

M A R C H 2 0 1 6

REPORT TO THE CONGRESS

Medicare Payment Policy



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

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

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

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

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March 15, 2016

The Honorable Joseph R. Biden
President of the Senate
U.S. Capitol
Washington, DC 20510

The Honorable Paul D. Ryan
Speaker of the House
U.S. House of Representatives
U.S. Capitol
Room H-232
Washington, DC 20515

Dear Mr. President and Mr. Speaker:

I am pleased to submit the Medicare Payment Advisory Commission's March 2016 *Report to the Congress: Medicare Payment Policy*. This report fulfills the Commission's legislative mandate to evaluate Medicare payment issues and make recommendations to the Congress.

The report contains 13 chapters:

- a chapter that provides a broader context for the report by documenting Medicare and total health care spending and their impacts on federal spending;
- a chapter that describes the Commission's analytical framework for assessing payment adequacy;
- nine chapters that describe the Commission's recommendations on fee-for-service payment rate updates and related issues;
- a chapter that updates the trends in enrollment, plan offerings, and payments in Medicare Advantage (MA) plans; and
- a chapter that updates the trends in enrollment and plan offerings for plans that provide prescription drug coverage.

In this report, we continue to make recommendations aimed at finding ways to provide high-quality care for Medicare beneficiaries, while giving providers incentives to constrain their cost growth and thus help control program spending.

In light of our payment adequacy analyses, we recommend no payment update in 2017 for six fee-for-service payment systems (long-term care hospital, hospice, ambulatory surgical center, skilled nursing facility, home health, and inpatient rehabilitation facility). For four of these sectors our recommendations also include elements to improve payment accuracy. We recommend:

- requiring ambulatory surgical centers to submit cost data;

- freezing skilled nursing facility payment rates for two years while the payment system is revised, then having the Secretary report whether any additional adjustments are needed;
- rebasing the home health payment system and eliminating therapy visits as a factor in payment; and
- conducting focused medical reviews for inpatient rehabilitation facilities with unusual patterns of case mix and coding and expanding the inpatient rehabilitation facility outlier pool.

In the other sectors (hospital inpatient and outpatient, physician and other health professionals, and outpatient dialysis), we recommend the updates in current law. For the hospital sector, this recommendation also includes reducing Medicare payment rates for 340B hospitals' separately payable Part B drugs by 10 percent and directing those savings to Medicare beneficiaries and the uncompensated care pool. We further recommend the uncompensated care payments be distributed using specific data from Medicare cost reports.

In addition, we make two recommendations to improve payments under the MA program. The first is to eliminate the cap on benchmark amounts and the doubling of quality increases in specified counties. The second is to develop a revised risk adjustment model and then apply a coding adjustment that fully accounts for the difference between coding in fee-for-service and MA plans.

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

Sincerely,

A handwritten signature in black ink that reads "Francis J. Crosson M.D." The signature is written in a cursive, flowing style.

Francis J. Crosson, M.D.

Enclosure

Acknowledgments

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

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Executive summary

Executive summary

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

- consider the context of the Medicare program in terms of the effects of its spending on the federal budget and its share of national gross domestic product (GDP).
- evaluate payment adequacy and make recommendations concerning Medicare FFS payment policy in 2017 for acute care hospital, physician and other health professional, ambulatory surgical center, outpatient dialysis facility, skilled nursing facility, home health care, inpatient rehabilitation facility, long-term care hospital, and hospice services.
- review the status of the MA plans that beneficiaries can join in lieu of traditional FFS Medicare (Part C).
- review the status of the plans that provide prescription drug coverage (Part D).

The goal of Medicare payment policy is to get good value for the program's expenditures, which means maintaining beneficiaries' access to high-quality services while encouraging efficient use of resources. Anything less does not serve the interests of the taxpayers and beneficiaries who finance Medicare through their taxes and premiums. This report includes recommendations on MA and provides information on Part D, but most of its content focuses on the Commission's recommendations for the annual payment rate updates under Medicare's various FFS payment systems and on aligning relative payment rates across those systems so that patients receive efficiently delivered, high-quality care.

We recognize that managing updates and relative payment rates alone will not solve what have been fundamental problems with Medicare FFS payment systems to date—that providers are paid more when they deliver more services without regard to the value of those additional services and are not routinely rewarded for care coordination. To address these problems directly, two approaches must be pursued. First, payment reforms, such as incentives to reduce excessive hospital readmission rates, need to be implemented more broadly and coordinated across settings. Second, delivery system

reforms that have the potential to encourage high-quality care, better care transitions, and more efficient provision of care—such as medical homes, bundling, accountable care organizations, and MA plans—need to be enhanced and closely monitored, and successful models adopted on a broad scale.

In the interim, it is imperative that the current FFS payment systems be managed carefully. Medicare is likely to continue using its current payment systems for some years into the future. This fact alone makes unit prices—their overall level, the relative prices of different services in a sector, and the relative prices of the same service across sectors—an important topic. In addition, constraining unit prices could create pressure on providers to control their own costs and to be more receptive to new payment methods and delivery system reforms.

For each recommendation, we present its rationale, its implications for beneficiaries and providers, and how spending for each recommendation would compare with expected spending under current law. The spending implications are presented as ranges over one-year and five-year periods; unlike official budget estimates, they do not take into account the complete package of policy recommendations or the interactions among them. Although we recognize budgetary consequences, our recommendations are not driven by any single budget target but instead reflect our assessment of the payment rate needed to provide adequate access to appropriate care.

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

Context for Medicare payment policy

Part of the Commission's mandate is to consider the effect of its recommendations on the federal budget and view Medicare in the context of the broader health care system. To help meet that mandate, Chapter 1 examines health care spending growth—for the nation at large and Medicare in particular—and considers its effect on federal and state budgets and on the budgets of individuals and families. The chapter also profiles the next generation of Medicare beneficiaries and reviews evidence of inefficient health care spending, structural features of the Medicare program that contribute to inefficient spending, and the Commission's approach to addressing those challenges.

Health care spending growth may be beginning to accelerate after several years of historic lows. National health care spending and Medicare spending both grew robustly from 1974 to 2009. Then from 2009 to 2013, growth in national health care spending and Medicare spending slowed to average annual rates of 3.6 percent and 4.1 percent, respectively.

The causes of the system-wide slowdown and whether it will be sustained or is transient are still a matter of speculation. A variety of factors could have contributed—weak economic conditions, payment and delivery system reforms, lower Medicare payment rates for most types of providers as mandated by the Patient Protection and Affordable Care Act of 2010 (PPACA), and the increased use of generic drugs as top-selling brand drugs lost patent protection.

However, experience in 2014 suggests that the slowdown may be coming to an end. Government actuaries estimate that spending grew faster that year: National health care spending grew 5.3 percent, and Medicare spending grew 5.5 percent. The increase in national health care spending growth was due largely to coverage expansions for health insurance that commenced that year under PPACA, as well as to a substantial increase in prescription drug spending, especially on new treatments for hepatitis C. The increase in Medicare spending growth was due to a substantial increase in prescription drug spending and spending on outpatient services (services received in hospital outpatient departments, physician services, and other services provided on an outpatient basis).

The aging of the baby-boom generation will have a profound impact both on the Medicare program and the taxpayers who support it. Over the next 15 years, as Medicare enrollment surges, the number of taxpaying workers per beneficiary is projected to decline. By 2030 (the year baby boomers will have all aged into Medicare), the Medicare Trustees project there will be just 2.4 workers for each Medicare beneficiary, down from 4.6 around the time of the program's inception. Those demographics create a financing challenge not only for the Medicare program but also for the entire federal budget. By 2040, under federal tax and spending policies specified in current law, Medicare spending combined with spending on other major health care programs, Social Security, and net interest on the national debt would exceed total federal revenues and would crowd out spending on all other national priorities.

The growth in health care spending also affects state budgets and the budgets of individuals and families. States pay for a significant portion of Medicaid spending (spending funded jointly by states and the federal government for health care services provided to state residents with low incomes). Under PPACA, the Medicaid population is expanding; however, the federal government will pay for most of the costs associated with the expansion. Increases in private insurance premiums have outpaced the growth of individual and family incomes over the past decade, and out-of-pocket costs for Medicare beneficiaries also have increased.

Some health care spending is inefficient. For Medicare, if such spending can be identified and eliminated, it could result in each Medicare dollar being spent more efficiently, improving beneficiary health, supporting the program's fiscal sustainability, and reducing federal budget pressures. Certain structural features of the Medicare program pose challenges for targeting inefficient spending, but the Commission has a framework to address those challenges that focuses on (1) payment accuracy and efficiency, (2) care coordination and quality, (3) information for patients and providers, (4) engaged beneficiaries, and (5) an aligned health care workforce.

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

As required by law, the Commission annually makes payment update recommendations for providers paid under FFS Medicare. As discussed in Chapter 2, an update is the amount (usually expressed as a percentage change) by which the base payment for all providers in a payment system is changed relative to the prior year. To determine an update, we first assess the adequacy of Medicare payments for providers in the current year (2016) by considering trends in beneficiaries' access to care, the quality of care, providers' access to capital, and Medicare payments and providers' costs (including, starting this year, marginal profitability as a measure of a provider's incentive to accept additional Medicare patients). Next, we assess how those providers' costs are likely to change in the year the update will take effect (the policy year—2017). As part of the process, we examine payments to support the efficient delivery of services consistent with our statutory mandate. Finally, we make a judgment about what, if any, update is needed.

This year, we consider recommendations in nine FFS sectors: acute care hospitals, physicians and other health professionals, ambulatory surgical centers, outpatient

dialysis facilities, skilled nursing facilities, home health care agencies, inpatient rehabilitation facilities, long-term care hospitals, and hospices. Each year, the Commission looks at all available indicators of payment adequacy and re-evaluates any assumptions from prior years using the most recent data available to make sure its recommendations accurately reflect current conditions. We may also consider changes that redistribute payments within a payment system to correct any biases that may make patients with certain conditions financially undesirable, make particular procedures unusually profitable, or otherwise result in inequity among providers. Finally, we may also make recommendations to improve program integrity.

These recommendations, if enacted, could significantly change the revenues providers receive from Medicare. Rates set to cover the costs of relatively efficient providers help create fiscal pressure on all providers to control their costs. In addition, the Commission examines payment rates for services that can be provided in multiple settings. Medicare often pays different amounts for similar services across settings. Basing the payment rate on the rate in the most efficient setting would save money for Medicare, reduce cost sharing for beneficiaries, and reduce the incentive to provide services in the higher paid setting for financial reasons. Medicare rates also have broader implications for health care spending. For example, Medicare rates are commonly used to set hospital rates charged to uninsured patients eligible for financial assistance, used by Medicare Advantage plans to set hospital prices, and used by the Department of Veterans Affairs (VA) to pay non-VA providers.

Hospital inpatient and outpatient services

In 2014, the Medicare FFS program paid 4,700 hospitals a total of \$173 billion for 9.7 million Medicare inpatient admissions, 193 million outpatient services, and \$9.4 billion of hospitals' uncompensated care costs. This amount represents a 4 percent increase in hospital spending from 2013. On net, Part A hospital payments increased by \$1 billion and Part B outpatient payments increased by \$5 billion. Part A payments increased because the increase in prices and patient severity more than offset a decline in inpatient volume. In addition, \$9.4 billion of Part A trust fund dollars were reallocated from inpatient disproportionate share (DSH) payments to non-Medicare uncompensated care payments. Outpatient payments rose due to volume increases, price increases, and packaging of some laboratory services that were

covered under the laboratory fee schedule into the outpatient payment rates.

As discussed in Chapter 3, most payment adequacy indicators (including access to care, quality of care, and access to capital) are positive, and Medicare payment rates are still higher than the variable costs associated with Medicare patients. However, Medicare margins are negative on average and about break even for efficient providers, and under current law, margins are expected to decline in 2016. Our findings on payment adequacy are:

- The average hospital occupancy rate was 61 percent in 2014, suggesting hospitals have excess inpatient capacity in most markets.
- Inpatient use per beneficiary declined by 3.6 percent in 2014 and outpatient services increased by 3.7 percent. However, some systems reported increases in both inpatient and outpatient volumes in the first half of 2015.
- Hospital quality metrics remained stable or improved in 2014.
- Access to bond and equity markets remains strong for most hospitals, in part reflecting hospitals' strong all-payer profitability from 2012 through 2014.
- In 2014, hospitals' aggregate Medicare margin was -5.8 percent. However, a set of relatively efficient hospitals were able to break even on Medicare while performing well on quality metrics. In addition, hospitals' marginal profits under Medicare were positive 10 percent; thus, hospitals with excess capacity had a financial incentive to serve more Medicare patients. Under current law, payment rates are projected to decline from 2014 to 2016 due to a \$3 billion decline in uncompensated care payments and other policy changes (by law, uncompensated care payments decline when the share of the population that is insured increases). We project hospitals' aggregate Medicare margin for 2016 will be about -9 percent.

Nonprofit hospitals with high shares of Medicaid and low-income Medicare patients (about one-third of all prospective payment system (PPS) hospitals) qualify for the 340B Drug Pricing Program. These hospitals receive substantial discounts from drug manufacturers for Part B drugs. The Office of Inspector General estimates that the aggregate discount across all 340B providers is 34 percent

of the average sales price (ASP). The hospital outpatient payment system pays for those drugs at 106 percent of each drug's ASP. Because Medicare does not currently adjust outpatient rates for the lower drug acquisition cost at 340B hospitals, Medicare payment rates are much higher than the acquisition costs of Part B drugs at these hospitals. Reducing the price Medicare pays 340B PPS hospitals for separately payable Part B drugs by 10 percent of ASP would accomplish two things. First, it would reduce beneficiary cost sharing. Second, it would reduce program spending for Part B drugs by approximately \$300 million—funds that could be reallocated within the hospital sector to support the Medicare-funded uncompensated care pool, as we discuss below.

The Commission recommends that the Congress direct the Secretary of the Department of Health and Human Services (HHS) to update inpatient and outpatient payments by the amount specified in current law, reduce 340B hospitals' Medicare payment rates for separately payable Part B drugs by 10 percent of ASP, direct the savings from reducing Part B drug payment rates to beneficiaries and to the Medicare-funded uncompensated care pool, and distribute all uncompensated care payments using data from the Medicare cost reports' Worksheet S-10. The use of S-10 uncompensated care data should be phased in over three years to allow for audits and improvement of the data. The Commission's multipart recommendation addresses the issues of updating Medicare hospital payments in view of mixed payment adequacy signals, allows beneficiaries to share in 340B drug discounts, and directs additional payments to hospitals that provide the most uncompensated care.

While the uncompensated care pool would be directly tied to hospitals' uncompensated care costs, the \$3.3 billion in traditional DSH dollars would still be distributed to hospitals based primarily on Medicaid days. Hospitals with high Medicaid shares would be disproportionately helped by the traditional DSH pool, and hospitals with high uncompensated care costs would be disproportionately helped by the uncompensated care pool.

While all hospitals are expected to experience increases in base payment rates due to the update, the effect of the remainder of the recommendation would vary depending on a hospital's characteristics. For example, DSH hospitals with high uncompensated care costs would see increases in payments that are above average, and DSH hospitals with below average uncompensated care costs would see

smaller increases or reductions in Medicare payments. The net effect of reduced payment rates for 340B hospitals' Part B drugs and increases in uncompensated care payments would be a small increase in average payments to 340B hospitals, reflecting the net effect of large increases in payment to 340B hospitals with high levels of uncompensated care (often public hospitals) and relatively smaller payment decreases to the 340B hospitals with lower than average levels of uncompensated care.

Physician and other health professional services

Physicians and other health professionals deliver a wide range of services, including office visits, surgical procedures, and diagnostic and therapeutic services in a variety of settings. In 2014, Medicare paid \$69.2 billion for physician and other health professional services, accounting for 16 percent of FFS Medicare spending. About 892,000 clinicians billed Medicare—576,000 physicians and 315,000 nurse practitioners, physician assistants, therapists, chiropractors, and other practitioners. Medicare pays for the services of physicians and other health professionals using a fee schedule. Current law updates Medicare's conversion factor for the fee schedule by 0.5 percent in 2017.

In Chapter 4, we use the following factors to assess payment adequacy for physicians and other health professionals: beneficiary access to care, volume growth, quality, changes in input costs, and differences in compensation across specialties.

- Overall, beneficiary access to physician and other health professional services is largely unchanged from last year and comparable with access for individuals with private insurance. Most beneficiaries report they are able to obtain timely appointments for routine care, illness, or injury, and most beneficiaries are able to find a new doctor without a problem. A small number of beneficiaries report more difficulty, with a higher share reporting problems obtaining a new primary care doctor than reporting problems obtaining a specialist.
- The number of physicians per beneficiary has remained relatively constant, the number of advanced practice nurses and physician assistants per beneficiary has grown slightly, and the share of providers accepting assignment and enrolled in Medicare's participating provider program remains high.

- In 2014, across all services, volume per beneficiary grew by 0.4 percent. Among broad categories of service, growth rates were 1.4 percent for major procedures, 0.8 percent for other procedures, 0.3 percent for evaluation and management, –0.6 percent for tests, and –1.1 percent for imaging services. While the imaging decrease continues the downward trend we have seen since 2009, use of imaging services remains much higher than it was in 2000. In addition, there has been a continued shift in billing for cardiovascular imaging from freestanding offices to hospitals.
- Currently, the Medicare program relies heavily on process measures to assess clinician quality, and the Commission would prefer the use of a few key outcome measures of importance to Medicare beneficiaries. However, the ability to differentiate performance on outcome measures at the individual clinician level is poor. We report two sets of measures at the national level—avoidable hospitalizations for ambulatory care–sensitive conditions and rates of low-value care in Medicare.
- CMS projects an increase in the Medicare Economic Index of 2.2 percent in 2017.
- In 2014, compensation for primary care physicians continued to be much lower than for physicians in specialty groups, raising concerns about fee schedule mispricing.

The evidence suggests that payments for physicians and other health professionals are adequate. Therefore, the Commission recommends the current law update for 2017.

Ambulatory surgical center services

Ambulatory surgical centers (ASCs) provide outpatient procedures to patients who do not require an overnight stay after the procedure. In 2014, over 5,400 ASCs treated 3.4 million FFS Medicare beneficiaries, and Medicare program spending on ASC services was \$3.1 billion.

Our analyses indicate that beneficiaries' access to ASC services is adequate, and most of the available indicators of payment adequacy for ASC services, discussed in Chapter 5, are positive. However, volume of ASC services declined in 2014.

- Our analysis of facility supply and volume of services indicates that beneficiaries' access to ASC services

has generally been adequate. From 2009 through 2013, the number of Medicare-certified ASCs grew by an average annual rate of 1.5 percent; in 2014, the number increased by 1.9 percent (the vast majority of new ASCs were for profit).

- From 2009 through 2013, the volume of services per beneficiary grew by an average annual rate of 1.3 percent; in 2014, volume decreased by 0.8 percent.
- ASCs began submitting data on quality measures to CMS in October 2012. CMS has made data publicly available for two of these measures and intends to make data on five others publicly available in April 2016. We commend CMS for creating a system for ASCs to submit data on quality measures. However, we are concerned that the data on the two measures that CMS has made publicly available are of limited value in assessing the quality of care in ASCs.
- Because the number of ASCs has continued to increase, access to capital appears to be adequate.
- From 2009 through 2013, Medicare payments per FFS beneficiary increased by an average of 2.6 percent per year and by 3.1 percent in 2014. Although volume per beneficiary decreased by 0.8 percent in 2014, Medicare payments per beneficiary increased because of increases in the ASC conversion factor and the average relative weight of the services provided.
- ASCs do not submit data on the cost of services they provide to Medicare beneficiaries. Therefore, we cannot calculate a Medicare margin as we do for other provider types to assist in assessing payment adequacy.

Considering these indicators, the Commission concludes that ASCs can continue to provide Medicare beneficiaries with access to ASC services with no update to the payment rates for 2017. In addition, we recommend that CMS require the submission of cost data from ASCs.

Outpatient dialysis services

Outpatient dialysis services are used to treat the majority of individuals with end-stage renal disease (ESRD). In 2014, about 383,000 beneficiaries with ESRD on dialysis were covered under FFS Medicare and received dialysis from about 6,300 dialysis facilities. In 2014, Medicare expenditures for outpatient dialysis services were \$11.2 billion, a 1 percent increase from 2013.

Our payment adequacy indicators for outpatient dialysis services, discussed in Chapter 6, are generally positive.

- Dialysis facilities appear to have the capacity to meet demand. Growth in the number of dialysis treatment stations has kept pace with growth in the number of dialysis beneficiaries.
- Between 2013 and 2014, the number of FFS dialysis beneficiaries and dialysis treatments each grew by 2 percent. At the same time, the per treatment use of most dialysis injectable drugs, including erythropoietin that is used in anemia management, continued to decline, but at a slower rate than in 2011 and 2012, the initial years of the PPS. The dialysis PPS created an incentive for providers to be more judicious about their provision of dialysis drugs.
- Using CMS data, we looked at changes in quality indicators since the dialysis PPS was implemented in 2011. Rates of emergency department use modestly increased, while rates of mortality and hospitalization declined. With regard to anemia management, negative cardiovascular outcomes associated with high erythropoiesis-stimulating-agent use have declined. Beneficiaries' use of home dialysis, which is associated with improved patient satisfaction and quality of life, increased from 8 percent to 10 percent of dialysis beneficiaries.
- Information from investment analysts suggests that access to capital for dialysis providers continues to be adequate. The number of facilities, particularly for-profit facilities, continues to increase.
- Between 2013 and 2014, cost per treatment increased by 1 percent, while Medicare payment per treatment decreased by about 1 percent. We estimate that the aggregate Medicare margin was 2.1 percent in 2014, and the rate of marginal profit—that is, the rate at which Medicare payments exceed providers' marginal cost—was nearly 18 percent. The 2016 Medicare margin is projected to be 0.8 percent.

The evidence on payment adequacy suggests that payments are adequate; therefore the Commission recommends that the Congress increase the outpatient dialysis base payment rate by the update specified in current law for calendar year 2017.

The Commission continues to have two concerns about the dialysis PPS. First, the low-volume payment adjustment

does not sufficiently target facilities that are both low-volume and isolated. Consequently, some facilities that receive this payment adjustment are in close proximity to other facilities. Second, CMS has not yet examined the appropriateness of the costs that facilities include on their cost reports, which can be done through cost report audits, and has used unaudited data to refine the ESRD market basket and the PPS payment adjustment factors. If facilities' costs are overstated, the Medicare margin—which the Commission uses as an indicator of payment adequacy—will be understated.

To address these concerns, the Commission reiterates its March 2014 recommendation that the Congress should direct the Secretary to redesign the low-volume payment adjustment to consider a facility's distance to the nearest facility and audit dialysis facilities' cost report data.

Skilled nursing facility services

Skilled nursing facilities (SNFs) provide short-term skilled nursing and rehabilitation services to beneficiaries after a stay in an acute care hospital. In 2014, about 15,000 SNFs furnished 2.4 million Medicare-covered stays to 1.7 million FFS beneficiaries. Medicare FFS spending on SNF services was \$28.6 billion in 2014.

To examine the adequacy of Medicare's payments, in Chapter 7, we analyze beneficiaries' access to care (including the supply of providers and volume of services), quality of care, provider access to capital, and Medicare payments in relation to providers' costs to treat Medicare beneficiaries. Key measures indicate Medicare payments to SNFs are more than adequate. We also find that relatively efficient SNFs—facilities identified as providing relatively high-quality care at relatively low costs—had very high Medicare margins, suggesting that opportunities remain for other SNFs to achieve greater efficiencies.

- Access to SNF services remains adequate for most beneficiaries. The number of SNFs participating in the Medicare program is stable. Over 90 percent of beneficiaries live in a county with three or more SNFs, and less than 1 percent live in a county without one. Available bed days increased slightly between 2013 and 2014. In 2014, the median occupancy rate remained at 86 percent, with one-quarter of SNFs having rates at or below 76 percent.
- Days and admissions per FFS beneficiary declined between 2013 and 2014, consistent with declines in

inpatient hospital admissions (a three-day inpatient stay is required for Medicare coverage of SNF services).

- Quality measures show mixed performance. Between 2013 and 2014, the community discharge rate and the rate of hospital readmissions occurring during SNF stays improved slightly. The rate of readmissions that occurred in the 30-day period after discharge from the SNF slightly increased (got worse), and the functional change measures were essentially unchanged.
- Because most SNFs are part of nursing homes, we examine nursing homes' access to capital. Access to capital was adequate and is expected to remain so. Medicare is regarded as a preferred payer of SNF services.
- In 2014, the average Medicare margin was 12.5 percent—the 15th year in a row that the average was above 10 percent. Margins continued to vary greatly across facilities and reflect shortcomings in the SNF PPS that encourage favorable selection of rehabilitation patients (over medically complex patients), differences in costs per day, and the cost control exhibited by some providers. The marginal profit was 20.4 percent. The projected Medicare margin for 2016 is 10.7 percent.

Medicare needs to revise the PPS. Over time, Medicare's payments have grown more inaccurate despite the many changes made to the payment system. The overpayments for therapy services have grown, strengthening the existing incentive to furnish therapy services regardless of clinical value. At the same time, the payments for nontherapy ancillary services are unrelated to these services' costs, making payments even more poorly targeted than they had been.

Given the continued need to revise the SNF PPS and rebase Medicare's level of payments, the Commission recommends that the Congress freeze Medicare's SNF payments for 2017 and 2018 and direct the Secretary to revise the payment system, and that in 2019, the Secretary report to the Congress on whether any additional adjustments are needed to align payment with costs.

As required by PPACA, we report on Medicaid use, spending, and total and non-Medicare margins. Medicaid finances mostly long-term care services provided in nursing homes, but also covers copayments for low-income Medicare beneficiaries (known as dual-eligible

beneficiaries) who stay more than 20 days in a SNF. The number of Medicaid-certified facilities remained essentially unchanged between 2014 and 2015. In 2014, the average total margin, reflecting all payers and all lines of business, was 1.9 percent, the same total margin as in 2013. The average non-Medicare margin (reflecting all payers and all lines of business except Medicare SNF services) was –1.5 percent, a slight improvement from 2013.

Home health care services

Home health agencies provide services to beneficiaries who are homebound and need skilled nursing or therapy. In 2014, about 3.4 million Medicare beneficiaries received care, and the program spent about \$17.7 billion on home health care services. Over 12,400 agencies participated in Medicare in 2014.

The indicators of payment adequacy for home health care, discussed in Chapter 8, are generally positive.

- Access to home health care is generally adequate: Over 99 percent of beneficiaries live in a ZIP code where a Medicare home health agency operates, and 82 percent live in a ZIP code with five or more agencies.
- In 2014, the number of agencies decreased by 1.2 percent after over a decade of continuous growth. From 2004 to 2014, the number of agencies increased by 65 percent. The decline in 2014 was concentrated in areas that experienced sharp increases in supply in prior years.
- In 2014, the volume of services declined slightly. The total number of users decreased by 1.3 percent and the average number of episodes per home health user decreased by 0.8 percent. This trend is not surprising because Medicare inpatient admissions, an important source of referrals, have declined. These decreases for home health care follow several years of rapid increases; between 2002 and 2014, the total number of episodes increased by 60 percent and the episodes per home health user increased from 1.6 to 1.9.
- In 2014, performance on quality measures did not change significantly. The share of beneficiaries reporting improvement in walking and transferring increased slightly; the share of beneficiaries hospitalized during their home health episode was 27.8 percent, similar to the rate in prior years.

- Access to capital is a less important indicator of Medicare payment adequacy for home health care because this sector is less capital intensive than other health care sectors. The major publicly traded for-profit home health companies had sufficient access to capital markets for their credit needs. The acquisition of two large home health companies by other health care companies indicates this sector is attractive to investors.
- In 2014, Medicare spending declined by 1.6 percent to \$17.7 billion. For more than a decade, however, payments have consistently and substantially exceeded costs in the home health prospective payment system. In 2014, Medicare margins for freestanding agencies averaged 10.8 percent. The marginal profit for home health agencies equaled 13.3 percent, indicating that agencies have an incentive to serve additional patients. The Commission projects a margin of 8.8 percent for 2016.

The high margins of home health agencies have led the Commission to recommend eliminating the payment update for 2017 and implementing a two-year rebasing beginning in 2018. These two actions should help to better align payments with actual costs, ensuring better value for beneficiaries and the taxpayer.

We also recommend that, concurrent with the beginning of rebasing in 2018, Medicare eliminate the use of therapy as a payment factor in the home health PPS. This feature of the PPS may create financial incentives that distract agencies from focusing on patient characteristics when setting plans of care. Eliminating this factor would base home health payment solely on patient characteristics, a more patient-focused approach to payment.

Inpatient rehabilitation facility services

Inpatient rehabilitation facilities (IRFs) provide intensive rehabilitation services to patients after an illness, injury, or surgery. Rehabilitation programs at IRFs are supervised by rehabilitation physicians and include services such as physical and occupational therapy, rehabilitation nursing, and speech–language pathology, as well as prosthetic and orthotic devices. In 2014, Medicare spent \$7.0 billion on FFS IRF care provided in about 1,180 IRFs nationwide. About 339,000 beneficiaries had almost 376,000 IRF stays. On average, Medicare accounts for about 60 percent of IRFs’ discharges.

As discussed in Chapter 9, our indicators of Medicare payment adequacy for IRFs are generally positive.

- Between 2013 and 2014, the number of IRFs nationwide grew 1.4 percent, reaching almost 1,180 providers. After declining for several years, the number of hospital-based IRFs and nonprofit IRFs grew slightly during this period, though the rate of growth was outpaced by that of freestanding and for-profit IRFs. The average IRF occupancy rate was 64 percent in 2014. This rate has remained relatively unchanged for several years and suggests that capacity is more than adequate to handle current demand for IRF services.
- Between 2013 and 2014, the number of Medicare FFS cases treated in IRFs grew by less than 1 percent.
- The Commission tracks three broad categories of IRF quality indicators: risk-adjusted change in functional and cognitive status during the IRF stay, discharge to the community and discharge to SNFs, and rates of readmission. Between 2013 and 2014, there were improvements in two measures of functional change and in the rate of discharge to the community. The rates of readmission remained unchanged.
- The parent institutions of hospital-based IRFs continue to have good access to capital. The major freestanding IRF chain, which accounted for 41 percent of all freestanding IRFs in 2014 and about a quarter of IRF discharges, also has very good access to capital. We were not able to determine the ability of other freestanding facilities to raise capital.
- The aggregate Medicare margin has risen steadily since 2009 and increased to 12.5 percent in 2014. Margins of freestanding IRFs continue to exceed those of hospital-based IRFs, largely driven by lower unit costs. The lower costs are due in part to greater economies of scale. But freestanding IRFs are also far more likely than hospital-based units to be for profit and therefore may be more focused on controlling costs. Further, there are notable differences in the mix of cases. To assess whether both types of providers have a financial incentive to expand the number of Medicare beneficiaries they serve, we examined IRFs’ marginal profit. We found that hospital-based IRFs’ marginal profit in 2014 was 19.0 percent, while freestanding IRFs’ marginal profit was 40.6 percent.
- We project that IRFs’ aggregate Medicare margin will be 13.9 percent in 2016.

On the basis of these indicators, the Commission maintains that IRFs can continue to provide Medicare beneficiaries with access to safe and effective care at current payment rates and recommends no update to the payment rates in fiscal year 2017.

Although differences in profitability across IRFs are driven in part by differences in underlying costs, the Commission also finds that the mix of case types is correlated with provider profitability. In addition, we find that high-margin IRFs have patients who are, on average, less severely ill in the preceding acute care hospital stay but who then appear to be more functionally disabled upon admission to the IRF. This discrepancy suggests the possibility that patient selection and assessment and coding practices may contribute to differences in costs—and profitability—across providers. To protect beneficiaries and taxpayers, the Secretary of HHS needs to analyze IRF coding to determine whether it accurately reflects the rehabilitation needs of patients. We recommend this analysis begin with focused medical record reviews of IRFs that have unusual patterns of case mix and coding. Conclusions from that analysis could help identify necessary reforms to the IRF payment system.

Research is also needed to assess variation in costs within the IRF case-mix groups and differences in relative profitability across case-mix groups. In the near term, we recommend that CMS better align IRF payments and costs by redistributing payments within the IRF PPS through an expanded high-cost outlier pool. To maintain budget neutrality, the expanded outlier pool should be funded by reducing the base payment amount for all IRF cases. We recognize that, by increasing payments for the most costly cases, Medicare may increase payments for providers who are less efficient as well as for providers who care for patients whose acuity is not well captured by the case-mix system. While this outcome is not desirable, the Commission's concern about the possible misalignment of Medicare's payments for resource-intensive cases warrants this approach in the near term until the payment system is further reformed. Ultimately, rebasing IRF payments may be necessary to prevent overpayments and protect the long-run sustainability of the Medicare program.

Long-term care hospital services

Long-term care hospitals (LTCHs) provide care to beneficiaries who need hospital-level care for relatively extended periods. To qualify as an LTCH for Medicare payment, a facility must meet Medicare's conditions of

participation for acute care hospitals, and its Medicare patients must have an average length of stay greater than 25 days. In 2014, Medicare spent \$5.4 billion on care provided in LTCHs. About 118,000 FFS beneficiaries had roughly 134,000 LTCH stays. On average, Medicare accounts for about two-thirds of LTCHs' discharges.

We have no direct measures of beneficiaries' access to needed LTCH services. Instead, in Chapter 10, we consider the capacity and supply of LTCH providers and changes over time in the volume of services they furnish. Trends suggest that access to care has been maintained.

- Growth in the number of LTCHs filing Medicare cost reports slowed considerably in recent years because of two moratoriums; the first was in effect through December 28, 2012. The second moratorium has been in effect since April 1, 2014, and extends through September 30, 2017. We estimate that the number of LTCHs and LTCH beds decreased by about 2.3 percent in 2014.
- From 2013 to 2014, the number of LTCH cases decreased by 2.8 percent. Controlling for the change in the number of FFS beneficiaries, the number of LTCH cases per beneficiary declined during this period by 2.6 percent. This decrease in per capita admissions is consistent with that seen in other inpatient settings.
- LTCHs began submitting quality of care data to CMS in 2012. LTCH quality data are not yet available for analysis; however, CMS will begin reporting quality data publicly for four measures beginning in the fall of 2016. Using claims data for 2014, we found stable or declining non-risk-adjusted rates of readmission, death in the LTCH, and death within 30 days of discharge for almost all of the top 25 LTCH diagnoses.
- For the past few years, the availability of capital to LTCHs has not reflected current Medicare payment rates but, rather, uncertainty regarding possible changes to Medicare's regulations and legislation governing LTCHs. The criteria to receive the higher LTCH payment rate specified in the Pathway for SGR Reform Act of 2013, beginning with cost reporting periods starting October 1, 2015, provide more long-term regulatory certainty for the industry compared with recent years. However, payment reductions implemented by CMS and a congressional moratorium on new LTCH beds and facilities through September 2017 continue to limit future opportunities for growth and reduce the industry's need for capital.

- LTCHs had an aggregate Medicare margin of 4.9 percent in 2014 compared with 6.8 percent in 2013. Financial performance in 2014 varied across LTCHs, reflecting differences in cost control and responses to payment incentives. The 2014 LTCH marginal profit, an indicator of whether LTCHs with excess capacity have an incentive to see more Medicare patients, was 20 percent.

Changes in admission patterns and cost structure will occur, resulting from the patient-specific criteria newly implemented in fiscal year 2016. There is a high degree of uncertainty regarding changes in admission patterns and cost per case associated with this new policy this year; therefore, we provide a projected margin range for qualifying cases that meet the specified criteria. We project that LTCHs' aggregate Medicare margin for these qualifying cases will be between 3.3 percent and 5.9 percent in 2016.

Considering these indicators, the Commission concludes LTCHs can continue to provide Medicare beneficiaries with access to safe and effective care and accommodate changes in their costs at current payment rates, and recommends no update to LTCH payment rates in fiscal year 2017. This update recommendation applies to the Medicare LTCH prospective payment system base payment rate, which means it applies to payments for discharges that meet the criteria specified in the Pathway for SGR Reform Act of 2013. Further, it applies to the portion of the blended payment that reflects the LTCH payment rate for discharges that do not meet the specified criteria.

Hospice services

The Medicare hospice benefit covers palliative and support services for beneficiaries who are terminally ill with a life expectancy of six months or less. Beneficiaries may choose to elect the Medicare hospice benefit; in so doing, they agree to forgo Medicare coverage for conventional treatment of their terminal condition. In 2014, more than 1.3 million Medicare beneficiaries (including 47.8 percent of decedents) received hospice services from over 4,000 providers, and Medicare hospice expenditures totaled about \$15.1 billion.

The indicators of payment adequacy for hospices, discussed in Chapter 11, are positive.

- In 2014, the proportion of beneficiaries using hospice services at the end of life continued to grow. Of the total Medicare beneficiary decedents in 2014,

47.8 percent used hospice, up from 47.3 percent in 2013. In 2014, hospice use increased across almost all demographic and beneficiary groups examined. Average length of stay among decedents was about 88 days in 2014, about the same level as the prior two years. The median length of stay for hospice decedents was 17 days in 2014 and has remained stable at approximately 17 or 18 days for more than a decade.

- The number of hospice providers increased by over 4 percent in 2014, due almost entirely to growth in the number of for-profit hospices—continuing a decade-long pattern.
- At this time, we do not have data to assess the quality of hospice care provided to Medicare beneficiaries. PPACA mandated that a hospice quality reporting program begin by fiscal year 2014, but public reporting of hospice quality information is unlikely before 2017.
- Hospices are not as capital intensive as some other provider types because they do not require extensive physical infrastructure. Continued growth in the number of for-profit providers (a 7 percent increase in 2014) suggests capital is readily available to them. Hospital-based and home health-based hospices have access to capital through their parent providers. Less is known about access to capital for nonprofit freestanding providers, for whom capital may be more limited.
- The aggregate 2013 Medicare margin was 8.6 percent, down from 10.0 percent in 2012. The rate of marginal profit—that is, the rate at which Medicare payments exceed providers' marginal cost—was about 12 percent in 2013. The projected aggregate Medicare margin for 2016 is 7.7 percent.

Because the payment adequacy indicators for which we have data are positive, the Commission maintains that hospices can continue to provide beneficiaries with appropriate access to care at current payment levels and recommends no update to the base payment rate in fiscal year 2017.

The Medicare Advantage program: Status report

Each year, the Commission provides a status report on the Medicare Advantage (MA) program. In Chapter 12, we find that in 2015, the MA program included 3,500 plan

options, enrolled more than 16.7 million beneficiaries (30 percent of all beneficiaries), and paid MA plans about \$170 billion to cover Part A and Part B services. To monitor program performance, we examine MA enrollment trends, plan availability for the coming year, and payments for MA plan enrollees relative to spending for FFS Medicare beneficiaries. We also provide updates on risk adjustment, risk coding practices, and current quality indicators in MA. As a result of the analyses, we make recommendations to adjust benchmarks and risk coding.

The MA program gives Medicare beneficiaries the option of receiving benefits from private plans rather than the traditional FFS Medicare program. The Commission strongly supports the inclusion of private plans in the Medicare program; beneficiaries should be able to choose between the traditional FFS Medicare program and alternative delivery systems that private plans can provide. Because Medicare pays private plans a per person predetermined rate rather than per service, plans have greater incentives than FFS providers to innovate and use care-management techniques.

The Commission has emphasized the importance of imposing fiscal pressure on all providers of care to improve efficiency and contain Medicare program costs. For MA, the Commission previously recommended that payments be brought down from previous levels, which were generally higher than FFS, and be set so that the payment system is neutral and does not favor either MA or the traditional FFS program. Legislation has reduced the inequity in Medicare spending between MA and FFS. As a result, over the past few years, plan bids and payments have come down in relation to FFS spending while enrollment in MA continues to grow. The pressure of competitive bidding and lower benchmarks has led to improved efficiencies that enable MA plans to continue to increase MA enrollment by offering benefits that beneficiaries find attractive.

- Between 2014 and 2015, enrollment in MA plans grew by about 6 percent (900,000 enrollees) to 16.7 million enrollees. About 30 percent of all Medicare beneficiaries were enrolled in MA plans in 2015, about the same rate as in 2014, but up from 28 percent in 2013. Among plan types, HMOs continued to enroll the most beneficiaries (11.0 million). Between 2014 and 2015, enrollment increased in local preferred provider organizations (PPOs) by about 9 percent and decreased in regional PPOs by about 1 percent.

- Access to MA plans remains high in 2016: Overall, 99 percent of all Medicare beneficiaries have access to an MA plan. Ninety-six percent of Medicare beneficiaries have an HMO or local PPO plan operating in their county of residence, up from 95 percent in 2015.
- In 2016, 70 percent of MA enrollees are projected to be in plans that will receive add-ons to their benchmarks through the quality bonus provisions of either 5 percent or 10 percent. On average, the quality bonuses in 2016 will add 4 percent to the base benchmarks. We estimate that 2016 MA benchmarks (including the average 4 percent for quality bonuses), bids, and payments will average 107 percent, 94 percent, and 102 percent of FFS spending, respectively.

Removing quality bonuses from the benchmarks, we expect the base benchmarks to average 102 percent of FFS in 2017 and thus approach rough equity with FFS in aggregate. However, there are several distributional issues that remain to be addressed to achieve equity among MA plans. First, CMS's calculation of FFS spending, which is the basis for MA benchmarks, needs refinement to be more representative of FFS spending for the beneficiaries who can enroll in MA plans (i.e., those who have both Part A and Part B). Second, benchmark caps can unduly penalize plans that exceed the cap—often through reduced quality bonuses. Third, double quality bonuses in certain counties inequitably give plans in those counties bonuses twice that of plans with identical quality that are in non-double-bonus counties. Therefore, the Commission recommends eliminating the benchmark caps and double quality bonuses to improve intercounty benchmark equity.

Medicare payments to plans for an enrollee are based on the plan's payment rate and the enrollee's health risk score. Analyses have shown that MA plan enrollees have higher risk scores than similar FFS beneficiaries because of plans' more intensive coding efforts. CMS makes an across-the-board adjustment to the scores to make them more consistent with FFS coding. We find that CMS would need to raise the coding adjustment (i.e., lower enrollees' risk scores) and/or change the way diagnoses are collected for use in the risk adjustment process to ensure the coding levels in aggregate are roughly equal between the FFS and MA programs. Specifically, we recommend an alternative approach to adjusting for coding differences that would (1) remove health risk assessments as a source of diagnoses from risk adjustment calculations, (2) use two years of FFS and MA diagnostic data in the

risk adjustment model, and (3) apply an across-the-board adjustment of appropriate size such that the combined effect eliminates the impact of differences in MA and FFS coding intensity.

The Commission recommended a quality bonus program for MA, and the Congress legislated such a program in PPACA. A comparison of the most current results for MA quality indicators shows that performance improved in several measures, declined for one measure among HMOs, and slightly declined in patient experience measures. In general, quality indicators remained stable, but a number of measures had specification changes that did not allow us to determine year-over-year changes in the measure results.

MA plans are able to receive bonus payments if they achieve an overall rating of 4 stars or higher on CMS's 5-star quality rating system. Across all plans, the share of enrollees in bonus-level plans increased from 59 percent to 70 percent. However, this increase is due in part to contract consolidations whereby an organization combines multiple plans under one surviving plan. For 2016, 16 contracts under 4 stars had their enrollees incorporated into 4-star or 4.5-star contracts.

The Commission and CMS have examined the question of whether the star rating system should take into account population differences when analyses indicate that there are systematic differences in measure results—specifically for low-income beneficiaries and beneficiaries with disabilities. Both the Commission and CMS have found systematic differences among these populations in certain measures, but the effects across plans are relatively small. CMS is considering making adjustments to the star rating system to address the potential bias in star ratings.

Status report on Part D

Each year, the Commission provides a status report on the Medicare prescription drug benefit established under Part D that describes beneficiaries' access to prescription drugs, enrollment levels, plan benefit designs, and the quality of Part D services. The report, in Chapter 13, also analyzes changes in plan bids, premiums, and program costs.

In 2014, Medicare spent \$78 billion for the Part D benefit, accounting for nearly 13 percent of total Medicare outlays. Part D experienced significant growth in 2014 and 2015 program spending, much of which was attributable to new treatments for hepatitis C. In 2015, about 39 million Medicare beneficiaries were enrolled in Part D, either in

stand-alone prescription drug plans (PDPs) or in Medicare Advantage–Prescription Drug plans (MA–PDs).

In 2015, 70 percent of Medicare beneficiaries were enrolled in Part D plans. An additional 4 percent received drug coverage through employer-sponsored plans that receive Medicare's retiree drug subsidy. As of 2013, 12 percent of beneficiaries had no drug coverage or coverage less generous than Part D. Our previous analysis showed that beneficiaries with no creditable coverage tended to be healthier, on average. Among those 39 million individuals enrolled in Part D, 61 percent were in PDPs, and 39 percent were in MA–PDs. Nearly 12 million individuals received the low-income subsidy (LIS), which provides extra help with premiums and cost sharing in Part D.

