The aging of the baby-boom generation will have an impact on both the Medicare program and the taxpayers who support it. By 2030, the entire baby-boom generation will be eligible for Medicare.⁸

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.

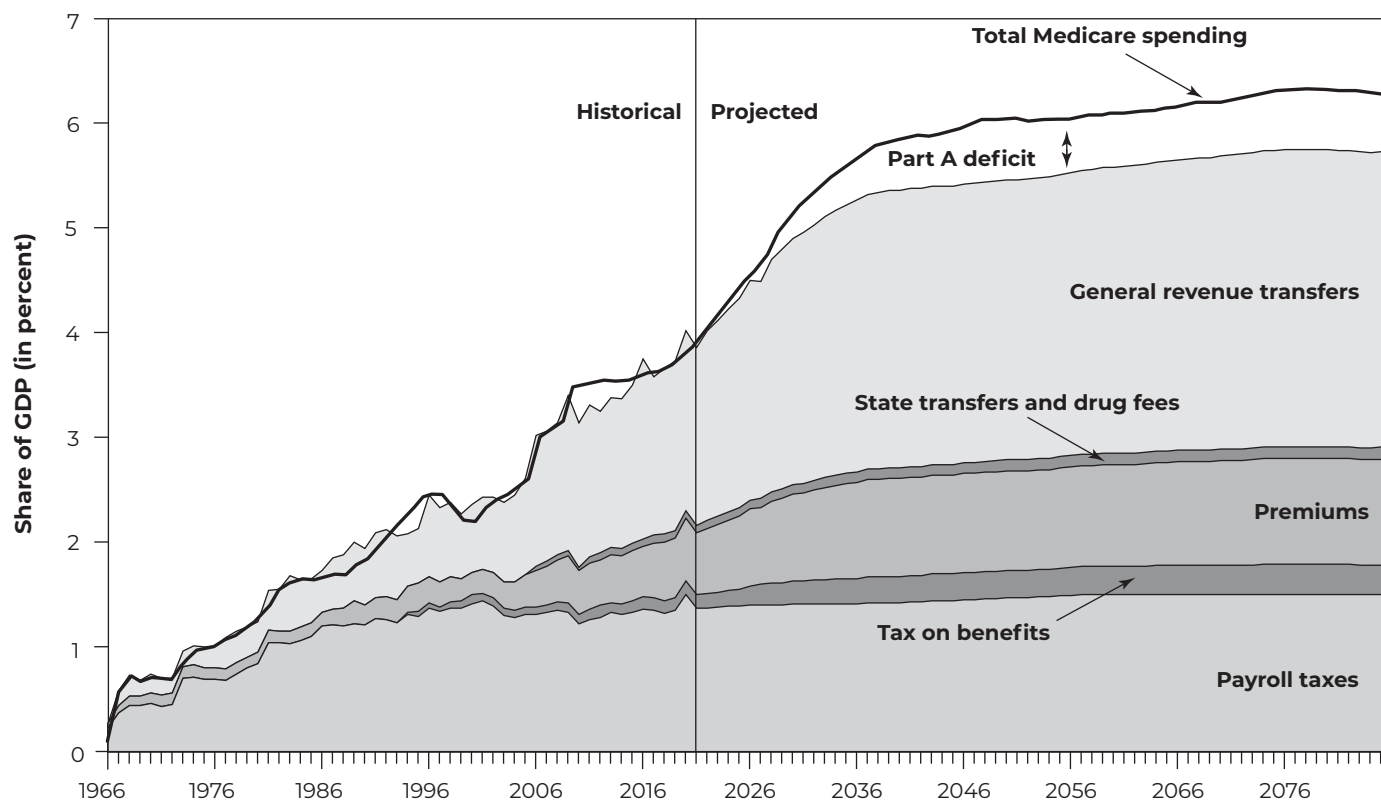
Source: MedPAC analysis of Table III.B8 in 2021 annual report of the Boards of Trustees of the Medicare trust funds.

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.