In 2016, plan sponsors are offering 886 PDPs and 1,682 MA–PDs, an 11 percent decrease from 2015 in the number of PDPs offered and a 5 percent increase in MA–PDs. PDP reductions appear to reflect sponsors consolidating their plan offerings into a smaller number of more widely differentiated products. Even with these consolidations, beneficiaries have between 19 and 29 PDPs to choose from, depending on where they live, as well as typically 9 or more Medicare Advantage options. MA–PDs continue to be more likely than PDPs to offer enhanced benefits, but a smaller share is offering gap coverage (beyond what is required by PPACA) compared with previous years. For 2016, 218 premium-free PDPs are available to enrollees who receive the LIS, a 23 percent decline from 2015. Most regions of the country continue to have at least 3 and as many as 10 PDPs available at no premium to LIS enrollees.

Between 2007 and 2014, Part D spending on an incurred basis increased from \$46 billion to \$73 billion—an average annual growth rate of about 6.8 percent. (The incurred amount of \$73 billion for 2014 differs from the \$78 billion described earlier because the larger amount includes reconciliation payments between Medicare and plan sponsors for benefits delivered in previous years.) In 2014, Part D program payments increased by nearly 15 percent from the year before, much of that increase due to spending for new hepatitis C drugs. Also in 2014, Medicare's reinsurance payments to plans surpassed LIS payments to become the single largest component of Part D spending. Reinsurance also remained the fastest growing component, at an average annual rate of 19 percent between 2007 and 2014. Program spending for Part D reflects two underlying trends. First, an unusually large number of patent expirations on widely used

brand-name drugs has led to a dramatic shift toward use of generics in Part D. Between 2007 and 2013, generic drugs' share of all Part D prescriptions filled rose from 61 percent to 84 percent. However, between 2012 and 2013, the share of enrollees who incurred spending high enough to reach the catastrophic phase of Part D's benefit grew by nearly 10 percent. Spending for these high-cost individuals grew by 8.4 percent per enrollee, driven primarily by increases in the average price per prescription filled. The pharmaceutical pipeline is shifting toward greater numbers of biologic products and specialty drugs, many of which have few therapeutic substitutes and high prices. The use of high-priced drugs by Part D enrollees will likely grow and put significant upward pressure on Medicare spending for individual reinsurance and the LIS.

In general, Medicare beneficiaries have good access to prescription drugs under Part D, with plans available to all individuals. The amounts enrollees pay in cost sharing can also affect access. Generally, between 2007 and 2013, average out-of-pocket costs remained stable or even decreased somewhat, in part because of the phased closure of Part D's coverage gap. For individuals whose

prescription medications either are not covered by their plans or are covered but have relatively high cost sharing, a well-functioning exceptions and appeals process is crucial. Plan-level data show low rates of claim rejections and appeals. At the same time, CMS has conducted audits that have found some compliance issues with formulary administration, claims adjudication, and appeals.

In 2016, the average star rating (an indicator of quality) among Part D plans decreased somewhat for PDPs but increased slightly for MA-PDs. PDP scores changed significantly because of changes to the mix of measures, making it difficult to use star ratings to evaluate changes in quality of services over time. Part D plans are required to implement medication therapy management (MTM) programs to improve quality. Although the Commission supports the goal of improving medication management, we have been concerned with the effectiveness of plans' MTM programs. Beginning in 2017, Medicare will test enhanced MTM programs by providing incentives for stand-alone PDPs to conduct medication reviews and tailor drug benefit designs to encourage adherence to appropriate drug therapies. ■

CHAPTER

1

Context for Medicare payment policy

Context for Medicare payment policy

Chapter summary

Part of the Commission’s mandate is to consider the effect of its recommendations on the federal budget and view Medicare in the context of the broader health care system. To help meet its mandate, this chapter examines health care spending growth—for the nation at large and Medicare in particular—and considers its effect on federal and state budgets and on the budgets of individuals and families. The chapter also profiles the next generation of Medicare beneficiaries and reviews evidence of inefficient health care spending, structural features of the Medicare program that contribute to inefficient spending, and the Commission’s approach to combating those challenges.

Health care spending growth may be beginning to accelerate after several years of historic lows. National health care spending and Medicare spending grew robustly from 1974 to 2009. Then from 2009 to 2013, growth in national health care spending and Medicare spending slowed to average annual rates of 3.6 percent and 4.1 percent, respectively.

The causes of the system-wide slowdown and whether it will be sustained or is transient are still a matter of speculation. A variety of factors could have contributed—weak economic conditions, payment and delivery system reforms, lower Medicare payment rates for most types of providers as

In this chapter

- National health care spending
- Medicare spending
- Medicare’s financing challenge
- Health care spending also consumes growing shares of state budgets and the budgets of individuals and families
- Assessing the impact of Medicare spending on quality
- Baby boomers will make up the next generation of Medicare beneficiaries
- Evidence of inefficient spending suggests Medicare could spend less without compromising care, but improving efficiency is challenging
- Conclusion

mandated by the Patient Protection and Affordable Care Act of 2010 (PPACA), and the increased use of generic drugs as top-selling brand-name drugs lost patent protection.

However, experience in 2014 could indicate that the slowdown is coming to an end. Government actuaries estimate that spending grew faster that year: National health care spending grew 5.3 percent, and Medicare spending grew 5.5 percent. The increase in national health care spending growth was due largely to coverage expansions for health insurance that commenced that year under PPACA, as well as to a substantial increase in prescription drug spending, especially on new treatments for hepatitis C. Growth in outpatient medical services also contributed to the increase in Medicare spending.

The aging of the baby-boom generation will have a profound impact both on the Medicare program and the taxpayers who support it. Over the next 15 years, as Medicare enrollment surges, the number of taxpaying workers per beneficiary is projected to decline. By 2030 (the year baby boomers will have all aged into Medicare), the Medicare Trustees project there will be just 2.4 workers for each Medicare beneficiary, down from 4.6 around the time of the program's inception. Those demographics create a financing challenge not only for the Medicare program but also for the entire federal budget. By 2040, under federal tax and spending policies specified in current law, Medicare spending combined with spending on other major health care programs, Social Security, and net interest on the national debt would exceed total federal revenues and would crowd out spending on all other national priorities.

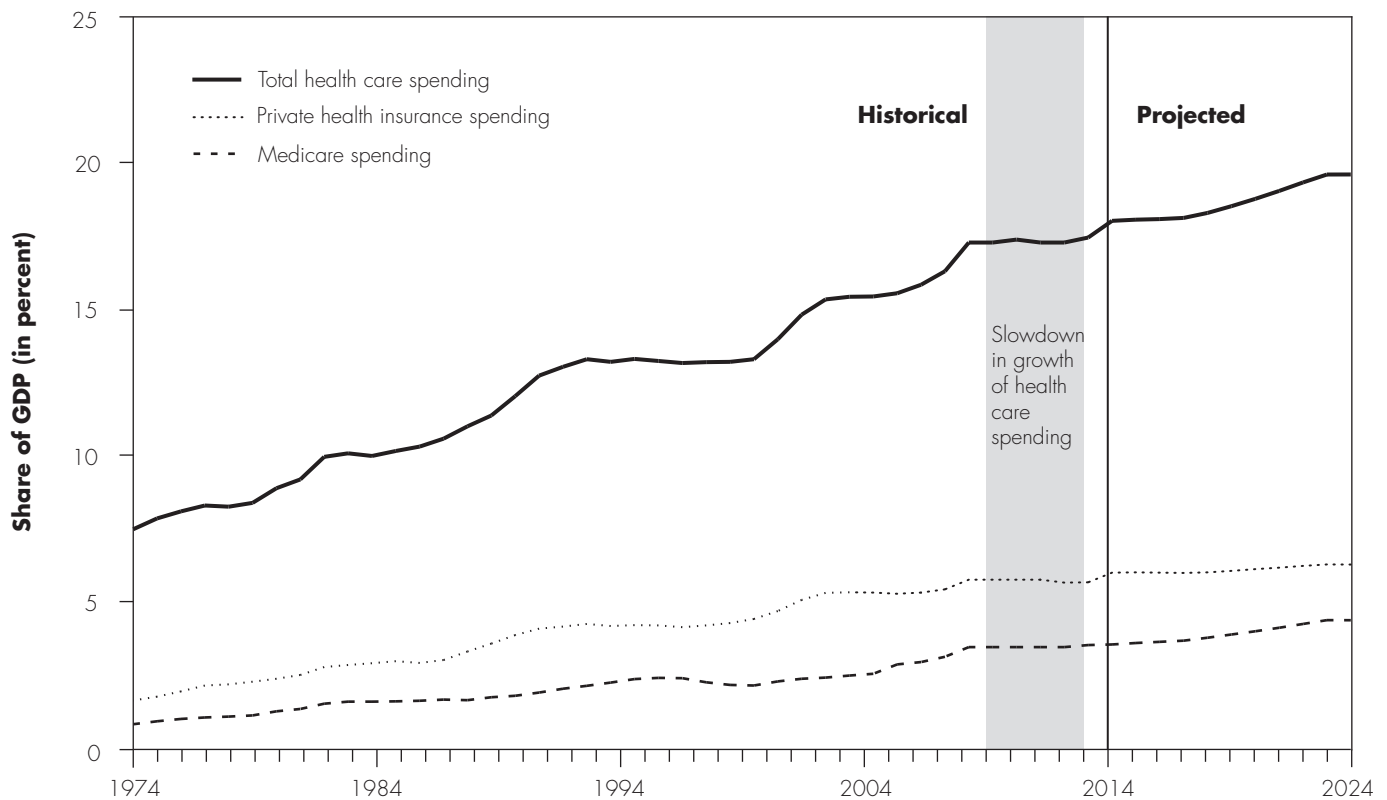
The growth in health care spending also affects state budgets and the budgets of individuals and families. States pay for a significant portion of Medicaid spending (spending funded jointly by states and the federal government for health care services provided to state residents with low incomes). Under PPACA, the Medicaid population is expanding; however, the federal government will pay for most of the costs associated with the expansion. Increases in private insurance premiums have outpaced the growth of individual and family incomes over the past decade, and out-of-pocket costs for Medicare beneficiaries have also increased.

Some health care spending is inefficient. For Medicare, if such spending can be identified and eliminated, it could result in each Medicare dollar being spent more efficiently, improving beneficiary health, supporting the program's fiscal sustainability, and reducing federal budget pressures. Certain structural features of the Medicare program pose challenges for targeting inefficient spending, but the

Commission has a framework to address those challenges that focuses on (1) payment accuracy and efficiency, (2) care coordination and quality, (3) information for patients and providers, (4) engaged beneficiaries, and (5) an aligned health care workforce. ■

**FIGURE
1-1**

**Recent historically low growth rates of health care spending
are projected to gradually and modestly increase**



Note: GDP (gross domestic product). First projected year is 2015. Federal subsidies—beginning in 2014—for the Patient Protection and Affordable Care Act of 2010 health insurance exchanges both for premiums and cost sharing are reflected as private health insurance spending.

Source: MedPAC analysis of National Health Expenditures Accounts from CMS, historical data released December 2015, projected data released July 2014.

Introduction

The Medicare program lies at the junction between the national health care system as a whole and the federal government. For this reason, it is important to review the following context in which Medicare operates to understand the payment policies discussed in the rest of this report:

- national health care spending and Medicare spending,
- impact of health care spending on federal and state budgets,
- effects of health care spending on individuals and families,
- impact of Medicare spending on the quality of health care,

- the next generation of Medicare beneficiaries, and
- evidence of inefficient health care spending.

This chapter also reviews the challenges that Medicare in particular faces and the Commission's principles for constructing recommendations to address those challenges.

National health care spending

For decades, health care spending has risen as a share of gross domestic product (GDP), but in the recent past its growth rate slowed. That general trend is true both for private health care spending and Medicare (Figure 1-1). From 1974 to 2009, health care spending as a share of GDP more than doubled, from 7.5 percent to 17.3 percent.

Private health insurance spending as a share of GDP more than tripled over that period, from 1.7 percent to 5.8 percent. Medicare spending as a share of GDP rose by a factor of four over that period, from 0.9 percent to 3.5 percent. In contrast, from 2009 through 2013, health care spending as a share of GDP remained relatively constant (Centers for Medicare & Medicaid Services 2014c).

The recent slowdown in the rate of health care spending growth has not been fully explained. Contributing factors could include weak economic conditions, payment and delivery system reforms, lower Medicare payment rates for most types of providers as mandated by the Patient Protection and Affordable Care Act of 2010 (PPACA), and the increased use of generic drugs as top-selling brand-name drugs lost patent protection.

However, government actuaries estimate that spending accelerated in 2014, both nationally and for Medicare. After averaging 3.6 percent growth annually from 2009 to 2013, national health care spending is estimated to have grown 5.3 percent and reached 17.5 percent of GDP in 2014. That growth is due largely to the increase in the insured population in that year because the PPACA health insurance exchanges and the Medicaid expansions commenced. It is also due to a substantial increase in prescription drug spending, especially on new treatments for hepatitis C.

After averaging 4.1 percent growth annually from 2009 to 2013, Medicare spending is estimated to have grown 5.5 percent in 2014. Like the increase in national health care spending, part of the increase in Medicare spending was due to an increase in prescription drug spending, especially for new treatments for hepatitis C. It was also due to an increase in per capita spending on health care services provided on an outpatient basis (for example, services received in hospital outpatient departments and physician services) and an increase in enrollment as members of the baby-boom generation aged into Medicare.

Over the next decade, government actuaries project growth rates for health care spending to gradually and modestly increase because of health insurance expansions under PPACA, faster economic growth, and population aging (Keehan et al. 2015). The growth rates are projected to be higher than the lows of the recent past, but lower than the historic highs. For 2024, actuaries project total health care spending as a share of GDP to increase to 19.6 percent. In that year, private health insurance spending and Medicare spending are projected to reach 6.3 percent and 4.4 percent of GDP, respectively.

To better understand who is paying for health care, we examine personal health care spending—all medical goods and services provided for an individual's treatment. In 2014, personal health care spending—which excludes spending on government public health activities (e.g., epidemiological surveillance and disease prevention programs), administration of private and public health insurance, and investments in medical research, equipment, and structures—accounted for 85 percent of total health care spending.

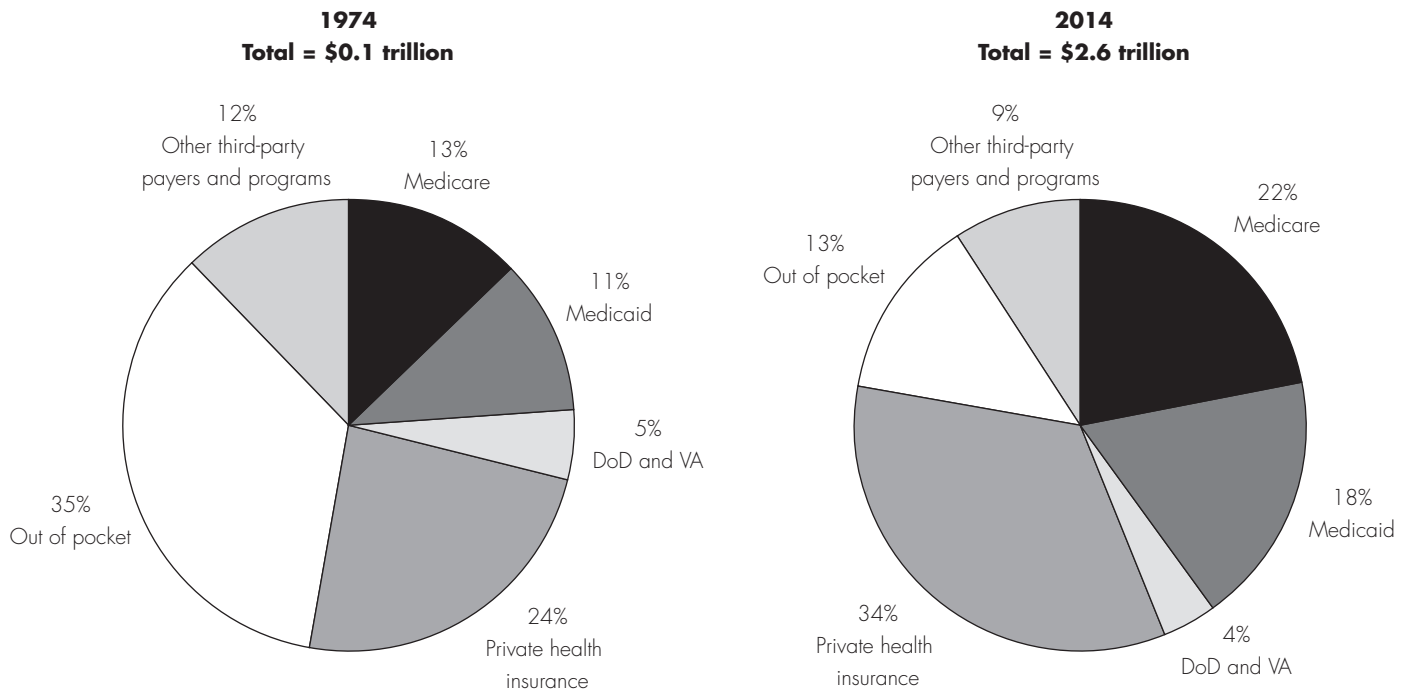
Over the past four decades, total personal health care spending increased from \$0.1 trillion to \$2.6 trillion. On a per person basis, spending increased from \$453 to \$8,062, a 7 percent increase per year, on average. During this period, out-of-pocket spending (e.g., cost sharing, deductibles, and health care services not covered by insurance) as a share of total personal health care spending declined from 35 percent to 13 percent, while the shares accounted for by private health insurance, Medicare, and Medicaid all increased (Figure 1-2). At the same time, Medicare has remained the largest single purchaser of health care in the United States (Centers for Medicare & Medicaid Services 2015b).¹

Despite the decline in the share of health care spending paid directly out of pocket by individuals and the increase in the share of health care spending paid by private and public insurance, people have not experienced similar declines in the share of health care costs they pay. One reason is that in the commonly defined health care spending categories, the premiums people pay are not included in the out-of-pocket category, but rather in the private health insurance and Medicare categories. Second, people receive lower salaries and reduced benefits in exchange for employer-sponsored health insurance. When an employer contributes to premiums, most economists agree that salary and other benefits are reduced to offset the employer contribution.

In 2014, Medicare covered 54 million people, and government actuaries estimate that Medicaid covered about 65 million people (Boards of Trustees 2015, Centers for Medicare & Medicaid Services 2014a). Private health insurance covered 171 million people under the age of 65, and 36 million people were uninsured (National Center for Health Statistics 2015b). Enrollment in Medicare, Medicaid, and private health insurance is continuing to increase due to the aging of the baby-boom generation and the enactment of PPACA.

**FIGURE
1-2**

Out-of-pocket spending's share of personal health care spending declined while private, Medicare, and Medicaid spending's share increased, 1974 and 2014



Note: DoD (Department of Defense), VA (Department of Veterans Affairs). Private health insurance accounted for a greater share of spending than Medicare (34 percent vs. 22 percent in 2014). However, in contrast to Medicare, private health insurance is not a single purchaser of health care; rather, it includes many payers, including traditional managed care, self-insured health plans, and indemnity plans. "Out-of-pocket" spending includes cost sharing for both privately and publicly insured individuals. Premiums are included in the shares of each program (e.g., Medicare and private insurance) rather than in the out-of-pocket share category. Medicaid includes the Children's Health Insurance Program. "Other third-party payers and programs" includes work-site health care, other private revenues, Indian Health Service, workers' compensation, general assistance, maternal and child health, vocational rehabilitation, other federal programs such as the Substance Abuse and Mental Health Services Administration, other state and local programs, and school health.

Source: MedPAC analysis of National Health Expenditure Accounts from CMS, data released in December 2015.

Some people have coverage from more than one source. In 2014, about 11 million people were enrolled in both Medicare and Medicaid (Boards of Trustees 2015). Medicaid pays for either a portion or all of the Medicare premium and out-of-pocket health care expenses for those enrollees who qualify for dual enrollment based on limited income and resources. Enrollees in public health insurance programs may also have private health insurance. For example, Medicare beneficiaries may also have supplemental insurance sold by private companies to pay some of the health care costs that Medicare does not cover, such as copayments, coinsurance, and deductibles.

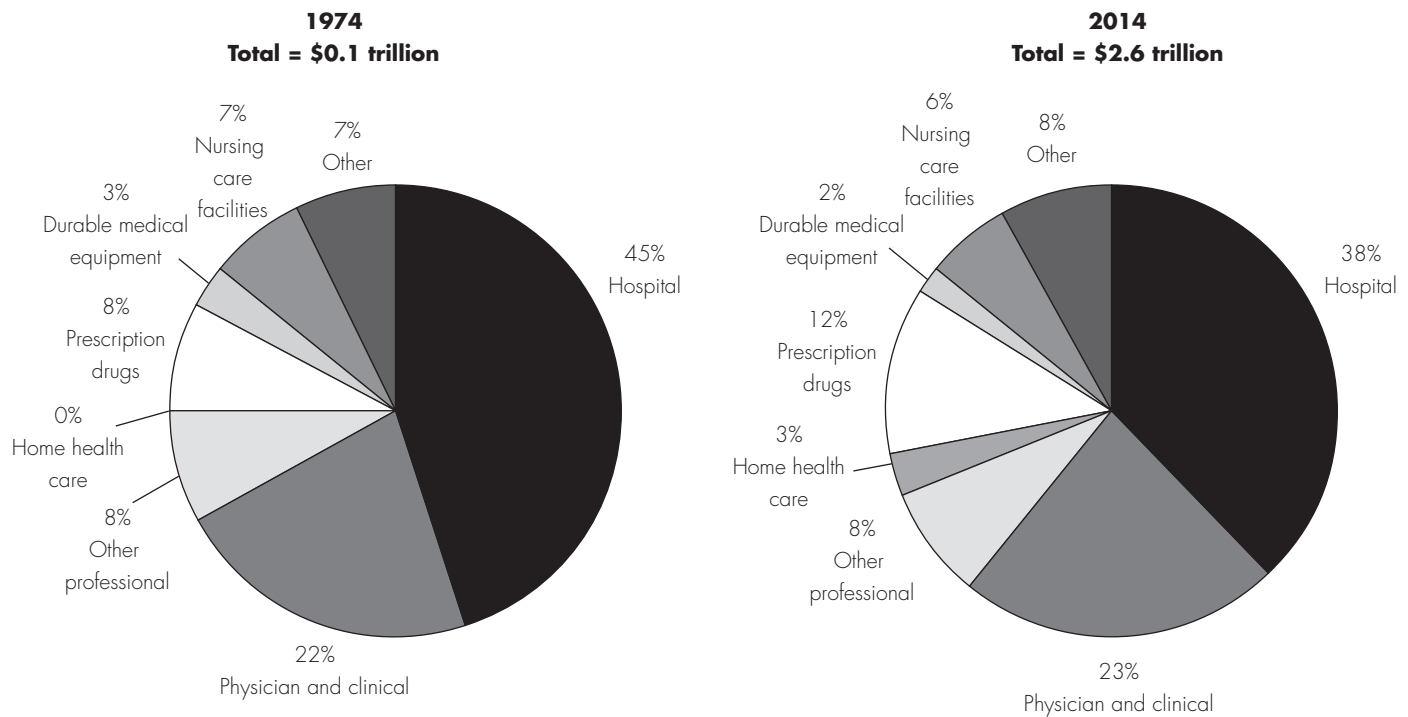
In 2014 as well as 1974, the largest shares of personal health care spending were for hospital care and physician and clinical services (Figure 1-3, p. 10). In 2014, hospital

care accounted for 38 percent of spending, or \$972 billion, and physician and clinical services accounted for 23 percent of spending, or \$604 billion. Smaller shares went to spending on prescription drugs (12 percent, or \$298 billion), nursing care facilities (6 percent, or \$156 billion), and home health care services (3 percent, or \$83 billion). Between 1974 and 2014, the share of spending on hospital care declined and the share of spending for prescription drugs increased (Centers for Medicare & Medicaid Services 2015b).

In 2014, Medicare accounted for 22 percent of spending for all services (Figure 1-2), but its share varied by type of service, with a slightly higher share of spending on hospital care (26 percent) and a much higher share of spending on home health services (42 percent)

**FIGURE
1-3**

Hospital care and physician services accounted for the largest shares of personal health care spending in 1974 and 2014



Note: "Other" includes expenditures on nondurable medical products and other health, residential, and personal care. "Other professional" includes expenditures on dental and other professional services. "Nursing care facilities" includes nursing care facilities and continuing care retirement communities.

Source: MedPAC analysis of National Health Expenditure Accounts from CMS, data released in December 2015.

(Figure 1-4). Medicare's share of spending on nursing care facilities was smaller than Medicaid's share because Medicare's benefit pays for skilled nursing or rehabilitation services only, whereas Medicaid pays for custodial care (assistance with activities of daily living) provided in nursing homes for people with limited income and assets.

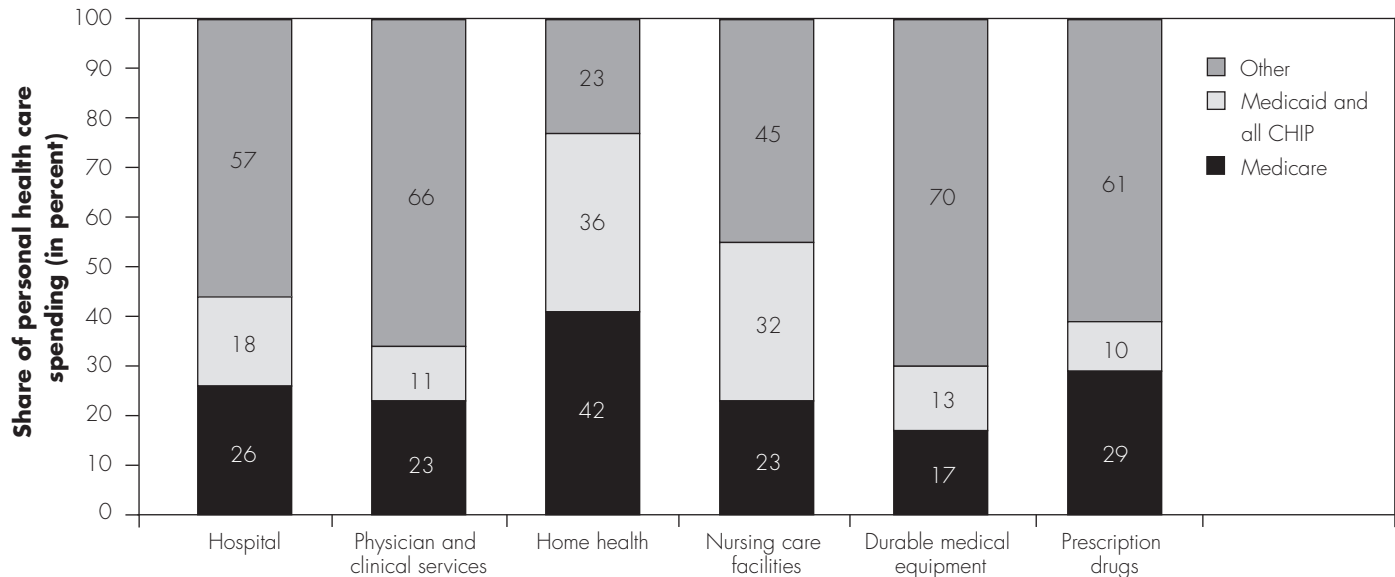
Medicare spending

Medicare spending can be divided into three program components: the traditional fee-for-service (FFS) program, the Medicare Advantage (MA) program, and the Part D prescription drug program.

- **Medicare's traditional fee-for-service program.** In FFS, Medicare pays health care providers directly for health care goods and services furnished to Medicare

FFS beneficiaries at prices set through legislation and regulation.

- **Medicare Advantage program.** As an alternative to FFS, beneficiaries can choose to enroll in MA, which consists of private health plans that receive capitated payments (or per enrollee payments) for providing health care coverage for enrollees. MA plans pay health care providers for health care goods and services furnished to their enrollees at prices negotiated between the plans and providers.
- **Medicare Part D prescription drug program.** Through Part D, beneficiaries can obtain subsidized prescription drug coverage by voluntarily purchasing insurance policies from private stand-alone drug plans or MA plans. Medicare heavily subsidizes the premiums established by those plans.

**FIGURE
1-4****Medicare's share of spending on personal health care varies by type of service, 2014**

Note: CHIP (Children's Health Insurance Program). "Personal health care" is a subset of national health expenditures. It includes spending for all medical goods and services that are provided for the treatment of an individual and excludes other spending, such as government administration, the net cost of health insurance, public health, and investment. "Nursing care facilities" includes nursing care facilities and continuing care retirement communities. "Other" includes private health insurance, out-of-pocket spending, and other private and public spending.

Source: CMS Office of the Actuary, National Health Expenditure Accounts, "Table 19: National Health Expenditures by Type of Expenditure and Program: Calendar Year 2014," released December 2015.

Recent growth in per beneficiary Medicare spending has been slow, but 2014 showed signs of acceleration; Figure 1-5 (p. 12) presents average annual growth rates for the last decade (from 2005 to 2014) in three-year periods. Growth was particularly low from 2011 to 2014 (the last period) for FFS and MA. The lower growth rates were generally because of decreased use of health care services and restrained payment rate increases.

In FFS, per beneficiary spending remained stable from 2011 to 2014. PPACA lowered payment rate updates in FFS for many types of providers (other than physicians) beginning in 2012. However, in 2014, FFS growth increased because of an increase in per beneficiary spending on a wide range of outpatient services, including services received in hospital outpatient departments and physician services.

MA spending also had little growth from 2011 to 2014. Historically, Medicare has spent more when a beneficiary is enrolled in MA than if that same beneficiary were enrolled in FFS. To bring payments more in line with FFS, PPACA began lowering payments to plans in

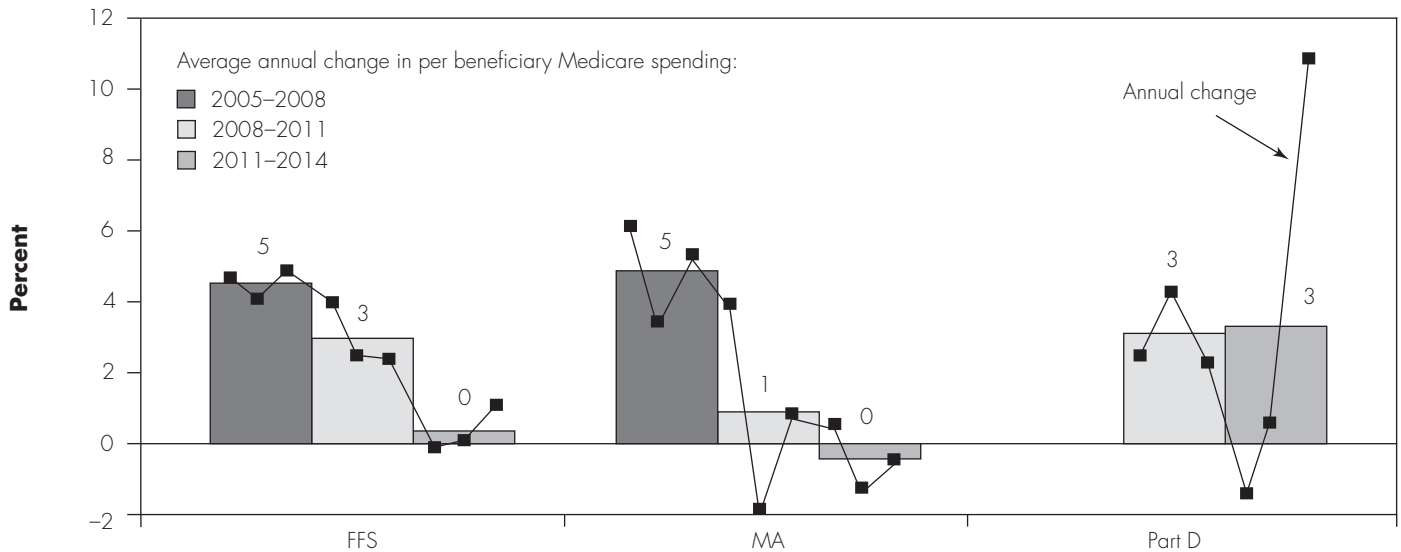
2011. The growth rate would have been lower, but the PPACA payment reductions were offset somewhat by new quality bonus payments and plans' increased coding of beneficiaries' medical conditions (payments to MA plans are higher when beneficiaries have more medical conditions, all other things being equal).

In Part D, growth averaged 3 percent annually from 2011 to 2014. The three-year annual average masks the spike in spending that occurred in 2014. From 2011 to 2013, per beneficiary spending was relatively constant at about \$1,600 per year. The low growth for those years was in part due to the increase in low-priced generic drugs on the market and plans' efforts to steer beneficiaries to generics and other low-priced drugs.

However, in 2014, per beneficiary spending spiked to \$1,811, growing 11 percent in one year.² That jump was mainly because of increased spending on high-priced specialty drugs to treat hepatitis C. The Medicare Trustees project the annual growth in per beneficiary Part D spending to remain high from 2016 to 2024 (ranging from 5 percent to 7 percent) because of a slowing of the trend

**FIGURE
1-5**

Recent growth in per beneficiary Medicare spending has been slow, but 2014 shows signs of acceleration

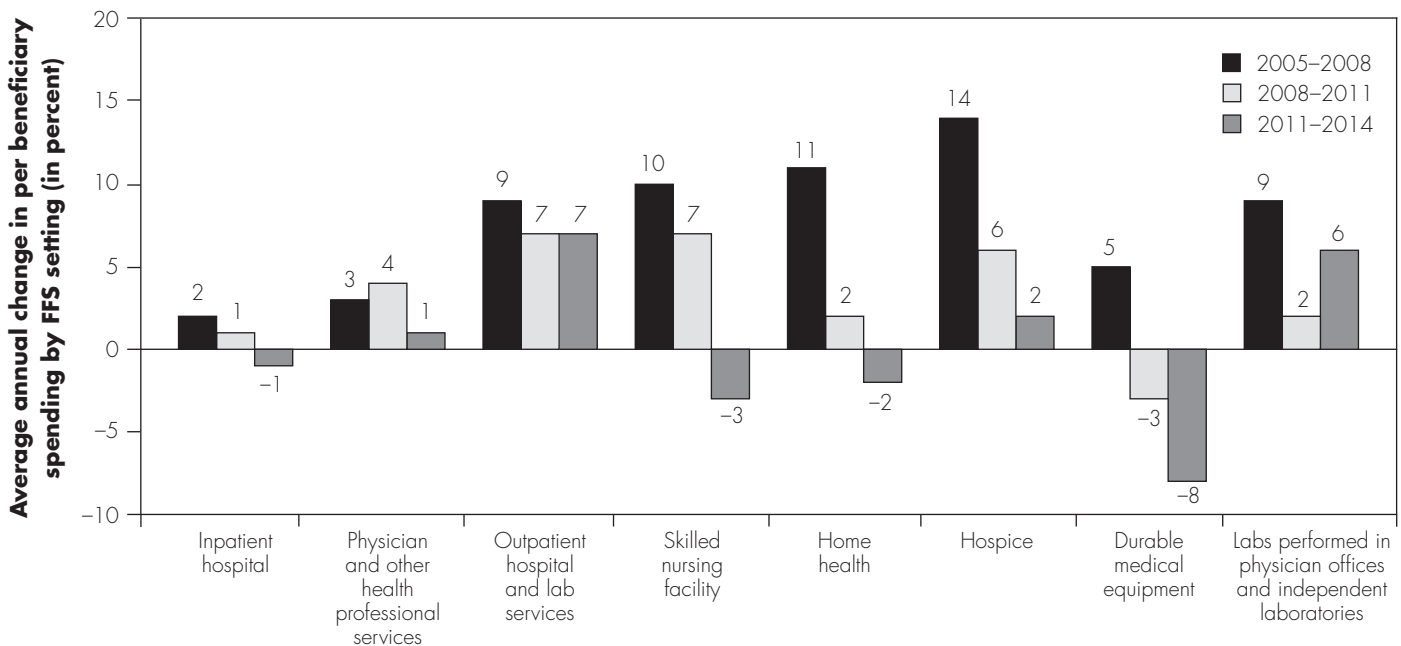


Note: FFS (fee-for-service), MA (Medicare Advantage). Part D average annual change from 2005 to 2008 is not shown because the program began in 2006.

Source: 2015 annual report of the Boards of Trustees of the Medicare trust funds.

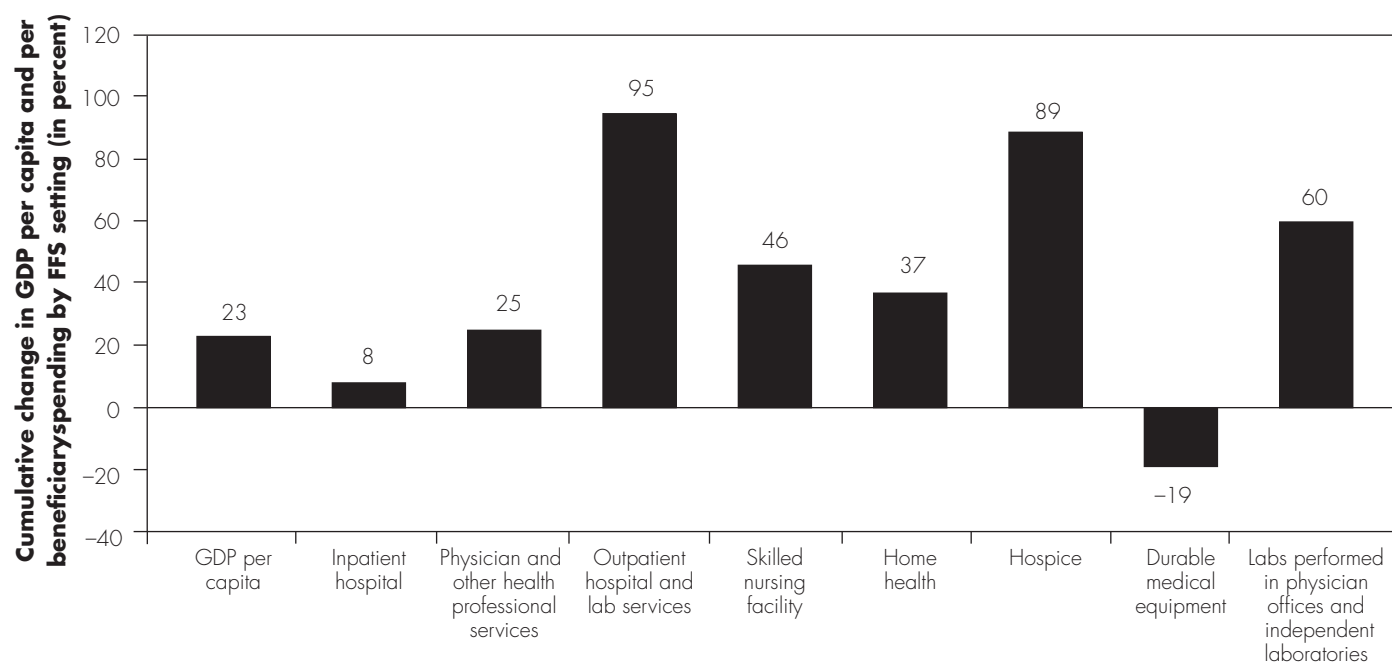
**FIGURE
1-6**

Per beneficiary spending growth in some FFS settings remained strong



Note: FFS (fee-for-service). Outpatient hospital services and outpatient lab services are combined in the figure because a large portion of outpatient laboratory services were bundled into the outpatient prospective payment system effective January 1, 2014.

Source: 2015 annual report of the Boards of Trustees of the Medicare trust funds.

**FIGURE
1-7****Per beneficiary spending grew over the decade in almost all FFS settings, 2005–2014**

Note: FFS (fee-for-service), GDP (gross domestic product). Outpatient hospital services and outpatient lab services are combined in the figure because a large portion of outpatient laboratory services were bundled into the outpatient prospective payment system effective January 1, 2014.

Source: 2015 annual report of the Boards of Trustees of the Medicare trust funds.

toward greater generic drug use and a continuing increase in the use and price of specialty drugs (Boards of Trustees 2015).

Figure 1-6 provides a more detailed look at FFS spending. Generally, all settings experienced a slowdown in per beneficiary spending growth; however, the impact was not uniform. For example, for inpatient hospital care, the average annual growth in per beneficiary spending fell from 2 percent in the first period to –1 percent in the last period. The per beneficiary spending growth in outpatient hospital and lab services declined but was still robust in the last period at 7 percent annually, in part because of shifts in site of care from both the inpatient hospital setting and physician offices to the outpatient hospital setting.³

Despite the recent slowing of annual growth rates, cumulative growth in per beneficiary FFS spending over the last decade has increased in almost all settings and increased substantially in some settings (Figure 1-7). Per beneficiary spending on physician and other health professional services, outpatient hospital and lab services, skilled nursing facilities, home health, hospice,

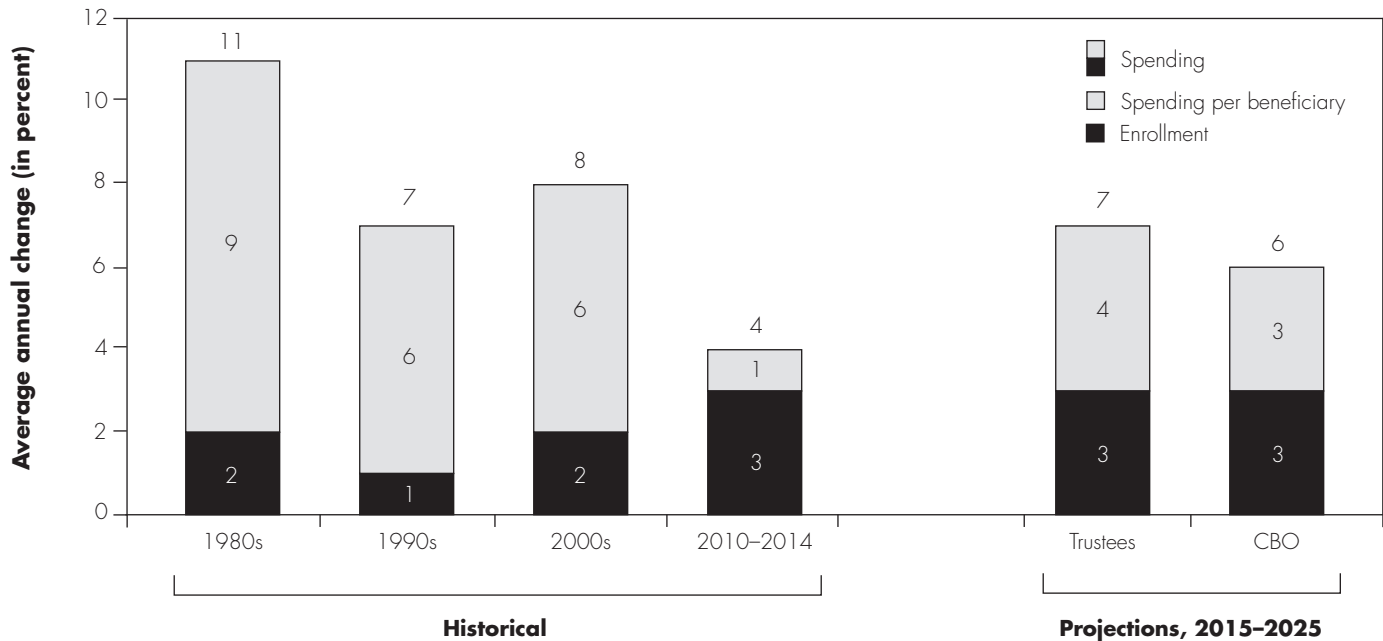
and labs performed in physician offices and independent laboratories all grew faster than per capita GDP. In contrast, during this time, per beneficiary spending on durable medical equipment fell 19 percent. That decline was due primarily to the phasing in of a competitive bidding program for durable medical equipment in which suppliers submit bids to provide services to beneficiaries.

A comparison of private sector and Medicare spending trends

Per capita spending on health care in the private sector grew steadily from 2010 to 2014 (Health Care Cost Institute 2015). Spending growth was largely driven by increased prices and occurred despite a decline in service use. One key driver of the private sector's higher prices was provider market power (Baker et al. 2014a, Baker et al. 2014b, Gaynor and Town 2012, Robinson and Miller 2014). Hospitals and physician groups have increasingly consolidated, in part to gain leverage over insurers in negotiating higher payment rates. For the private sector, that consolidation resulted in per capita spending

**FIGURE
1-8**

Despite recent slowdown in per beneficiary spending growth, total Medicare spending growth is projected to rise



Note: CBO (Congressional Budget Office). See online Appendix 1-A, available at <http://www.medpac.gov>, for annual growth rates of spending, enrollment, and spending per beneficiary, as well as more detail on trends in spending per beneficiary.