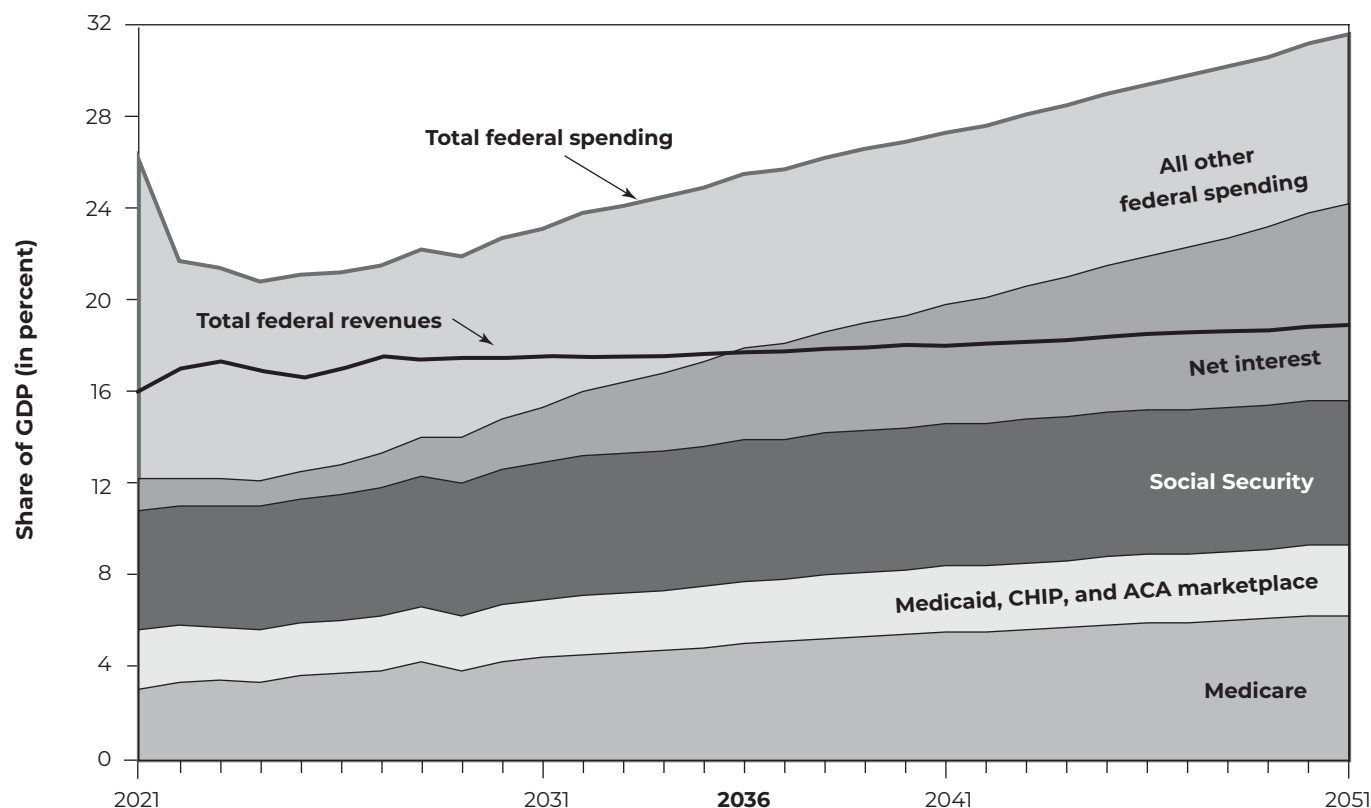
are replaced with more generous payment policies, Medicare spending will increase at a rate that is more in line with past spending growth and more in line with spending growth for the overall health care sector. This would mean that by 2045, instead of Medicare spending constituting 6.15 percent of 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).