Source: 2015 annual report of the Boards of Trustees of the Medicare trust funds and CBO report *Updated Budget Projections: 2015 to 2025*, released March 2015.

growth from 2010 to 2014 of 3.3 percent annually. By comparison, over that same period, Medicare spending per beneficiary increased by 1.0 percent annually, partly attributable to restrained increases in Medicare's payment rates.

Over the long term, private sector trends can influence Medicare trends. 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, potentially impeding access to care for Medicare beneficiaries and exerting pressure on the Medicare program to increase its payment rates (Medicare Payment Advisory Commission 2009, Stensland et al. 2010, White and Wu 2014).

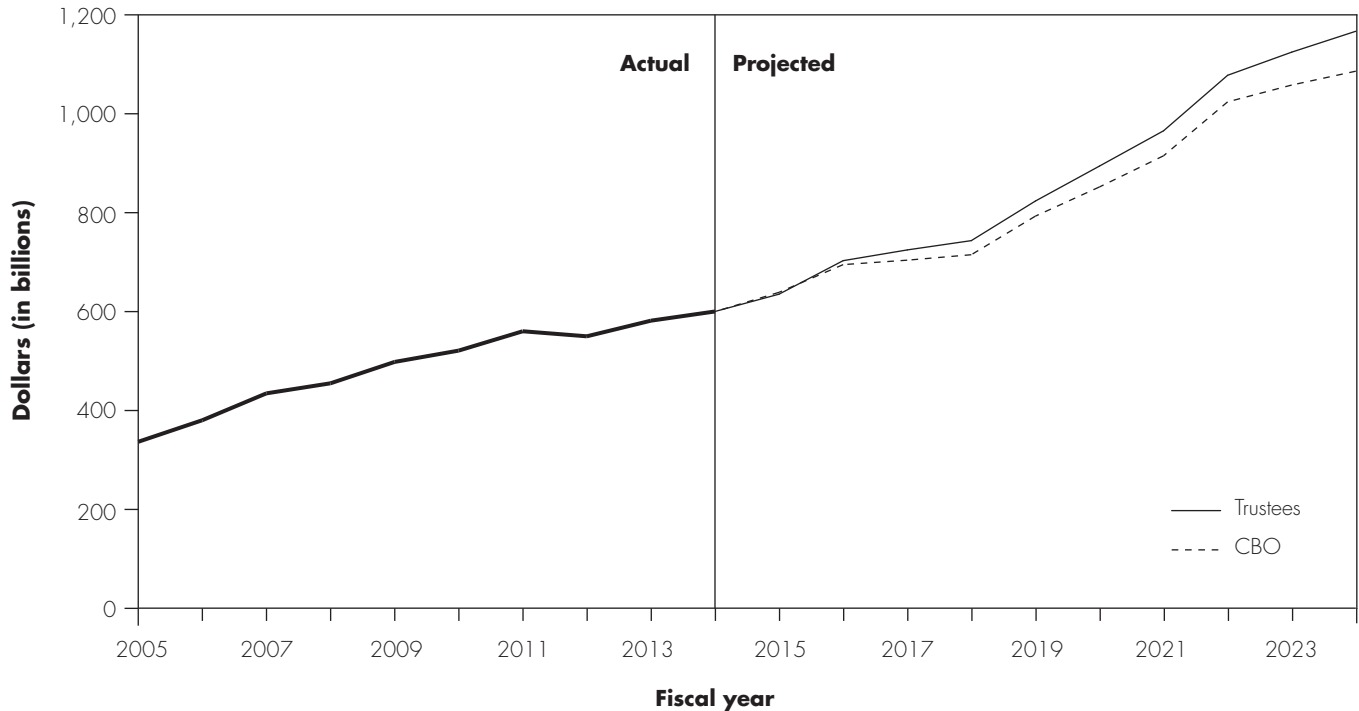
Medicare spending projections

What do these current trends portend for Medicare? The growth in Medicare's per beneficiary spending has fallen from average annual rates of 9 percent in the 1980s and 6 percent in the 1990s and 2000s to 1 percent over the last

four years (Figure 1-8). This average annual growth over the last four years, however, includes some zero-growth years and growth of about 2 percent in 2014.

For the next 10 years, the Trustees and the Congressional Budget Office (CBO) project that growth in per beneficiary spending will be higher than the recent lows but lower than the historic highs, with an average annual growth rate of either 4 percent (the Trustees' projection) or 3 percent (CBO's projection) (Boards of Trustees 2015, Congressional Budget Office 2015d).⁴

At the same time, the aging of the baby-boom generation is causing an increase in enrollment. The growth rate of enrollment increased from about 2 percent per year historically to 3 percent. That increase occurred over the last few years and is projected to continue throughout the next decade.⁵ So despite the slowdown in spending per beneficiary (relative to historical standards), growth in total spending over the next decade is projected by the Trustees to average 7 percent annually, or 6 percent annually according to the CBO. Under either projection,

**FIGURE
1-9****Trustees and CBO project Medicare annual spending
to reach 1 trillion dollars within 10 years**

Note: CBO (Congressional Budget Office).

Source: 2015 annual report of the Boards of Trustees of the Medicare trust funds and CBO report *An Update to the Budget and Economic Outlook: 2015 to 2025*, August 2015.

the rate of growth in spending outpaces the projected average annual growth in GDP of 5 percent.

At those rates, Medicare annual spending would rise from about \$600 billion today to \$1 trillion within the coming decade (by 2022) under either projection (Figure 1-9) (Boards of Trustees 2015, Congressional Budget Office 2015c).

Medicare's financing challenge

The aging of the baby-boom generation will have a profound impact both on the Medicare program and the taxpayers who support it. Over the next 15 years, as Medicare enrollment surges, the number of workers per beneficiary is projected to decline (Figure 1-10, p. 16). Workers pay for the Medicare program through payroll taxes and taxes that are deposited into the general fund of the Treasury. However, the number of workers per

Medicare beneficiary has already declined from about 4.6 around the program's inception to 3.1 today. By 2030 (the year by which all baby boomers will have aged into Medicare), the Medicare Trustees project there will be just 2.4 workers for each Medicare beneficiary.

These demographics are creating a financing challenge for the Medicare program. The Trustees project that Medicare's Hospital Insurance (HI) Trust Fund will become insolvent by 2030, but that date does not tell the whole financial story. The HI Trust Fund covers less than half of Medicare spending (44 percent in 2014), and that share is projected to continue to shrink over the next decade (Figure 1-11, p. 16). The Supplementary Medical Insurance (SMI) Trust Fund covers the remainder and is described below. The HI Trust Fund pays for Medicare Part A services, such as inpatient hospital stays, skilled nursing facilities, and hospice, and is largely funded through a dedicated payroll tax (i.e., a tax on wage earnings).

**FIGURE
1-10**

Medicare enrollment is rising while the number of workers per HI beneficiary is declining

Figure 1-10a. Medicare enrollment

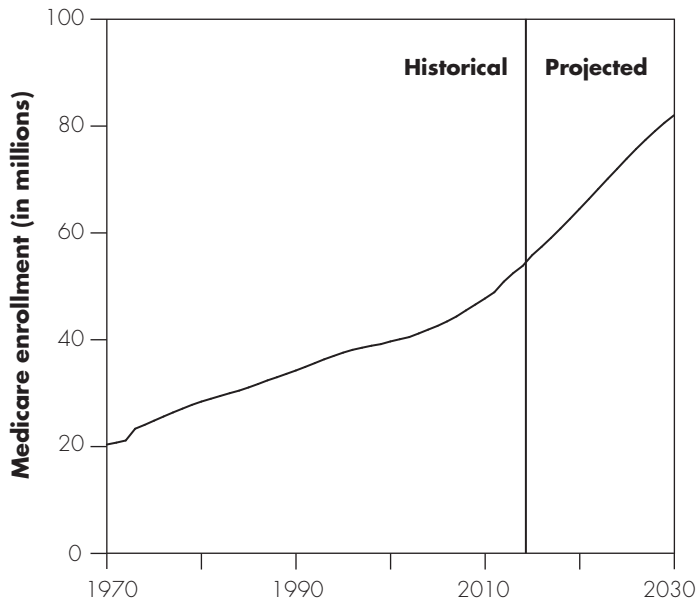
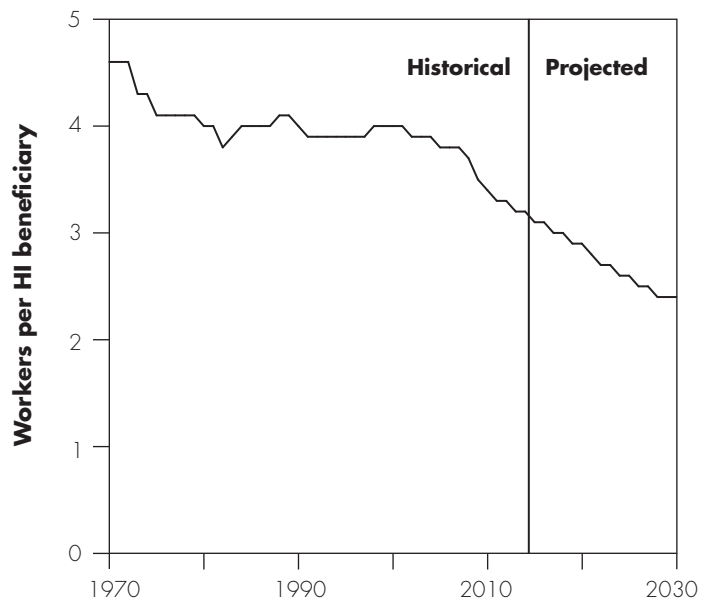


Figure 1-10b. Workers per HI beneficiary

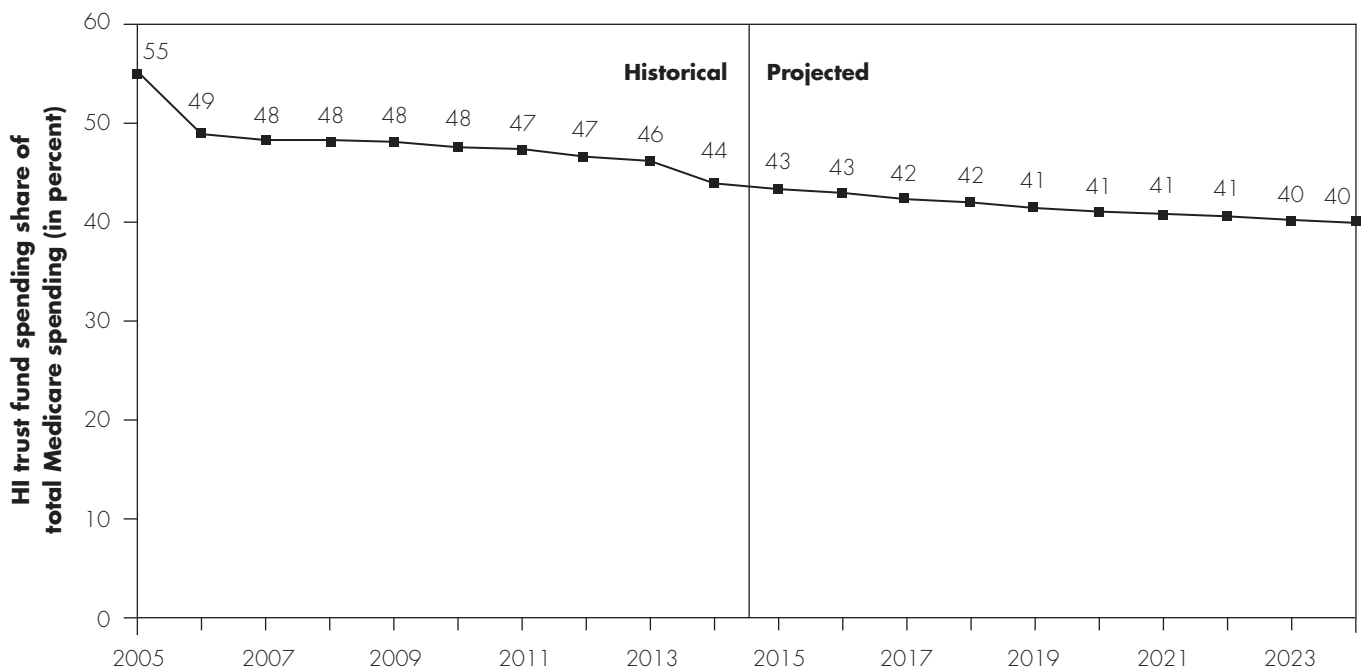


Note: HI (Hospital Insurance). Hospital Insurance is also known as Medicare Part A.

Source: 2015 annual report by the Boards of Trustees of the Medicare trust funds.

**FIGURE
1-11**

The HI Trust Fund covers a declining share of total Medicare spending



Note: HI (Hospital Insurance). The rest of Medicare spending is covered by the Supplementary Medical Insurance Trust Fund.

Source: 2015 annual report of the Boards of Trustees of the Medicare trust funds.

**TABLE
1-1****Increase in payroll tax or decrease in HI spending needed to maintain HI Trust Fund solvency for specific time periods**

To maintain HI Trust Fund solvency for:	Increase 2.9 percent payroll tax by:	Or decrease HI spending by:
25 years (2015–2039)	16%	11%
50 years (2015–2064)	22	15
75 years (2015–2089)	23	15

Note: HI (Hospital Insurance). Hospital Insurance is also known as Medicare Part A.

Source: 2015 annual report of the Boards of Trustees of the Medicare trust funds.

Since payroll tax revenues are not growing as fast as Part A spending, the HI Trust Fund is projected to become insolvent by 2030 (Boards of Trustees 2015). To keep the HI Trust Fund solvent over the next 50 years—the time at which millennials will all have aged into the program—the Trustees estimate that either the payroll tax would need to be increased immediately by 22 percent, rising from its current rate of 2.9 percent to 3.54 percent, or Part A spending would need to be reduced immediately by 15 percent (Boards of Trustees 2015). (For periods of 25, 50, and 75 years, see Table 1-1.)

The rest of Medicare spending (56 percent) is covered by SMI, which covers services under Part B (physician services and other ambulatory care received in hospital outpatient departments) and Part D (prescription drug coverage). Part B and Part D are financed by premiums paid by beneficiaries (covering 25 percent of spending) and general tax revenues (covering 75 percent of spending). Premiums and general tax revenue transfers from the nation's Treasury are reset each year to match expected Part B and Part D spending. Since premiums and general tax revenue transfers are set to grow at the same rate as Part B and Part D spending, the SMI Trust Fund is expected to remain solvent by construction. However, as SMI spending rises, premiums and transfers from the nation's Treasury to the Medicare program also grow, increasing deficits, the debt, and the strain on the household budgets both of workers and retirees and—assuming no other policy or legislative interventions—reducing the resources available to make investments that expand future economic output (e.g., investments in education, transportation, and research and development).

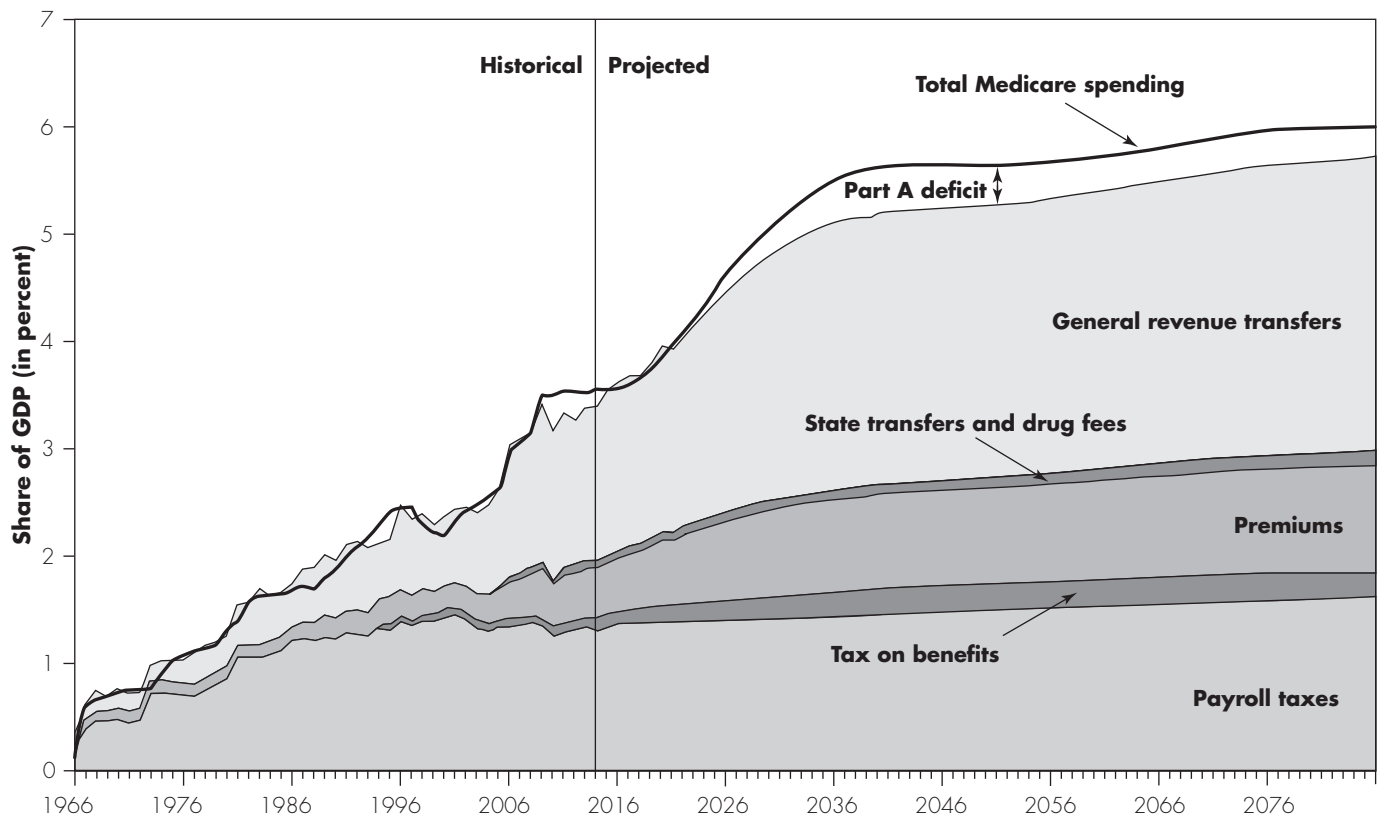
For a more complete financial picture, consider the combined spending and sources of income from the two

trust funds: The black line at the top of Figure 1-12 (p. 18) depicts Medicare spending as a share of GDP, and the layers below the line represent sources of Medicare income. Medicare's three primary sources of income are payroll taxes, premiums paid by beneficiaries, and general revenue transfers. The white space below the Medicare spending line in Figure 1-12 (p. 18) represents the Part A deficit created when payroll taxes fall short of Part A spending.

Undeniably, the Part A deficit is a financing challenge, but so too is the large and growing share of Medicare spending funded through general revenues. General revenues account for 42 percent of Medicare funding today and are projected to grow to 48 percent by 2030; notably, in this context, general revenues include both general tax revenue and federal borrowing since with few exceptions federal spending has exceeded federal revenues since the Great Depression.

To understand why the growing reliance on general revenues presents a financing challenge, consider the situation from the perspective of the federal budget: The line at the top of Figure 1-13 (p. 19) represents total federal spending as a share of GDP, and the line below spending represents total federal revenues. Year after year, the federal government has spent more than it collects in revenues, increasing the federal debt to levels not seen since World War II.

The layers below the top line in Figure 1-13 (p. 19) depict federal spending by program. Medicare spending is projected to rise from 3.5 percent of our economy today to a little over 6 percent of our economy in 25 years, in 2040. In fact, in 25 years—assuming no other policy or legislative interventions—spending on Medicare, Medicaid, the other major health programs, Social

**FIGURE
1-12****General revenue is paying for growing share of Medicare spending**

Note: GDP (gross domestic product). "Tax on benefits" refers to the portion of income taxes that higher income individuals pay on Social Security benefits that 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 in the Patient Protection and 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.

Source: 2015 annual report of the Boards of Trustees of the Medicare trust funds.

Security, and net interest payments will reach about 20 percent of our economy, and by themselves will exceed total federal revenues.⁶

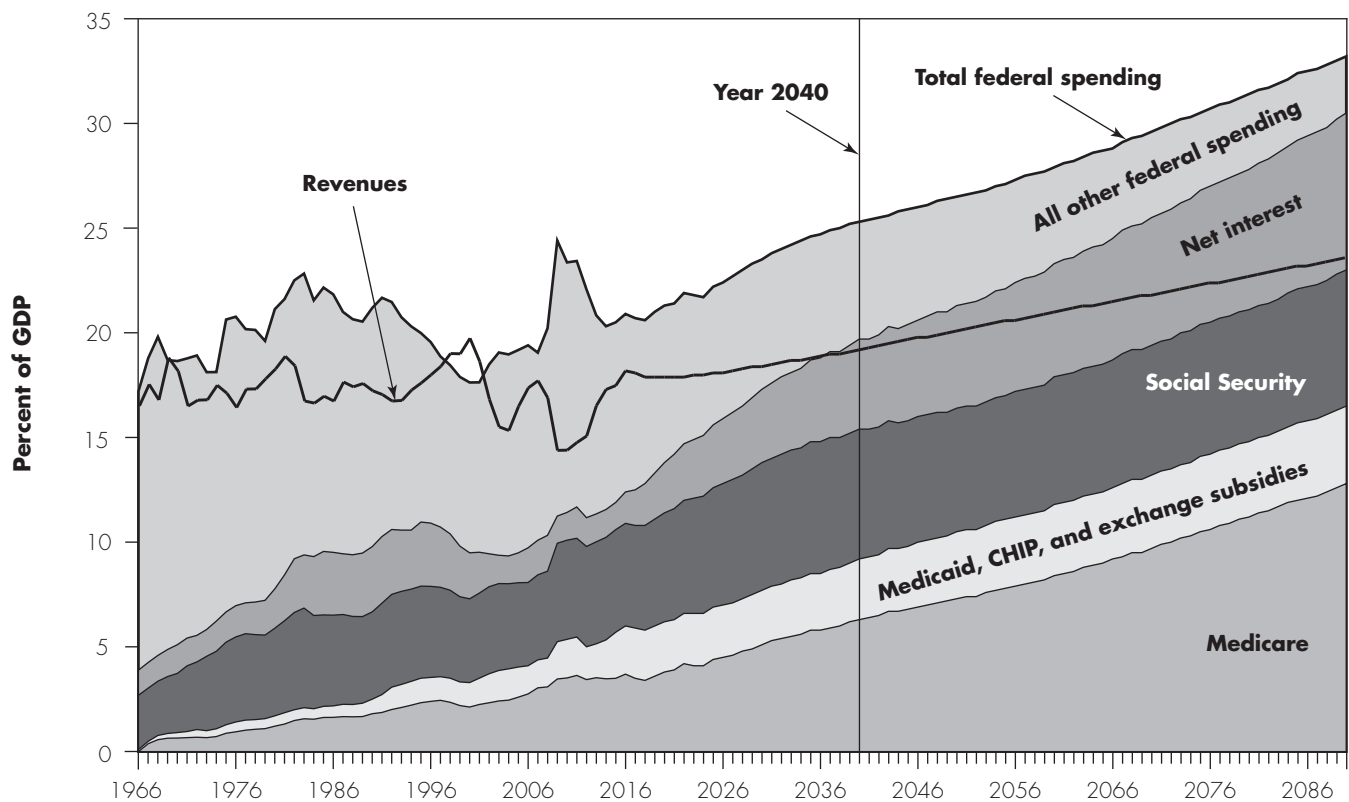
Moreover, the projection assumes that federal revenues will rise above 20 percent of GDP, well above the historical average of 17 percent of GDP. The increase in revenues is projected to occur mainly because income is projected to grow more rapidly than inflation, pushing more income into higher inflation-indexed tax brackets over time. However, if federal revenues continue at their historical average of 17 percent of GDP, spending on these major programs and net interest payments would exceed total federal revenues even sooner.

With their reliance on general tax dollars and federal deficit spending, Medicare and the other major health care programs have a substantial effect on the federal debt. Debt equaled 35 percent of GDP at the end of 2007 as the economy entered the last recession (Figure 1-14, p. 20). As a result of the recession, the debt soared, reaching 72 percent of GDP in 2013—a higher share than at any point in U.S. history, except briefly around World War II.

Under baseline assumptions, which reflect current law, CBO projects the debt will reach 107 percent of GDP in about 25 years (or by 2040). However, the CBO baseline assumes that per beneficiary spending for Medicare and Medicaid increases more slowly in the future than it has during the past several decades. If per beneficiary

**FIGURE
1-13**

Spending on Medicare, other major health programs, Social Security, and net interest is projected to exceed total federal revenues in 25 years (by 2040)



Note: GDP (gross domestic product), CHIP (Children's Health Insurance Program).

Source: Congressional Budget Office 2015a.

spending growth were three-quarters of a percentage point higher than that of the baseline, the federal debt would be 129 percent of GDP by 2040. On the other hand, if per beneficiary spending growth were three-quarters of a percentage point lower, the federal debt would be 89 percent of GDP by 2040. Still, under all three scenarios, the debt is projected to be at levels not seen since the aftermath of World War II.

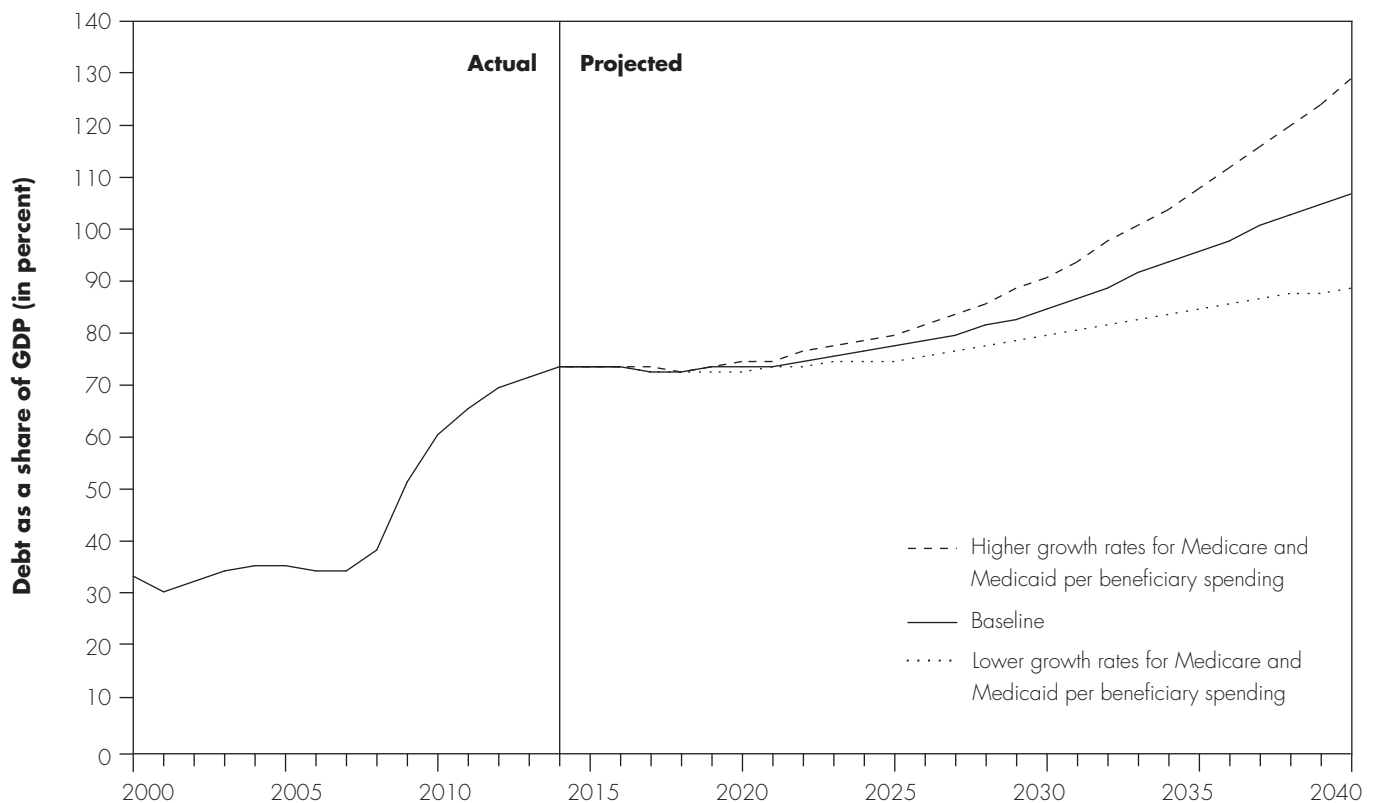
Health care spending also consumes growing shares of state budgets and the budgets of individuals and families

Part of the Commission's mandate is to view Medicare in the context of the broader health care system. This

section examines the effect of health care spending on state budgets and on the budgets of individuals and families. States bear a significant share of Medicaid costs, so rising health care spending also has implications for state budgets. For individuals and families, increases in premiums and cost sharing have negated real income growth in the past decade. Likewise, premiums and cost sharing for Medicare beneficiaries are projected to grow faster than Social Security benefits, which make up a significant share of many beneficiaries' income.

Health care spending and state budgets

States and the federal government jointly finance Medicaid, a program that pays for health care services provided to people with low incomes. In 2013, before the coverage expansions made by PPACA, monthly enrollment in Medicaid averaged about 59 million people,

**FIGURE
1-14****Health care spending growth impacts future debt levels**

Note: GDP (gross domestic product). The higher growth rate of per beneficiary spending on Medicare and Medicaid is 0.75 percentage point per year higher than under the baseline assumptions; the lower growth rate is 0.75 percentage point per year lower than under the baseline assumptions.

Source: Congressional Budget Office 2015a.

and total spending was \$457.8 billion, with the states paying 42 percent and the federal government paying the remainder. Medicaid spending accounted for an estimated 18.9 percent of state expenditures in that year (Centers for Medicare & Medicaid Services 2014a).

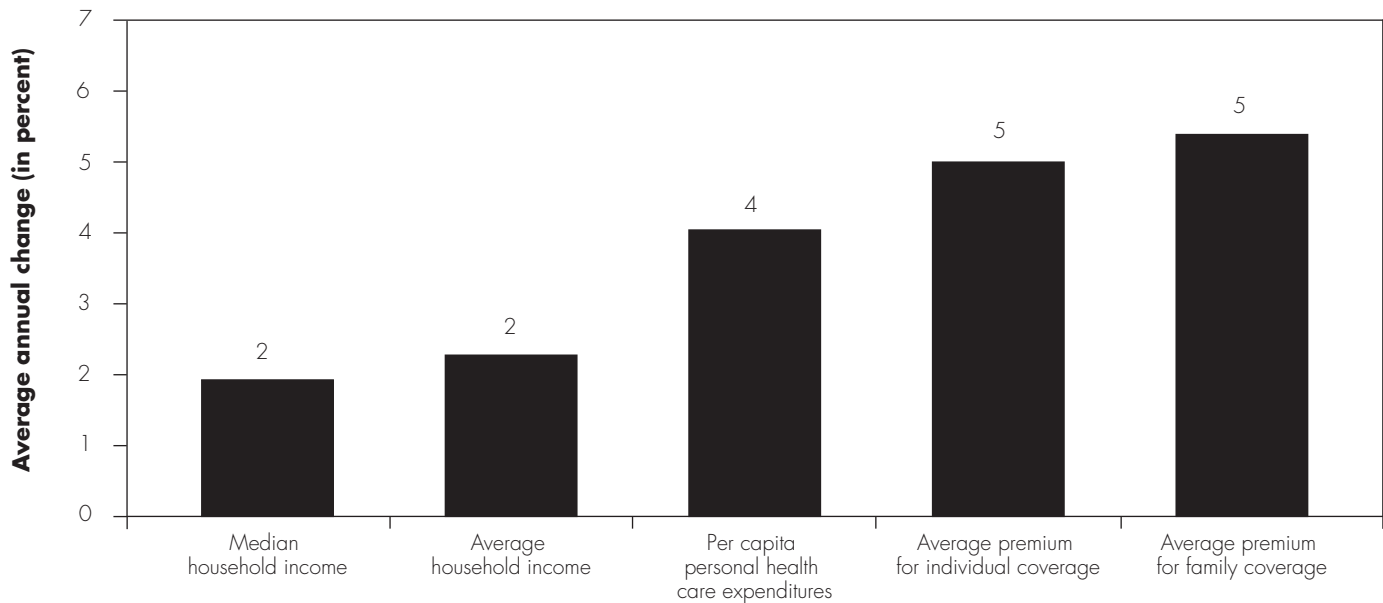
Under PPACA, states are given the option to expand Medicaid coverage—beginning in 2014—to nonelderly individuals with total family income of less than 138 percent of the federal poverty threshold. States receive full federal financing to cover this expansion population in 2014, phasing down to 90 percent federal financing by 2020. In 2014, government actuaries projected that monthly enrollment in Medicaid would increase 9.6 percent, reaching 64.6 million people, and total spending would increase 9.4 percent, reaching \$498.9 billion. Because the federal government paid for 100 percent of

the costs of newly eligible enrollees, the states' share of all Medicaid expenditures decreased to 40 percent in 2014 (Centers for Medicare & Medicaid Services 2014a). CBO projects that the states' share will be slightly lower than 40 percent over the next 10 years as more states expand coverage (the states' share is projected to range between 36 percent and 38 percent from 2015 to 2025) (Congressional Budget Office 2015a).

PPACA also increased the payment amount primary care providers received for seeing Medicaid patients in 2013 and 2014 so that it equaled Medicare's payment. This policy represented a significant increase in payments to providers since Medicaid primary care FFS payment rates averaged 59 percent of Medicare fee levels in 2012. The federal government incurs 100 percent of the cost of the payment increase. Total spending for the primary care

**FIGURE
1-15**

**Growth in health care spending and premiums
outpaced growth in household income, 2004–2014**



Note: Household income, health expenditures, and premiums are all measured in nominal dollars. Average premiums for individual and family coverage are for employer-sponsored health insurance and include contributions from workers and employers. Labels for these columns were rounded.

Source: MedPAC analysis of Census Bureau, Current Population Survey, Annual Social and Economic Supplements 2015, National Health Expenditure Accounts from CMS 2015, Kaiser Family Foundation and Health Research & Educational Trust 2015.

add-on to Medicaid payments is expected to reach about \$12 billion. (The actual amount is not yet known because states have up to two years to submit claims for federal reimbursement.) Even though the federal subsidies expired at the end of 2014, 16 states and the District of Columbia are continuing to pay enhanced rates (Tollen 2015).

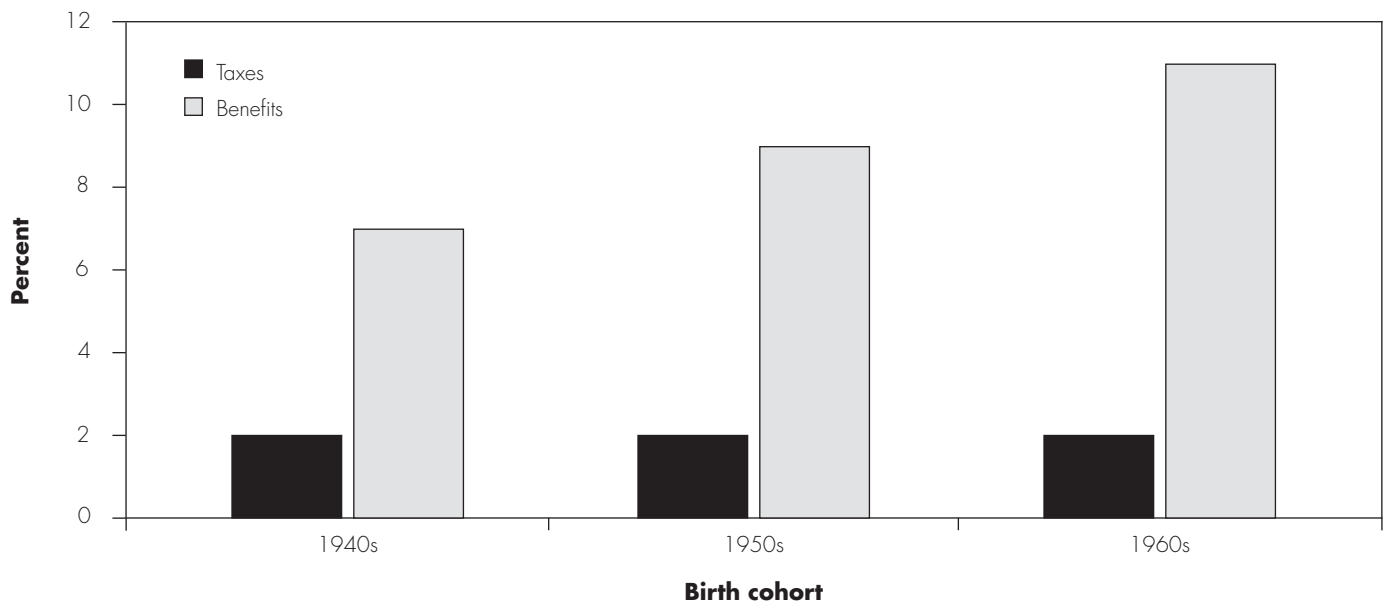
A provision also established under PPACA authority allows state demonstrations for beneficiaries dually eligible for Medicare and Medicaid. In 2011, the Medicare–Medicaid Coordination Office at CMS announced a financial alignment demonstration through which states can develop integrated care programs for full-benefit dual-eligible beneficiaries. States have the option to implement a capitated model, a managed fee-for-service model, or both. Under the capitated model, a health plan receives Medicare and Medicaid capitation payments to cover all Medicare and Medicaid services. Ten states have approved capitated models, two states have approved managed fee-for-service models, and one has an alternative model (Centers for Medicare & Medicaid Services 2014b). As of January 1, 2015, about 350,000

beneficiaries are being served under this demonstration in eight states.

Health care spending and individual and family budgets

For individuals and families, growth in health care spending means higher health insurance premiums and higher taxes devoted to health care (Auerbach and Kellermann 2011). Additionally, for those covered by employer-sponsored health insurance, an increase in premiums results in lower wage growth because employers offset their increased costs of providing health insurance to their employees (Baicker and Chandra 2006, Gruber 2000). As health care spending increases, an increasing share of income from individuals and families is transferred to hospitals, physicians, and other providers of health care services.

In the last decade, per capita health care spending and premiums have grown much more rapidly than median and average household incomes (Figure 1-15). From 2004 to 2014, per capita personal health care spending grew

**FIGURE
1-16****Mean lifetime Medicare payroll taxes and benefits
relative to lifetime earnings, by decade of birth**

Source: Congressional Budget Office 2015a.

at an average annual rate of 4 percent, and premiums for individuals and families grew at an average annual rate of 5 percent (Centers for Medicare & Medicaid Services 2015b, Kaiser Family Foundation and Health Research & Educational Trust 2015). In contrast, during this period, median and average household incomes grew at an average annual rate of just 2 percent (Census Bureau 2015).

Medicare beneficiaries are not exempt from the financial challenges of the program's ever-growing cost-sharing liabilities. In 2014, SMI (Medicare Part B and Part D) premiums and cost sharing consumed 23 percent of the average Social Security benefit, up from 7 percent in 1980 (Boards of Trustees 2015). (Those percentages do not include beneficiary spending on premiums for Medicare supplemental insurance.) The Medicare Trustees estimate that those costs will consume 30 percent of the average Social Security benefit by 2030. On average, Social Security benefits account for about 70 percent of income for seniors. For more than one-fifth of seniors, Social Security benefits account for 100 percent of income (Social Security Administration 2012). However, seniors also rely on accumulated assets to supplement their income in retirement. Additionally, despite the increasing cost-sharing burden, the availability of SMI Part B and Part D benefits

greatly reduces the costs that beneficiaries would otherwise pay for health care services without those benefits since general revenues cover a large share of those costs.

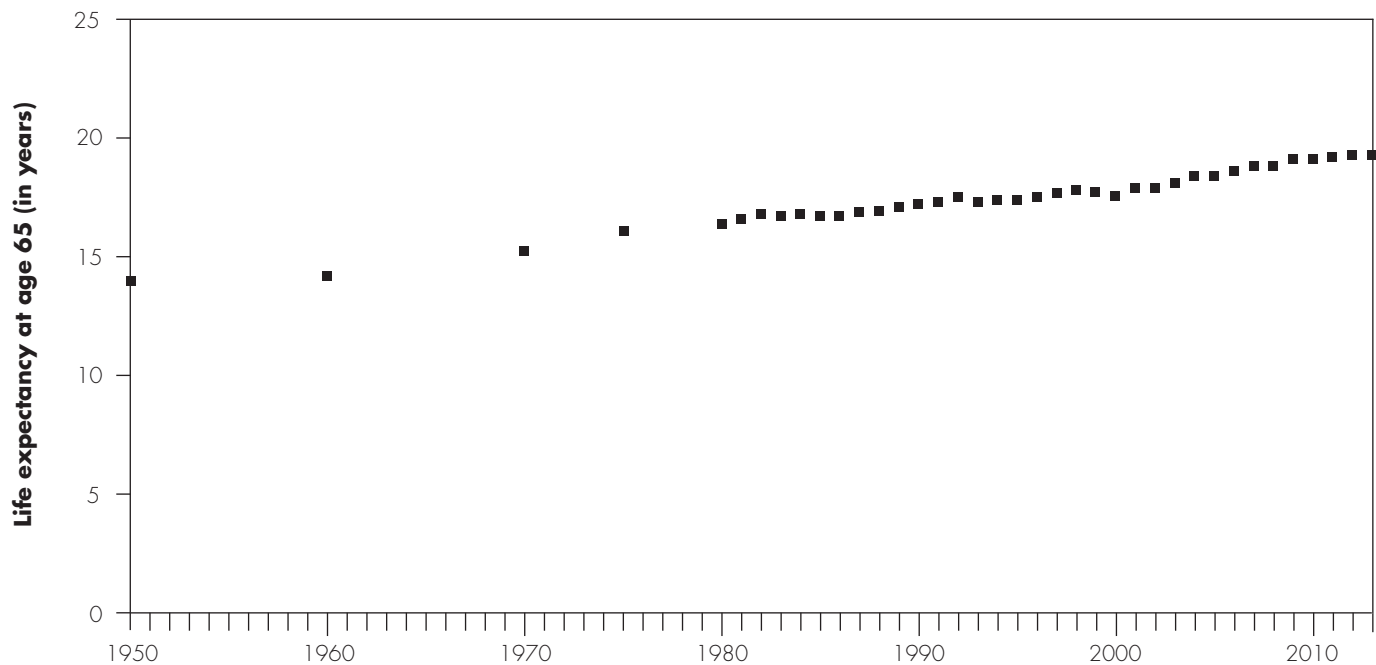
A final factor to keep in mind is that over the course of their lifetimes, members of different generations will pay different amounts of Medicare payroll taxes and receive different amounts of Medicare benefits. Generally, benefits will be greater for later generations because of growth in per capita health care spending and longer life expectancy (Congressional Budget Office 2015a). CBO estimates that benefits received over a lifetime will equal about 7 percent of lifetime earnings for people born in the 1940s, on average, but 11 percent for people born in the 1960s (Congressional Budget Office 2015a). By contrast, real average lifetime payroll taxes relative to lifetime earnings will be about 2 percent for most cohorts (Figure 1-16).

**Assessing the impact of Medicare
spending on quality**

Medicare beneficiaries are financially better off because of the Medicare program because it reduces their out-of-pocket spending on health care services. But as

**FIGURE
1-17**

Life expectancy at age 65 has steadily increased over time, available years 1950–2013



Source: National Center for Health Statistics 2015a.

Medicare per beneficiary spending has increased over the life of the program, has the quality of health care received by Medicare beneficiaries improved? One way to examine this issue is to look at the health and longevity of beneficiaries. From that perspective, there are several indications that great improvements have been made:

- Life expectancy at age 65 has steadily increased since the introduction of Medicare (Figure 1-17). Individuals who reached age 65 in 2013 had a remaining life expectancy of 19 years, 5 more years than the life expectancy for individuals who reached age 65 in 1960.
- The share of people age 65 or older reporting fair or poor health status has declined from 29 percent in 1991 to 23 percent in 2013 (Figure 1-18, p. 24).
- While the percentage of people age 65 or older with chronic conditions such as diabetes, hypertension, and high cholesterol has increased over time, the percentage of people who have those conditions under control has also increased (National Center for Health Statistics 2015a).

(Comparable information for the Medicare population under age 65 is not readily available.)