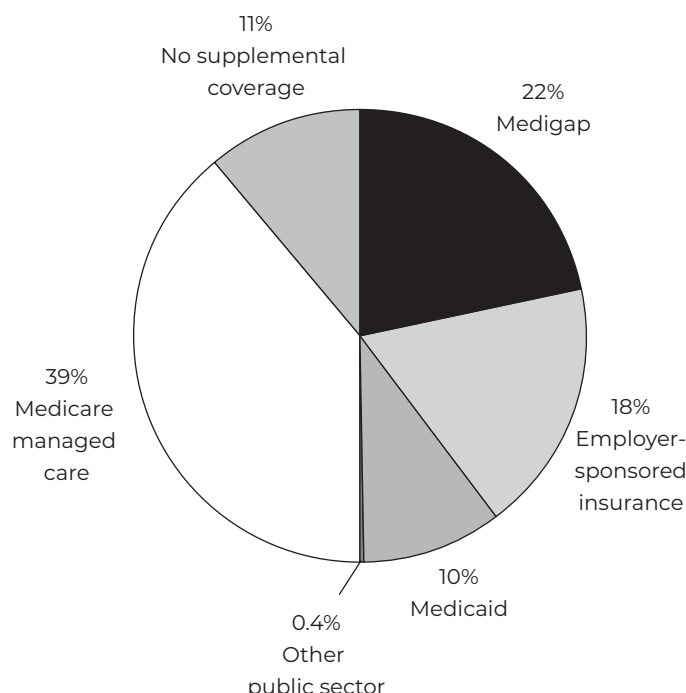
Although rising premiums and cost sharing can strain a small share of beneficiaries' household budgets, cost sharing can be beneficial to the Medicare program, because it can help deter overuse of services. (To ensure that cost sharing does not deter beneficiaries' use of high-value services, Medicare 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.

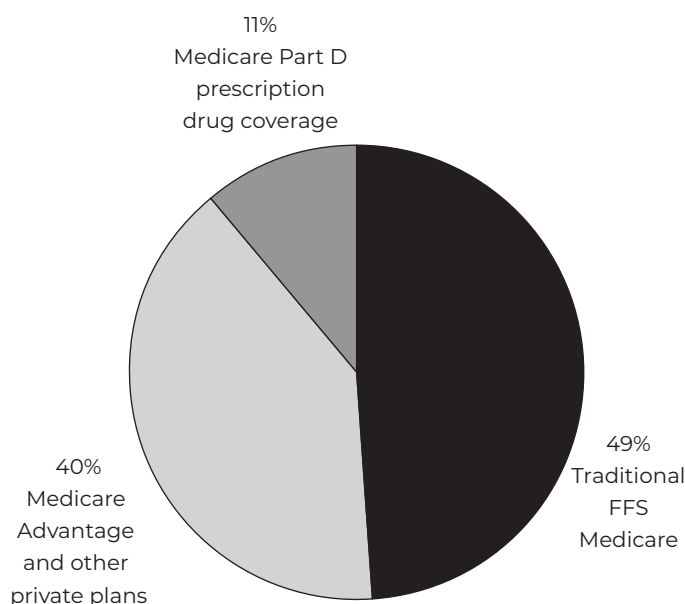
plans; and about a tenth pays for Medicare Part D drug coverage (Figure 1-12).