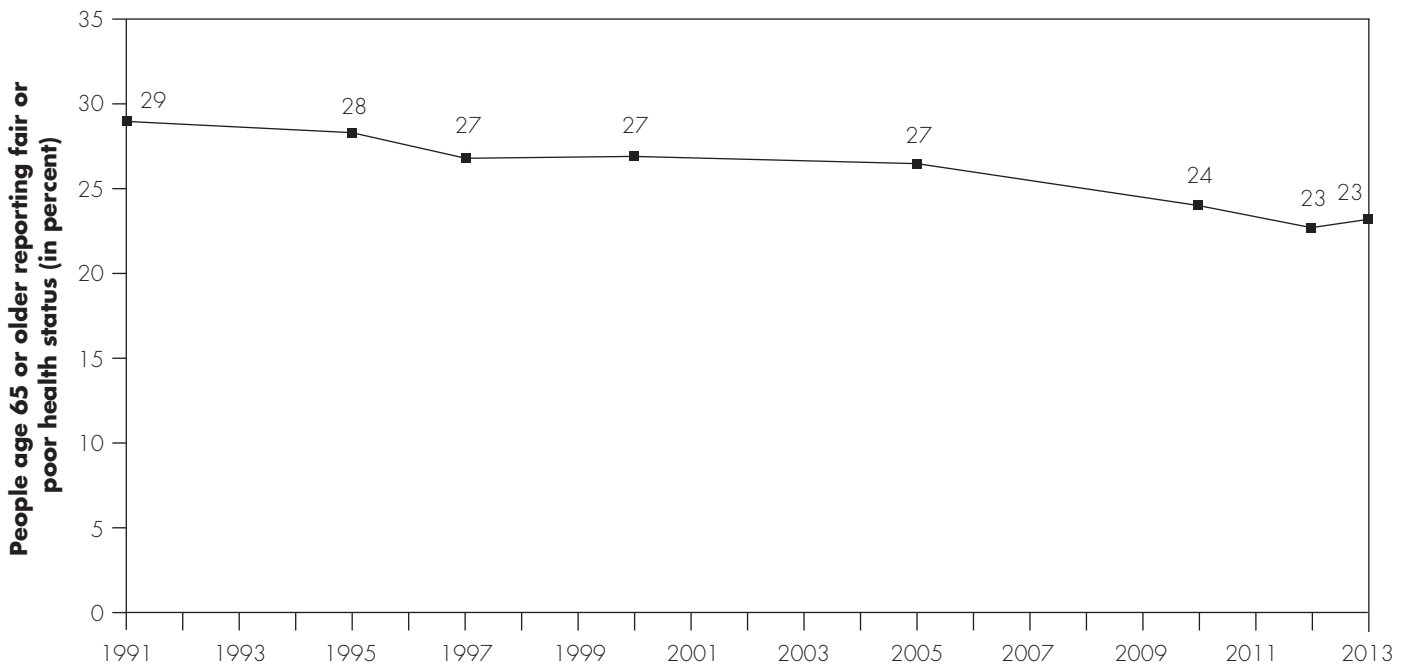
However, many factors other than health care also impact individual and population health, including poverty, income levels, and individual behavioral choices such as smoking and alcohol consumption. For example, with the support of the Social Security program, the poverty rate among people ages 65 years and older has fallen dramatically over time, potentially having a substantial effect on individual and population health for that age group (Figure 1-19, p. 24).

Baby boomers will make up the next generation of Medicare beneficiaries

As the baby-boom generation ages, enrollment in the Medicare program will surge. In 15 years, Medicare is projected to have over 80 million beneficiaries, almost 90 percent of whom will be of the baby-boom generation. The baby-boom generation will define the next generation

**FIGURE
1-18**

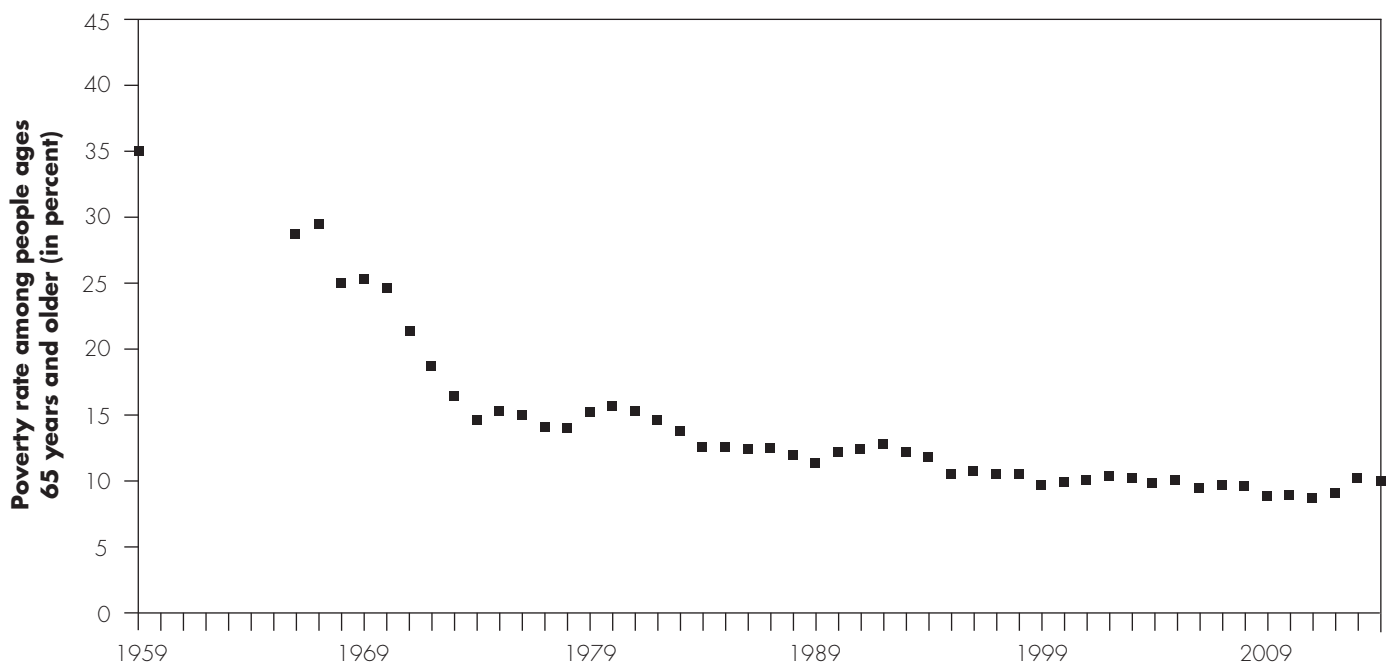
The percentage of people ages 65 or older reporting fair or poor health status has declined over time, available years 1991-2013



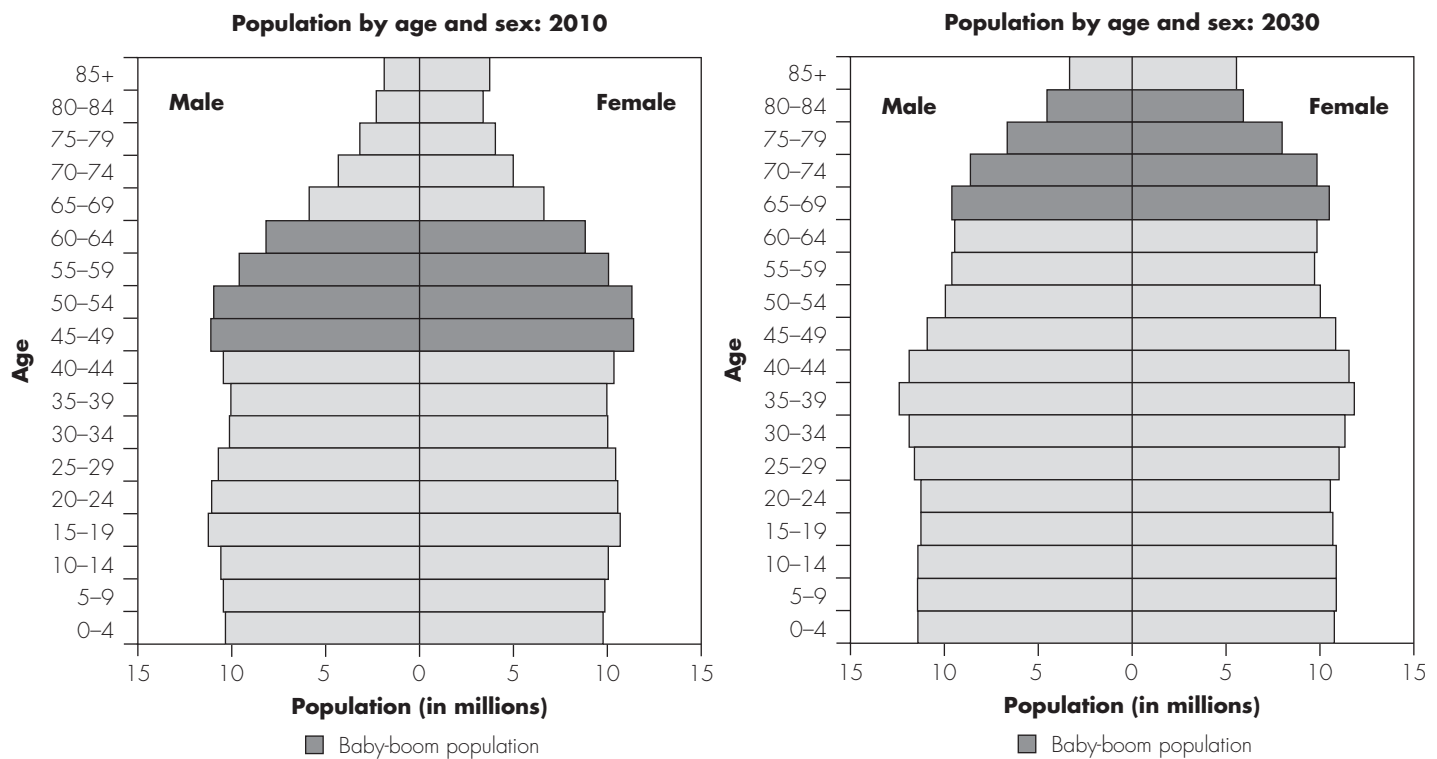
Source: National Center for Health Statistics 2015a.

**FIGURE
1-19**

The poverty rate among people ages 65 years and older has fallen dramatically over time, available years 1959-2014



Source: Bureau of the Census, Current Population Survey, Annual Social and Economic Supplements.

**FIGURE
1-20****By 2030, the entire baby-boom generation will be eligible for Medicare**

Source: Census Bureau, 2010 Census and 2012 National Population Projections, Middle series.

of Medicare beneficiaries in terms of its age distribution, race and ethnic diversity, population health, health insurance experiences before Medicare enrollment, and financial security.

The Medicare population will expand, become younger, and then grow older as the baby-boom generation ages

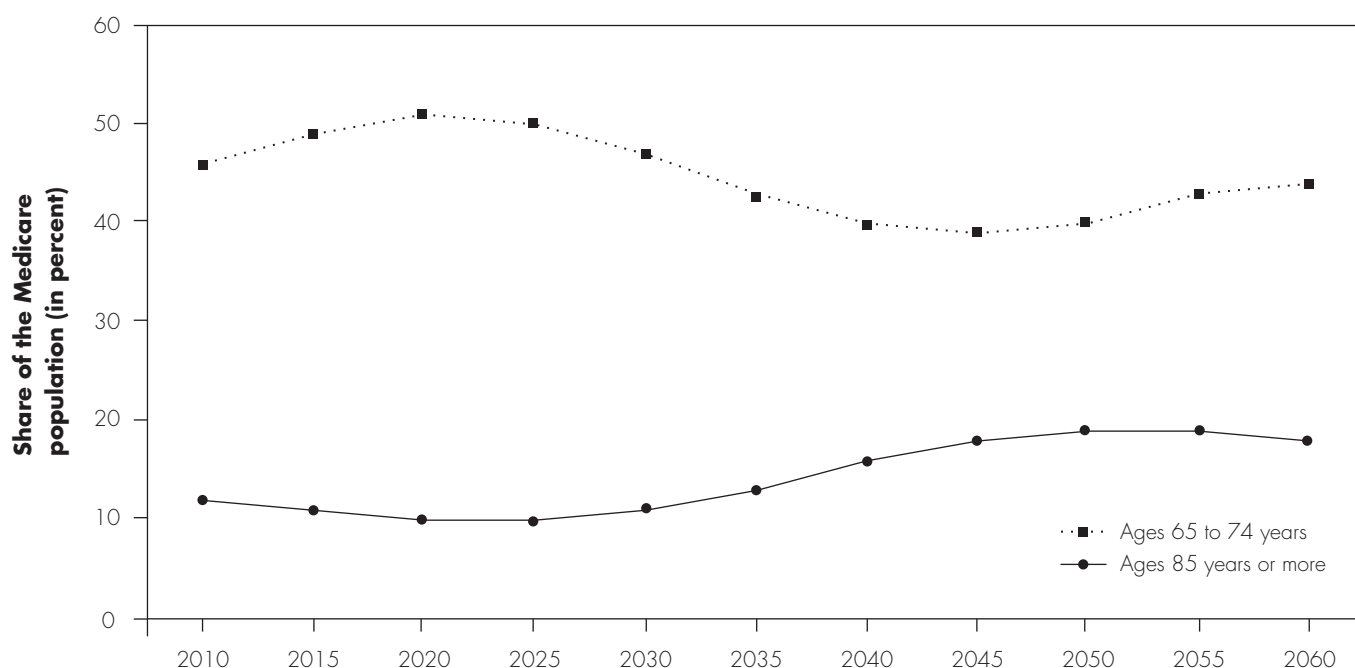
Enrollment in the Medicare program is projected to grow rapidly over the next two decades as members of the baby-boom generation age into the program (Figure 1-10a, p. 16). These individuals began aging into Medicare in 2011 at an average rate of 10,000 people per day. By 2030, Medicare is projected to have over 80 million beneficiaries—up from 54 million beneficiaries today—almost entirely made up of baby boomers (Figure 1-20) (Census Bureau 2012).

The Medicare population over the next 15 years will be relatively younger as members of the baby-boom generation join its ranks and increase the number of

beneficiaries in younger age categories (Figure 1-21, p. 26). The share of the Medicare population ages 85 years or older is projected to decline slightly through 2025 and then grow as baby boomers continue to age (Boards of Trustees 2014, Census Bureau 2012). In 2012, per beneficiary spending for those ages 85 and older was about twice that of those ages 65 to 74. So the changing age structure of the Medicare population will exert somewhat less pressure on spending in the very near term, at least on a per capita basis, and then pressure will increase again over the longer term.⁷

Racial and ethnic diversity of the older population will lag behind that of the total population

The older population is, and will be for some time, less diverse racially and ethnically than the total population. Non-Hispanic Whites are projected to remain a majority of the older population through 2060, whereas Non-Hispanic Whites are projected to no longer be a majority of the total population by 2043 (Figure 1-22, p. 27). The older

**FIGURE
1-21****The Medicare population will become younger and then older**

Source: 2014 annual report of the Boards of Trustees of the Medicare trust funds and Census Bureau, 2012 National Population Projections.

population's racial and ethnic diversity will lag behind that of the total population for several reasons. First, at any given time, the racial and ethnic composition of the Medicare population largely reflects the U.S. population 66 to 100 years ago—when currently aged Medicare beneficiaries were born. When the baby-boom generation was born—between 1946 and 1964—almost 90 percent of the total U.S. population was Non-Hispanic White (Ortman et al. 2014). Second, since 1964, the nation's population has become increasingly diverse through increases in immigration and minority births. However, recent immigration does not have much of an effect on the age structure of the older population because most immigrants are under the age of 40 when they arrive in the United States (Ortman et al. 2014).

The health of the future Medicare population

How will the health of the Medicare population change over the next couple of decades as the baby-boom generation ages into the program? A lot of uncertainty surrounds that question. What is known is that members of the baby-boom generation have longer life expectancies and a much lower rate of smoking than earlier generations.

However, the baby-boom generation has higher rates of some diseases and chronic conditions, although those higher rates could be driven in part by expanded testing and disease definitions. Moreover, baby boomers are much more likely than prior generations to have some of those chronic conditions under control.

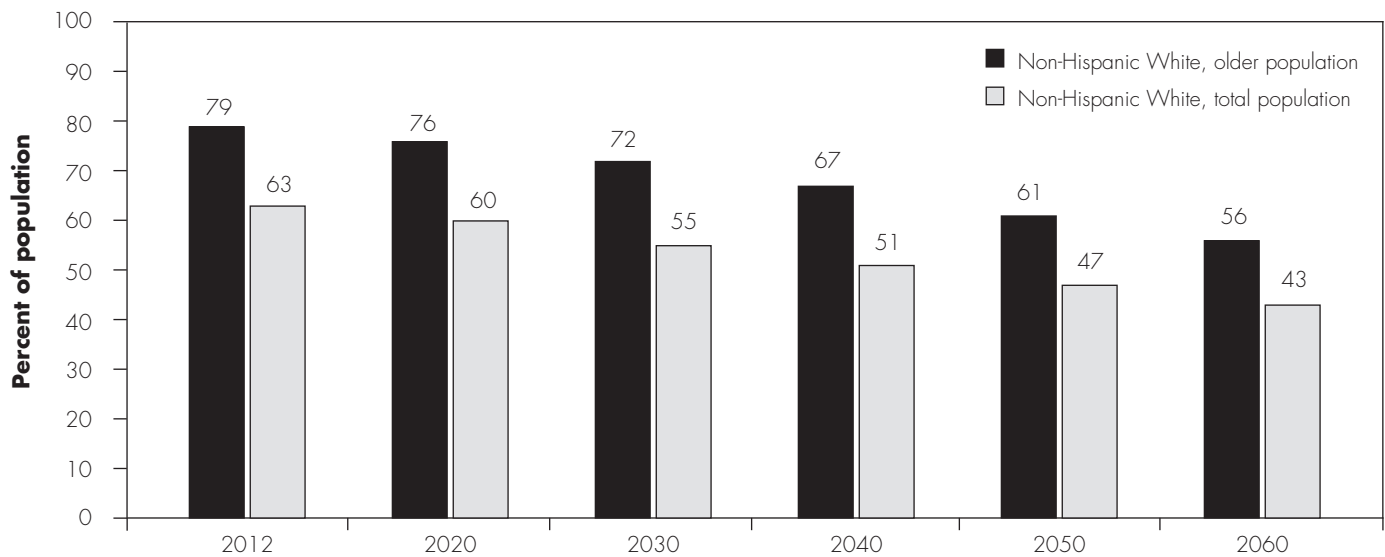
Positive indicators: Longer life expectancies and lower rates of smoking

The baby-boom generation enjoys much longer life expectancies than earlier generations. Between 1900 and 1960, life expectancy at birth improved by more than 20 years, from 47 years to 70 years. The baby-boom generation compared with earlier generations also enjoys longer life expectancies at older ages (Census Bureau 2014). Individuals born in 1905 who reached age 65 in 1970 had a remaining life expectancy of about 15 years. Individuals born in 1945 who reached age 65 in 2010 had a remaining life expectancy of about 19 years, a 4-year increase over the 1905 birth cohort.

The baby-boom generation's rate of smoking is much lower than it was in previous generations (Cutler and Glaeser 2006). When members of the previous generation

**FIGURE
1-22**

The older population (ages 65 and older) is less racially and ethnically diverse than the total population



Source: Census Bureau, 2012 National Population Projections.

were adults in the 1950s and mid-1960s, Americans had one of the highest smoking rates in the developed world; in 1965, over 40 percent of those ages 18 years and older smoked (Census Bureau 2014). But since the mid-1960s and throughout the period in which baby boomers entered adulthood, that rate has been on a dramatic decline. By 2012, only 18 percent of those ages 18 years and older smoked.

Negative indicators: Higher rates of obesity and diabetes

Although smoking rates have declined, the share of adults who are obese has risen dramatically over the last 40 years. In the 1970s, about 15 percent of the adult population ages 20 to 74 years were obese. By 2010, the share more than doubled—reaching 36 percent. The proportion of baby boomers who were obese in 2010 was even higher, at about 40 percent.

Related to higher rates of obesity, baby boomers have higher rates of diabetes than the previous generation (15.0 percent versus 13.9 percent, respectively). However, baby boomers diagnosed with diabetes are much more likely to have the disease under control than members of the previous generation.⁸ For the U.S. adult population

overall, researchers found a doubling of the share with diabetes from 1990 to 2008 and a plateauing between 2008 and 2012 (Geiss et al. 2014). Despite the leveling off in recent years, the share of African Americans, Hispanics, and those with a high school education or less who have diabetes appears to continue to increase.

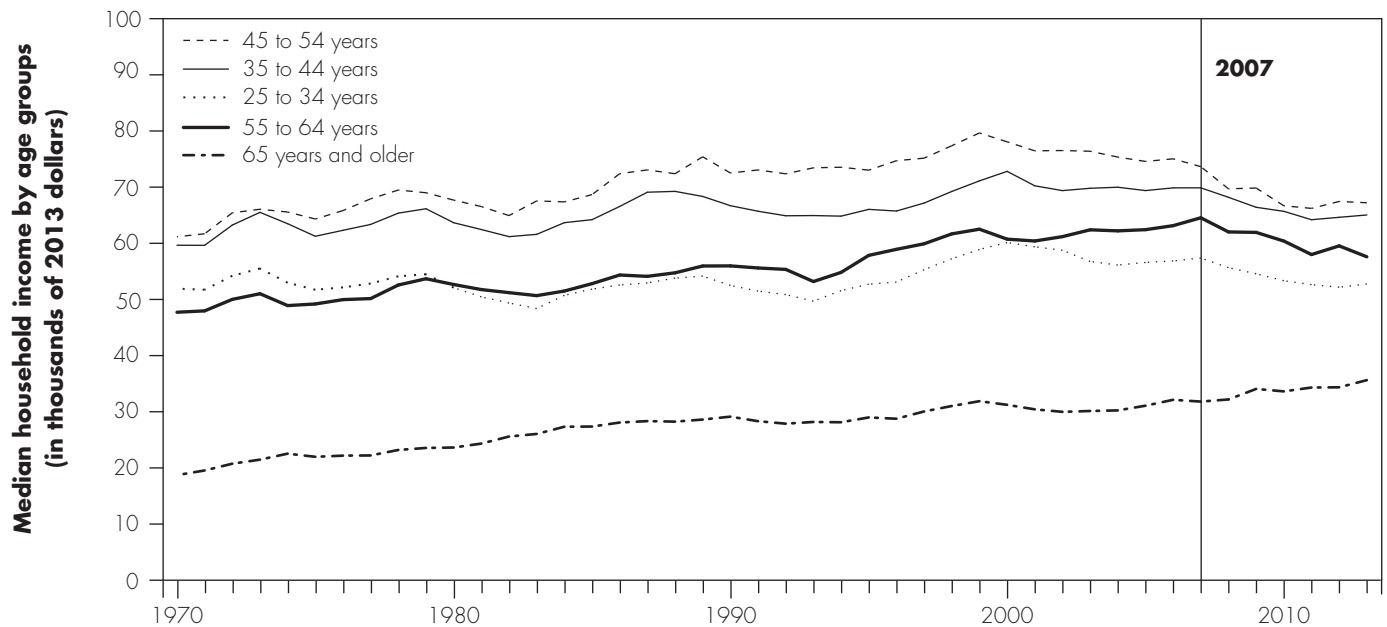
Mortality from diabetes has declined, leading to more years spent with diabetes but fewer years lost to the disease for the average individual with diabetes (Gregg et al. 2014a, Gregg et al. 2014b). For the population as a whole, however, the number of years lost to diabetes has increased due to the increase in the numbers of people who have the disease.

Mixed indicators: Higher rates of some diseases and chronic conditions, but evidence of better management

When compared with the previous generation, the baby-boom generation has higher rates of hypertension and high cholesterol, but baby boomers with those conditions are much more likely to have them under control.⁹ Perhaps because of better management of those conditions, baby boomers have shares of heart disease and stroke similar to the previous generation. Some research also indicates that

**FIGURE
1-23**

Real median household income declined substantially for all age groups under age 65 since the Great Recession began in 2007



Source: Census Bureau, Current Population Survey, Annual Social and Economic Supplements.

cancer rates have increased in the baby-boom population (National Center for Health Statistics 2014).

However, higher rates of disease and chronic conditions could also be the result of increased use of diagnostic testing and more aggressive or expansive treatment practices (Welch et al. 2011). For example, an extremely slow-growing cancer may now be detectable in a person with no symptoms, but it would never progress to make the person sick; in such cases, treatment might be unwise.

Also, not all diseases and chronic conditions have the same impact on per beneficiary spending. For example, high blood pressure and high cholesterol were the two most prevalent chronic conditions among Medicare beneficiaries in 2012, but were not the most costly. Stroke, heart failure, and chronic kidney disease were among the chronic conditions associated with the highest per beneficiary spending (Centers for Medicare & Medicaid Services 2015a, Centers for Medicare & Medicaid Services 2015c).

Another factor affecting per beneficiary Medicare spending is whether beneficiaries were continuously

insured before age 65. Research has found that Medicare spending is significantly higher for previously uninsured adults than for previously insured adults (McWilliams et al. 2009). Therefore, the increased availability of health insurance under PPACA could reduce future Medicare spending for younger baby boomers. Coverage under PPACA through Medicaid expansions (in participating states) and federal and state exchanges began in 2014, when the youngest baby boomers were 50 years old. So some baby boomers who otherwise would have been uninsured before aging into the Medicare program now may have up to 15 years of continuous coverage before becoming eligible for Medicare.

A final factor to consider regarding the effect of the baby-boom generation on future Medicare spending is that Medicare spending on beneficiaries in their last year of life is substantial (per beneficiary spending was more than six times higher for decedents than for survivors annually throughout the last decade). So as the baby-boom generation ages, the increased number of beneficiaries entering their last year of life will likely exert upward pressure on Medicare spending (Hogan 2015).

Health insurance experience of baby boomers before Medicare enrollment and its effect on enrollment decisions for Medicare

The health insurance experience of baby boomers before Medicare enrollment may also affect enrollment decisions for Medicare Advantage and medigap and preferences about trade-offs between cost sharing and limitations placed on choice of providers. The baby-boom generation's experience with private health insurance coverage has been evolving.

Baby boomers likely began their working years in conventional health plans—that is, plans in which health care can be delivered by any provider, with the insurer paying a share of the provider's charges. But over time, many also experienced the disappearance of conventional plans and the rise and subsequent decline of managed care in the form of HMOs—plans in which health care must be delivered by providers in a network.

Throughout the lives of this generation, the share of the insured population enrolled in preferred provider organizations (PPOs) has grown steadily. PPOs generally have lower cost sharing for services delivered by in-network providers versus out-of-network providers. PPO plans likely had broad provider networks supported by rapidly rising premiums, deductibles, and copayments. After the backlash against managed care in the mid-1990s, employees and employers favored the broadest possible access to providers and demanded very large networks. Only since the Great Recession that began in 2007 did employees and employers become increasingly willing to accept plans with narrower networks in return for lower premiums, deductibles, and copayments.

All but the youngest baby boomers are not likely to have had much experience with either high-deductible plans—plans with lower premiums than traditional plans but that require the enrollee to pay a large deductible before receiving insurance benefits—or the health insurance exchanges that commenced in 2014 under PPACA, owing to their recency.

The baby boomers may be less financially secure than previous generations in retirement

Over the past decade, real median household income remained relatively flat or declined for all age groups under age 65 and declined substantially since the Great Recession began in 2007 (Figure 1-23).¹⁰ Since many baby boomers were either near retirement or in their peak earning years during the economic slowdown, they may

be less financially secure than previous generations in retirement.

Baby boomers nearing retirement and turning 64 in 2013 saw real median household income for their age group fall 7 percent over the decade (Figure 1-24, p. 30). In contrast, members of the previous generation (called the “silent generation”) during the same 10-year age span, turning 55 in 1986 and 64 in 1995, saw real median household income for the same age group increase by 6 percent.¹¹ In fact, a 64-year-old baby boomer in 2013 would have slightly less income than a 64-year-old member of the silent generation in 1995 (at median real household incomes for 55- to 64-year-olds).

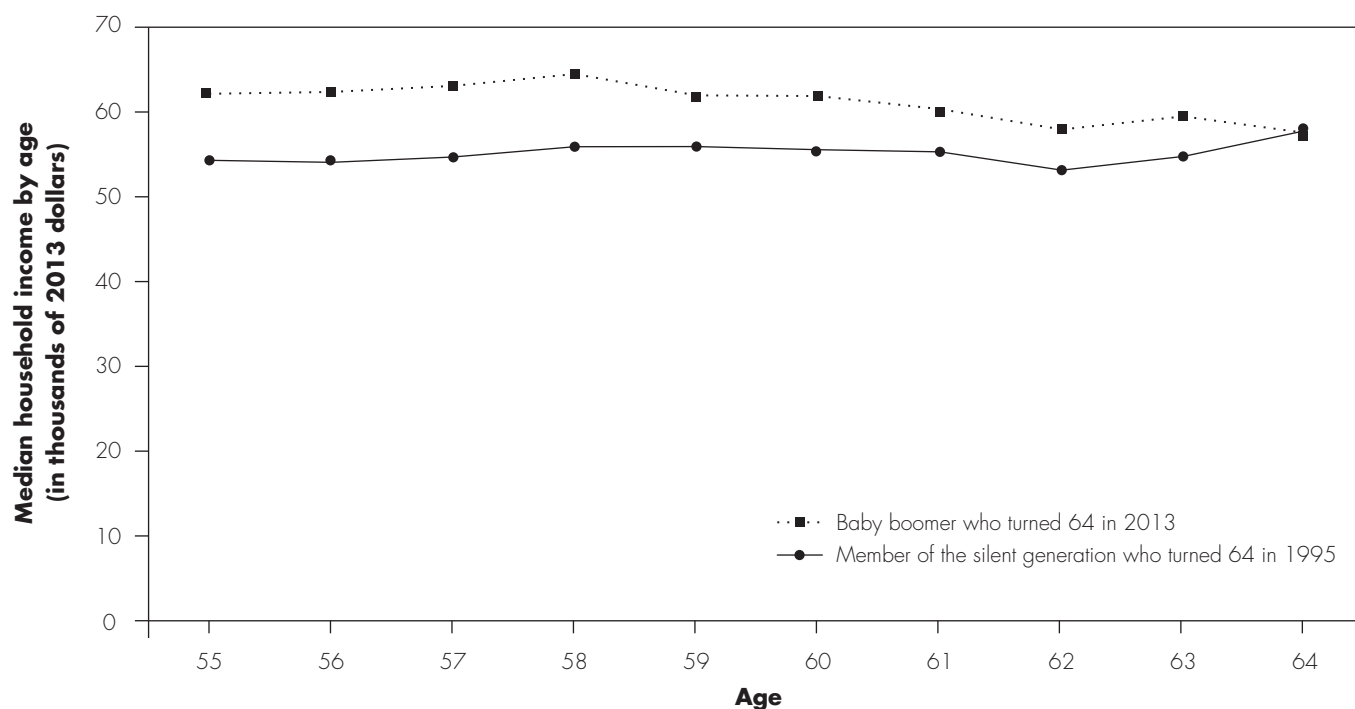
Income tends to peak when people are between ages 45 and 54 (Figure 1-23). However, baby boomers in those typical peak-earning years, turning 45 in 2004 and 54 in 2013, saw real median household income for their age group plummet, falling by 11 percent over the decade (Figure 1-25, p. 31). In contrast, members of the silent generation during the same 10-year age span, turning 45 in 1986 and 54 in 1995, saw real median household income for the same age group increase by 1 percent. In fact, the income of a 54-year-old baby boomer in 2013 would be about 8 percent less than the income of a 54-year-old member of the silent generation in 1995 (at real median household incomes of 45- to 54-year-olds).

Since the Great Recession, family net worth (assets minus liabilities) has also declined (Figure 1-26, p. 31). Baby boomers nearing retirement and turning 64 in 2013 saw real median family net worth for their age group fall 42 percent in the last 6 years (Figure 1-27, p. 32). In contrast, a member of the silent generation turning 64 in 1995 saw real median family net worth for the same age group fall 1 percent over the six-year period from 1989 to 1995. In fact, a 64-year-old baby boomer in 2013 would have slightly lower net worth than a 64-year-old member of the silent generation in 1995 (at median real family net worth for 55- to 64-year-olds).

To be sure, the economic slowdown also took its toll on the generation that came after the baby boomers (called “Generation X”).¹² When compared at similar ages, members of Generation X are less financially secure than the baby boomers. The extent to which members of Generation X will recover financially depends in part on the pace of economic growth from now until they retire. Some experts expect the economy to grow more slowly in the future than it did in the 1980s and 1990s because

**FIGURE
1–24**

At age 64, median income, in 2013 dollars, was slightly lower for the baby boom generation than for the silent generation



Note: Data are for the median household income for 55- to 64-year-olds. Members of the baby-boom generation were born between 1946 and 1964. Members of the silent generation were born between 1928 and 1945.

Source: Census Bureau, Current Population Survey, Annual Social and Economic Supplements.

the labor force is anticipated to expand more slowly than it did then. Labor force growth is anticipated to be held down by the ongoing retirement of the baby boomers and by a relatively stable labor force participation rate among working-age women, after sharp increases from the 1960s to the mid-1990s (Congressional Budget Office 2015b).

Evidence of inefficient spending suggests Medicare could spend less without compromising care, but improving efficiency is challenging

With few exceptions throughout modern history, health care spending in the United States has grown robustly, outpacing the growth in the economy. Even if Medicare's recent low growth in per beneficiary spending is sustained (and experience in 2014 suggests it may not be), enrollment growth from the aging of the baby boomers still will contribute to growth in total spending. However,

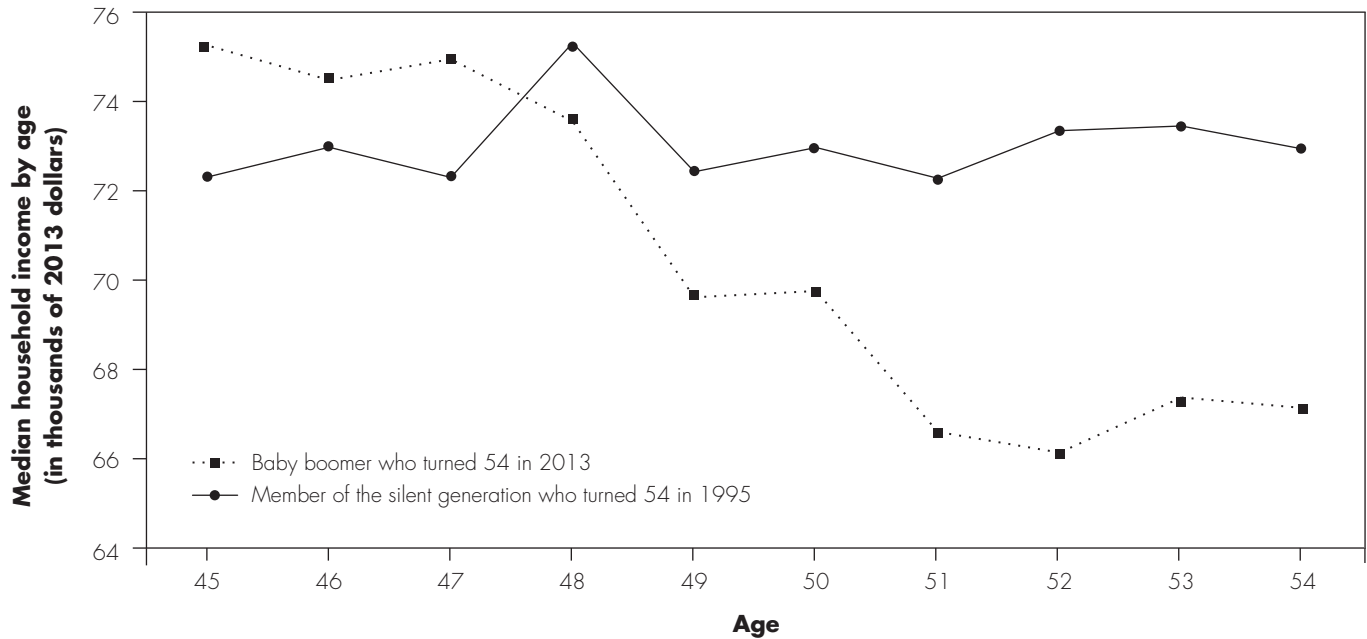
the Commission does not believe that ever-increasing health care spending is inevitable. There is strong evidence that a sizeable share of current health care spending—both nationally and by Medicare—is inefficient or unnecessary, providing an opportunity for policymakers to reduce spending, extend the life of the program, and reduce pressure on the federal budget.

Geographic variation within and outside the United States indicates that some share of spending is inefficient

Research on Medicare spending shows that areas with higher spending or more intensive use of services do not have higher quality of care or improved patient outcomes (Fisher et al. 2003a, Fisher et al. 2003b, Institute of Medicine 2013). Even measures of service use, adjusted for health status and standardized prices, show considerable variation (Medicare Payment Advisory Commission 2011b). Services that have been widely recognized as low value continue to be performed regularly (Schwartz et al. 2014).

**FIGURE
1-25**

A 54-year-old baby boomer in 2013 would have substantially lower income than a 54-year-old member of the silent generation in 1995

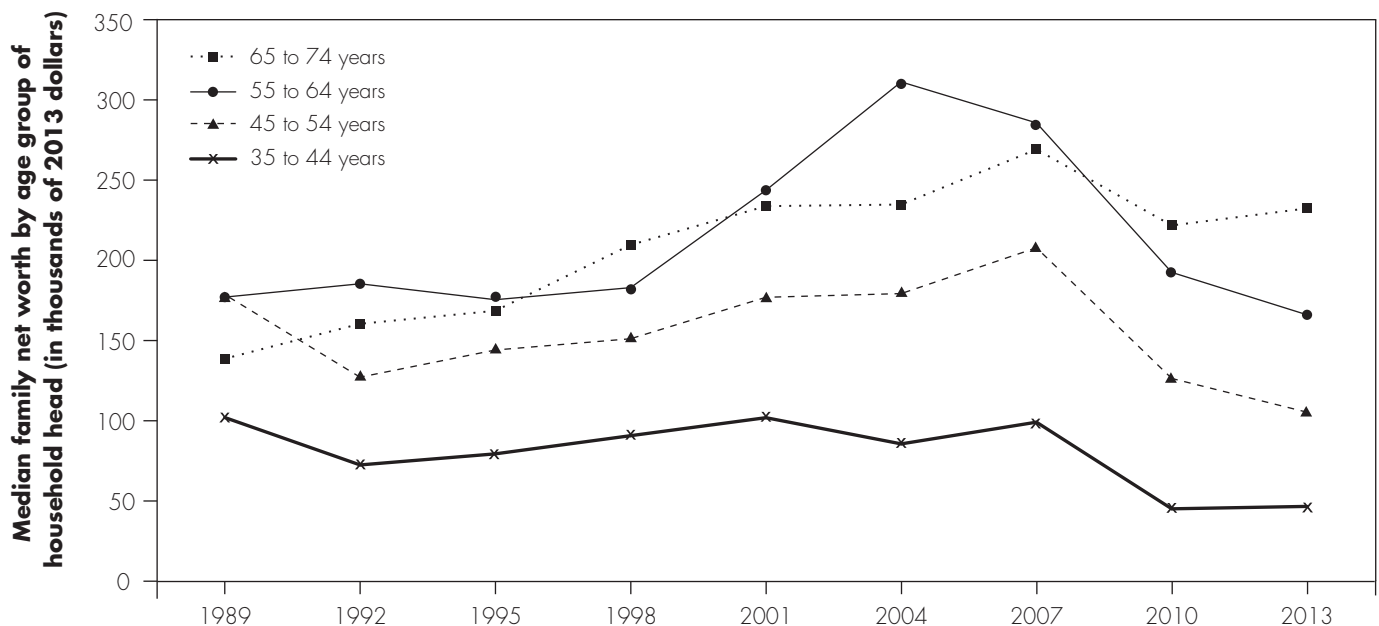


Note: Data are for the median household income for 45- to 54-year-olds. Members of the baby-boom generation were born between 1946 and 1964. Members of the silent generation were born between 1928 and 1945.

Source: Census Bureau, Current Population Survey, Annual Social and Economic Supplements.

**FIGURE
1-26**

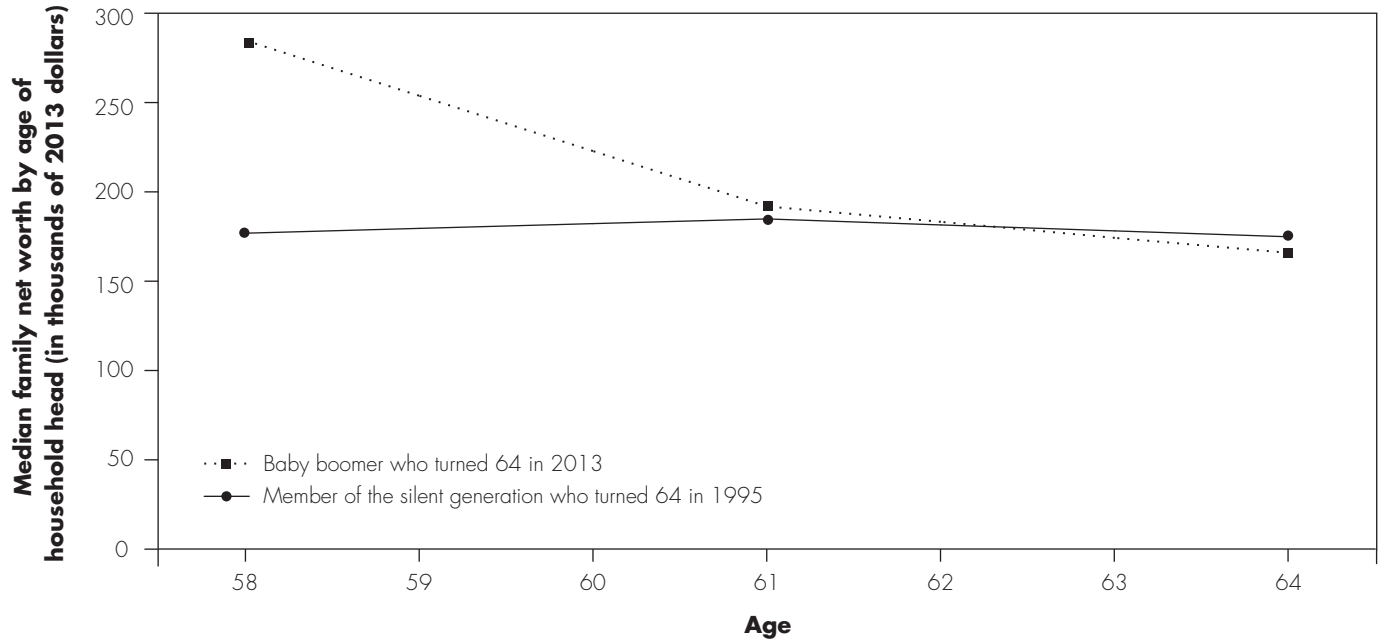
Real family net worth declined substantially for all age groups under age 65 since the Great Recession began in 2007



Source: Federal Reserve 2014.

**FIGURE
1-27**

A 64-year-old baby boomer in 2013 would have lower net worth than a 64-year-old member of the silent generation in 1995



Note: Data are for the median real family net worth for 55- to 64-year-olds. Members of the baby-boom generation were born between 1946 and 1964. Members of the silent generation were born between 1928 and 1945.

Source: Federal Reserve 2014.

The United States spends more on health care than any other country in the world (both on a per capita basis and as a share of GDP), but studies consistently show it ranks poorly on indicators of efficiency, equity, and outcomes. According to a 2014 study by the Commonwealth Fund, the United States ranks last of 11 nations on 2 indicators of healthy lives—mortality amenable to medical care and healthy life expectancy at age 60 (Davis et al. 2014).

Medicare's challenges to increasing efficiency

The Medicare program is a complex and fragmented system, consisting of multiple paths to entitlement, multiple types of coverage (Part A, Part B, Part C, and Part D), multiple payment systems, and different rules for each setting. The Medicare program must set prices for thousands of discrete services at different levels of aggregation (e.g., inpatient hospital payments are paid based on the stay, while physician payments are based on the service) and in different labor markets across the country. The Medicare program statute and rule making include a substantial number of exceptions, adjustments,

and modifications to its general policies. Several of Medicare's structural features (and some shared across the health care system) complicate efforts to achieve spending efficiencies:

- ***Fragmented payment system across multiple settings.*** The program sets payment rates each year for at least nine different health care settings or provider types: inpatient and outpatient hospitals, physician and other health professional services, home health agencies, skilled nursing facilities, long-term care facilities, hospices, inpatient rehabilitation facilities, ambulatory surgical centers, and outpatient dialysis facilities. In addition to the yearly rule-making process involved in setting these rates, administrators oversee other parts of the program that operate on fee schedules (ambulances, outpatient lab facilities) or on cost-based payment (rural health centers, critical access hospitals). Payment rates for Part C (Medicare Advantage) are set using administrative pricing based on a competitive process, and Part D payments (prescription drugs) are set generally by market rates.

The fragmented payment system across multiple health care settings reduces incentives to provide patient-centered, coordinated care.