- **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

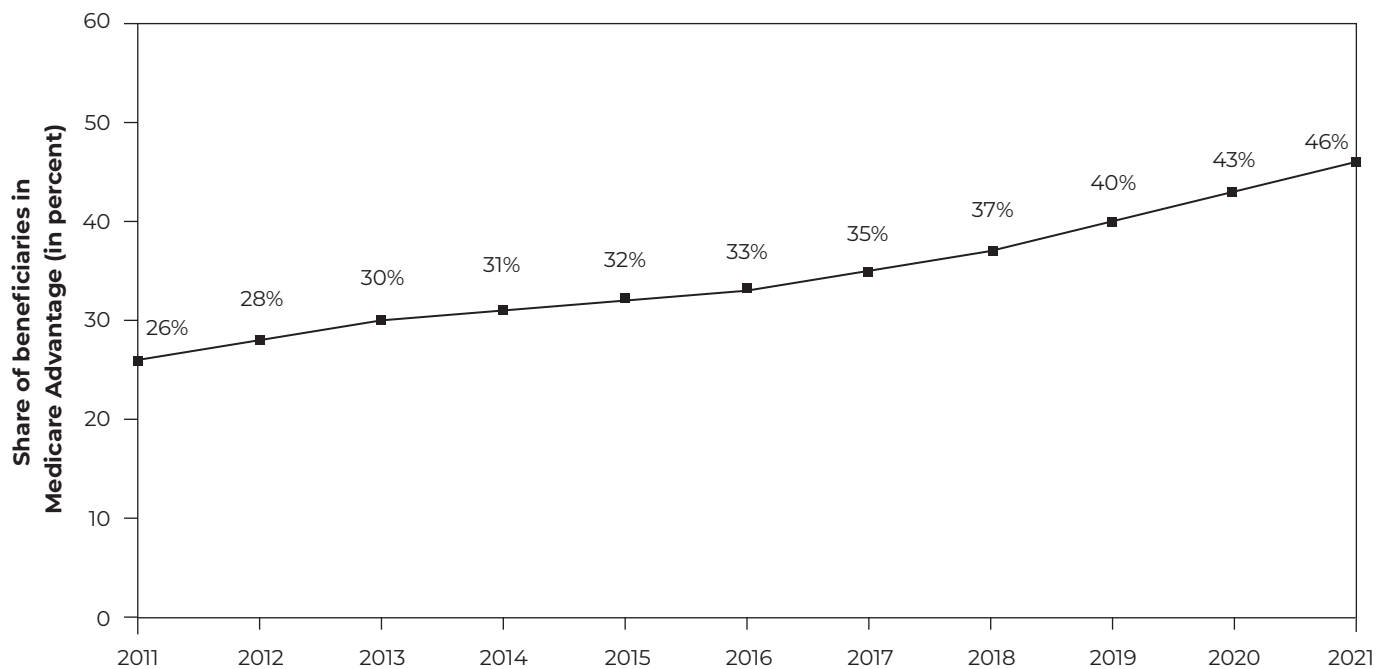


Note: Fee-for-service (FFS). Figure shows share of aggregate reimbursement amounts on an incurred basis. Includes spending for all FFS Medicare beneficiaries, including those with only Part A or Part B coverage. Medicare Advantage spending does not include medical education, hospice, and nonhospice Part 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:

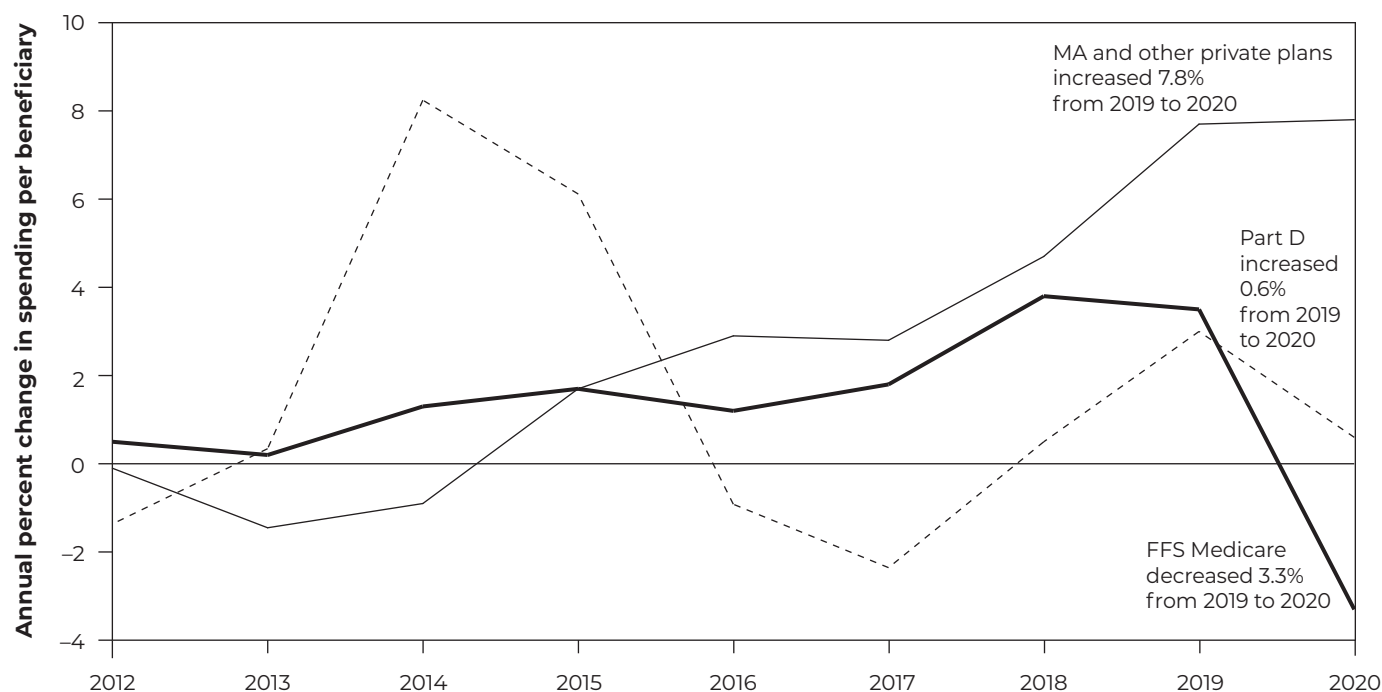
Medicare–Medicaid plans, Program of All-Inclusive Care for the Elderly (PACE) plans, and cost-based (as opposed to capitated) plans. Only about 6 percent of the beneficiaries in private plans are in one of these non-MA plans.