- **Coverage of services delivered by any willing provider.** Under Medicare's statute, the program generally covers all medically necessary services in each benefit category that are delivered by any willing provider (any provider that is willing to meet Medicare's rules). As a result, Medicare does not have the authority to develop provider networks or to credential providers, tools that private payers often use to reduce the potential for fraud and abuse. In some cases, the Medicare program even has difficulty removing providers or suppliers whose claims history clearly demonstrates aberrant patterns of billing, care, or both.
- **The program's benefit design.** 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 altogether not covered (for example, Medicare does not generally cover long-term care). Medicare Part A and Part B lack a cap on out-of-pocket costs, a feature that exists in nearly all private insurance policies. In response, many beneficiaries purchase supplemental coverage that includes an out-of-pocket maximum. Most supplemental policies also substantially reduce or eliminate most of the beneficiary liability for coinsurance and deductibles, thereby blunting the impact of cost sharing. As a result, there is little incentive for beneficiaries to be cost conscious—that is, to select only those services that are necessary and choose providers who employ efficient clinical practices (Medicare Payment Advisory Commission 2012).
- **Different prices for the same or similar services.** Given the different settings in which services are delivered, the Medicare program 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 higher paid setting, which leads to increased program spending and higher beneficiary cost sharing.
- **Undervalued and overvalued services.** In the process of setting rates for thousands of services, certain services are undervalued relative to others, providing

incorrect incentives for their use. For example, the Commission has raised concerns that the Medicare fee schedule overpays for services provided by clinicians in procedural specialties and underpays for services provided by clinicians in primary care specialties (Medicare Payment Advisory Commission 2011a). This imbalance results in significantly higher income for clinicians in procedural specialties relative to those in primary care specialties, contributing to a corresponding imbalance in clinician supply.

- **Prompt payment standards.** The Medicare program also follows prompt payment requirements, paying claims within 30 days of receipt. Otherwise, Medicare is liable for interest. This emphasis on timely payment means that, in many cases, the claim may be paid and only thereafter identified as potentially fraudulent or erroneous.
- **Vulnerability to patient selection, steering, and overuse.** Another consequence of Medicare's payment structure is its vulnerability to patient selection, steering, and overuse. For example, with some payment systems it is financially advantageous for providers to treat certain kinds of beneficiaries and avoid others, provide certain types of services over others, or treat beneficiaries in a higher paid setting. In addition, in Medicare's FFS system, providers may be able to increase their revenue by increasing the volume of services they provide without commensurate value to the beneficiary. In addition, clinicians can prescribe pharmaceutical drugs and medical devices while receiving payment from the manufacturers.

These features make the program vulnerable to inappropriate care, waste, and fraud. In recent years, CMS has gained new authorities to exclude potentially fraudulent providers from the program and apply different levels of scrutiny to new providers based on their fraud potential. CMS has also further developed its ability to identify potentially fraudulent billing patterns. However, all of CMS's activities in this area are constrained by resources and subject to statutory requirements that limit its ability to use the same tools as private insurers to reduce fraud (Government Accountability Office 2013).

The Commission's approach to addressing these challenges

Medicare's goal should be to obtain the greatest possible value for the program's expenditures, which means maintaining beneficiaries' access to high-quality services

while encouraging their efficient use. However, managing payment rates alone will not address the Medicare FFS system's key challenge—that providers are paid more for doing more services and are not held accountable for outcomes. Resolving this conundrum will require reform of both the payment and delivery systems.

The Commission's work can be categorized in the following domains: (1) payment accuracy and efficiency, (2) care coordination and quality, (3) information for patients and providers, (4) engagement of beneficiaries, and (5) alignment of the health care workforce. Regardless of the issue, the Commission always considers the interests of three main actors: the beneficiary—access to high-quality, efficient care; the provider—fair and equitable pay; and the taxpayer—the most prudent and valuable use of the public's dollar.

- **Payment accuracy and encouraging efficiency.** In Medicare's payment systems, the payment rates for individual products and services may not accurately reflect the cost of furnishing the product or service. Inaccurate payment rates create incentives for higher volume growth for certain services, thereby unduly disadvantaging some providers and unintentionally rewarding others. The Commission pursues payment accuracy in its update recommendations as well as other policy recommendations, with a focus on ensuring that payment is adequate for the efficient provision of care.
- **Care coordination and quality.** Providers may provide quality care to uphold professional standards and satisfy patients, but until recently Medicare did not have the authority to hold them accountable for improving, or to provide incentives to improve, the quality of care they provide. Similarly, few structures exist in Medicare to hold providers accountable for the full spectrum of care a beneficiary may use, even when they make the referrals that dictate additional resource use. The Commission has supported policies that move Medicare beyond FFS into payment systems that make a provider responsible for the patient's entire episode of care to help address these gaps between settings.
- **Broadening information available to patients and providers.** Medicare and its providers lack the information and tools needed to improve quality and use program resources efficiently. For example, Medicare lacks quality data from many settings of

care and does not have timely cost or market data to set accurate payment rates. In addition, beneficiaries are called on to make complex choices among delivery systems, drug plans, and providers. Medicare has started to make available for beneficiaries the information that could help them choose higher quality providers or lower cost treatments and improve their satisfaction. The Commission has supported policies that promote comparative effectiveness, disclosure of physician financial relationships, and public reporting of quality information.

- **Engaging beneficiaries.** While much of the Commission's work focuses on providers and their payment incentives, how beneficiaries view the Medicare program and how they make decisions about their health care are vital to the program's success. Developing policies that engage the beneficiary as well as the provider has the potential to improve health, improve the experience of health care provided through Medicare, and control costs for the beneficiary and taxpayer alike. The Commission has supported reforming the current benefit design and has promoted shared decision making.
- **Aligning the health care workforce.** Our nation's system of medical education and graduate training is not aligned with the delivery system reforms essential for increasing the value of health care in the United States. The Commission has pursued policies that increase the incentives for residency programs to focus on quality, efficiency, and accountability so that the future clinician workforce can better address the needs of beneficiaries.

Conclusion

The level and growth of health care spending as a share of the economy suggest that an ever-increasing amount of the country's economic activity and gain will be dedicated to purchasing health care. Medicare is the single largest payer in the health care sector and will expand with the aging of the baby-boom generation, greatly increasing program spending. Significant cross-sectional variation in use and spending does not correspond with quality outcomes, raising concern that higher health care use and spending are not improving overall health and are putting beneficiaries at risk, both medically and financially.

Because of its size, and because other payers use its payment methods, Medicare is an important influence on the nation's health care delivery system and its evolution. Reciprocally, trends in the private health care insurance market can influence whether Medicare's payment reforms are ultimately successful. Because of this interaction between public and private payers, the alignment of incentives across payers is an important consideration for delivery system reforms.

Despite the relatively lower rates of spending growth recently experienced by Medicare, the program will continue to absorb increasing amounts of federal revenue. Other public investments such as education and infrastructure will be crowded out by high and growing levels of health care spending. State and federal budgets face continued fiscal pressure, effects intensified by health care spending trends. In light of strained federal, family, and individual budgets, the Medicare program must be vigilant in pursuing reforms that decrease spending and improve quality. ■

Endnotes

- 1 Figure 1-2 (p. 9) shows that the share of spending accounted for by private health insurance (34 percent in 2014) is greater than Medicare's share (22 percent in 2014). However, in contrast to Medicare, private health insurance is not a single purchaser of health care; rather, it includes many payers, including traditional managed care, self-insured health plans, and indemnity plans.
- 2 The Commission's calculations are based on aggregate Part D reimbursements to plans and employers on an incurred basis as shown in Table IV.B10 of the 2015 annual report of the Boards of Trustees of the Medicare trust funds. Per beneficiary spending excludes premium payments.
- 3 Outpatient hospital services and outpatient lab services are combined in Figure 1-6 (p. 12) and Figure 1-7 (p. 13) because a large portion of outpatient laboratory services were bundled into the outpatient prospective payment system effective January 1, 2014.
- 4 The Trustees' and CBO's projections of per beneficiary spending growth differ slightly (by about 1 percentage point per year on average) in the initial 10-year period because each agency establishes its own detailed growth rate assumptions by individual type of service. So for example, slightly different assumptions about the average mix of services provided to beneficiaries would affect per beneficiary spending growth in the short run. Each agency derives long-run assumptions about per beneficiary spending growth. In the long run, the Trustees assume that the weighted average growth rate for per beneficiary Medicare spending is 4 percent, or GDP plus 0 percent, and CBO assumes 5 percent, or GDP plus 1 percent. So while the Trustees' projection of spending is higher than CBO's initially, by the early 2040s CBO's projection of spending begins to exceed the Trustees'. Both agencies emphasize the uncertainty of their long-range projections stemming from unknown future changes in tax and spending policies and unexpected changes in the economy, demographics, and other factors.
- 5 An estimate of the fiscal impact of the higher rate of enrollment growth is not available. However, CBO scored a budget option to raise the eligibility age for Medicare that provides an illustrative example of the fiscal impact of lower enrollment growth. CBO assumed the eligibility age would be raised by two months every year until it reached age 67. Since the eligibility age would increase gradually in that scenario, CBO estimated minimal short-term effects. For the long term, CBO estimated that spending on Medicare would be about 3 percent less by 2038; however, roughly two-thirds of those long-term savings would be offset by increases in federal spending for Medicaid and subsidies to purchase health insurance through the PPACA insurance exchanges (Congressional Budget Office 2013).
- 6 Other major health programs include Medicaid, the Children's Health Insurance Program, and federal subsidies for the federal and state exchanges legislated under PPACA.
- 7 For example, the Medicare Trustees estimate hospital inpatient admissions per beneficiary to decline through 2021 and begin increasing thereafter because of the aging of the baby-boom population (Boards of Trustees 2014). The Congressional Budget Office also projects comparatively slow growth in per beneficiary spending for the next decade (2015 to 2025), in part because of the influx of younger beneficiaries, who tend to use fewer health care services and therefore lower Medicare's average spending per beneficiary (Congressional Budget Office 2015b).
- 8 When compared with the previous generation at ages 45 to 64, the baby-boom generation had a larger share of individuals with physician-diagnosed and undiagnosed diabetes (15.0 percent versus 13.9 percent, respectively), but a smaller share of individuals with diagnosed diabetes who had poor glycemic control (14.1 percent versus 26.0 percent, respectively) (National Center for Health Statistics 2014).
- 9 When compared with the previous generation at ages 45 to 64, the baby-boom generation had larger shares of individuals with hypertension (42.2 percent of male and 39.5 percent of female baby boomers versus 34.2 percent and 32.8 percent, respectively, of males and females in the previous generation), but smaller shares of individuals with hypertension who had uncontrolled high blood pressure (50.2 percent of male and 36.5 percent of female baby boomers vs. 73.1 percent and 62.1 percent, respectively, of males and females in the previous generation).

Similarly, when compared with the previous generation at ages 45 to 64, the baby-boom generation had larger shares of individuals with high cholesterol or taking cholesterol-lowering medication (39.8 percent of male and 42.4 percent of female baby boomers vs. 30.1 percent and 36.4 percent, respectively, of males and females in the previous generation) but smaller shares of the population with high serum total cholesterol (16.2 percent of male and 22.4 percent of female baby boomers vs. 27.2 percent and 33.4 percent, respectively, of males and females in the previous generation) (National Center for Health Statistics 2014).
- 10 Income for individuals over age 65 grew slightly because as individuals leave the workforce Social Security makes up a larger and larger share of their income (DeNavas-Walt and Proctor 2013, National Bureau of Economic Research 2014).
- 11 Members of the silent generation were born between 1928 and 1945.
- 12 Members of Generation X were born between 1965 and 1980.

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C H A P T E R

2

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

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

Chapter summary

As required by law, the Commission annually makes payment update recommendations for providers paid under fee-for-service (FFS) Medicare. An update is the amount (usually expressed as a percentage change) by which the base payment for all providers in a payment system is changed relative to the prior year. To determine an update, we first assess the adequacy of Medicare payments for providers in the current year (2016) by considering beneficiaries' access to care, the quality of care, providers' access to capital, and Medicare payments and providers' costs. Next, we assess how those providers' costs are likely to change in the year the update will take effect (the policy year, 2017). As part of the process, we examine payments to support the efficient delivery of services consistent with our statutory mandate. Finally, we make a judgment about what, if any, update is needed. (The Commission also assesses Medicare payment systems for Part C and Part D and makes recommendations as appropriate. But because they are not FFS payment systems, they are not part of the discussion in this chapter.)

This year, we consider recommendations in nine FFS sectors: acute care hospitals, physicians and other health professionals, ambulatory surgical centers, outpatient dialysis facilities, skilled nursing facilities, home health care agencies, inpatient rehabilitation facilities, long-term care hospitals, and hospices. Each year, the Commission looks at all available indicators of payment adequacy and re-evaluates any assumptions from prior years using

In this chapter

- Are Medicare payments adequate in 2016?
- What cost changes are expected in 2017?
- How should Medicare payments change in 2017?
- Payment adequacy in context

the most recent data available to make sure its recommendations accurately reflect current conditions. We may also consider recommending changes that redistribute payments within a payment system to correct any biases that may make patients with certain conditions financially undesirable, make particular procedures unusually profitable, or otherwise result in inequity among providers. Finally, we may also make recommendations to improve program integrity.

Our recommendations, if enacted, could significantly change the revenues providers receive from Medicare. Rates set to cover the costs of relatively efficient providers help create fiscal pressure on all providers to control their costs. Medicare rates also have broader implications for health care spending. For example, Medicare rates are commonly used to set hospital rates charged to uninsured patients eligible for financial assistance; used by Medicare Advantage plans to set hospital prices; and used by the Department of Veterans Affairs (VA) to pay non-VA providers (Department of Veterans Affairs 2010, Internal Revenue Service 2014, Medicare Payment Advisory Commission 2013).

The Commission also examines payment rates for services that can be provided in multiple settings. Medicare often pays different amounts for similar services across settings. Basing the payment rate on the rate in the most efficient setting would save money for Medicare, reduce cost sharing for beneficiaries, and reduce the incentive to provide services in the higher paid setting for financial reasons. However, putting into practice the principle of paying the same rate for the same service across settings can be complex because it requires that the definition of the services and the characteristics of the beneficiaries across settings be sufficiently similar. In March 2012, we recommended equalizing rates for evaluation and management office visits provided in hospital outpatient departments and physicians' offices (Medicare Payment Advisory Commission 2012). In 2014, we extended that recommendation to additional services provided in those two settings and recommended consistent payment between acute care hospitals and long-term care hospitals for certain classes of patients (Medicare Payment Advisory Commission 2014). In the Bipartisan Budget Act of 2015, the Congress made payment to outpatient departments for certain services equal to the physician fee schedule rates for those same services provided at any new outpatient off-campus location beginning in 2017. In 2015, we recommended site-neutral payments to inpatient rehabilitation facilities (IRFs) for select conditions treated both in skilled nursing facilities and IRFs (Medicare Payment Advisory Commission 2015). The Commission will continue to analyze opportunities for applying this principle to other services and settings. ■

Background

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

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

To help determine the appropriate base payment rate for a given payment system in 2017, we first consider whether payments are adequate for relatively efficient providers in 2016. To inform the Commission's judgment, we examine data on beneficiaries' access to care, the quality of care, providers' access to capital, and Medicare payments and providers' costs for 2016. We then consider how providers' costs will change in 2017. Taking these factors into account, we then determine how Medicare payments for the sector in aggregate should change in 2017.

Within a given level of funding for a sector, we may also consider changes in payment policy to improve payment accuracy. Such changes are intended to improve equity among providers or access to care for beneficiaries and may also affect the distribution of payments among providers in a sector. For example, we have recommended removing biases in the skilled nursing facility (SNF) prospective payment system (PPS) that make it more financially desirable to treat patients who need only therapy than to treat medically complex patients.

We also make recommendations to improve program integrity when needed. In some cases, our data analysis reveals problematic variation in service utilization across geographic regions or providers. For example, in reaction to patterns of unusually long stays in a subset of hospices, we recommended medical review focused on hospices that have many long-stay patients. In this report, we recommend the Secretary closely examine the coding

practices of certain inpatient rehabilitation facilities that appear to result in very high Medicare margins.

We compare our recommendations for updates and other policy changes for 2017 with the base payment rates specified in Medicare law to understand the implications for beneficiaries, providers, and the Medicare program. As has been the Commission's policy in the past, we consider our recommendations each year in light of the most current data and, in general, recommend updates for a single year.

Are Medicare payments adequate in 2016?

The first part of the Commission's approach to developing payment updates is to assess the adequacy of current Medicare payments. For each sector, we make a judgment by examining information on the following:

- beneficiaries' access to care
- the quality of care
- providers' access to capital
- Medicare payments and providers' costs for 2016

Some measures focus on beneficiaries (e.g., access to care) and some focus on providers (e.g., the relationship between payments and costs). The direct relevance, availability, and quality of each type of information vary among sectors, and no single measure provides all the information needed for the Commission to judge payment adequacy. Ultimately, the Commission makes its recommendations considering all of these factors.

Beneficiaries' access to care

Access to care is an important indicator of the willingness of providers to serve Medicare beneficiaries and the adequacy of Medicare payments. For example, poor access could indicate that Medicare payments are too low. However, factors unrelated to Medicare's payment policies may also affect access to care. These factors include coverage policies, beneficiaries' preferences, local market conditions, and supplemental insurance.

The measures we use to assess beneficiaries' access to care depend on the availability and relevance of information in each sector. We use results from several surveys to assess physicians' and other health professionals' willingness to

serve beneficiaries and beneficiaries' opinions about their access to physician and other health professional services. For home health services, we examine data on whether communities are served by providers.

Access: Capacity and supply of providers

Rapid growth in the capacity of providers to furnish care may increase beneficiaries' access and indicate that payments are more than adequate to cover providers' costs. Changes in technology and practice patterns may also affect providers' capacity. For example, less invasive procedures could be performed in outpatient settings and lower priced equipment could be more easily purchased by providers, increasing the capacity to provide certain services.

Substantial increases in the number of providers may suggest that payments are more than adequate and could raise concerns about the value of the services being furnished. If Medicare is not the dominant payer for a given provider type (such as ambulatory surgical centers), changes in the number of providers may be influenced more by other payers and their demand for services and thus may be difficult to relate to Medicare payments. When facilities close, we try to distinguish between closures that have serious implications for access to care in a community and those that may have resulted from excess capacity.

Access: Volume of services

The volume of services can be an indirect indicator of beneficiary access to services. An increase in volume shows that beneficiaries are receiving more services and suggests sufficient access—although it does not necessarily demonstrate that the services are appropriate. Volume is also an indicator of payment adequacy; an increase in volume beyond that expected for an increase in the number of beneficiaries could suggest that Medicare's payment rates are too high. Very rapid increases in the volume of a service might even raise questions about program integrity or whether the definition of the corresponding benefit is too vague. Reductions in the volume of services can sometimes be a signal that revenues are inadequate for providers to continue operating or to provide the same level of service. Finally, rapid changes in volume between sectors whose services can be substituted for one another may suggest distortions in payment and raise questions about provider equity. For example, payment rates for evaluation and management (E&M) office visits are much higher in hospital outpatient departments (HOPDs) than in physicians' offices, and

over the last several years, the volume of those services in HOPDs has increased while the volume in physicians' offices has decreased.

However, changes in the volume of services are often difficult to interpret because increases and decreases can be explained by other factors such as population changes, changes in disease prevalence among beneficiaries, technology, practice patterns, deliberate policy interventions, and beneficiaries' preferences. For example, the number of Medicare beneficiaries in the traditional fee-for-service (FFS) program decreased in recent years as more beneficiaries chose plans in the Medicare Advantage program; therefore, we look at the volume of services per FFS beneficiary as well as the total volume of services. Explicit decisions about service coverage can also influence volume. For example, in 2004, CMS began enforcing compliance with a rule mandating that a certain percentage of patients in each inpatient rehabilitation facility (IRF) have 1 of 13 qualifying conditions. As a result, the volume of IRF patients decreased markedly.

Changes in the volume of physician services must be interpreted particularly cautiously. Evidence suggests that for discretionary services, volume may go up when payment rates go down—the so-called volume offset. Whether a volume offset phenomenon exists in other sectors depends on how discretionary the services are and on the ability of providers to influence beneficiaries' demand for them.

Quality of care

The relationship between the quality of care and the adequacy of Medicare payment is not direct. Simply increasing payments through an update for all providers in a sector, regardless of their individual quality, is unlikely to influence the quality of care because, historically, Medicare payment systems have created little or no incentive for providers to spend additional resources on improving quality. The Medicare program has begun to implement quality-based payment policies in a number of sectors; however, some issues have arisen. First, it is very difficult to differentiate quality performance among providers when the number of cases per provider is low. This issue has been particularly vexing in measuring quality performance for individual clinicians and even for measuring the performance of groups of clinicians. Second, the Commission has been increasingly concerned that Medicare's approach to quality measurement is flawed because it relies on too many clinical process measures.

Many current process measures are weakly correlated with outcomes of interest such as mortality and readmissions, and most process measures focus on addressing the underuse of services, while the Commission believes that overuse and inappropriate use are also of concern. Therefore, we have begun exploring the use of a small set of population-based outcome measures to assess and compare the performance of FFS Medicare, Medicare Advantage (MA), and Medicare accountable care organizations (ACOs) within a local area. We also continue to assess whether provider-level quality measures will still be required to make FFS payment adjustments, even after a population-based quality measurement system is put in place.

Providers' access to capital

Providers must have access to capital to maintain and modernize their facilities and to improve their capability to deliver patient care. Widespread ability to access capital throughout a sector may reflect the adequacy of Medicare payments. Some sectors such as hospitals require large capital investments, and access to capital can be a useful indicator. Other sectors such as home health care do not need large capital investments, so access to capital is a more limited indicator. In some cases, a broader measure such as changes in employment may be a useful indicator of financial health within a sector. Similarly, in sectors where providers derive most of their payments from other payers (such as ambulatory surgical centers) or other lines of business, or when conditions in the credit markets are extreme, access to capital may be a limited indicator of the adequacy of Medicare payments.

Medicare payments and providers' costs for 2016

For most payment sectors, we estimate Medicare payments and providers' costs for 2016 to inform our update recommendations for 2017. To maintain Medicare beneficiaries' access to high-quality care while keeping financial pressure on providers to make better use of taxpayers' and beneficiaries' resources, we investigate whether payments are adequate to cover the costs of relatively efficient providers, where available data permit such providers to be defined.

Relatively efficient providers use fewer inputs to produce quality outputs. Efficiency could be increased by using the same inputs to produce a higher quality output or by using fewer inputs to produce the same quality output. The Commission follows two principles when selecting a set of

efficient providers. First, the providers must do relatively well on cost and quality metrics. Second, the performance has to be consistent, meaning that the provider cannot have poor performance on any metric over the past three years. The Commission's approach is to develop a set of criteria and then examine how many providers meet them. It does not establish a set share (say, 10 percent) of providers to be considered efficient and then define criteria to meet that pool size.

This year, we reviewed the set of criteria used to define efficient providers and evaluated potential improvements to our methodology. Specifically, we tested the effect of using different selection criteria such as adjusting the threshold of minimum acceptable quality or relaxing the consistency requirement. The Commission concluded that alternative methods could change the number of efficient providers by varying degrees, but these methods would not result in greater distinction between the efficient and average providers. Most fundamentally, the clarity of the information provided for assessing payment adequacy would not improve significantly with any of the new methods tested. Therefore, the Commission will continue to use its standard method to define efficient providers in this year's report. In the future, we will continue to look for improvements in our methods, including using new quality metrics as better indicators of patient outcomes are developed.

For providers that submit cost reports to CMS—acute care hospitals, SNFs, home health agencies, outpatient dialysis facilities, IRFs, long-term care hospitals, and hospices—we estimate total Medicare-allowable costs and assess the relationship between Medicare's payments and those costs. We typically express the relationship between payments and costs as a payment margin, which is calculated as aggregate Medicare payments for a sector, minus costs, divided by payments. By this measure, if costs increase faster than payments, margins will decrease.

In general, to estimate payments, we first apply the annual payment updates specified in law for 2015 and 2016 to our base data (2014 for most sectors). We then model the effects of other policy changes that will affect the level of payments in 2016. To estimate 2016 costs, we consider the rate of input price inflation or historical cost growth, and, as appropriate, we adjust for changes in the product (such as fewer visits per episode of home health care) and trends in key indicators (such as historic cost growth and the distribution of cost growth among providers).

Using margins

In most cases, we assess Medicare margins for the services furnished in a single sector and covered by a specific payment system (e.g., SNF or home health services). However, in the case of hospitals, which often provide services that are paid for by multiple Medicare payment systems, our measures of payments and costs for an individual sector could become distorted because of the allocation of overhead costs or the presence of complementary services. For example, having a hospital-based SNF or IRF may allow a hospital to achieve shorter lengths of stay in its acute care units, thereby decreasing costs and increasing inpatient margins. For hospitals, we assess the adequacy of payments for the whole range of Medicare services they furnish—inpatient and outpatient (which together account for more than 90 percent of Medicare payments to hospitals), SNF, home health, psychiatric, and rehabilitation services—and compute an overall Medicare hospital margin encompassing costs and payments for all the sectors. The hospital update recommendation in Chapter 3 applies to hospital inpatient and outpatient payments; the updates for other distinct units of the hospital, such as SNFs, are covered in separate chapters.

Total margins, which include payments from all payers and revenue from nonpatient sources, do not play a direct role in the Commission’s update deliberations but can inform our assessment of overall fiscal pressure and other indicators. The adequacy of Medicare payments is assessed relative to the costs of treating Medicare beneficiaries, and the Commission’s recommendations address a sector’s Medicare payments, not total payments. We calculate a sector’s Medicare margin to determine whether total Medicare payments cover average providers’ costs for treating Medicare patients and to inform our judgment about payment adequacy. Margins will always be distributed around the average, and aggregate payment adequacy does not mean that every provider has a positive Medicare margin. To assess whether changes are needed in the distribution of payments, we calculate Medicare margins for certain subgroups of providers with unique roles in the health care system. For example, because location and teaching status enter into the payment formula, we calculate Medicare margins based on where hospitals are located (in urban or rural areas) and their teaching status (major teaching, other teaching, or nonteaching).

Multiple factors can contribute to changes in the Medicare margin, including changes in the efficiency of providers,

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

Another factor we consider when evaluating the adequacy of payments is whether providers have any financial incentive to expand the number of Medicare beneficiaries they serve. In considering whether to treat a patient, a provider with excess capacity compares the marginal revenue it will receive (i.e., the Medicare payment) with its marginal costs—that is, the costs that vary with volume. If Medicare payments are larger than the marginal costs of treating an additional beneficiary, a provider has a financial incentive to increase its volume of Medicare patients. On the other hand, if payments do not cover the marginal costs, the provider may have a disincentive to care for Medicare beneficiaries.

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

Appropriateness of current costs

Our assessment of the relationship between Medicare’s payments and providers’ costs is complicated by differences in providers’ efficiency, responses to changes in payment systems, product changes, and cost reporting accuracy. Measuring the appropriateness of costs is particularly difficult in new payment systems because changes in response to the incentives in the new system are to be expected. For example, the number and types of visits in a home health episode changed significantly after the home health PPS was introduced, although the payments were based on the older, higher level of use and costs. In other systems, coding may change. As an example, the hospital inpatient PPS introduced a new patient classification system in 2008 to improve

payment accuracy. However, for a number of years after its implementation, it resulted in higher payments because provider coding became more detailed, making patient complexity appear higher—although the underlying patient complexity was largely unchanged. Any kind of rapid change in policy, technology, or product can make it difficult to measure costs per unit.

To assess whether reported costs reflect the costs of efficient providers, we examine recent trends in the average cost per unit, variation in standardized costs and cost growth, and evidence of change in the product. One issue Medicare faces is the extent to which private payers exert pressure on providers to constrain costs. If private payers do not exert pressure, providers' costs will increase and, all other things being equal, margins on Medicare patients will decrease. Providers who are under pressure to constrain costs generally have managed to slow their growth in costs more than those who face less pressure (Medicare Payment Advisory Commission 2011, Robinson 2011, White and Wu 2014). Some have suggested that, in the hospital sector, costs are largely outside the control of hospitals and that hospitals shift costs onto private insurers to offset Medicare losses. This belief assumes that costs are immutable and not influenced by whether the hospital is under financial pressure. We find that costs do vary in response to financial pressure and that low margins on Medicare patients can result from a high cost structure that has developed in reaction to high private-payer rates. In other words, when providers receive high payment rates from insurers, they face no particular need to keep their costs low, and so, all other things being equal, their Medicare margins are low because their costs are high. Lack of pressure is more common in markets where a few providers dominate and have negotiating leverage over payers. In some sectors, Medicare itself could, and should, exert greater pressure on providers to reduce costs.

Variation in cost growth among a sector's providers can give us insight into the range of performance that facilities can achieve. For example, if some providers' costs grow more rapidly than others in a given sector, we might question whether those increases are appropriate. Changes in product can also significantly affect unit costs. Returning to the example of home health services, one would expect that substantial reductions in the number of visits per 60-day home health episode would reduce costs per episode. If costs per episode instead increased while the number of visits decreased, one would question the appropriateness of the cost growth.

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

What cost changes are expected in 2017?

The second part of the Commission's approach to developing payment update recommendations is to consider anticipated cost changes in the next payment year. This step incorporates not only the uncertainties discussed earlier concerning what cost growth is appropriate but also the uncertainty of any projection into the future. For each sector, we review evidence about the factors that are expected to affect providers' costs. One factor is the change in input prices, as measured by the price index that CMS uses for that sector. For facility providers, we start with the forecasted increase in an industry-specific index of national input prices, called a "market basket index." For physician services, we start with a CMS-derived weighted average of price changes for inputs used to provide physician services. Forecasts of these indexes approximate how much providers' costs would change in the coming year if the quality and mix of inputs they use to furnish care remained constant—that is, if there were no change in efficiency. Other factors may include the trend in actual cost growth, which could be used to inform our estimate if it differs significantly from the projected market basket.

How should Medicare payments change in 2017?

The Commission's judgments about payment adequacy, forthcoming policy changes, and expected cost changes result in an update recommendation for each payment system. An update is the amount (usually expressed as a percentage change) by which the base payment for all providers in a payment system is changed relative to the prior year. In considering updates, the Commission makes its recommendations for 2017 relative to the 2016 base payment as defined in Medicare's authorizing statute—

Title XVIII of the Social Security Act. The Commission's recommendations may call for an increase, a decrease, or no change from the 2016 base payment. For example, if the statutory base payment for a sector were \$100 in 2016, an update recommendation of a 1 percent increase for a sector means that we are recommending that the base payment in 2017 for that sector should be 1 percent greater, or \$101.

A complicating factor in our analyses in recent years has been the “sequester” (the federal budget sequestration established by the Budget Control Act of 2011). The Commission has argued against the sequester as applied to Medicare because it reduces payments across all sectors by 2 percent without regard to payment adequacy. However, regarding our analysis, the sequester effects are now fully reflected in provider cost report data and, thus, in our payment adequacy analyses. Our recommendations are made in this context and reflect conditions and impacts in the sequester budget environment. Therefore, we will continue to assess payment adequacy sector by sector and year by year—including the effects of the sequester—to give the Congress our best analysis and advice on the level and distribution of Medicare FFS payments.

When our recommendations differ from current law, as they often do, the Congress and the Secretary of Health and Human Services would have to take action and change law or regulation to put them into effect. Each year, we look at all available indicators of payment adequacy and reevaluate prior year assumptions using the most recent data available. The Commission does not start with any presumption that an update is needed or that any increase in costs should be automatically offset by a payment update. Instead, an update (which may be positive, zero, or negative) is warranted only if it is supported by the empirical data, in the judgment of the Commission. The Commission generally takes a year-by-year approach in its deliberations so that the most recent empirical data can be evaluated.

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

The Commission, as it makes its update recommendations, may in some cases take into consideration payment

differentials across sectors and make sure the relative update recommendations for the sectors do not exacerbate existing incentives to choose a site of care based on payment considerations. The difficulty of harmonizing payments across sectors to remove inappropriate incentives illustrates one weakness of FFS payment systems specific to each provider type and highlights the importance of moving beyond FFS to more global and patient-centric payment systems. As we continue to move Medicare payment systems toward those approaches, we will also continue to look for opportunities to rationalize payments for specific services across sectors to approximate paying the costs of the most efficient sector and lessen financial incentives to prefer one sector over another. Our forthcoming statutorily mandated report on a unified prospective payment system for post-acute care will address these issues directly.

Paying the same for the same service across settings

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

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

In 2012, the Commission recommended that payments for E&M office visits in the outpatient and physician office sectors be made equal. This service is comparable across the two settings. Our recommendation sets payment rates for E&M office visits both in the outpatient department and physician office sectors equal to those in the physician fee schedule, lowering both program spending and beneficiary liability (Medicare Payment Advisory Commission 2012). In 2014, we extended that principle to additional services for which payment rates in the outpatient PPS should be lowered to better match payment rates in the physician office setting (Medicare Payment Advisory Commission 2014). In the Bipartisan Budget Act of 2015, the Congress made payment for outpatient departments for the same services equal to the physician fee schedule rates for those services at any new outpatient off-campus clinic beginning in 2017. We also recommended consistent payment between acute care hospitals and long-term care hospitals for certain classes of patients (Medicare Payment Advisory Commission 2014). Last year, we recommended site-neutral payments to IRFs for select conditions treated in both SNFs and IRFs (Medicare Payment Advisory Commission 2015). The Commission will continue to study other services that are provided in multiple sites of care to find additional services for which the principle of the same payment for the same service can be applied.

Budgetary consequences

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

Payment adequacy in context

As discussed in Chapter 1, it is essential to look at payment adequacy not only within the context of individual payment systems but also in terms of Medicare as a whole. The Commission is concerned by any

increase in Medicare spending per beneficiary without a commensurate increase in value such as higher quality of care or improved health status. Growth in spending per beneficiary, combined with the aging of the baby boomers, will result in the Medicare program absorbing increasing shares of the gross domestic product and federal spending. Medicare's rising costs are projected to exhaust the Hospital Insurance Trust Fund and significantly burden taxpayers. Ensuring that the recent moderate growth trends in Medicare spending per beneficiary continue will require vigilance. The financial future of Medicare prompts us to look at payment policy and ask what can be done to develop, implement, and refine payment systems to reward quality and efficient use of resources while improving payment equity.

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

As we examine each of the payment systems, we also look for opportunities to develop policies that create incentives for providing high-quality care efficiently across providers and over time. Some of the current payment systems create strong incentives for increasing volume, and very few of these systems encourage providers to work together toward common goals. New programs such as alternative payment models and ACOs are meant to stimulate delivery system reform toward more integrated and value-oriented health care systems and may address these issues. We will continue to contribute to their development and track their progress. In the near term, the Commission must continue to closely examine a broad set of indicators, make sure there is consistent pressure on providers to control their costs, and set a demanding standard for determining which sectors qualify for a payment update each year. ■

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C H A P T E R

3

Hospital inpatient and outpatient services

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

- 3** The Congress should direct the Secretary of the Department of Health and Human Services to:
- update inpatient and outpatient payments by the amount specified in current law,
 - reduce Medicare payment rates for 340B hospitals' separately payable 340B drugs by 10 percent of the average sales price (ASP),
 - direct the program savings from reducing Part B drug payment rates to the Medicare-funded uncompensated care pool, and
 - distribute all uncompensated care payments using data from the Medicare cost reports' Worksheet S-10. The use of S-10 uncompensated care data should be phased in over three years.

COMMISSIONER VOTES: YES 14 • NO 3 • NOT VOTING 0 • ABSENT 0

Hospital inpatient and outpatient services

Chapter summary

In 2014, the Medicare fee-for-service (FFS) program paid 4,700 hospitals a total of \$173 billion for 9.7 million Medicare inpatient admissions, 193 million outpatient services, and \$9.4 billion of uncompensated care costs. These sums represent a 4 percent increase in hospital spending from 2013. On net, Part A hospital payments increased by \$1 billion, and Part B outpatient payments increased by \$5 billion. Part A payments increased because the increase in prices and patient severity more than offset a decline in inpatient volume. In addition, \$9.4 billion of Part A trust fund dollars were reallocated from inpatient disproportionate share (DSH) payments to non-Medicare uncompensated care payments. Outpatient payments rose due to volume increases, price increases, and bundling of some laboratory services into the outpatient fee schedule. The \$6 billion increase between 2013 and 2014 in overall hospital payments is equivalent to payments per FFS beneficiary increasing from \$4,630 to \$4,820.

Assessment of payment adequacy

In brief, most payment adequacy indicators (including access to care, quality of care, and access to capital) are positive. However, average Medicare margins are negative, and under current law they are expected to decline in 2016. Despite negative average margins, hospitals with excess capacity still have an incentive to see more Medicare beneficiaries because Medicare

In this chapter

- Are Medicare payments adequate in 2016?
- How should Medicare payment rates change in 2017?

payment rates are still higher than the variable costs associated with Medicare patients. To judge whether payments are adequate, the Commission makes a collective judgment after discussing the payment adequacy indicators listed below.

Beneficiaries' access to care—Access measures include the capacity of providers and the volume of services.

- ***Capacity and supply of providers***—The average hospital occupancy rate was 61 percent in 2014, suggesting hospitals have excess inpatient capacity in most markets.
- ***Volume of services***—Inpatient use per beneficiary declined by 3.6 percent in 2014 and outpatient services increased by 3.7 percent. However, some systems reported increases in both inpatient and outpatient volumes in the first half of 2015.

Quality of care—Hospital quality metrics remained stable or improved in 2014.

Providers' access to capital—Access to bond and equity markets remains strong for most hospitals, in part reflecting hospitals' strong all-payer profitability from 2012 through 2014.

Medicare payments and providers' costs—In 2014, hospitals' aggregate Medicare margin was –5.8 percent. However, a set of relatively efficient hospitals were able to break even on Medicare while performing well on quality metrics. Under current law, payment rates are projected to decline from 2014 to 2016 because of a \$3 billion decline in uncompensated care payments and other policy changes. Uncompensated care payments declined due to an increase in the share of the population that was insured. The reduction in Medicare payment rates from 2014 to 2016 could lower Medicare margins for all hospitals, including the relatively efficient providers. We project hospitals' aggregate Medicare margin for 2016 to be about –9 percent. While Medicare payments are lower than overall costs (fixed and variable combined), Medicare payments continue to be about 10 percent higher than the variable costs of treating Medicare patients. Therefore, hospitals with excess capacity will still have a financial incentive to serve more Medicare patients in 2016.

Sharing 340B discounts with beneficiaries and hospitals serving the uninsured

Nonprofit hospitals with high shares of Medicaid and low-income Medicare patients (about one-third of all prospective payment system hospitals) qualify for the 340B Drug Pricing Program. These hospitals receive substantial discounts from drug companies for Part B drugs. The Office of Inspector General estimates that discounts across all 340B providers (hospitals and certain clinics) average 34

percent of the average sales price (ASP). Medicare sets payment rates for all Part B drugs that are separately payable under the outpatient prospective payment system (OPPS) at 106 percent of each drug's ASP. Medicare does not currently adjust the OPPS payment rates for the lower drug acquisition cost at 340B hospitals, resulting in substantial differences between Medicare payment rates and the acquisition costs of Part B drugs at these hospitals.

The Commission has discussed whether those savings should be shared with beneficiaries and taxpayers. The Commission decided that a portion of the discount that these hospitals receive should be shared with beneficiaries through lower cost sharing. However, the Commission did not want to reduce net program payments to hospitals providing the most uncompensated care. Instead, the Commission recommends redistributing part of the Medicare program's share of the discounts (\$300 million) to hospitals with the highest uncompensated care costs.

Helping hospitals that provide the most uncompensated care

In 2016, the Medicare program will distribute \$6.4 billion of uncompensated care payments to hospitals. The \$300 million in redirected Medicare payments (from 340B drug payments to uncompensated care payments) would increase the size of that pool to \$6.7 billion (if rates of uninsurance do not change). Since the start of the uncompensated care payment distributions in 2014, the Secretary of the Department of Health and Human Services has decided to distribute the funds using Medicaid days (and inpatient days of low-income Medicare patients) as a proxy for uncompensated care costs. In 2016, the Secretary expects to pay each DSH hospital a payment of \$174 per Medicaid day from this pool. In this chapter, we provide data on why Medicaid days are a poor proxy for uncompensated care, discuss problems with Medicare cross-subsidizing Medicaid, and explain why using cost report data (Worksheet S-10) would be a more effective way to target uncompensated care payments to hospitals that disproportionately serve the uninsured.

Recommendation

The Commission's multipart recommendation addresses the issues of updating Medicare hospital payments in view of mixed payment adequacy signals, allowing beneficiaries to share in 340B drug discounts, and directing additional program payments to hospitals that provide the most uncompensated care. Specifically, this multipart recommendation would increase providers' base payment rates by the amount stipulated in current law, currently projected to be a 1.75 percent increase. We also recommend reducing the price Medicare pays for separately payable 340B drugs by 10 percent. While the Commission decided that beneficiaries should share in discounts from the 340B program, we were concerned about the impact of

reducing the Medicare price for 340B drugs for hospitals that provide high levels of uncompensated care. Therefore, the \$300 million in program payments saved by reducing Medicare payment rates for 340B drugs would be redirected into the Medicare-funded uncompensated care pool. To better target all uncompensated care payments, CMS would be required to distribute the expanded uncompensated care pool based on reported uncompensated care costs on hospital cost reports.

Our recommendation does not change the 340B program: Pharmaceutical companies would still have to provide hospitals the same 340B discounts (estimated to be 34 percent) that they currently provide. One-third of the 34 percent spread between Medicare payment rates and hospitals' acquisition costs would be shared with the beneficiary (10 percent lower cost sharing) and with hospitals providing uncompensated care that would receive the savings from the 10 percent reduction (\$300 million) in uncompensated care payments.

While the uncompensated care pool would be directly tied to hospitals' uncompensated care costs, the \$3.3 billion in traditional DSH dollars would still be distributed to hospitals, based primarily on Medicaid days. Hospitals with high Medicaid shares would be disproportionately helped by the traditional DSH pool, and hospitals with high uncompensated care costs would be disproportionately helped by the uncompensated care pool. The expanded uncompensated care pool would be large enough to pay for roughly 20 percent of DSH hospitals' uncompensated care costs.

While all hospitals are expected to experience increases in base payment rates because of the update, DSH hospitals with high uncompensated care costs would see increases in payments that are above average, and DSH hospitals with below average uncompensated care costs would see smaller increases or reductions in Medicare payments. The net effect of reduced payment rates for 340B hospitals' Part B drugs and increases in uncompensated care payments would be a small increase in average payments to 340B hospitals, reflecting large increases in payment to 340B hospitals with high levels of uncompensated care (often public hospitals) and relatively smaller payment decreases to the 340B hospitals with lower than average levels of uncompensated care. ■

**TABLE
3-1****Growth in Medicare inpatient and outpatient spending**

Hospital services	2006	2013	2014	Average annual change 2006-2013	Change 2013-2014
Inpatient services					
Total FFS payments (in billions)	\$110	\$118	\$110	1%	-7%
Payments per FFS beneficiary	3,080	3,170	2,950	0	-7
Outpatient services					
Total FFS payments (in billions)	29	49	54	8	11
Payments per FFS beneficiary	880	1,470	1,630	8	11
Uncompensated care payments					
Total (in billions)	N/A	N/A	9	N/A	N/A
Payments per FFS beneficiary	N/A	N/A	250	N/A	N/A
Inpatient, outpatient, and uncompensated care payments					
Total FFS payments (in billions)	139	167	173	3	4
Payments per FFS beneficiary	3,970	4,630	4,820	2	4

Note: FFS (fee-for-service), N/A (not applicable). Reported hospital FFS spending includes all hospitals covered by Medicare's inpatient prospective payment system along with critical access hospitals and Maryland hospitals. Fiscal year 2014 payments include partial imputation to account for the hospitals that had not yet submitted 2014 cost reports covering fiscal year 2014. Combined inpatient and outpatient services per capita are based on a weighted average of the Part A and Part B services. A portion of the growth in outpatient payments is due to certain lab tests that had been paid separately under the laboratory fee schedule now being packaged into ambulatory payment classifications in the outpatient payment system. CMS estimates that this change accounts for over \$2 billion of the growth in outpatient payments (Centers for Medicare & Medicaid Services 2015b). Numbers may not sum to stated totals due to rounding.

Source: MedPAC analysis of CMS Medicare hospital cost reports and Medicare Provider Analysis and Review files.