- **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.

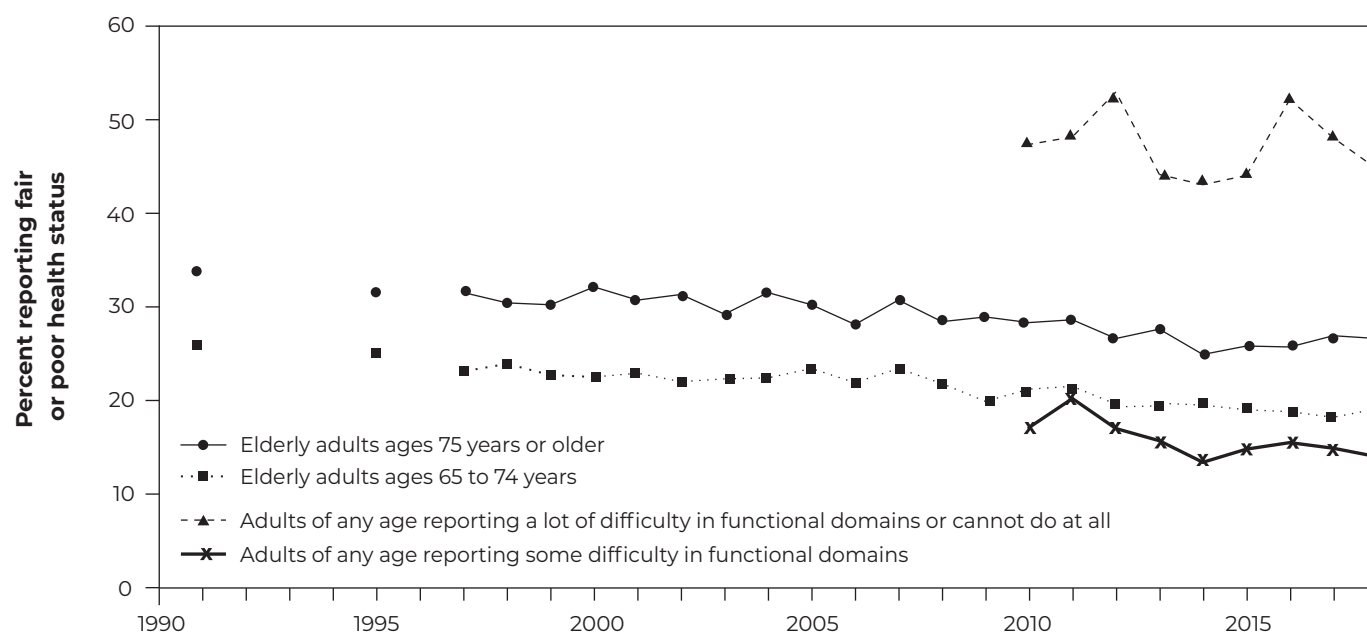
Most common chronic conditions and causes of death

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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