Background

Medicare spending on hospitals

In 2014, the Medicare fee-for-service (FFS) program paid acute care hospitals \$110 billion for inpatient care, \$54 billion for outpatient care, and approximately \$9.4 billion in uncompensated care payments (Table 3-1). The \$9.4 billion represents a reallocation of Medicare trust fund dollars, as mandated by the Patient Protection and Affordable Care Act of 2010 (PPACA). Under this change, approximately 2,500 disproportionate share (DSH) hospitals received 25 percent of the DSH payment they would have received under the older DSH formula and \$9.4 billion in uncompensated care payments in 2014. The result was that inpatient payments (which include traditional DSH payments but not uncompensated care payments) declined, but the overall sum of inpatient and uncompensated care payments was roughly flat from 2013 to 2014. Outpatient spending per FFS beneficiary grew

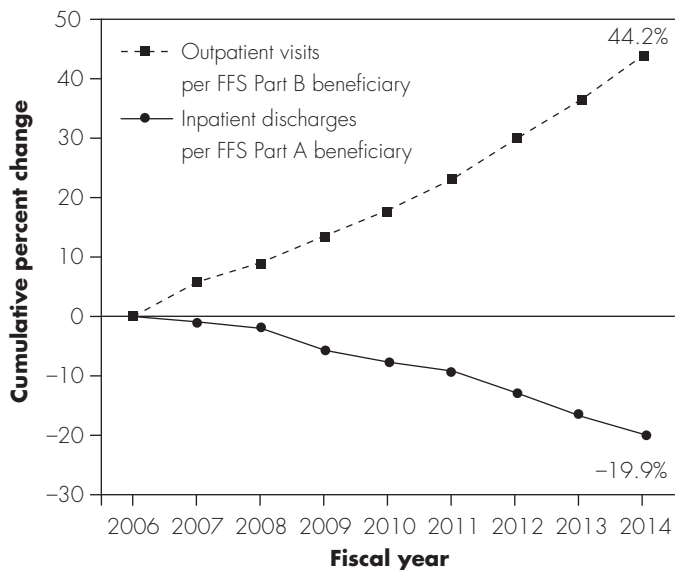
by 11 percent (Table 3-1), driving a 4 percent increase in overall Medicare inpatient and outpatient payments in 2014.¹ The \$5 billion increase in outpatient payments resulted from several changes, including the packaging of laboratory tests into outpatient payments (which shifted dollars from being paid under the laboratory fee schedule to the outpatient payment system), a 2 percent increase in payment rates, increasing volume, and a shift in some services from physician offices to higher paying hospital sites of care.

Medicare's payment systems for inpatient and outpatient services

Medicare's inpatient and outpatient prospective payment systems have a similar basic structure. Each has a base rate that is modified for the differences in type of case or service, as well as geographic differences in input prices. However, each prospective payment system (PPS) has different units of service and a different set of payment adjustments.

**FIGURE
3-1**

Medicare inpatient discharges per beneficiary continued to decline as outpatient visits per beneficiary continued to increase



Note: FFS (fee-for-service). Data include general and surgical, critical access, and children's hospitals.

Source: MedPAC analysis of CMS's inpatient and outpatient claims and enrollment data.

Acute inpatient prospective payment system

Medicare's acute inpatient prospective payment system (IPPS) pays hospitals a predetermined amount for most discharges. The payment rate is the product of a base rate and a relative weight that reflects the expected costliness of cases in a particular clinical category compared with the average of all cases. The labor-related portion of the base payment rate is adjusted by a hospital geographic wage index to account for differences in hospital input prices among market areas. Payment rates are updated annually.

To set inpatient payment rates, CMS uses a clinical categorization system called Medicare severity–diagnosis related groups (MS–DRGs). The MS–DRG system classifies each patient case into 1 of 749 groups, which reflect similar principal diagnoses, procedures, and severity levels. The severity levels are determined according to whether patients have a complication or comorbidity (CC) associated with the base MS–DRG (the categories are no CC, a nonmajor CC, or a major CC). A more detailed description of the acute IPPS, including

payment adjustments, can be found at <http://www.medpac.gov/documents/payment-basics/hospital-acute-inpatient-services-payment-system-15.pdf?sfvrsn=0>.

Hospital outpatient prospective payment system

The outpatient prospective payment system (OPPS) pays hospitals a predetermined amount per service. CMS assigns each outpatient service to 1 of about 700 ambulatory payment classification (APC) groups. Each APC has a cost-based relative weight, and a conversion factor translates these relative weights into dollar payment amounts. In 2014, CMS started to package additional laboratory tests (previously paid separately under the clinical laboratory fee schedule) into the services covered under the OPPS. CMS estimated that this change shifted \$2.4 billion of payments from the laboratory fee schedule to the outpatient fee schedule. In 2015, CMS implemented comprehensive ambulatory payment classifications (C–APCs) in the OPPS and expanded packaging in some APCs. A more detailed description of the OPPS can be found at <http://www.medpac.gov/documents/payment-basics/outpatient-hospital-services-payment-system-15.pdf?sfvrsn=0>.

Are Medicare payments adequate in 2016?

To judge whether payments in 2016 are adequate for relatively efficient hospitals, we examine several indicators of payment adequacy. We consider beneficiaries' access to care, changes in the quality of care, hospitals' access to capital, and the relationship of Medicare's payments to hospitals' costs for both average and relatively efficient hospitals. Most of our payment adequacy indicators for hospitals are positive, but 2014 Medicare margins remained negative for most hospitals and were approximately zero for relatively efficient providers.

Beneficiaries' access to care remained good as excess inpatient capacity increased

To evaluate access to care, we examine the availability of hospital services to Medicare beneficiaries by analyzing inpatient and outpatient utilization, hospital service offerings, hospital openings and closures, hospital occupancy rates, and other measures. Our framework also includes an evaluation of hospitals' access to capital, which provides an outlook on the industry's ability to sustain or expand its existing resources.

Medicare beneficiaries' access to hospital services remains good, in part because of excess hospital capacity in most markets. Between 2013 and 2014, inpatient discharges per Medicare beneficiary declined 3.6 percent; from 2006 to 2014, the drop in discharges totaled 19.9 percent (Figure 3-1). Inpatient volume declined more rapidly at rural hospitals than urban hospitals. Between 2013 and 2014, the number of inpatient discharges declined by 3.9 percent at urban hospitals and by 6.7 percent at rural hospitals. Rural hospitals with fewer than 50 beds had an 8.4 percent decline in discharges (data not shown).

From 2013 to 2014, the volume of inpatient services declined approximately 2 percent to 7 percent across all Medicare age groups. Among privately insured individuals under age 65, acute inpatient discharges per capita declined by 3.8 percent in 2012, 2.8 percent in 2013, and 2.7 percent in 2014 (Health Care Cost Institute 2015). This trend suggests that care patterns are changing for all insured patients, not just Medicare beneficiaries. On a combined basis (called adjusted discharges), total inpatient and outpatient volume across all payers was roughly flat from 2013 to 2014. In 2015, there are some reports of modest increases in inpatient volume for Medicare and non-Medicare services, suggesting that the decline in inpatient volume through 2014 may have paused (Census Bureau 2015, Moody's Investors Service 2015b, Morningstar Document Research 2015a, Morningstar Document Research 2015c).

The growth in outpatient hospital services in part reflects incentives to shift patients to higher cost sites of care

From 2013 to 2014, the use of outpatient services increased by 3.7 percent per Medicare FFS Part B beneficiary; over the past eight years, the cumulative increase was 44 percent. Approximately one-quarter of the growth in outpatient volume in 2014 was due to an increase in the number of evaluation and management (E&M) visits billed as outpatient services. This growth in part reflects hospitals purchasing freestanding physician practices and converting the billing from the physician fee schedule to higher paying hospital outpatient department (HOPD) visits. The conversions shift market share from freestanding physician offices to HOPDs (Table 3-2). From 2012 to 2014, hospital-based E&M visits per beneficiary grew by 16 percent, compared with a 1 percent decline in visits based in physicians' offices. Other categories of services, such as echocardiograms and nuclear cardiology, are also shifting to hospital-based

**TABLE
3-2**

E&M office visits and cardiac imaging services are migrating from freestanding offices to HOPDs, where payment rates are higher

Type of service	Share of ambulatory services performed in HOPDs, 2012	Per beneficiary volume growth, 2012-2014	
		HOPD	Freestanding physician office
E&M office visits	11%	16%	-1%
Echocardiography	34	15	-13
Nuclear cardiology	39	1	-20

Note: E&M (evaluation and management), HOPD (hospital outpatient department). In 2012 and 2013, the E&M office visits had Current Procedural Terminology (CPT) codes 99201-99215. In 2014, all facility fees for E&M office visits were billed under a single CPT code, 60463. Echocardiography includes services in ambulatory payment classification (APC) 0269, APC 0270, and APC 0697. Nuclear cardiology includes services in APC 0377 and APC 0398.

Source: MedPAC analysis of standard analytic claims files from 2012-2014.

billing. Hospital-based echocardiograms per capita grew by 15 percent, compared with a 13 percent decline in physician-office echocardiograms. Nuclear cardiology grew by 1 percent in HOPDs, compared with a 20 percent decline in nuclear cardiology in physician offices.

We have documented how the billing for these services has shifted from physician offices to higher cost outpatient sites of care in previous reports (Medicare Payment Advisory Commission 2014d, Medicare Payment Advisory Commission 2013b, Medicare Payment Advisory Commission 2012). Among other effects, the shift in care setting increases Medicare program spending and beneficiary cost-sharing liability because Medicare payment rates for the same or similar services are generally higher in HOPDs than in freestanding offices. For example, we estimate that the Medicare program spent \$1.0 billion more in 2009 and \$1.3 billion more in 2014 than it would have if payment rates for E&M office visits in HOPDs were the same as freestanding office rates. Analogously, beneficiaries' cost sharing was \$260 million higher in 2009 and \$325 million higher in 2014 than it would have been because of the higher rates paid in HOPD settings.²

To address the increased spending that results when services shift from freestanding offices to HOPDs, the Commission recommended adjusting OPPS payment rates so that Medicare payment for E&M office visits is equal in freestanding physician offices and HOPDs (Medicare Payment Advisory Commission 2012). The Commission also recommended adjusting OPPS payment rates for a set of other services so that payment rates are equal or more closely aligned across these two settings (Medicare Payment Advisory Commission 2014d). In 2015, the Congress moved partially toward the Commission's recommendations by equalizing rates between new off-campus HOPDs and physician offices. However, on-campus HOPDs as well as existing off-campus HOPDs will continue to receive the higher HOPD facility fees under the Bipartisan Budget Act of 2015.

Part of the decline in discharges and growth in outpatient services is due to increased use of observation services as a substitute for inpatient care

From 2006 to 2014, the number of outpatient observation stays increased by 30 stays per 1,000 beneficiaries. In contrast, the number of 1-day inpatient stays declined by 17 stays per 1,000 beneficiaries, and stays with 2 or more days declined by 55 stays per 1,000 beneficiaries. Given that observation stays increased by 30 stays and inpatient stays declined by 72 stays (17 + 55) per 1,000 beneficiaries, we conclude that about 40 percent of the decline in discharges over this period can be explained by the shift of some cases from inpatient stays to observation stays over the past 8 years.

Excess capacity varies by region

Between 2006 and 2013, hospital occupancy rates declined from approximately 64 percent to 61 percent nationwide. Between 2013 and 2014, occupancy rates were largely unchanged overall, as were rates of 64 percent for urban hospitals. However, between 2013 and 2014, rates at rural hospitals declined 1 percentage point, to 41 percent. Rural hospitals with fewer than 100 beds had the lowest occupancy rates in 2014, at 37 percent. Occupancy rates declined the most for small rural hospitals (9 percentage points from 2006 to 2014), suggesting that individuals from rural areas often bypass small rural hospitals and travel to urban hospitals for inpatient care.

Bed capacity and service use continues to vary by market. The 10 major metropolitan areas with the lowest number of beds per capita had an average occupancy rate of 68

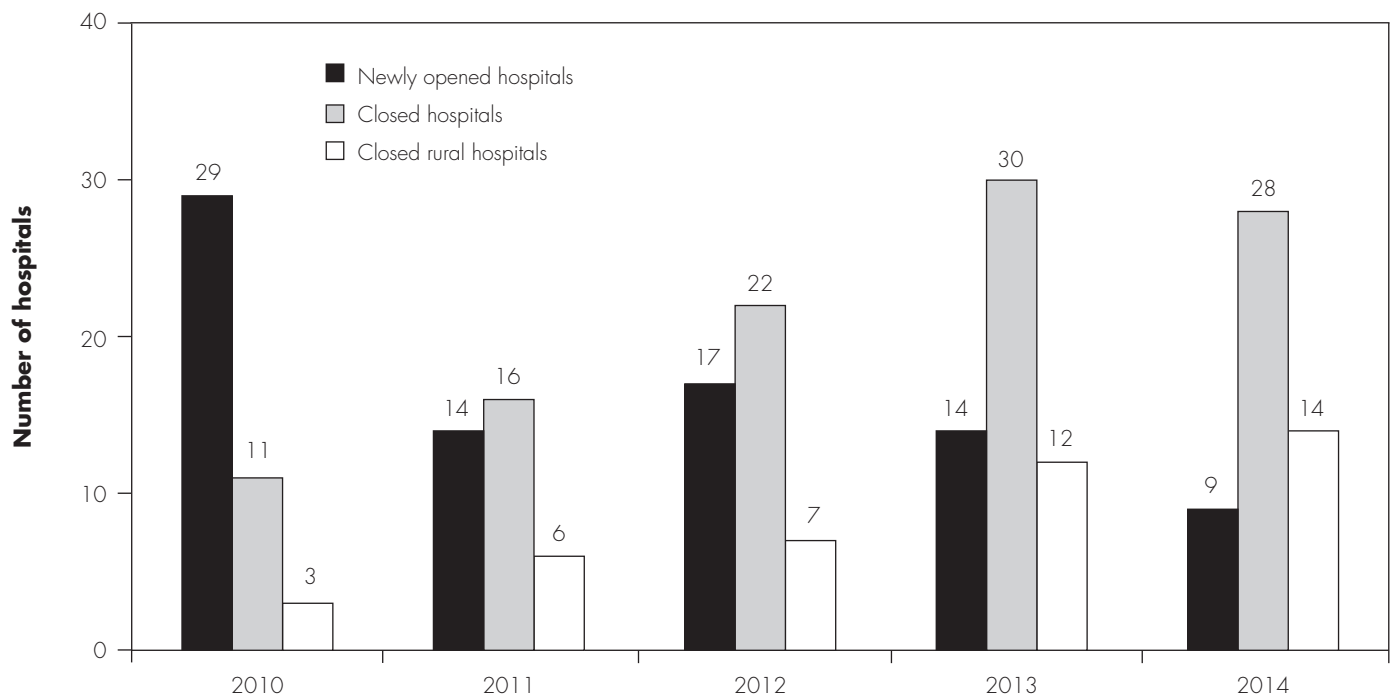
percent, and the 10 markets with the highest number of beds per capita had an average occupancy rate of 61 percent. For example, in 2014, the market-wide occupancy rate in Atlanta (with 1.8 beds per 1,000 people) was 72 percent compared with 55 percent in St. Louis, MO (with over 3.4 beds per 1,000 people). In 2013, there were 319 stays and 1,631 inpatient days per 1,000 beneficiaries in the St. Louis hospital referral region (HRR) compared with 260 stays and 1,451 days per 1,000 beneficiaries in the Atlanta HRR. The difference in inpatient volume per capita reflects a combination of differences in beneficiary health status and physician practice styles across the two markets.

As occupancy fell, hospital closures increased slightly

There have been slightly more hospital closures than hospital openings over the past four years. In 2014, we identified 28 closures and 9 openings (Figure 3-2). Among those that closed in 2014, 14 were in urban counties and 14 were in rural counties. All nine openings were urban.

Hospitals that closed in 2014 were smaller than average and had low occupancy and poor profitability; a large share were located in states that did not expand their Medicaid program in recent years. These 28 hospitals had an average of 55 inpatient beds. The urban hospitals that closed were an average of 9 miles from the nearest hospital, and the rural hospitals were an average of 18 miles from the nearest hospital. Twenty of the 28 hospitals (71 percent) that closed were in states that did not expand their Medicaid programs under PPACA. In addition, among all the hospitals that closed, 20 closed completely and 8 remained open as different types of facilities: 3 as outpatient centers with 24-hour per day emergency departments (2 rural and 1 urban), 2 as urgent care centers, 2 as outpatient facilities with long-term care capacity, and 1 as a clinic.

The hospitals that closed in 2014 had low occupancy rates and poor margins. The average occupancy rate of these 28 hospitals was 25 percent, and their average total all-payer margin in the most recent year available was -5.6 percent. Among the urban hospitals that closed, the average occupancy rate was 32 percent in the year before closure, and the average all-payer margin was -8.0 percent. Among the rural hospitals that closed in 2013, the average occupancy rate was 19 percent, and the average all-payer margin was -3.6 percent. The seven critical access hospitals that closed had average occupancy rates of 24 percent and an average total all-payer margin of -4.2 percent.

**FIGURE
3-2****Hospitals opened and closed, including rural, by year**

Note: Counts of closed hospitals include the rural hospital closures.

Source: MedPAC analysis of the CMS Provider of Services file, internet searches, and personal communication with Sara Young of the Office of Rural Health Policy.

To date, we have identified 10 hospitals that closed in 2015. Among these were six urban hospitals and four rural hospitals. While this count is preliminary, it appears that these 10 hospitals have characteristics similar to the hospitals that closed in 2014, including 2 that remained open as outpatient facilities with emergency departments.

Preserving emergency services as inpatient volumes decline in rural areas

From January 2013 through October 2015, there were 30 rural hospital closures, 41 if we include the hospitals located in rural portions of urban counties (Young 2015). These closures raise questions about whether there are more efficient and financially stable ways to ensure access to emergency services in these communities. One option for these types of communities could be payment models that are focused on outpatient access rather than maintaining inpatient services (Thompson 2015). In the fall of 2014, the Commission started to discuss alternative models for preserving access to care at rural hospitals, and we will continue to investigate new models. The objective is to create models that can do a better job preserving access

and do more to improve the efficiency of care delivered in rural areas. Meeting these objectives involves targeting communities that would otherwise lack emergency care and developing payment models to support emergency and primary care services in these communities.

Quality of care has been improving

The quality of hospital care has been improving in recent years, and at least part of this improvement appears to be due to financial incentives in the Medicare program. While the financial incentives are not perfect and the Commission has discussed refinements to the quality improvement programs, the data suggest that even imperfect incentives can lead to improved quality.

In 2016, hospitals' performance on quality metrics has the potential to increase base IPPS payment rates by as much as 3.0 percent and lower payments by as much as 5.75 percent. Three payment adjustments are responsible for these potential changes: the Hospital Readmissions Reduction Program (HRRP) (can account for up to a 3.0 percent reduction), the Hospital Value-Based Purchasing

**TABLE
3-3****Potentially preventable readmission rates have declined**

Reason for initial admission	2010	2011	2012	2013	2014	Percentage point change, 2010-2014
All	12.9%	12.4%	11.9%	11.3%	11.0%	-1.9
AMI	17.3	16.9	16.1	15.0	14.3	-3.0
Heart failure	19.5	19.2	18.4	17.6	17.0	-2.5
Pneumonia	13.1	12.6	12.1	11.5	11.5	-1.6
COPD	16.8	16.5	15.9	15.1	14.7	-2.1

Note: AMI (acute myocardial infarction), COPD (congestive obstructive pulmonary disease). Rates are adjusted for changes in the mix of patients.

Source: MedPAC analysis of 2010 through 2014 Medicare claims data and 3M™ potentially preventable readmissions software.

(VBP) Program (between a 3.0 percent increase and a 1.75 percent reduction to payments), and the Hospital-Acquired Condition (HAC) Reduction Program (a 1.0 percent reduction to payments for 25 percent of hospitals). While these adjustments have the potential to change inpatient payments, they do not alter outpatient payments. In 2016, about a quarter of hospitals will see a net increase in payments (averaging about \$70,000) and two-thirds will see a net decrease in payments (averaging around \$380,000) under the combined effect of these programs. On net, these three programs lower Medicare payments by about \$780 million, or 0.5 percent of overall Medicare payments.³

Overall hospital quality metrics show improvement

To assess aggregate trends in quality of care across all IPPS hospitals, we use mortality rates and patient safety indicators (PSIs) that are developed and maintained by the Agency for Healthcare Research and Quality (AHRQ). Our analysis of these measures from 2010 through 2014 shows significant improvements in 8 of 10 mortality rate measures, which include in-hospital and 30-day postdischarge mortality rates for 5 prevalent clinical conditions.⁴ We also found improvements in some of the AHRQ PSIs, but only one measure's improvement was statistically significant. It is difficult to get statistically significant changes for rare patient safety events.

The quality improvements reflect the efforts hospitals have made to improve patient outcomes, but also reflect the closure or restructuring of some of the poorest performing hospitals. In 2014, we examined 112 hospitals that had a combination of low occupancy, high readmission rates,

and poor patient experience from 2009 through 2011 (Medicare Payment Advisory Commission 2014d). By 2015, 13 of the 112 hospitals closed, a quarter of the hospitals changed ownership, and others replaced their facilities. This finding is consistent with a recent study that suggests market share is flowing to higher quality hospitals (Chandra et al. 2015).

Readmission rates declining The Congress enacted a Medicare HRRP in 2010, and since that time the program has expanded to include more conditions. Penalties under the HRRP started in fiscal year 2013, based on three conditions, with the maximum penalty capped at 1 percent.⁵ In fiscal year 2016, hospitals are penalized if they have above-average readmission rates (from a prior three-year period (July 1, 2011, through June 30, 2014)) in one of five clinical conditions (acute myocardial infarction (AMI), heart failure, pneumonia, congestive obstructive pulmonary disease (COPD), or elective total hip or knee replacement). As stated earlier, HRRP is capped at a 3 percent reduction to base inpatient payments. In fiscal year 2017, readmission rates for coronary graft bypass surgery will be added to the program.

In 2016, 78 percent of hospitals will have payments reduced due to the HRRP, with 15 percent receiving a penalty of between 1 percent and 3 percent of base payments. While a larger share of major teaching hospitals (91 percent) and hospitals serving large shares of poor patients (86 percent) receive a readmission penalty, only 12 percent of these facilities are receiving a penalty of 1 percent or more. A large share of hospitals will receive an HRRP penalty in 2016 because a hospital needs to have an above-expected rate for only one of the five conditions to receive

Increase in observation stays is only a small factor contributing to decline in readmissions

Some have contended that the decline in readmissions can be largely attributed to the rapid increase in the use of observation stays (Himmelstein and Woolhandler 2015). However, the Commission analyzed the increase in observation stays and decline in readmissions; we found that readmission rates declined substantially even after adjusting for observation stays. For the three conditions covered by the Hospital Readmissions Reduction Program in 2013, readmission rates dropped by more than one percentage point from 2011 to 2013, even after counting observation stays as readmissions. In general, only 20

percent to 25 percent of the decline in readmissions can be accounted for by increased use of outpatient observation stays of one day or longer. Moreover, growth in use of 24-hour-plus observation stays occurring within 30 days of discharge from a hospital (22.2 percent) was essentially the same as the overall per capita growth rate in 24-hour-plus observation stays from 2011 to 2013 (22.1 percent). Thus the increased use of observations was not systematically higher for patients with a prior admission than for the Medicare population overall. ■

a penalty. While most hospitals face a penalty, the average penalty was a modest \$160,000 per hospital in 2016. Total penalties are expected to be \$420 million in 2016.⁶

In 2013, the Commission suggested several improvements to the HRRP. One called for setting a fixed target for readmission rates so aggregate penalties would go down when industry performance improves. We also suggested using an all-condition readmission measure to increase the number of observations and reduce the random variation that single-condition readmission rates face under current policy. A third improvement would be to evaluate hospitals' readmission rates against rates for peer hospitals with similar shares of poor patients as a way to adjust penalties for the possible effects of socioeconomic status on hospitals' readmission rates (Medicare Payment Advisory Commission 2013a).

The readmission reduction payment policy and other efforts, such as the Partnership for Patients, have encouraged hospitals to look beyond their walls to improve care coordination with providers outside of the hospital to reduce readmissions. The Commission has found that readmission rates continued to fall through 2014, including for the three conditions initially included in the HRRP (Table 3-3). From 2010 to 2014, potentially preventable readmissions declined by 1.9 percentage points across all cases, after adjusting for changes in the mix of patients. Potentially preventable readmission rates dropped 3.0 percentage points for AMI, 2.5 percentage points for heart failure, and 1.6 percentage points for pneumonia. Readmission rates for COPD (which was

added to the program in 2015) fell 2.1 percentage points between 2010 and 2014. Increases in the use of 24-hour-plus observation care account for only a small portion of the drop in readmission rates, meaning that care (not just coding) is improving (see text box).

Hospital value-based purchasing incentives are increasing

The Congress mandated a value-based purchasing (VBP) program for IPPS hospitals beginning in fiscal year 2013. Under the program, CMS reduces all IPPS hospitals' base operating diagnosis related group payment amounts by 1.75 percent in fiscal year 2016 (2.0 percent in 2017) to create a pool of funds from which the performance-based VBP incentive payments will be distributed.⁷ As required by law, the hospital VBP program is budget neutral; that is, the pool of withheld payments must be redistributed to hospitals based on their performance on the VBP program's quality measures.

In 2016, the VBP program will redistribute approximately \$1.5 billion in Medicare inpatient payments (Centers for Medicare & Medicaid Services 2015a). The program uses a combination of measures from 4 quality domains to develop hospital scores under the program:

- 10 percent based on clinical process-of-care measures using hospitals' reported patient safety indicators;
- 25 percent based on patient experience of care using 8 measures from the Hospital–Consumer Assessment of Healthcare Providers and Systems® (H–CAHPS®) survey;

- 40 percent based on patient outcomes, which are assessed using a combination of three 30-day mortality measures, a composite patient safety measure (AHRQ's PSI 90)⁸, and four health care associated infections; and
- 25 percent based on efficiency measures, which use a 30-day Medicare measure of spending per beneficiary.

The VBP program gives a hospital credit for achievement (relative to other hospitals) and improvement (relative to its own base-line performance). Some of the quality metrics included in the VBP program overlap with other quality programs, particularly the Hospital-Acquired Condition Reduction Program, which is discussed next.

In 2016, the VBP program will increase payments to 56 percent of IPPS hospitals (by an average of \$80,000) and will decrease payments to 37 percent of them (by an average of \$120,000). For roughly a third of these hospitals, the change in payments under the program will be small, less than 0.25 percent of base payments. However, 10 percent will see an increase of between 1 percent and 3 percent, and another 10 percent will see a decrease of more than 0.5 percent. Performance under the VBP program varies by hospital group, with 35 percent of major teaching hospitals receiving rewards compared with 63 percent of nonteaching hospitals. Further research is needed to evaluate reasons for the differences across hospital groups.

Hospital-Acquired Condition Reduction Program implemented in 2015 The Congress mandated the Hospital-Acquired Condition Reduction Program to begin in fiscal year 2015. Under this program, Medicare reduces hospitals' inpatient payments by 1 percent for hospitals whose performance on a set of hospital-acquired condition (HAC) measures defined by CMS ranks in the lowest performing quartile nationally. The 1 percent reduction applies to total inpatient payments, including indirect medical education (IME), DSH, and other quality payment adjustments (readmissions and hospital VBP). This program is not budget neutral because it reduces payments by 1 percent for 25 percent of all hospitals.

The HAC program measures hospitals in two domains. In the first domain, hospitals' overall performance is examined in terms of a blended set of eight patient safety indicators (AHRQ's PSI 90), including pressure ulcers, various postoperative complications, and certain hospital-acquired infections. The second domain includes four infection measures: central line-associated bloodstream

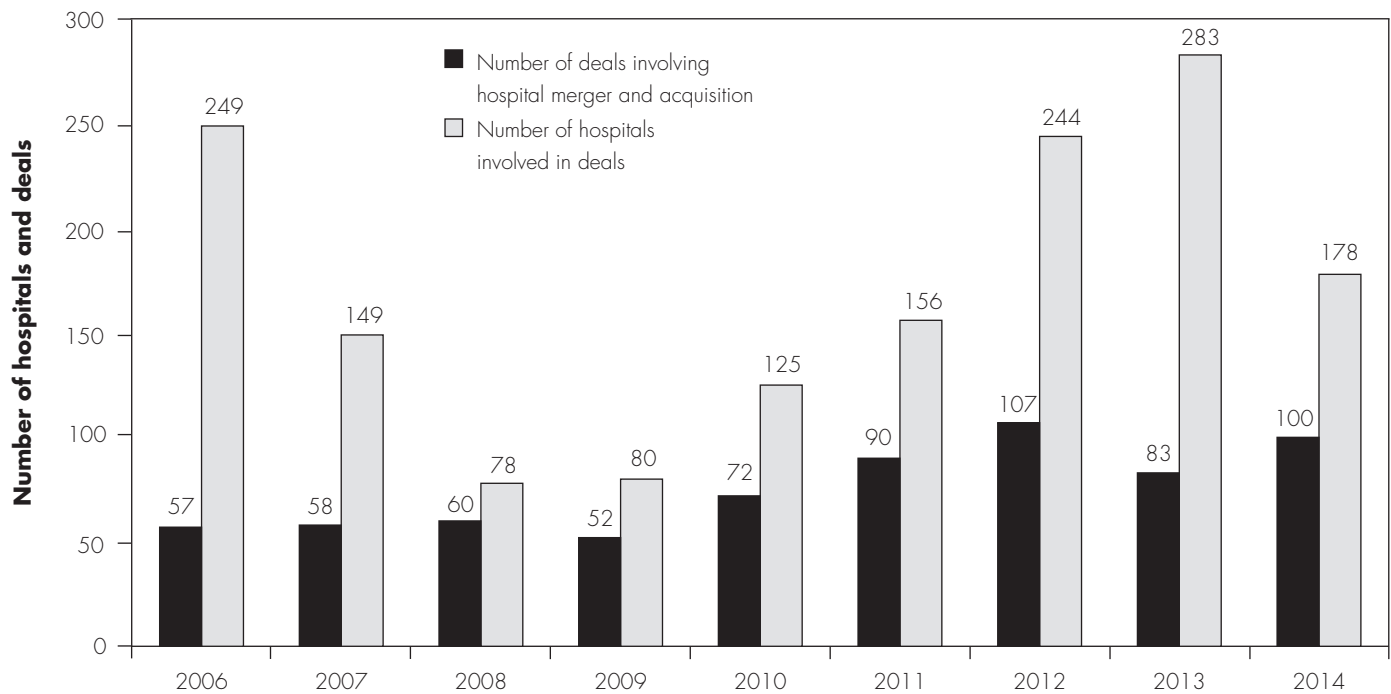
infections (CLABSIs), catheter-associated urinary tract infections (CAUTIs), and surgical site infections (SSIs) for colon and hysterectomy surgeries.⁹ The patient-safety domain is given a weight of 25 percent in fiscal year 2016, and the infection measures are given a weight of 75 percent.¹⁰ The HAC measures are also included in the patient outcome domain in the hospital VBP program. The fiscal year 2016 HAC penalty is based on performance data from 2012 to 2014. In 2016, the HAC program will reduce payments to 735 hospitals (25 percent), with penalties totaling around \$360 million, or an average of almost \$500,000 per penalized hospital. Penalties will vary by type of hospital, with 46 percent of major teaching hospitals receiving a penalty compared with an average of 25 percent across all hospitals. This variance may in part reflect types of cases (e.g., intensive care unit cases) and procedures (e.g., surgical cases) that occur more frequently in major teaching hospitals.

Hospitals have been successful in reducing the number of HACs. An AHRQ study found a 17 percent decline in HACs per 1,000 discharges from 2010 to 2013. This study also found that approximately 50,000 fewer patients died in the hospital as a result of the reduction in HACs, and approximately \$12 billion in health care costs were saved from 2010 to 2013 (Agency for Healthcare Research and Quality 2014). Similarly, data from the Centers for Disease Control and Prevention demonstrate substantial declines in hospital-associated infections from 2008 to 2013, including a 46 percent decline in CLABSIs and a 19 percent decline in SSIs for 10 procedures collectively (Centers for Disease Control and Prevention 2015).

The Commission has expressed concern that the current statutory design of the HAC Reduction Program penalizes 25 percent of hospitals every year, even if all hospitals significantly reduce HAC rates (Medicare Payment Advisory Commission 2013a). Similar to the Hospital Readmissions Reduction Program, a fixed performance target may improve the HAC program by creating an incentive for all hospitals to decrease HACs to at least the benchmark rate to avoid the payment penalty.

Access to capital and hospital employment strong

Hospitals' access to capital remained strong due to hospitals' unusually high levels of profitability and continued low interest rates in recent years. The three major bond rating agencies report improved financial measures such as days-cash-on-hand, the ratio of revenues to expenses, and the cash-to-debt ratio (Fitch Ratings

**FIGURE
3-3****Hospital merger and acquisition activity increased**

Source: MedPAC analysis of 2014 data from Irving Levin Associates Inc.

2015a, Moody's Investors Service 2015b, Standard & Poor's Ratings Services 2015). The agencies cite improvements in all-payer volumes due to pent-up demand, the aging population, and the general expansion of insurance coverage. In addition, Moody's reports the self-pay share of hospital patients declined from 7.7 percent in 2013 to 6.9 percent in 2014 (Moody's Investors Service 2015a).

Thomson Reuters found that, through the first three quarters of 2015, hospitals issued \$22 billion dollars in bonds, surpassing the \$17 billion of bond offerings in 2014 levels. The rebound of bond offerings in 2015 reflects hospitals' strong financial position and continuing low interest rates. The average interest rate for a double-A tax-exempt 30-year nonprofit hospital bonds remain low, at 3.63 percent in October 2015 (Cain Brothers 2015). This rate is approximately the same level as November 2014 (3.70).

The level of bond offerings may remain below the historic highs seen earlier in the decade (\$30+ billion) because nonprofit hospitals are focused on less expensive

capital investments such as outpatient and ambulatory capacity and information technology, as opposed to more costly inpatient capacity (Fitch Ratings 2015b). The shift from building inpatient capacity to outpatient and other ambulatory capacity reduces hospital debt and the need to borrow. As a result, measures of hospital capital expenditures from 2013 to 2014 show a decline (Fitch Ratings 2015b, Moody's Investors Service 2015b).

Capital continues to be available for acquisitions (Figure 3-3). In 2014, 178 individual hospitals were acquired in 100 transactions, sustaining the high level of transactions in recent years (Irving Levin Associates Inc. 2015). In general, many smaller community hospitals merged with or were acquired by larger health systems. For example, Duke LifePoint Healthcare acquired the three hospitals that were part of the Conemaugh Health System in central Pennsylvania for \$500 million, and University of Wisconsin Health acquired two hospitals that were part of the Swedish American Health System in Rockford, Illinois, for \$255 million (Irving Levin Associates Inc. 2015). The most active acquirer in 2014 was Prime Healthcare Services, which acquired eight hospitals with

1,609 beds in seven separate deals. These deals differed from those that occurred in 2013, which featured large corporations such as Tenet and Community Health System acquiring other large hospital companies in billion-dollar deals. The long-term trend is greater consolidation in the industry, with independent hospitals joining larger systems.

Construction spending steady and changing

Annualized hospital construction spending was \$26 billion through July 2015, a \$3 billion increase from 2014 but lower than the \$31 billion in average annual spending from 2008 to 2012. Spending declined because hospitals are now focused more on building outpatient capacity than on expensive inpatient capacity. Based on a survey of nonprofit hospital executives, Fitch reported that executives' top capital investment priorities are information technology, clinics, and outpatient capacity (Fitch Ratings 2015b).

Hospital employment increased

Between October 2010 and October 2015, the number of individuals employed by hospitals increased 6 percent, with more than half of this growth occurring in the last 12 months. Growth in hospital employment over the last 12 months (3.5 percent) was faster than the rest of the health care sector (3.3 percent) and the rest of the economy excluding health care (1.9 percent). In their third quarter 2015 financial statements, three of the largest hospital entities—HCA, Tenet, and Lifepoint—indicated that they have seen some volume increases and have increased hiring. HCA noted that those entities have increased use of higher cost contract nurses (Morningstar Document Research 2015a, Morningstar Document Research 2015b, Morningstar Document Research 2015c). This increased demand for nurses could start to push wages higher.

Based on data from a separate Bureau of Labor Statistics (BLS) survey that best corresponds to the period described above, we observed hospitals hiring individuals in certain high-skill occupational categories and reducing the number of individuals in certain lower skilled occupations. Occupations that experienced the largest increase in hospital employment from 2010 to 2014 were physicians (26 percent), computer specialists (18 percent), pharmacists (12 percent), business and financial occupations (11 percent), and diagnostic imaging technicians (5 percent). By contrast, BLS reported declines in hospital employment for licensed practical nurses (LPNs) and licensed vocational nurses (LVNs) (–30

percent), food service employees (–5 percent), building and grounds employees (–5 percent), and clinical lab technicians (–2 percent). While the number of LPNs and LVNs employed by hospitals declined by 44,000 (–30 percent), the number of registered nurses increased by 39,000 (3 percent).

Medicare payments and providers' costs

In assessing payment adequacy, the Commission also considers the relationship between Medicare payments and the costs of providing care to Medicare patients. We assess the adequacy of Medicare payments for the hospital as a whole (across all Medicare services), thus measuring the relationship between payments and costs using an overall Medicare margin. This overall margin includes all Medicare payments and all Medicare-allowable costs for the six hospital departments covered by the inpatient, outpatient, and post-acute PPS systems as well as uncompensated care payments and graduate medical education payments and costs.¹¹

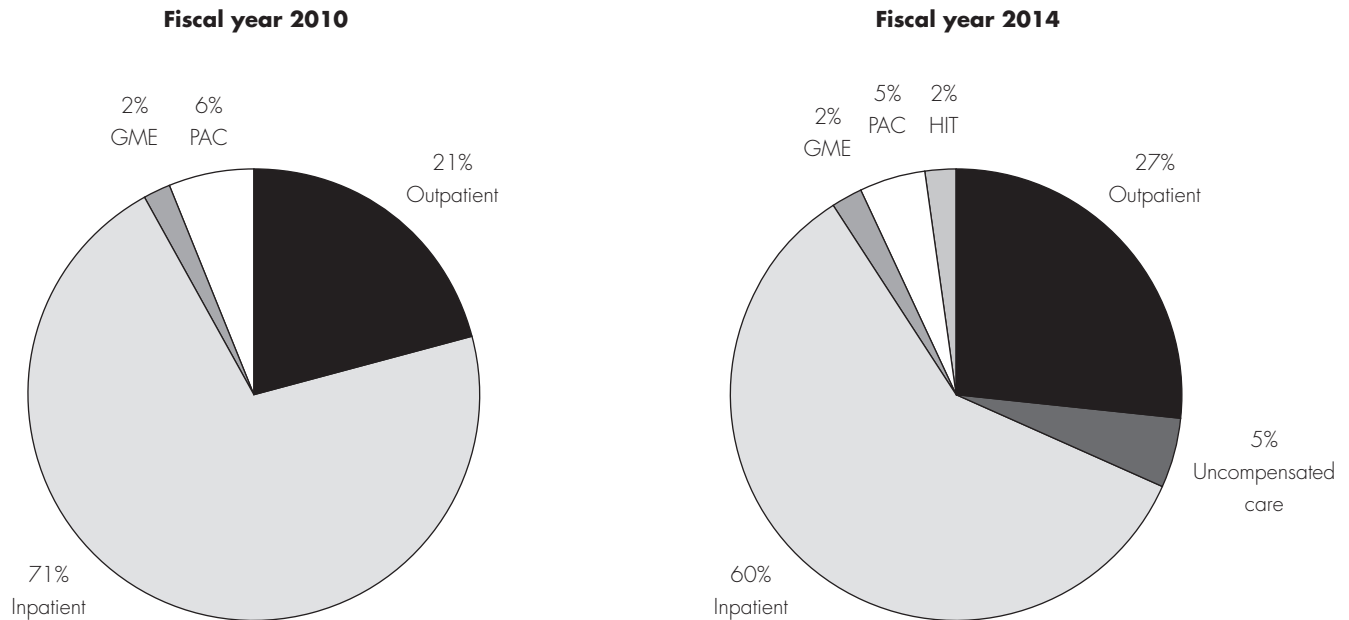
We report the overall Medicare margin across service lines because no hospital service is a purely independent business. For example, we find that operating a skilled nursing facility (SNF) improves the profitability of acute inpatient care services because an in-hospital SNF allows hospitals to safely discharge patients sooner from their acute care beds, thus reducing the cost of the inpatient stay. The overall Medicare margin also takes into account revenues that are not included in the service-line payments for inpatient and outpatient care. These revenues include Medicare payments for health information technology (beginning fiscal year 2011) and uncompensated care payments (beginning fiscal year 2014). Excluding these Medicare revenues would understate Medicare payments to hospitals.

Another benefit of focusing on overall margins is that we can avoid challenges of precisely allocating overhead and administrative costs among the different service lines. We also capture the additional Medicare revenues hospitals receive that are not included in Medicare payment rates for individual services (e.g., uncompensated care payments and electronic health records incentive payments).

To determine whether hospitals have an incentive to treat additional Medicare patients, we also examine the marginal profits for treating additional Medicare patients. This measure examines whether Medicare payments cover the variable cost of treating an additional Medicare patient. We find that, while Medicare payments do not cover all costs

**FIGURE
3-4**

Share of revenue from inpatient services has declined



Note: GME (graduate medical education), PAC (post-acute care), HIT (health information technology). The uncompensated care payments that were started in 2015 are payable only to hospitals serving a disproportionate share of poor patients. The uncompensated care payments are funded through a reduction in traditional disproportionate share payments to these hospitals. There were no HIT payments in 2010.

Source: MedPAC analysis of Medicare hospital payments using hospitals cost reports.

(fixed and variable), they are sufficient to cover the variable costs of treating additional Medicare patients. This measure is an indicator of whether hospitals with excess capacity have an incentive to see more Medicare patients.

To measure the overall pressure that hospitals are under to control costs, we also examine hospital total (all-payer) profit margins and hospital cash flows. When total margins and cash flows are strong, hospitals are under less pressure to control their costs, which in turn affects their Medicare margin.

The source of Medicare revenues to hospitals has shifted

Historically, 92 percent of Medicare revenues to hospitals have come from inpatient and outpatient services. Over time, however, the share of revenue coming from the outpatient setting has increased, and the share coming from the inpatient setting has decreased (Figure 3-4). From 2010 to 2014, the share of revenues coming from

the outpatient setting increased from 21 percent to 27 percent. The increase resulted from several changes: a shift in services from the inpatient to the outpatient setting, a general increase in beneficiary outpatient service use, a shift in the billing of physician office services from the physician fee schedule to the OPPS, and changes made to the outpatient payment system that packaged many lab services into outpatient payment rates that were previously paid on a fee schedule rather than the OPPS.¹²

The share of revenues coming from the inpatient side fell from 71 percent in 2010 to 60 percent in 2014. This decline results from (1) a shift in services from the inpatient setting to the outpatient setting, as just discussed, and (2) changes in Medicare DSH payments. Starting in fiscal year 2014, Medicare DSH payments (which are included in inpatient payments) are paid at 25 percent of the historical payment formula that uses the hospitals' current low-income patient share percentage. This decrease in inpatient DSH payments, however, is offset

**TABLE
3-4****Cost growth slightly above input price inflation since 2010**

Cost measure	Annual cost growth					Average annual cost growth 2010-2014
	2010	2011	2012	2013	2014	
Inpatient costs per discharge	2.2%	2.6%	3.0%	2.9%	2.2%	2.6%
Inpatient case-mix index	0.6	0.5	1.4	2.0	2.0	1.3
Input price inflation*	2.0	2.6	2.1	1.9	1.7	2.1

Note: Cost growth numbers are not adjusted for reported changes in case mix. Analysis excludes critical access hospitals and Maryland hospitals.

*Input price inflation reflects a weighted average of changes in the hospital operating and capital market basket indexes.

Source: MedPAC analysis of Medicare cost reports, claims files, and input price estimates from CMS.

in large part by a new payment for uncompensated care costs (accounting for 5 percent of Medicare revenues in 2014) that goes to DSH hospitals. The uncompensated care payments, however, are not tied to hospitals' Medicare inpatient payment rates or case volume. They were intended to be allocated to DSH hospitals based on each hospital's share of total uncompensated care costs, but they are currently being distributed based on each DSH hospital's share of total Medicaid and low-income Medicare patient days (see text box on DSH payments, pp. 72-73).

The additional temporary payments that hospitals have received as a part of the Medicare Electronic Health Records (EHR) Incentive Program also increased total Medicare payments. Between 2011 and 2014, Medicare EHR payments rose from \$0.7 billion to \$3.2 billion, and in 2014 they totaled \$2.5 billion, accounting for almost 2 percent of total Medicare payments to IPPS hospitals in 2014.¹³ HIT payments (under the EHR Incentive Program), however, will gradually decline as this program phases out.

Medicare payment growth

Changes in Medicare inpatient hospital payments per discharge under the IPPS depend primarily on three factors: (1) annual updates to base payment rates, (2) changes in reported case mix, and (3) policy changes that are not implemented in a budget-neutral manner. In 2014, the average Medicare inpatient payment per case fell primarily because of reallocating \$9.4 billion of inpatient payments to uncompensated care payments. The key changes to inpatient payments were:

- a 75 percent reduction in the Medicare inpatient DSH payment adjustment, resulting in about a 7 percent reduction in inpatient payments (but with an offsetting increase in uncompensated care payments),
- a 0.7 percent increase in base payment rates,
- a 2 percent increase in case mix, and
- full implementation of the budget sequester, which reduced inpatient payments by 2 percent, 1 percentage point more than in 2013.¹⁴

On net, inpatient payments declined by 4.5 percent per case; however, the reduction in inpatient DSH payments was largely offset in aggregate by a new payment for uncompensated care.¹⁵ (For more details on DSH and uncompensated care payments, see the text box on pp. 72-73.)

Rate of cost growth remains close to rate of input price inflation

Hospitals' per case cost increases have been relatively low since 2010, averaging 2.6 percent over the period, about 0.5 percentage points faster than input price inflation (the hospital market basket index) (Table 3-4). This growth is much slower than that experienced through most of the 2000s, when costs per case increased at twice this rate, an average of 5.6 percent per year, or 1.4 percentage points faster than underlying input price inflation.

The lower cost growth from 2010 through 2014 was partly due to lower input price inflation facing hospitals, reflecting low economy-wide inflation and slow wage growth. Hospitals benefited from this low economy-

wide wage growth, with compensation costs for hospital workers growing by less than 2 percent in each year from 2010 through 2014 (Bureau of Labor Statistics 2014).

From 2012 through 2014, there was also a sizable increase in inpatient case mix, rising by 1.4 percent in 2012 and 2.0 percent in both 2013 and 2014. In examining this recent growth in case mix, we suspect that most of it is due to increases in the relative complexity of the cases seen rather than due to coding changes we saw after implementation of the MS-DRGs. If we control for this sizable increase in case mix, the hospital cost increase for the past three years would be substantially less than underlying input price inflation. The Commission believes it is imperative for hospitals to continue to maintain this lower cost growth in the coming years for the financial health of the Medicare program and the costs of the overall health care system.

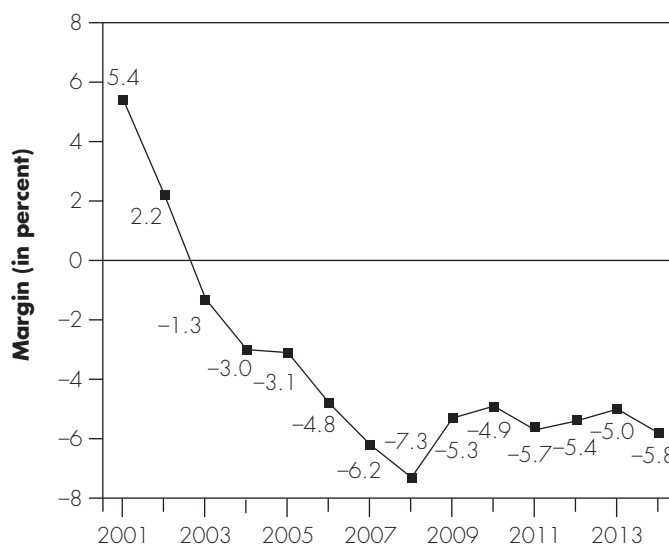
Lower cost growth, however, was not uniform across hospital types. Rural hospitals had much higher cost growth than urban hospitals; from 2010 through 2014, inpatient costs per case increased an average of 3.4 percent in rural hospitals compared with 2.4 percent in urban hospitals. Over the same period, smaller rural hospitals, those under 50 beds, saw even higher average cost increases, 5.4 percent. Some of the rural hospitals' higher cost growth may have been driven by the higher revenues associated with the low-volume adjustment, which provided rural hospitals with higher payments; these payments may have eased the financial pressure on some of these hospitals, resulting in higher cost growth. In addition, total inpatient volume in rural hospitals declined more than in urban hospitals, possibly contributing to higher cost growth because of reduced economies of scale. During this same period, urban hospitals with the fewest total discharges also saw much higher cost growth, averaging 4.2 percent, compared with the highest volume urban hospitals, for which cost growth averaged 2.3 percent. Hospitals with lower levels of uncompensated care also had higher average cost growth, at 3.4 percent.

Trend in the overall Medicare margin

We define Medicare margins as Medicare payments minus the allowable costs of treating Medicare patients divided by Medicare payments. In analyzing hospital margins, we compute margins with and without critical access hospitals (CAHs), which are 1,300 rural hospitals whose payments are based on their incurred costs. We also exclude hospitals in Maryland, which are excluded from the IPPS and paid under a statewide all-payer prospective payment system. The overall Medicare margin trended downward

FIGURE 3-5

Overall Medicare margin has held relatively steady since 2009



Note: A margin is calculated as payments minus costs, divided by payments; margins are based on Medicare-allowable costs. Analysis excludes critical access and Maryland hospitals. "Overall Medicare margin" covers acute inpatient, outpatient, hospital-based skilled nursing facility (including swing beds), hospital-based home health, and inpatient psychiatric and rehabilitation services, plus graduate medical education and health information technology payments and Medicare payments for uncompensated care.

Source: MedPAC analysis of Medicare cost reports from CMS.

from 2001 through 2008 (Figure 3-5).¹⁶ However, from 2008 to 2010, the overall Medicare margin went up, from -7.3 percent to -4.9 percent, largely because of increases in reported case mix—the result of documentation and coding changes hospitals made with the introduction of MS-DRGs in 2008—and lower cost growth as a result of the downturn in the economy from the recession (Medicare Payment Advisory Commission 2013b). From 2009 to 2013, the overall Medicare margin has held relatively steady, varying from -4.9 to -5.7 percent. From 2013 to 2014, it dropped from -5.0 percent to -5.8, its lowest level since 2008 as the full effect of the 2.0 percent sequester took effect in fiscal year 2014.

Despite the budget sequester, Medicare margins have held relatively steady, in part, because CMS overestimated hospital wage inflation. Each year, the hospital update is based on forecast, not actual, input price inflation. In every year from 2012 to 2014, CMS overestimated the market basket, which added over 2 percentage points to hospital

DSH and uncompensated care payments

Disproportionate share (DSH) payments are supplementary inpatient payments given to hospitals with high shares of low-income patients. Uncompensated care payments are payments the Medicare program makes to DSH hospitals to pay for part of their non-Medicare charity care and non-Medicare bad debts. See our March 2014 report for a discussion of the history, literature, and mechanics of DSH and uncompensated care payments.

The Congress made several changes in the DSH payments as part of the Patient Protection and Affordable Care Act of 2010 (PPACA). Beginning in 2014, hospitals that treat a disproportionate share of low-income patients can qualify for two payment adjustments.

- First, hospitals will receive 25 percent of the operating DSH payments they received under the traditional DSH formula. Under the traditional DSH formula, any hospital with a share of low-income patients exceeding 15 percent is eligible to receive operating DSH payments. The low-income patient share is the sum of the proportion of its Medicare inpatient days provided to patients eligible for Supplemental Security Income (SSI) benefits and the proportion of its total acute inpatient days furnished to Medicaid patients. This 25 percent is referred to as the empirically justified Medicare DSH payment, and CMS expects to make \$3.3 billion of these payments in 2016.
- Second, hospitals that qualify for the empirically justified Medicare DSH payment may also receive a share of a fixed pool of dollars referred to as the uncompensated care pool. PPACA stipulated the formula by which the available DSH funds will continue to decline in proportion to the decline in the share of the uninsured population. The rationale is that as the rate of uninsurance declines, hospitals' uncompensated care burdens should also decline.

Due to declines in the rate of uninsurance (resulting from the insurance exchanges and Medicaid expansion), the amount of uncompensated care dollars has been reduced from \$9.4 billion in 2014 to \$7.6

billion in 2015 and down to \$6.4 billion in 2016. This \$3 billion reduction in DSH payments is slightly less than 2 percent of annual Medicare payments to hospitals. We expect only modest reductions in the DSH pool, unless the rate of uninsurance falls more rapidly than is expected. The Congressional Budget Office's current projections for the rate of uninsurance for 2017 (10 percent for those under 65) are close to what the projections were for 2016 (11 percent) (Congressional Budget Office 2015).

For fiscal year 2016, CMS continues to use Medicaid and Medicare SSI days as a proxy for hospitals' uncompensated care costs. Therefore, a DSH hospital's uncompensated care payments will be purely a function of the number of Medicaid and Medicare SSI days at the hospital. About 85 percent of the payments are tied to Medicaid days and 15 percent to Medicare SSI days because Medicaid days are more common. Due to the dominance of Medicaid in the formula, we will emphasize the effect of Medicaid days on payments. In 2016, hospitals receive a fixed payment of \$174 per Medicaid day directly from the Medicare trust fund.¹⁷ In other words, Medicare is directly subsidizing Medicaid.

Medicare subsidizing Medicaid is problematic

Several problems arise when Medicare subsidizes Medicaid. First, if Medicare tells states that it will increase payments when states decrease Medicaid rates, it sends a signal for states to underpay for Medicaid. Second, the Medicaid program already has two special payment policies (upper payment limit payments and Medicaid DSH payments) that are in part designed to cover Medicaid patients' costs that exceed Medicaid fee-for-service (FFS) payment rates. The \$29 billion provided to hospitals under these supplemental payment policies was equivalent to more than 50 percent of base Medicaid FFS rates (Medicaid and CHIP Payment and Access Commission 2015). Having both Medicare and Medicaid cover Medicaid shortfalls could be duplicative. Third, state Medicaid rates vary widely, and in some cases, Medicaid base payments and Medicaid supplemental payments will more than fully fund all Medicaid costs. Fourth,

(continued next page)

DSH and uncompensated care payments (cont.)

costs vary widely across hospitals. Therefore, some “Medicaid shortfalls” may be due to high costs rather than low payment rates, especially after Medicaid supplemental payments are considered. Fifth, CMS sets Medicare FFS rates, and Medicare Advantage (MA) plans often follow these FFS rates; the result is that hospitals receive both \$174 per Medicaid day from the FFS program and additional payments from the MA program. Because MA payments per Medicaid day are not considered when setting Medicare uncompensated care payments, the combined FFS and MA payments per Medicaid day (\$174 + “uncompensated care” payments built into MA rates) are not proportionate to the hospitals’ number of Medicaid days or the Medicaid “shortfall.” (The changes made to Medicare DSH payments are explained in the online appendix to the hospital chapter in our March 2014 report to the Congress, available at <http://www.medpac.gov>.)

One cross subsidy that is expected to continue even with a reform of Medicare’s uncompensated care payments is that Medicare will continue to pay 65 percent of dual-eligible patients’ bad debts. These bad debts are incurred when state Medicaid agencies decline to pay Medicare coinsurance due to Medicare program payments exceeding the base Medicaid rate for a service. Nonpayment of cost sharing by Medicaid programs results in approximately \$1.1 billion of Medicare bad-debt payments to hospitals. In addition, there are over \$3 billion in traditional DSH payments that are tied to Medicaid shares of patients and paid out as a percentage add-on to inpatient payment rates. These traditional DSH payments will continue even if uncompensated care payments start to be distributed based on more accurate measures of uncompensated care.

Rather than have Medicare pay a per diem for each Medicaid day, a better way to fund uncompensated care costs would be to use data from Worksheet S-10 on the Medicare hospital cost reports. Representatives of the hospital industry have stated that CMS needs to move toward using Worksheet S-10 to compute charity care levels, but they have also expressed concerns that the data still need to be refined before they are used. However, we find that S-10 data

(even in their current imperfect state) are a better predictor of audited uncompensated care costs than the Medicaid/SSI proxy being used. We used 2009 audited data that the Medicaid program collects on the cost of caring for the uninsured for each hospital that receives Medicaid DSH payments. While the Medicaid audited uncompensated care data cannot be used for Medicare payment because it is available only for about one-third of Medicare hospitals, it can be used to determine how closely the S-10 data matches audited uncompensated care data. We used 2009 data because it was the most recent data we could obtain from the Medicaid and CHIP Payment and Access Commission, which has compiled CMS DSH audit information from publicly available files into a more readily analyzable format. The S-10 data on uncompensated cost of caring for the uninsured and the Medicaid/SSI days are from 2011.¹⁸ The correlation between audited uncompensated care data and S-10 data was over .80 compared with a correlation of .50 for the Medicaid/SSI measure currently being used.

There are two reasons why Medicaid days are a poor proxy for uncompensated care. First, the Medicaid/SSI proxy assumes hospitals’ relative Medicaid shares are proportional to their relative uncompensated care shares. In contrast, the data show that public hospitals tend to have more uncompensated care than would be predicted based purely on their Medicaid and SSI days. In addition, the Medicaid/SSI days proxy is purely an inpatient measure. It ignores uncompensated care that occurs in the emergency department, which is problematic for rural hospitals that may provide much of their uncompensated care in an outpatient setting and may have relatively few Medicaid inpatient days, especially if they do not offer obstetric care.

Given that the S-10 more closely tracks hospitals’ relative costs of caring for the uninsured, we have urged CMS to transition over three years to using S-10 data and simultaneously continue to revise the S-10 as needed. A three-year transition will prevent financial shocks to hospitals and will create an incentive for them to more accurately report uncompensated care on the S-10. ■

**TABLE
3-5****Overall Medicare margins by hospital type**

Hospital group	2008	2009	2010	2011	2012	2013	2014
All hospitals (excluding CAHs)	-7.3%	-5.3%	-4.9%	-5.7%	-5.4%	-5.0%	-5.8%
Urban	-7.4	-5.4	-5.2	-6.0	-5.8	-5.7	-6.0
Rural							
Excluding CAHs	-5.9	-4.2	-2.8	-2.7	-1.3	1.4	-3.6
Including CAHs	-3.9	-2.7	-1.7	-1.4	0.3	1.9	-1.9
Nonprofit	-8.5	-6.6	-6.3	-7.2	-7.0	-6.5	-7.4
For profit	-2.7	-0.2	0.0	-0.3	1.1	1.3	1.0
Major teaching	-2.0	-0.7	-0.4	-1.8	-2.4	-3.1	-4.0
Other teaching	-7.4	-5.1	-5.0	-5.5	-5.3	-4.8	-5.7
Nonteaching	-10.5	-8.4	-7.8	-8.4	-7.5	-6.4	-7.5

Note: CAH (critical access hospital). Data are for all hospitals covered by the Medicare acute inpatient prospective payment system in 2014 and for CAHs where indicated. A margin is calculated as payments minus costs, divided by payments; margins are based on Medicare-allowable costs. "Overall Medicare margin" covers acute inpatient, outpatient, hospital-based skilled nursing facility (including swing beds), hospital-based home health, and inpatient psychiatric and rehabilitation services, plus graduate medical education and health information technology payments. The rural margins are shown with and without 1,300 CAHs, which are paid 101 percent of costs for inpatient and outpatient services. The margins without CAHs illustrate the profitability of rural inpatient prospective payment system hospitals; the rural margins with CAHs give a fuller picture of rural hospital profitability. Government-owned providers operate in a different context from other providers and are not included in this table.

Source: MedPAC analysis of Medicare cost reports, Medicare Provider Analysis and Review files, and impact files from CMS.

payment rates. The overestimation more than offset the effects of the 2 percent sequester and allowed hospital margins to remain relatively constant.

2014 Medicare margins by hospital type

We further examined overall aggregate Medicare margins by hospital type. In 2014, rural PPS hospitals had a -3.6 percent overall Medicare margin, which was 2.4 percentage points higher than the -6.0 percent margin for urban hospitals (Table 3-5). In 2014, the overall Medicare margin for major teaching hospitals (i.e., hospitals with a high resident-to-bed ratio) was -4.0 percent. Major teaching hospitals have higher overall Medicare margins than the average IPPS hospital in large part because of the extra payments they receive through the IME and DSH adjustments and uncompensated care payments (see text box).

In 2014, for-profit hospitals had positive overall Medicare margins (1.0 percent), well above the -7.4 percent overall Medicare margin for nonprofit hospitals (Table 3-5). Most of this differential can be explained by lower costs at for-

profit hospitals; in particular, they have lower outpatient costs. A detailed analysis of 2009 outpatient services indicated that for-profit hospitals' outpatient margins also benefit somewhat from a more favorable service mix and from being less likely to incur outpatient teaching costs (Medicare Payment Advisory Commission 2014d).

Marginal profits

Another consideration in evaluating the adequacy of payments is to assess whether providers have a financial incentive to increase the number of Medicare beneficiaries they serve. In considering the financial incentive to treat more Medicare patients, the provider compares the marginal revenue it will receive (i.e., the Medicare payment) with its marginal costs—that is, the costs that vary with volume. If Medicare payments are larger than the marginal costs of treating an additional beneficiary, a provider has a financial incentive to increase its volume of Medicare patients. On the other hand, if marginal payments do not cover the marginal costs, the provider may have a disincentive to admit Medicare beneficiaries.

Medicare indirect medical education adjustment

Past Commission analysis has shown that the inpatient indirect medical education (IME) and disproportionate share (DSH) hospital adjustments have provided payments that substantially exceed the estimated effects that teaching and providing service to low-income patients has on hospitals' average costs per discharge. Commission analysis of 2013 data regarding the relationship between teaching intensity and costs per case continues to show that the IME adjustment is set higher than can be empirically justified, with only about one-third of IME payments being necessary to account for the higher patient care costs associated with these training programs in the inpatient setting. In 2014, IME payments (for both fee-for-service beneficiaries and Medicare

Advantage enrollees) totaled approximately \$7.8 billion. In June 2010, the Commission recommended using teaching-hospital payments as incentives to train physicians in the skill sets needed to treat future Medicare beneficiaries (Medicare Payment Advisory Commission 2010).

As part of the Patient Protection and Affordable Care Act of 2010, starting in fiscal year 2014, the DSH adjustment has been reduced by 75 percent with funds redirected to an uncompensated care pool. Our analysis shows that the new level of DSH funding (set at 25 percent of the former adjustment) closely approximates the higher patient care costs associated with treating low-income patients in the inpatient setting. ■

To operationalize this concept, we compare payments for Medicare services with marginal costs, which is approximated as:

Marginal profit = (payments for Medicare services – (total Medicare costs – fixed building and equipment costs)) / Medicare payments

On average, the marginal profit across hospital service lines was at least 10 percent in 2014.¹⁹ Because hospitals would be expected to generate at least a 10 percent profit on a marginal increase in Medicare volume, hospitals with excess capacity have a financial incentive to serve more Medicare beneficiaries.

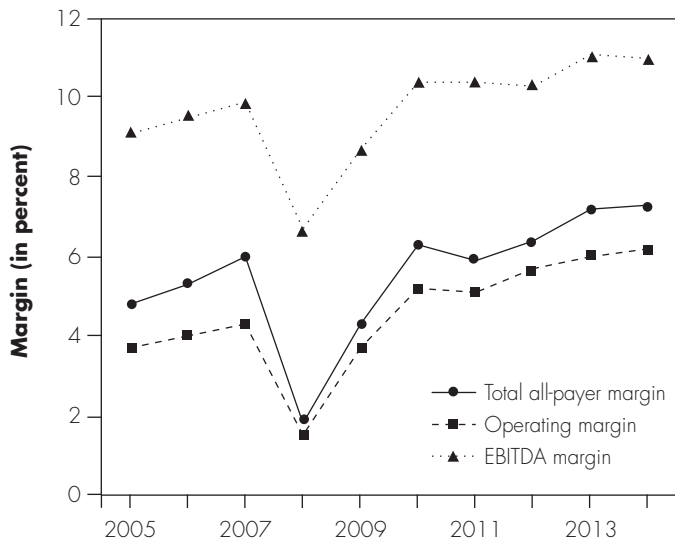
Medicare Select

Some hospitals accept discounts off Medicare rates from medigap plans to increase their Medicare volume; this practice suggests they believe that Medicare payment rates are above their marginal costs. These hospitals accept discounted deductibles from certain medigap plans, and in exchange, these plans place the hospitals on the medigap plan's in-network list of hospitals. Beneficiaries with these medigap plans have lower cost sharing if they use these in-network hospitals. Medigap plans with these preferred provider networks are called "Medicare Select" plans. The Kaiser Family Foundation estimated that 9 percent of

medigap plans were Medicare Select plans in 2010 (Huang et al. 2013). More recently, some traditional medigap plans (e.g., Type F plans) have been offering premium discounts to beneficiaries if they use network hospitals that accept discounts to Medicare's standard rates. For example, one insurer has proposed a system in which "[n]etwork hospitals would provide discounts of up to 100 percent on Medicare inpatient deductibles.... The [insurer] would return a portion of the savings resulting from the [discount] directly to any policyholder who has an inpatient stay at a network hospital. The savings would be shared with the policyholder in the form of a \$100 credit toward the policyholder's next renewal premium..." (Office of Inspector General 2015a). Our conversations with medigap-plan and hospital representatives suggest that hospitals are more likely to accept the discounts when they have excess capacity, commercial rates are relatively low, and their costs are relatively low.

Payments and costs for Part B drugs provided by 340B hospitals

Under the 340B Drug Pricing Program, approximately one-third of all PPS hospitals (primarily those with high Medicaid shares) receive steep discounts from pharmaceutical companies on the cost of the Part B drugs. Payment rates for all Part B drugs that are separately payable under the OPPS are set at 106 percent of each drug's average sales price (ASP).²⁰

**FIGURE
3-6****Hospitals' financial performance
has rebounded strongly after
poor performance in 2008**

Note: EBITDA (earnings before interest, taxes, depreciation, and amortization). A margin is calculated as revenues minus costs, divided by payments. Analysis excluded critical access hospitals.

Source: MedPAC analysis of Medicare hospital cost report data.

In aggregate, the Office of Inspector General (OIG) estimates that discounts across all 340B providers (hospitals and certain clinics) average 34 percent of ASP, allowing these providers to generate significant profits when they administer Part B drugs (Office of Inspector General 2015b). We propose reducing Medicare payment rates for separately payable 340B drugs by 10 percent of the ASP. This reduction would allow 340B hospitals to still make a profit on these drugs and accomplish two goals for Medicare. First, it will reduce beneficiary cost sharing by 10 percent, allowing beneficiaries to partially share in the discounts hospitals receive from pharmaceutical companies. Although in some cases, the savings will accrue to the beneficiaries' supplemental insurers (and would be expected to reduce supplemental policy premiums over time), about 19 percent of beneficiaries who received Part B drugs at 340B hospitals in 2014 did not have private or Medicaid supplemental coverage for Part B drugs.²¹ Reduced cost sharing may be material to these beneficiaries given that approximately 70 percent of beneficiaries without private or Medicaid supplemental coverage had incomes under \$30,000 per year in 2011 (Medicare Payment Advisory Commission 2015a).

Second, the 10 percent reduction in program payments would be redirected into the uncompensated care pool (see the text box on DSH payments, pp. 72–73). These uncompensated care dollars would be directed to hospitals with high uncompensated care costs.

Currently, the 340B program is not well targeted to hospitals with high levels of uncompensated care or to hospitals with financial difficulties. We find that 40 percent of 340B hospitals provide less than the median level of uncompensated care (3.6 percent) as reported on Worksheet S–10 of the Medicare cost reports. While the median all-payer margin is 3.8 percent for 340B hospitals compared with 5.3 percent at non-340B hospitals, there is wide variation in profitability among 340B hospitals: 25 percent of 340B hospitals reported all-payer margins of over 8.0 percent in 2014. Because of variation in the uncompensated care provided by 340B hospitals and variation in the profit margins of 340B hospitals, we are suggesting that a portion of the 340B discounts be redirected toward the hospitals providing the most uncompensated care. For more details on the 340B program, see the text box, pp. 78–79.

Total (all-payer) profitability reached a 30-year high in 2014

Hospitals' total (all-payer) profit margins are an indicator of how much financial pressure hospitals are under to control costs. In 2014, total margins for hospitals increased to 7.3 percent, the highest level recorded since the first year of the IPPS 30 years ago (Figure 3-6). All-payer margins grew because private-payer rate growth was strong (4 percent to 6 percent in recent years) and cost growth has been low (2 percent to 3 percent) (Bureau of Labor Statistics 2013, Health Care Cost Institute 2015, Health Care Cost Institute 2014, Health Care Cost Institute 2012). Other measures of all-payer profitability are also strong. Cash flow—as measured by earnings before interest, taxes, depreciation, and amortization (EBITDA)—increased from 10.3 percent in 2012 to 11.0 percent in 2013 and 2014, indicating hospitals maintained a relatively strong cash flow.

In 2014, total margins varied across types of hospitals. For-profit hospitals had the highest total (all-payer) margin, reaching a record 10.5 percent, more than 4 percentage points higher than in 2007, before the recession; nonprofit hospitals' total margin stood at 7.3 percent, 1 percentage point higher than in 2007; and major teaching hospitals' total margin stood at 5.2

percent, similar to the 5.1 percent margin they had in 2007. Substantial diversity also existed in the financial condition of rural hospitals. Some isolated rural hospitals closed, raising concerns about access to emergency care. In addition, rural hospitals adjacent to urban areas had low total margins (–1.2 percent in aggregate). On the other hand, the 21 frontier PPS hospitals (those in low population-density counties) had an average total margin of 10.9 percent, the highest of any group, which suggests that isolated hospitals can do well in frontier areas when they have sufficient volumes of insured individuals. The total margin for critical access hospitals was 3.4 percent.

A key question is whether the high total margins and strong cash flows the industry has enjoyed in recent years will result in increased cost growth. As we discussed earlier, there are signs of increasing wage pressure in 2015.

Profit margins and financial pressure to constrain costs vary by hospital

In aggregate, all-payer profit margins are at record highs. However, among individual hospitals, their market power, charges, and prices negotiated with insurers vary widely. An analysis of Truven Health MarketScan® data shows that negotiated rates commercial insurers paid to hospitals vary widely (Medicare Payment Advisory Commission 2011a). For example, in 2013, 10 percent of hospital commercial claims were paid less than \$236 for a head computed tomography scan (CPT 70450), but another 10 percent of hospital commercial claims were paid over \$1,472 for the same service (see online Appendix 3-A, available at <http://www.medpac.gov>). Given the variability in market power, charges, and the discounts hospitals negotiate with private insurers, we expect to see a wide variation both in hospital profits and in pressure to constrain costs.

Hospitals with strong profits on non-Medicare services and investments are under relatively little pressure to constrain their costs. Other hospitals, with losses on non-Medicare services, face overall losses (and possibly closure) if they do not constrain costs and generate profits on Medicare patients. To determine the effect of financial pressure on costs, we grouped hospitals into three levels of financial pressure from private payers: high, medium, and low, based on their median non-Medicare profit margins and other factors from 2009 to 2013. For these years, the hospitals under high pressure had non-Medicare profits of less than 1 percent, while the low-pressure hospitals had non-Medicare margins of more than 5 percent. We

found that hospitals under high pressure from 2009 to 2013 ended up with lower standardized Medicare costs per discharge in 2014 than hospitals under low levels of financial pressure during the same five-year period. For more details on our analytic methods, see our earlier analysis of payment adequacy (Medicare Payment Advisory Commission 2011b).

The following are key findings from our analysis of financial pressure on hospitals:

- **High pressure = low cost:** The 25 percent of hospitals under the most financial pressure had median standardized Medicare costs per case that were 8 percent lower than the national median for all 2,776 IPPS hospitals with available data. Because of their lower Medicare costs, hospitals under pressure generated a median overall Medicare profit margin of 6 percent, which is 10 percentage points above the national median.
- **Low pressure = high cost:** The 59 percent of hospitals that were under a low level of financial pressure had median standardized Medicare costs per case that were 2 percent above the national median. Because of higher costs, they generated a median Medicare profit margin of –8 percent, which is 4 percentage points below the national median.
- **For-profit hospitals have different incentives:** For-profit hospitals tended to keep their median standardized Medicare costs per case at the national median even when they were under little financial pressure. This finding suggests that if nonprofit and for-profit hospitals receive high payment rates from private payers, the higher revenues tend to result in higher costs in nonprofit hospitals, whereas in for-profit hospitals, a larger share of the revenue is retained as operating profit for shareholders.

Relatively efficient hospitals

The Commission follows two principles when selecting a set of efficient providers. First, the providers must do relatively well on cost and quality metrics. Second, the performance has to be consistent, meaning that the provider cannot have poor performance on any metric over the past three years. The Commission’s approach is to develop a set of criteria and then examine how many providers meet them. It does not establish a set share (say, 10 percent) of providers to be considered efficient and then define criteria to meet that pool size.

The 340B Drug Pricing Program

The 340B Drug Pricing Program (“340B program”) allows certain hospitals and other health care providers (“covered entities”) to obtain discounted prices on covered outpatient drugs (prescription drugs and biologics other than vaccines) from drug manufacturers for drugs provided to eligible patients.²² This text box provides an overview of the program; for more information, see the Commission’s *Overview of the 340B Drug Pricing Program*, available at <http://www.medpac.gov>.

The 340B program was created in 1992 following the adoption of the Medicaid Drug Rebate Program and is named for the provision in the Public Health Service Act that authorizes it. To have their drugs covered under Medicaid, manufacturers must offer 340B discounts to “covered entities.” In fiscal year 2013, covered entities saved about \$3.8 billion on outpatient drugs through the program (Health Resources and Services Administration 2015). Medicare Part B pays for certain 340B drugs that covered entities provide to beneficiaries, such as drugs used to treat cancer and rheumatoid arthritis.

The Health Resources and Services Administration (HRSA) calculates a 340B ceiling price for each covered outpatient drug using a statutory formula that is based on the formula used to calculate Medicaid drug rebates. According to statute, HRSA is allowed to share these prices with covered entities but not with the general public. The 340B ceiling price represents the maximum price a manufacturer can charge for a 340B drug. However, covered entities that participate in HRSA’s Prime Vendor Program may pay less than the ceiling price. By pooling the purchasing power of entities, the prime vendor (Apexus) negotiates subceiling prices on 340B drugs with manufacturers; the average savings was 10 percent below the ceiling price in fiscal year 2013 (Department of Health and Human Services 2014, Health Resources and Services Administration 2014).

The statute specifies which types of providers are eligible to participate in the 340B program. Several types of hospitals and certain clinics that receive grants from the Department of Health and Human Services (e.g., Federally Qualified Health Centers and family

planning clinics) are eligible for the program. There are six types of eligible hospitals: disproportionate share (DSH) hospitals, critical access hospitals (CAHs), rural referral centers (RRCs), sole community hospitals (SCHs), children’s hospitals, and freestanding cancer hospitals. Each eligible hospital must be owned by a state or local government, be a public or nonprofit hospital that is formally delegated governmental powers by a state or local government, or be a nonprofit hospital under contract with a state or local government to provide services to low-income patients who are not eligible for Medicare or Medicaid. Each type of eligible hospital except for CAHs must have a minimum DSH adjustment percentage (which is based on the share of a hospital’s inpatients who are Medicaid and low-income Medicare patients) to qualify for the program.²³

The 340B program has grown substantially during the past decade. Covered entities and their affiliated sites spent over \$7 billion to purchase 340B drugs in 2013, three times the amount spent in 2005. This figure includes both oral and physician-administered drugs and refers to the amount spent by covered entities to purchase 340B drugs for all patients, not the payments received by entities from public and private payers and patients for these drugs. Despite substantial growth in the number of covered entities, much of the growth in what is paid for drugs provided in the covered entities has occurred in covered entities that have been in the 340B program for a number of years. For example, Medicare spending on separately payable Part B drugs at hospitals that were in the 340B program in both 2008 and 2013 rose from \$1.2 billion in 2008 to \$2.8 billion in 2013, an increase of 145 percent. Although total drug spending in the United States has had strong growth, the rate of growth is much slower than the rate of growth in the 340B program. Total drug spending in the United States grew by 33 percent from 2005 to 2013 (IMS Institute for Healthcare Informatics 2014, IMS Institute for Healthcare Informatics 2012). During that period, spending by covered entities on 340B drugs increased from 1.0 percent to 2.2 percent of total drug spending in the United States.

From 2005 to 2010, the number of hospital organizations in the 340B program grew from 583 to

(continued next page)

The 340B Drug Pricing Program (cont.)

1,365 (134 percent).²⁴ Most of this increase reflects growth in the number of DSH hospitals during that period, from 583 to 1,001. From 2010 to 2014, the number of 340B hospitals grew by 57 percent to 2,140. This increase was driven by growth in the number of CAHs and other types of hospitals (e.g., RRCs and SCHs) that became eligible for 340B through the Patient Protection and Affordable Care Act of 2010 (PPACA).

From 2004 to 2013, Medicare spending for separately payable Part B drugs at hospitals that participate in 340B grew from \$0.5 billion to \$3.5 billion, or 543 percent.²⁵ Hospitals in the 340B program accounted for 22 percent of Medicare spending for Part B drugs at all Medicare acute care hospitals in 2004, growing to 48 percent in 2013. Some of the growth in Medicare spending at 340B hospitals during this period was due to an increase in the number of participating hospitals after the passage of PPACA. However, most of the growth in Medicare spending occurred among hospitals that were in the 340B program before the PPACA expansion. For example, 733 hospitals in the 340B program received Medicare payments for separately payable Part B drugs in both 2008 and 2013. These hospitals accounted for 73 percent of the growth in Medicare spending for separately payable Part B drugs at all 340B hospitals from 2008 to 2013.

Covered entities can use 340B drugs for all eligible patients, including patients with Medicare or private insurance, and can generate revenue if the reimbursements from payers exceed the discounted prices they pay for the drugs. The 340B statute does not restrict how covered entities can use revenue generated through the program. Therefore, entities can use these funds to expand the number of patients served, increase the scope of services offered to low-income and other patients, invest in capital, cover administrative costs, or

accomplish any other purpose.²⁶ HRSA does not have statutory authority to track how entities use this revenue.

Even though hospitals (except for CAHs) are required to have a minimum share of Medicaid and low-income Medicare patients to qualify for the 340B program, we found that many 340B hospitals do not provide high levels of uncompensated care (charity care and bad-debt costs).²⁷ Forty percent of 340B hospitals provided less than the national median share (3.6 percent) of uncompensated care in 2014. However, the median 340B hospital had uncompensated care costs equal to 4.3 percent of expenditures in 2014.

In a recent report, the Department of Health and Human Services Office of Inspector General (OIG) estimated that the aggregate discount on Part B drugs received by covered entities equaled 33.6 percent of the average sales price (ASP) in 2013 (Office of Inspector General 2015b).²⁸ In other words, entities paid 33.6 percent less than ASP to acquire Part B drugs. Medicare's payment rates for these drugs are based on ASP plus 6 percent (ASP + 6 percent). OIG's estimate of the aggregate discount was based on all covered entities (hospitals and certain clinics). Because 340B hospitals accounted for 91 percent of Part B drug spending for all covered entities in 2013, it is reasonable to assume that 340B hospitals received a discount similar to 33.6 percent of ASP.

Under the outpatient prospective payment system, Medicare pays 340B hospitals and non-340B hospitals the same payment rates for Part B drugs, even though 340B hospitals are able to purchase these drugs at steep discounts. Similarly, beneficiaries have a cost-sharing liability of up to 20 percent of Medicare's payment rate for outpatient drugs received at both types of hospitals.²⁹ By contrast, many state Medicaid programs pay 340B hospitals their actual cost of acquiring outpatient drugs.³⁰ ■

This year, we reviewed the set of criteria used to define efficient providers and evaluate potential improvements in our methodology. Specifically, we tested the effect of using different selection criteria such as adjusting the threshold of minimum acceptable quality or relaxing the consistency requirement. The Commission concluded

that alternative methods could change the number of efficient providers by varying degrees, but these methods did not result in greater distinction between the efficient and average providers, and in some cases, the differences were reduced. Most fundamentally, the clarity of the information provided for assessing payment adequacy

would not have improved significantly with any of the new methods tested. Therefore, the Commission will use its previous definition of an efficient provider in this year's report, but we will continue to look for improvements in our methods, including using new quality metrics as better indicators of patient outcomes are developed.

In the hospital sector, the variables we use to identify relatively efficient hospitals are hospital-level mortality rates (AHRQ Inpatient Quality Indicators), readmission rates (3M[®] potentially preventable readmissions), and standardized inpatient Medicare costs per case. Our assessment of efficiency is not in absolute terms, but rather, relative to other IPPS hospitals.

Categorizing hospitals as relatively efficient We assigned hospitals to the relatively efficient group or the control group according to each hospital's performance relative to the national median on a set of risk-adjusted cost and quality metrics for the period 2011 to 2013.³¹ We then examined the performance of the two hospital groups in fiscal year 2014.

Hospitals were identified as relatively efficient if they met four criteria in each year from 2011 to 2013:

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

The objective was to identify hospitals that consistently performed at an above-average level on at least one measure (cost or quality) and that always performed reasonably well on all measures. The rationale for this methodology and the details of computing the various measures is discussed in detail in our March 2011 report (Medicare Payment Advisory Commission 2011b). As a secondary check on hospital quality, we also require that at least 60 percent of the hospital's patients rated the hospital a 9 or 10 on a 10-point scale.³²

Examining performance of relatively efficient and other hospitals from 2011 to 2013 Of the 1,953 hospitals that met our screening criteria, 302 (15 percent) were found to

be relatively efficient during the 2011 to 2013 period. We examined the performance of relatively efficient hospitals on three measures from 2011 to 2013 by reporting the group's median performance divided by the median for the set of hospitals in our analysis (Table 3-6). The median efficient hospital's relative risk-adjusted 30-day mortality rate from 2011 through 2013 was 86 percent of the national median, meaning that the 30-day mortality rate for the efficient group was 14 percent below (that is, better than) the national median. The median readmission rate for the efficient group was 6 percent below the national median. The standardized Medicare cost per discharge for the efficient group was 9 percent lower than the national median. These relatively efficient hospitals were spread across the country and had a diverse set of characteristics, but they were more likely to be larger nonprofit hospitals because those hospitals tend to have better performance on the quality metrics we analyzed. For a more complete description of the methodology and other characteristics of relatively efficient providers, see the online Appendix 3-B, available at <http://www.medpac.gov>.

Historically strong performers had lower mortality and costs in 2014 In 2014, the efficient group's median composite mortality rate was 12 percent below the national median, and its median standardized Medicare cost per discharge was 9 percent lower than the national median. The lower costs allowed the relatively efficient hospitals to generate higher overall Medicare margins. The median hospital in the efficient group had an overall Medicare margin of 1 percent, while the median hospital in the comparison group had an overall Medicare margin of -5 percent. The marginal profits (which ignore the approximately 20 percent of costs that are fixed) were about 15 percent for the relatively efficient provider. As shown in past years, it is possible to deliver relatively good quality care that patients value at a cost roughly equal to Medicare payment rates.

Summary of hospitals' financial performance

The financial measures presented for 2014 present a mixed picture. All-payer margins were at a 30-year high of 7.3 percent, but Medicare margins were at a relative low, -5.8 percent in aggregate and 1 percent for the relatively efficient providers. While Medicare payments do not cover the full costs (fixed and variable) of the average hospital, they are at least 10 percent higher than the marginal cost of adding additional Medicare patients. Therefore, hospitals with excess capacity have an incentive to serve more Medicare patients.

**TABLE
3-6****Performance of relatively efficient hospitals**

Relative performance measure	Type of hospital	
	Relatively efficient during 2011-2013	Other hospitals
Number of hospitals	302	1,651
Share of hospitals	15%	85%
Historical performance, 2011-2013 (percent of national median)		
Risk-adjusted:		
Composite 30-day mortality (AHRQ)	86%	102%
Readmission rates (3M TM)	94	102
Standardized Medicare costs per discharge	91	102
Performance metrics, 2014 (percent of national median)		
Risk-adjusted:		
Composite 30-day mortality (AHRQ)	88%	101%
Composite 30-day readmission (3M)	95	102
Standardized Medicare costs per discharge	91	102
Median:		
Overall Medicare margin, 2014	1%	-5%
Non-Medicare margin, 2014	10	8
Total (all-payer) margin, 2014	7	5

Note: AHRQ (Agency for Healthcare Research and Quality). Relative measures are the median for the group as a percentage of the median of all hospitals. Per case costs are standardized for area wage rates, case-mix severity, prevalence of outlier and transfer cases, interest expense, low-income shares, and teaching intensity. Composite mortality was computed using the AHRQ methodology to compute risk-adjusted mortality for six conditions (acute myocardial infarction, congestive heart failure, pneumonia, gastrointestinal hemorrhage, stroke, and hip fracture). We then weighted the scores for each type of discharge by the share of discharges in that particular hospital. We removed hospitals with low Medicaid patient loads (the bottom 10 percent of hospitals) and hospitals in markets with high service use (top 10 percent of hospitals) because of concerns that socioeconomic conditions and aggressive treatment patterns can influence unit costs and risk-adjusted quality metrics.

Source: MedPAC analysis of 2011 to 2014 Medicare cost report and claims-based quality data.

How would current law changes for 2015, 2016, and 2017 affect hospitals' Medicare payments and beneficiaries' access?

We project Medicare margins for 2016 based on margins in 2014 and policy changes that take place in 2015 and 2016. The 2015 update for inpatient and outpatient payments was 2.2 percent. In 2016, the update is 1.7 percent for inpatient services, but outpatient payment rates are projected to decline by -0.4 percent. This reduction in outpatient rates reflects a correction for overestimating the number of services that were packaged into new APCs.³³ On net, the average update (across inpatient and outpatient services) is about 3 percent over the two-year period. However, as we discussed in our March 2015 report to the Congress, several policy changes in current law are expected to fully offset that increase in payment rates from 2014 to 2016.

First, Medicare uncompensated care payments will fall from \$9.4 billion in 2014 to \$6.4 billion in 2016 due to a sizable drop in the number of uninsured, which the Congressional Budget Office (CBO) estimated will decline from 16 percent in 2014 to 11 percent in 2016. CBO projects modest reductions in rates of uninsurance for 2017, meaning we do not expect to see a significant additional reduction in uncompensated care payments in 2017.

Second, payments from Medicare's EHR Incentive Program will sunset in 2016, declining by almost \$1.8 billion from 2014 to 2016, which is about 1 percent of overall Medicare payments.

Third, expansion of quality incentive payment programs will also reduce payments to hospitals with poor performance on quality metrics. This expansion includes the start of HAC payment penalties in fiscal year 2015,

which reduced by 1 percent per year the inpatient payments to 25 percent of hospitals. In fiscal year 2016, penalties under this program will total about \$360 million, or 0.2 percent of overall Medicare payments. In addition, the Hospital Readmissions Reduction Program added two additional conditions to the program and increased the maximum penalty from 2 percent to 3 percent of base payments in 2015, increasing total penalties under the program by about \$200 million, or 0.1 percent of overall Medicare payments.

Finally, mandated recovery of past overpayments due to documentation and coding changes following implementation of MS-DRGs resulted in a 0.8 percent adjustment to inpatient rates, equivalent to 0.5 percent of overall payments in 2015 and 2016. This reduction is expected to occur again in 2017.

We expect cost growth per discharge to remain around 2.5 percent per year in 2015 and 2016, similar to what we have seen for the past several years. We expect case mix to increase about 1 percent per year. On net, payment updates and case-mix increases in 2015 and 2016 will offset expected cost growth. However, the above-mentioned payment policy changes will reduce payments by about 3 percent between 2014 and 2016. With this decline in payments and continued modest cost growth, we expect the overall Medicare margin to decline from –5.8 percent in 2014 to around –9 percent in 2016. We also expect that the median overall Medicare margin for relatively efficient hospitals will be slightly negative in 2016.

There is some interest in understanding what margins would be without penalties from the quality incentive programs. Hospitals with above-average readmission rates and hospitals with HAC rates in the top 25 percent both receive penalties. In aggregate, penalties from these two programs are relatively small (less than 0.5 percent of overall Medicare revenues), and thus excluding them from our margin calculation would not materially change our projected overall Medicare margin. We would still expect the aggregate overall margin in 2016 to be around –9 percent. However, it is important to understand that the magnitude of these penalties does not reflect industry-wide quality performance. Because these are “tournament model” penalties, industry-wide improvement or declines in performance will not affect the industry-wide level of these penalties. The Commission has suggested changing the penalty structure so that industry-wide penalties decline when performance improves (Medicare Payment Advisory Commission 2014a).

Current law payment changes in 2017

Under current law, the hospital update is projected to be 1.75 percent. This share is the result of a 3.0 percent projected market basket increase, a 0.5 percent reduction for productivity, and a 0.75 percent reduction mandated by PPACA. We expect CMS to make its final temporary adjustment for documentation and coding and a further reduction in payments for health information technology in 2017. We do not expect substantial further declines in uncompensated care payments coming from the Medicare trust fund in 2017. Readmission penalties may increase slightly when cardiac bypass surgery is added to the Hospital Readmissions Reduction Program in 2017, but aggregate penalties and rewards from the other quality incentive programs should hold relatively steady. The net result would be an expected increase in payment rates of slightly less than 1 percent under current law in 2017. Depending on cost growth, Medicare margins could decline between 2016 and 2017.

Hospitals will continue to have a financial incentive to see Medicare patients

Despite Medicare margins of –5 percent to –6 percent in recent years, hospitals’ all-payer margins (which include Medicare) in 2014 rose to a record high of over 7 percent. The all-payer margins are at historic highs due to rate increases from private insurers that are well above cost growth, resulting in high margins for patients with commercial insurance (Health Care Cost Institute 2014, Medicare Payment Advisory Commission 2014b). While commercial rates vary wildly from hospital to hospital and insurer to insurer, on average, commercial rates are about 50 percent higher than hospital costs and often far more than 50 percent above Medicare rates (Cooper et al. 2015, Health Care Cost Institute 2014, Medicare Payment Advisory Commission 2014b, Selden et al. 2015). For example, Selden and colleagues found that average private rates were 75 percent higher than Medicare rates in 2012; Aetna and Blue Cross of California paid hospitals rates that were often 200 percent of Medicare’s rate for inpatient care and 300 percent of Medicare’s rate for outpatient services in California in 2014 (California Department of Insurance 2014a, California Department of Insurance 2014b).

Despite this growing gap, we do not expect to see any near-term material reductions in Medicare beneficiaries’ access to care for several reasons:

- Most hospitals have excess inpatient capacity.

- Medicare payment rates, while less than the total cost of care, are still sufficient to generate a marginal profit of approximately 10 percent on each additional Medicare patient. Therefore, it is still profitable for the average hospital to fill its empty beds with Medicare patients.
- Some hospitals currently accept discounts on Medicare rates from Medicare Select medigap plans to gain Medicare market share (Huang et al. 2013, Lee et al. 1997, Office of Inspector General 2015a). These hospitals want more Medicare patients, even at rates lower than standard Medicare rates.

Because hospitals have a financial incentive and the capacity to serve Medicare patients, we do not believe beneficiaries' access to care is at risk in the near term. However, in the long run, the growing disparity between Medicare rates and commercial rates (rates that continue to grow at roughly 4 percent to 5 percent per year) will have to be addressed. The gap cannot be closed by increasing Medicare rates by 4 percent to 5 percent or more per year; the Medicare trust fund would not be able to absorb those price increases. Therefore, commercial payment rate growth will have to decline, or eventually the difference between commercial rates and Medicare rates will grow so large that more hospitals would have an incentive to focus primarily on patients with commercial insurance. Thus, in the long term, Medicare beneficiaries' access to care may in part depend on commercial payers restraining rates paid to hospitals.

How should Medicare payment rates change in 2017?

RECOMMENDATION 3

The Commission's multipart recommendation addresses the issues of updating Medicare hospital payments in view of mixed payment adequacy signals, allowing beneficiaries to share in 340B drug savings, and directing additional payments to hospitals that provide the most uncompensated care. Specifically, the Commission recommends:

The Congress should direct the Secretary of the Department of Health and Human Services to:

- **update inpatient and outpatient payments by the amount specified in current law,**
- **reduce Medicare payment rates for 340B hospitals' separately payable 340B drugs by 10 percent of the average sales price (ASP),**
- **direct the program savings from reducing Part B drug payment rates to the Medicare-funded uncompensated care pool, and**
- **distribute all uncompensated care payments using data from the Medicare cost reports' Worksheet S-10. The use of S-10 uncompensated care data should be phased in over three years.**

This recommendation will increase providers' base payment rates by the amount stipulated in current law. It will also change Medicare payment rates for 340B hospitals' Part B drugs. While pharmaceutical companies will still have to provide hospitals the same 340B discounts that they currently provide, the discount will be shared with beneficiaries (10 percent lower cost sharing) and hospitals that provide high levels of uncompensated care. Reducing Medicare payment rates for 340B drugs will generate approximately \$300 million in additional funds for uncompensated care payments to hospitals. To better target all uncompensated care payments, CMS will be required to distribute uncompensated care payments based on uncompensated care costs reported in hospital cost reports.

RATIONALE 3

We recommend a base payment rate update equal to current law (projected to be 1.75 percent) to maintain beneficiaries' access to care. While our recommendation does not change the 340B program or the discounts pharmaceutical companies must provide to hospitals, we do recommend a reduction in Medicare payment rates for separately payable 340B drugs. One objective of the rate reduction is to allow beneficiaries to share in the discounts 340B hospitals receive from drug companies. While the Commission decided that beneficiaries should share in the benefit of 340B discounts, it does not want to reduce program payments to hospitals providing the most care to the uninsured. Therefore, the Commission recommends that the program savings from reducing Medicare payment rates for 340B drugs be redirected to the uncompensated care pool. In addition, to make sure that dollars in the uncompensated care pool actually go to the DSH hospitals providing the most uncompensated care, we recommend payments be distributed in proportion to the amount of uncompensated care that hospitals provide. This distribution can be done by using S-10 data to measure hospitals' uncompensated care costs.

These changes would maintain beneficiaries' access to care and improve the targeting of Medicare dollars toward hospitals providing the most uncompensated care. However, in the long term, given the Medicare trust fund's funding challenges, policymakers will need to deal with the larger question of how society in general should fund hospitals' non-Medicare charity care and bad debt costs.

IMPLICATIONS 3

Spending

- The recommendation would not change the update and is budget neutral.

Beneficiaries and providers

- The recommendation would maintain the projected 1.75 percent increase in base payment rates to all hospitals. It would also reduce beneficiary cost sharing on separately payable Part B drugs at 340B hospitals by 10 percent. This would reduce aggregate hospital revenue by about \$70 million, or \$30,000 per DSH hospital on average. The recommendation would also reduce program payments for 340B drugs by \$300 million and increase program payments for uncompensated care by \$300 million. Across all categories of DSH hospitals (e.g., 340B, non-340B, for profit, nonprofit), those with high uncompensated care shares would experience an increase in payments, and those with low levels of uncompensated care costs would experience a decline in payments relative to

current law. On average, the 340B hospitals' revenue from Part B drugs would decline, but their total Medicare revenues would increase slightly because of the expanded pool of dollars for uncompensated care and allocating the full uncompensated care pool on the basis of S-10 data.³⁴ On average, we estimate that payments per 340B hospital would increase by \$170,000 over current law, and payments per non-340B hospital would decline by \$190,000. We estimate average Medicare payments to public hospitals would increase by \$2.7 million per hospital relative to current law, while payment to nonprofit and for-profit hospitals would decline by \$500,000 and \$800,000 per hospital, respectively. To prevent large one-year swings in payments, these changes would be phased in over three years. The policy would not affect non-DSH hospitals or CAHs.

While the uncompensated care pool would be directed to help fund uncompensated care cost, as better measured by the S-10 worksheet, the \$3.3 billion in traditional DSH dollars would still be distributed to hospitals primarily based on Medicaid days. Hospitals with high Medicaid shares would be disproportionately helped by the traditional DSH pool, and hospitals with high uncompensated care costs would be disproportionately helped by the uncompensated care pool. ■

Endnotes

- 1 A portion of the growth in outpatient payments is due to certain lab tests that were paid separately under the laboratory fee schedule being packaged into APCs. CMS estimates that this growth accounts for over \$2 billion of the growth in outpatient payments (Centers for Medicare & Medicaid Services 2015b). Payments include roughly \$7 billion of inpatient and outpatient payments to critical access hospitals (CAHs), which are paid 1 percent over their costs of inpatient, outpatient, and post-acute services in swing beds. CAHs do not receive disproportionate share payments or uncompensated care payments.
- 2 To obtain these results, we used the volume of E&M visits in outpatient PPS hospitals, OPFS payment rates in 2014, and physician fee schedule payment rates in 2014.
- 3 CMS reports on hospital quality performance on Hospital Compare, a website that allows consumers to view an array of quality information on individual hospitals and compare their performance to other hospitals in the community and state and throughout the nation.
- 4 In-hospital mortality rates for all five conditions that we analyze—acute myocardial infarction (AMI), congestive heart failure, hip fracture, stroke, and pneumonia—improved (i.e., went down) by statistically significant percentages from 2010 to 2014. Over the same period, 30-day postdischarge mortality rates demonstrated statistically significant declines (i.e., improved) for AMI, hip fracture, and stroke.
- 5 The initial three conditions included in the Hospital Readmissions Reduction Program were acute myocardial infarction, heart failure, and pneumonia.
- 6 Twenty-two percent of hospitals avoided a penalty for one of two reasons. Seven percent were exempted because they did not have the minimum number of cases (25) over three years in any of the five conditions covered by the program. The remaining 15 percent of hospitals avoided penalties because they had better than average performance for all conditions for which they had the minimum 25 cases.
- 7 The program began in fiscal year 2013 with 1 percent of base payments at risk, phasing in to a maximum of 2 percent starting in fiscal year 2017.
- 8 The PSI 90 measure used is a composite of eight patient safety measures: PSI 03 (pressure ulcers); PSI 06 (iatrogenic pneumothorax); PSI 07 (central venous catheter-related bloodstream infections); PSI 08 (postoperative hip fracture); PSI 12 (perioperative pulmonary embolism or deep vein thrombosis); PSI 13 (post-operative sepsis); PSI 14 (post-operative wound dehiscence); and PSI 15 (accidental puncture or laceration).
- 9 SSI measures were added in fiscal year 2016. The HAC program will include two additional HAC infection measures in fiscal year 2017: methicillin-resistant staphylococcus aureus (MRSA) and clostridium difficile.
- 10 The domain weight for the patient safety indicators will be reduced to 15 percent and the weight for infections increased to 85 percent.
- 11 In 2014, the six largest services in order of Medicare patient revenues were inpatient acute care, outpatient care, inpatient rehabilitation, inpatient psychiatric, home health care, and skilled nursing services.
- 12 In 2014, many lab services were packaged into outpatient service rates, which shifted revenues and costs from the lab fee schedule to the outpatient payment system. CMS estimates that this change added approximately \$2.4 billion in covered services to the outpatient payment system, services that were previously paid on a separate fee schedule (Centers for Medicare & Medicaid Services 2015b). This change makes it difficult for us to assess underlying outpatient cost growth.
- 13 The \$3.2 billion consists of payments to IPPS hospitals for FFS patients; it does not include payments for managed care patients or payments received by critical access hospitals under the program.
- 14 Total payments in fiscal year 2013 were reduced by about 1 percent because the budget sequester was in effect for approximately one-half of the fiscal year. The sequester reduces payments from the Medicare program. It does not reduce payments from beneficiaries.
- 15 While CMS currently uses the inpatient payment system to distribute uncompensated care payments, the total payments hospitals will receive from the program are not affected by Medicare inpatient case volume or patient mix.
- 16 The services included in the overall Medicare margin are Medicare acute inpatient, outpatient, graduate medical education, Medicare SNF (including swing beds), Medicare home health care, Medicare inpatient psychiatric, and Medicare inpatient rehabilitation, as well as special payments for health information technology, temporary extra payments to hospitals located in low-spending counties, and (starting October 1, 2014) uncompensated care payments.

- 17 These DSH hospitals will also receive uncompensated care payments for each Medicaid day from Medicare Advantage plans, which generally follow Medicare FFS pricing (Berenson et al. 2015, Medicare Payment Advisory Commission 2014c).
- 18 We used the 2011 Worksheet S-10 Line 23, Column 1, which reports the uncompensated cost of caring for the uninsured because it most closely matches data on the audited Medicaid DSH financial statements. In addition, the more comprehensive definition of uncompensated care (Line 30, Column 1, which includes charity care and bad debts) was not of sufficient quality to be accurate in 2011. In 2011 and 2012, there was some confusion as to whether bad debts incurred in prior years and written off in the current year should be reported as bad debt. This confusion may have made bad-debt reporting inconsistent in 2011. In 2013, CMS clarified that the S-10 should match the hospital's financial statements, and all bad debts written off during the fiscal year qualify as bad debts on the Worksheet S-10. Therefore, the comprehensive computation of uncompensated care on Line 30 of the S-10 is now of sufficient quality to be used to distribute uncompensated care payments.
- 19 Using a cost-accounting approach, we find that approximately 20 percent of hospital costs are fixed, resulting in a marginal profit of approximately 10 percent. This estimate of 20 percent is conservative because it ignores any potential managerial or clinical labor costs that are fixed. In last year's report, we took an econometric approach to estimating hospitals' marginal costs and also found that fixed costs were approximately 20 percent of overall costs. This figure also matches the 20 percent figure used in the Medicare outlier policy. For a discussion of our econometric results and the literature on hospital marginal costs, see online Appendix 3-A from the March 2015 report, available at <http://www.medpac.gov> (Medicare Payment Advisory Commission 2015b).
- 20 For most Part B drugs that are separately payable under the OPPS, Medicare pays 80 percent of the payment rate, and beneficiaries' cost sharing is the remaining 20 percent. The sequester reduces the program payment by 2 percent. Therefore, the payment rate in the OPPS for most separately payable Part B drugs in 2016 is: $0.98 \times 0.8 \times 1.06 \times \text{ASP} + 0.2 \times 1.06 \times \text{ASP} = 1.043 \times \text{ASP}$, or 104.3 percent of ASP.
- 21 We determined this finding through the Commission's analysis of claims data for 340B separately payable drugs and CMS data on beneficiaries' supplemental insurance.
- 22 Covered entities are allowed to provide 340B drugs only to individuals who are eligible patients of the entity, but the statute does not define who should be considered "a patient of the entity." HRSA's current guidance, released in 1996, lists the criteria for individuals to be considered eligible patients.

For example, the covered entity must have a relationship with the individual, which is defined as maintaining the individual's health care records.
- 23 The minimum DSH adjustment percentage is generally 11.75 percent, with some lower levels allowed for certain hospitals. The formula for the DSH adjustment percentage is complicated, but the part that is relevant for 340B hospitals equals $5.88 \text{ percent} + [0.825 \times (\text{DSH patient percentage} - 20.2 \text{ percent})]$. The DSH patient percentage is the sum of the percentage of Medicare inpatient days for patients who are eligible for Supplemental Security Income and the percentage of total inpatient days for patients on Medicaid.
- 24 A hospital and all of its affiliated sites count as one hospital organization. Each hospital that files its own Medicare cost report must register separately with HRSA and counts as a unique organization.
- 25 Because some 340B hospitals do not provide 340B drugs to Medicaid beneficiaries, we excluded spending for drugs provided to patients of these hospitals who are eligible for both Medicare and Medicaid (dual eligible). We also excluded spending on vaccines (because they are excluded from the 340B program) and spending for all orphan drugs used by hospitals that are subject to the orphan drug exclusion.
- 26 Although there are no requirements under the 340B statute for how 340B revenue can be used, covered entities that are federal grantees may be required to use 340B revenue in ways that are consistent with their grant requirements. In addition, nonprofit hospitals are required to conduct a community needs assessment and document their community benefits in Internal Revenue Service tax filings.
- 27 Uncompensated care was measured as the cost of charity care and the cost of bad debts as reported on line 30 of the Medicare cost report Worksheet S-10.
- 28 OIG used data on ceiling prices and Medicare spending for Part B drugs to estimate the discount.
- 29 Although cost sharing equals 20 percent of the payment rate for most drugs, cost sharing is less than 20 percent for some high-cost drugs because cost sharing is capped at the level of the hospital inpatient deductible (\$1,216 in 2014). On average, cost sharing accounts for about 18 percent of the payment rate. In 2014, about 81 percent of beneficiaries who received Part B drugs at 340B hospitals had supplemental coverage that covered their cost-sharing for Part B drugs. About 19 percent of these beneficiaries lacked supplemental coverage.
- 30 In 2011, the Department of Health and Human Services Office of Inspector General found that about half of states had policies that required covered entities to bill Medicaid at

their actual acquisition cost (AAC) for 340B drugs (Office of Inspector General 2011). According to interviews conducted by the Government Accountability Office (GAO) with 18 covered entities in 2011, most of these entities that used 340B drugs for Medicaid patients reported that Medicaid reimbursement for 340B drugs was based on the AAC plus a dispensing fee (Government Accountability Office 2011). According to GAO, state Medicaid agencies may reimburse covered entities at AAC because states cannot claim Medicaid rebates for drugs when entities decide to use drugs purchased at 340B prices for Medicaid patients.

31 We use medians rather than means to limit the influence of outliers on our set of efficient providers.

32 While H-CAHPS and similar patient satisfaction surveys have the limitation of being subjective, we add it as another way to screen out low-value providers because it has the advantage of not being dependent on coding. It is possible that overly aggressive coding by some providers could artificially lower their risk-adjusted cost and risk-adjusted mortality metrics.

33 CMS started to package some clinical lab tests into APCs in 2014. However, CMS overestimated the number of lab services that would be provided as part of each APC, resulting in payment rates for these services being too high. Starting in 2016, CMS will reduce conversion factors for all APCs to correct this overestimate. The reductions will more than fully offset the update for 2016, resulting in a net reduction in payment rates for outpatient services between 2015 and 2016.

34 We used data from line 30 of the 2014 Medicare cost reports, data on current uncompensated care payments for 2016, and data from 2014 Part B drug claims to estimate how the two policies would redistribute payments to hospitals in 2017. To check the robustness of our estimates, we also estimated how payments would be redistributed based on a sample of hospitals with audited data pertaining to their costs of caring for the uninsured. We took this extra step because CMS may choose to distribute dollars based only on charity care costs for the uninsured (line 23 of Worksheet S-10), rather than on the combination of charity care and bad debts (line 30 of Worksheet S-10). The results across hospital groups were similar, indicating an increase in payments to public hospitals. The policy materially redistributes payments, but overall Medicare payments would not change by using the S-10 data.

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C H A P T E R

4

Physician and other health professional services

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

- 4** The Congress should increase payment rates for physician and other health professional services by the amount specified in current law for calendar year 2017.

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

Physician and other health professional services

Chapter summary

Physicians and other health professionals deliver a wide range of services, including office visits, surgical procedures, and diagnostic and therapeutic services in a variety of settings. In 2014, Medicare paid \$69.2 billion for physician and other health professional services, accounting for 16 percent of fee-for-service (FFS) Medicare spending. About 892,000 clinicians billed Medicare—576,000 physicians and 315,000 nurse practitioners, physician assistants, therapists, chiropractors, and other practitioners.

Medicare pays for the services of physicians and other health professionals using a fee schedule. Under current law, Medicare's conversion factor for the fee schedule will be updated by 0.5 percent in 2017.

Assessment of payment adequacy

We use the following factors to assess payment adequacy for physicians and other health professionals: beneficiary access to care, volume growth, quality, and Medicare payments and providers' costs.

Beneficiaries' access to care—Overall, beneficiary access to physician and other health professional services is largely unchanged from last year and comparable to access for individuals with private insurance. Most beneficiaries report they are able to obtain timely appointments for routine care, illness, or injury, and most beneficiaries are able to find a new doctor without a problem.

In this chapter

- Are Medicare fee schedule payments adequate in 2016?
- How should Medicare payments change in 2017?

A small number of beneficiaries report more difficulty, with a higher share reporting problems obtaining a new primary care doctor than reporting problems obtaining a specialist.

- ***Supply of providers***—The number of physicians per beneficiary has remained relatively constant, the number of advanced practice registered nurses and physician assistants per beneficiary has grown slightly, and the share of providers accepting assignment and enrolled in Medicare’s participating provider program remains high.
- ***Volume of services***—In 2014, across all services, volume per beneficiary grew by 0.4 percent. Among broad categories of service, growth rates were 0.3 percent for evaluation and management, –1.1 percent for imaging services, 1.4 percent for major procedures, 0.8 percent for other procedures, and –0.6 percent for tests. While the imaging decrease continues the downward trend we have seen since 2009, use of imaging services remains much higher than it was a decade ago. The decrease in imaging volume includes a shift in billing for cardiovascular imaging from freestanding offices to hospitals.

Quality of care—Currently, the Medicare program relies heavily on process measures to assess clinician quality, and the Commission would prefer the use of a few key outcome measures of importance to Medicare beneficiaries. However, reliability of outcome measures at the individual clinician level is poor. We report two sets of measures at the national level—avoidable hospitalizations for ambulatory care–sensitive conditions and rates of low-value care in Medicare.

Medicare payments and providers’ costs—CMS currently projects that the increase in 2017 in the Medicare Economic Index will be 2.2 percent. We find that the ratio of Medicare payments to private insurer payments for physician and other health professional services is steady (Medicare rates were 78 percent of commercial rates in 2014). In 2014, compensation was much lower for primary care physicians than for physicians in specialty groups such as radiology and nonsurgical, procedural specialties, continuing to raise concerns about fee schedule mispricing and its impact on primary care.

The evidence suggests that payments for physicians and other health professionals are adequate. Therefore, the Commission recommends an update for 2017 consistent with current law. ■

Background

Physicians and other health professionals billing under Medicare's Part B fee schedule deliver a wide range of services—office visits, surgical procedures, and diagnostic and therapeutic services—in a variety of settings.

In 2014, the Medicare program paid \$69.2 billion for physician and other health professional services, or 16 percent of benefit spending in Medicare's traditional fee-for-service (FFS) program (Boards of Trustees 2015). In 2014, about 892,000 professionals billed Medicare through the fee schedule—576,000 physicians and 315,000 nurse practitioners, physician assistants, therapists, chiropractors, and other practitioners.

Medicare uses a fee schedule to pay for physician and other health professional services based on a list of over 7,000 services and their payment rates. In determining payment rates for each service, CMS considers the amount of work required to provide a service, expenses related to maintaining a practice, and professional liability insurance costs. These three factors are adjusted by variation in the input prices in different markets (through the geographic practice cost index (GPCI) adjustment factor), and the sum is multiplied by the fee schedule's conversion factor

(average payment amount) to produce a total payment amount.¹

The conversion factor was \$35.93 in 2015 and is \$35.80 in 2016 (Centers for Medicare & Medicaid Services 2015b). The effective conversion factor for 2016 is lower than for 2015, which is due in part to a current law target of 1 percent for misvalued codes that CMS did not meet. The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) established a new set of updates for clinicians billing under the Medicare fee schedule and repealed the prior framework that set the conversion factor—the sustainable growth rate (SGR) formula (Table 4-1).

The SGR was established to limit total fee schedule spending by restraining annual updates when spending exceeded certain parameters. Years of legislated overrides of negative adjustments by the Congress would have led to a large negative reduction in 2015 (Medicare Payment Advisory Commission 2011).² MACRA repealed the SGR system, eliminating the proposed negative updates and establishing a set of statutory payment updates. MACRA also enacted other provisions into law affecting Medicare's payments for clinician services. These provisions:

- created a payment incentive for clinicians who are qualifying participants in eligible alternative payment entities;

**TABLE
4-1**

Statutory payment updates and incentive payments for physicians and other health professionals

	2015		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026 and later
	January–June	July–December											
FFS clinicians													
Update	0%	0.5%	0.5%	0.5%	0.5%	0.5%	0%	0%	0%	0%	0%	0%	0.25%
Potential MIPS adjustments						(–4% to +4%)	(–5% to +5%)	(–7% to +7%)	(–9% to +9%)	(–9% to +9%)	(–9% to +9%)	(–9% to +9%)	(–9% to +9%)
APM clinicians													
Update	0%	0.5%	0.5%	0.5%	0.5%	0.5%	0%	0%	0%	0%	0%	0%	0.75%
APM incentive payment						5%	5%	5%	5%	5%	5%		

Note: FFS (fee-for-service), MIPS (Merit-based Incentive Payment), APM (alternative payment model). The MIPS adjustments are budget neutral. The potential positive MIPS adjustments may be larger than those shown here due to a scaling factor and additional funds for exceptional performance.

Source: Medicare Access and CHIP Reauthorization Act of 2015.

Alternative payment models

The Medicare Access and CHIP Reauthorization Act of 2015 establishes a payment incentive for clinicians who are qualifying participants in eligible alternative payment models. To be a qualifying participant, a clinician must have a specified share of their Medicare fee-for-service revenue in an eligible alternative payment entity. Eligible alternative payment entities are participants in alternative payment models that require participants to use certified electronic health records technology; provide for payment based

on quality measures comparable to the Merit-based Incentive Payment System; and bear financial risk for monetary losses in excess of a nominal amount (or are medical homes that have been certified for expansion by the CMS Office of the Actuary). Qualifying participants will receive a 5 percent incentive payment each year that they are eligible from 2019 through 2024. The incentive payment is applied to their professional services revenue and is delivered in a lump sum. ■

- established a Merit-based Incentive Payment System (MIPS) for making payment adjustments to clinicians who do not qualify as alternative payment model (APM) participants, to start in 2019 (see text box);
- will eliminate, at the end of 2018, the separate clinician payment adjustments (meaningful use of electronic health records, the Physician Quality Reporting System (PQRS), the value-based payment modifier, and the current quality and resource use reports);
- established a Technical Advisory Panel for physician-focused payment models;
- required the Secretary to continue making Medicare data available to the public;
- changed the process for physicians who opt out of participating in Medicare so that their opt-out is automatically renewed every two years unless they affirmatively elect back into the program, and the provisions require CMS to publish information on the number of opt-out physicians, effective February 1, 2016;
- required three Commission reports: two reports on the relationship between clinician utilization and total utilization and one report on the effect of the statutory payment updates from 2015 through 2019;
- extended the work GPCI floor and the therapy caps exceptions process through 2017 (including a process for medical review of certain therapy claims); and

- prohibited CMS from finalizing a proposal to unbundle global surgical codes.

Are Medicare fee schedule payments adequate in 2016?

We assess payment adequacy by reviewing beneficiary access to care provided by physicians and other health professionals, volume growth, quality of care, and Medicare payments and providers' costs. Overall, most indicators show no significant change from prior years.

Beneficiaries' access to care

We use a number of measures to assess beneficiary access to timely, appropriate care, including direct reporting from beneficiaries (through, for example, our own beneficiary telephone survey); focus groups with beneficiaries and practitioners; and health facility site visits conducted yearly. Supplementing these primary sources, we also review other patient access surveys and clinician surveys. Where possible, we note whether the pattern under discussion pertains to the entire Medicare population or to FFS beneficiaries only.

Each year, the Commission sponsors a telephone survey of 4,000 Medicare beneficiaries ages 65 and over and 4,000 privately insured individuals ages 50 to 64. The goal in surveying these two populations is to assess whether access concerns reported by Medicare beneficiaries are unique to the Medicare population or are part of trends

in the broader health care delivery system. This year's survey was fielded in the summer and fall of 2015. The Commission also conducts focus groups in markets around the country to provide a qualitative description of beneficiary and provider experiences with the Medicare program.³ This year, the focus groups consisted of Medicare beneficiaries and primary care physicians. We also conducted site visits, with a focus this year on retail clinics and urgent care facilities.

Overall, findings from our survey and focus groups are consistent with one another and with external sources. Medicare beneficiaries have generally stable access to ambulatory care services, and their reported access is either as good as or better than access among privately insured individuals. The share of beneficiaries who waited longer than they wanted for an appointment is largely unchanged from prior years. Beneficiaries seeking a new primary care doctor are more likely to report difficulty doing so than are beneficiaries seeking a specialist, although the share of beneficiaries experiencing any problem continues to be small.

Medicare beneficiaries' overall satisfaction with care is better than privately insured patients

Medicare beneficiaries reported high levels of satisfaction with their overall health care and were more likely to report being satisfied than privately insured individuals ages 50–64. In our telephone survey, higher shares of Medicare beneficiaries reported that they were very or somewhat satisfied with their care (88 percent) compared with those who have private insurance (80 percent) (Table 4-2).

These overall satisfaction rates are similar to those found in other surveys. The Medicare Expenditure Panel Survey (MEPS) finds that satisfaction with care for individuals ages 65 and over with Medicare is largely comparable with those under age 65 with private insurance. At about the same rates as the under-65 insured population, Medicare beneficiaries reported that they were able to get appointments as soon as they needed them and felt that their providers are respectful, explain information clearly, and listen carefully (Soni and Zibman 2014).

Most beneficiaries report that they are able to see a doctor when they need to

Based on our telephone survey, the share of Medicare beneficiaries reporting that they never had to wait longer than they wanted for routine care (72 percent) or illness or

**TABLE
4-2**

Satisfaction with the overall quality of health care received in all settings in the past 12 months, 2014–2015

	Medicare (ages 65 or older)	Private insurance (ages 50–64)
Very satisfied	69%	55%
Somewhat satisfied	19	25
Somewhat dissatisfied	3	5
Very dissatisfied	2	2

Note: Table excludes the following responses: "Did not receive health care in past 12 months," "Don't know," and "Refused." It does not include Medicare beneficiaries under the age of 65.

Source: MedPAC-sponsored telephone survey conducted in 2015.

injury care (82 percent) is consistent with prior years and better than the rates reported by the privately insured—69 percent for routine care and 77 percent for illness or injury care (the differences are statistically significant) (Table 4-3, p. 98).

Beneficiaries report more difficulty accessing primary care than specialty care

Most beneficiaries reported that they were able to obtain timely appointments for routine care, illness, or injury, and most beneficiaries were able to find a new doctor without a problem. However, beneficiaries seeking a primary care doctor were more likely to report that they had a problem finding a doctor than beneficiaries seeking a specialist (Table 4-3, p. 98).

Among those beneficiaries looking for a new doctor, a larger share reported a big problem finding primary care doctors than specialists. For primary care, 7 percent were looking for a new doctor, and of those looking, 14 percent reported a big problem (7 percent \times 14 percent = 1.0 percent of the total Medicare population). Among those looking for a new specialist, 16 percent were looking for a new doctor, and of those looking, 6 percent reported a big problem (16 percent \times 6 percent = 1.0 percent of the total Medicare population).

Medicare beneficiaries overall were less likely than privately insured individuals to report a big problem finding either a new primary care doctor or a new specialist, although the same pattern of greater difficulty

**TABLE
4-3**

Most aged Medicare beneficiaries and older privately insured individuals have good access to physician care, 2011-2015

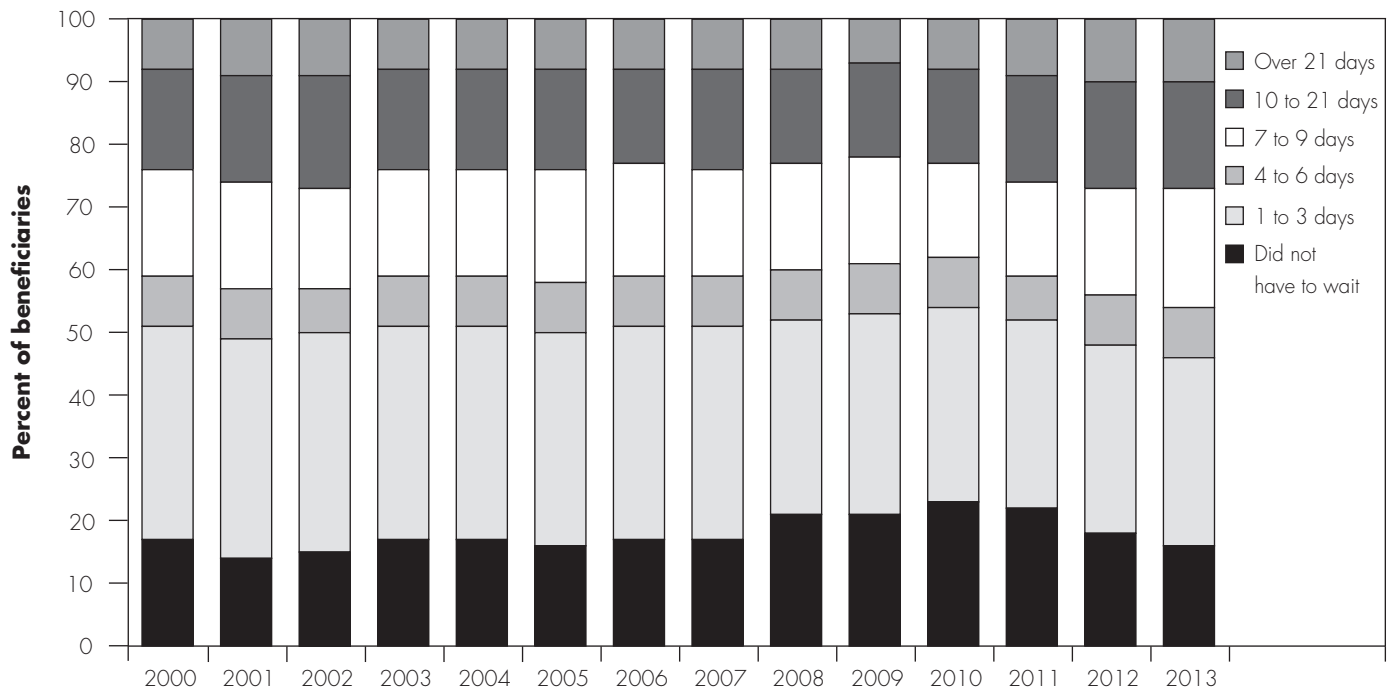
Survey question	Medicare (ages 65 or older)					Private insurance (ages 50-64)				
	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015
Unwanted delay in getting an appointment: Among those who needed an appointment in the past 12 months, "How often did you have to wait longer than you wanted to get a doctor's appointment?"										
For routine care										
Never	74% ^b	77% ^b	73%	72% ^a	72% ^a	71%	72% ^b	69%	69% ^a	69% ^a
Sometimes	18	17	20	20 ^a	19 ^a	21	21	23	23 ^a	23 ^a
Usually	3	3	3	3	4	4	3	4	4	4
Always	2	2	3	3	3	3	3	3	3	3
For illness or injury										
Never	82	84 ^b	82	83 ^a	82 ^a	79	80 ^b	77	79 ^a	77 ^a
Sometimes	14	12	14	12 ^a	13 ^a	17	16	17	16 ^a	17 ^a
Usually	2	2	2	2	3	2	2 ^b	3	2	3
Always	1	1	1	1 ^a	2	1 ^b	2	2	2 ^a	2
Not accessing a doctor for medical problems: "During the past 12 months, did you have any health problem or condition about which you think you should have seen a doctor or other medical person, but did not?"										
Percent answering "Yes"	8 ^b	8 ^b	8 ^b	10	11	11	11	11	11	12
Looking for a new doctor: "In the past 12 months, have you tried to get a new...?" (Percent answering "Yes")										
Primary care doctor	6 ^b	7	7	8	7 ^a	7 ^b	7 ^b	8	8	9 ^a
Specialist	14 ^b	13 ^b	14	17	16	16	18	16 ^b	17	18
Getting a new physician: Among those who tried to get an appointment with a new primary care physician or a specialist in the past 12 months, "How much of a problem was it finding a primary care doctor/specialist who would treat you? Was it..."										
Primary care physician										
No problem	65	72	70	67	67	68	75 ^b	67	63	63
Percent of total insurance group	3.6	4.7	5.2	5.5	4.7	4.5 ^b	5.0	5.2	4.9	5.7
Small problem	12	14	11	16	18	16	9 ^b	15	16	18
Percent of total insurance group	0.7	0.9	0.8	1.3	1.2	1.1 ^b	0.6 ^b	1.2	1.3	1.7
Big problem	23 ^b	14	17	15	14	14	15	18	19	17
Percent of total insurance group	1.3	0.9	1.3	1.2	1.0	0.9 ^b	1.0 ^b	1.4	1.5	1.5
Specialist										
No problem	84	87	86	85	87 ^a	86	86 ^b	87 ^b	85	82 ^a
Percent of total insurance group	12.1	11.7	12.4	14.4	14.2	13.9	15.6	13.9	14.5	14.8
Small problem	8	6	8	7	7	8	7	6	9	8
Percent of total insurance group	1.1	0.7	1.2	1.2	1.1	1.3	1.2	0.9 ^b	1.4	1.5
Big problem	7	7	5	7	6	6 ^b	7	7	6 ^b	9
Percent of total insurance group	1.0	0.9	0.7	1.2	1.0 ^a	1.0 ^b	1.2	1.1 ^b	1.0 ^b	1.7 ^a

Note: Numbers may not sum to 100 percent because missing responses ("Don't know" or "Refused") are not included. Sample sizes for each group (Medicare and privately insured) are 4,000. Sample sizes for individual questions varied. "Aged" beneficiaries are those ages 65 or older.

^a Statistically significant difference between the Medicare and privately insured groups in the given year (at a 95 percent confidence level).

^b Statistically significant difference from 2015 within the same insurance category (at a 95 percent confidence level).

Source: MedPAC-sponsored telephone surveys conducted from 2011 to 2015.

**FIGURE
4-1****Slightly less than half of beneficiaries report that they can see their doctor in three days or less, 2000–2013**

Note: Data include noninstitutionalized beneficiaries only.

Source: Medicare Current Beneficiary Survey, 2000–2013.

finding a primary care doctor than a specialist exists among respondents with private insurance.

Beneficiaries in our focus groups reported some difficulty obtaining specialty visits, particularly with certain types of providers—notably, dermatologists. This finding could be due in part to dermatologists specializing in areas other than medical dermatology (e.g., cosmetic dermatology). Physicians in our focus groups also reported difficulty obtaining psychiatric referrals for all of their patients because, in their experience, many psychiatrists do not accept any type of insurance. Primary care providers also reported that they sometimes treated their patients' behavioral health issues themselves if they could not obtain alternative treatment for them. Some physicians in the focus groups mentioned that, for their patients in Medicare Advantage, they had trouble finding certain types of specialty services in network, especially dermatology and psychiatry.

Wait times for appointments

The Medicare Current Beneficiary Survey (MCBS), a panel survey (a survey covering the same group of people over time) of Medicare beneficiaries, includes a question assessing wait times—how long, specifically, respondents waited for their last physician appointment. In 2013, the share of beneficiaries reporting that they could see their doctor within three days remained slightly below 50 percent, continuing a slight trend downward since 2010, when 54 percent reported seeing their physician in three days or less (Figure 4-1). By type of coverage, beneficiaries with private insurance in addition to Medicare were more likely to report that they did not have to wait for an appointment (20 percent reported they did not have to wait) than those without any supplemental coverage (15 percent) (data not shown).

In our focus groups, most beneficiaries said that they could get a check-up with their primary care provider within one

**TABLE
4-4**

Medicare beneficiaries have better or similar access to physicians compared with privately insured individuals, but minorities in both groups report problems more frequently, 2015

Survey question	Medicare (ages 65 or older)			Private insurance (ages 50-64)		
	All	White	Minority	All	White	Minority
Unwanted delay in getting an appointment: Among those who needed an appointment in the past 12 months, "How often did you have to wait longer than you wanted to get a doctor's appointment?"						
For routine care						
Never	72% ^a	74% ^{ab}	64% ^b	69% ^a	70% ^{ab}	66% ^b
Sometimes	19 ^a	18 ^{ab}	23 ^b	23 ^a	23 ^a	23
Usually	4	4	5	4	4	6
Always	3	3 ^b	6 ^b	3	3 ^b	5 ^b
For illness or injury						
Never	82 ^a	83 ^{ab}	76 ^b	77 ^a	78 ^a	74
Sometimes	13 ^a	12 ^a	15 ^a	17 ^a	17 ^a	20 ^a
Usually	3	3	4	3	3	2
Always	2	1 ^{ab}	4 ^b	2	2 ^{ab}	3 ^b
Not accessing a doctor for medical problems: "During the past 12 months, did you have any health problem or condition about which you think you should have seen a doctor or other medical person, but did not?"						
Percent answering "Yes"	11	10 ^b	15 ^b	12	11 ^b	16 ^b
Looking for a new doctor: "In the past 12 months, have you tried to get a new...?" (Percent answering "Yes")						
Primary care physician	7 ^a	7 ^a	8	9 ^a	9 ^a	10
Specialist	16	16 ^a	15	18	19 ^a	16
Getting a new physician: Among those who tried to get an appointment with a new primary care physician or a specialist in the past 12 months, "How much of a problem was it finding a primary care doctor/specialist who would treat you? Was it..."						
Primary care physician						
No problem	67	66	68	63	63	62
Percent of total insurance group, by race	4.7	4.4	5.6	5.7	5.7	6.0
Small problem	18	17	20	18	18	18
Percent of total insurance group, by race	1.2	1.2	1.6	1.7	1.6	1.7
Big problem	14	15	12	17	17	19
Percent of total insurance group, by race	1.0	1.0	1.0	1.5	1.5	1.8
Specialist						
No problem	87 ^a	87	86	82 ^a	84	77
Percent of total insurance group, by race	14.2	14.3	13.3	14.8	15.7 ^b	12.0 ^b
Small problem	7	6	10	8	8	11
Percent of total insurance group, by race	1.1	1.0	1.5	1.5	1.4	1.7
Big problem	6	7	4 ^a	9	8	12 ^a
Percent of total insurance group, by race	1.0 ^a	1.1	0.7 ^a	1.7 ^a	1.6	1.9 ^a

Note: Respondents who did not report race or ethnicity were not included in "White" or "Minority" results but were included in "All" results. Numbers may not sum to 100 percent because missing responses ("Don't know" or "Refused") are not included. Sample sizes for each group (Medicare and privately insured) were 4,000 in 2015. Sample sizes for individual questions varied.

^a Statistically significant difference between the Medicare and privately insured populations in the given year (at a 95 percent confidence level).

^b Statistically significant difference by race within the same insurance category in the given year (at a 95 percent confidence level).

Source: MedPAC-sponsored telephone surveys conducted in 2015.

to two weeks, and most said that they could get an acute primary care visit the same day with either their regular primary care provider or another provider in the same practice. Many beneficiaries told us that they went to an urgent care facility for primary care when they could not see their primary care provider right away.

Medicare beneficiaries about as likely to report delaying medical care as privately insured individuals

Medicare and privately insured respondents in our telephone survey were equally likely to report that they had a health problem for which they should have seen a doctor, but did not (11 percent for Medicare, 12 percent for privately insured individuals, no statistical difference).

From the MEPS, in 2013, about 12 percent of individuals over age 65 with Medicare said they had difficulty receiving needed medical or dental care or prescription drugs, slightly higher than the figure reported for privately insured individuals (9.2 percent). Privately insured individuals were more likely to report that cost or insurance reasons were the reason they had trouble receiving medical care, while Medicare beneficiaries cited other reasons for why they could not obtain needed care (Agency for Healthcare Research and Quality 2014).

Some groups of beneficiaries report more difficulty obtaining care

In our telephone survey, minority beneficiaries were more likely than White beneficiaries to report that they could not obtain care as quickly as they wanted. Differences in reported access between urban and rural beneficiaries were minimal. Finally, from other sources, Medicare beneficiaries under age 65 reported significantly more difficulty obtaining care and less satisfaction with their care than beneficiaries over age 65.

Minority beneficiaries report more difficulty receiving care as soon as they want and higher rates of forgoing care In our 2015 telephone survey, the share of beneficiaries reporting that they never had to wait longer than they wanted for routine care was lower for minority Medicare beneficiaries (64 percent) than for White Medicare beneficiaries (74 percent) (Table 4-4). Minority Medicare beneficiaries were more likely than White Medicare beneficiaries to report that they always had to wait longer than they wanted for a routine doctor's appointment (6 percent vs. 3 percent, respectively). This pattern is replicated among the survey's privately insured

respondents: Minorities with private insurance were less likely than Whites to report that they never had to wait longer than wanted for routine care.

Minority Medicare beneficiaries were also more likely than White beneficiaries to say that they did not receive care when they thought they should have (15 percent for minority beneficiaries vs. 10 percent for White beneficiaries). The pattern is echoed on the private side: Minorities with private insurance were also more likely than White respondents to report forgoing care (16 percent for minority respondents vs. 11 percent for White respondents).

Differences in reported access between minority and White Medicare beneficiaries have appeared in other years in our survey. In particular, in 2013, we reported that our survey found a higher share of minority than White beneficiaries who said they had difficulty finding a specialty provider. However, it is worth noting that while this year's survey suggests differences between White and minority beneficiaries in their wait times for appointments, there were no significant differences between the two groups facing difficulty in finding a new physician (either primary care or specialist).

We also looked at racial and ethnic differences in reported access and satisfaction using the MCBS to see whether these patterns appeared in other data sources. In the 2013 MCBS, black and Hispanic beneficiaries were more likely to report that they were very unsatisfied with their care (5 percent for black and Hispanic beneficiaries vs. 3 percent for Whites). Hispanic beneficiaries in particular reported significantly higher rates of dissatisfaction with ease of access to their doctor (8 percent, vs. 5 percent for Whites), and they reported difficulty obtaining care at about twice the rates of White beneficiaries. Other differences by race and ethnicity were not significant or only marginally so (Centers for Medicare & Medicaid Services 2014).

Another factor that may underlie reported differences in access by race is the presence of other coverage. Black and minority beneficiaries over age 65 are more likely to be dually eligible for Medicaid and Medicare than are White beneficiaries, and the share enrolled in Medicare Advantage also varies by race and ethnicity (Table 4-5, p. 102). Beneficiaries with Medicaid coverage consistently report more difficulty accessing services than do Medicare beneficiaries who are not dually eligible for Medicare and Medicaid.

**TABLE
4-5**

**Share of beneficiaries
ages 65 and over with other
coverage, December 2012**

	Dually eligible for Medicaid	Enrolled in Medicare Advantage
White	8%	26%
Black	27	32
Asian	38	31
Hispanic	31	43

Note: Beneficiaries in the first column include those entitled to either full or partial Medicaid benefits (full benefits, qualified Medicare beneficiary plus, specified low-income Medicare beneficiary plus, qualified Medicare beneficiary, specified low-income Medicare beneficiary, qualifying individual or qualified disabled working individual).

Source: MedPAC analysis of enrollment files from CMS.

No major differences in access between urban and rural beneficiaries The Commission's telephone survey shows no major differences in access between urban and rural beneficiaries (Table 4-6). There was no significant difference between the share of urban and rural beneficiaries experiencing an unwanted delay in getting an appointment. Beneficiaries in rural areas have been more likely than beneficiaries in urban areas to report no problem finding a primary care doctor and in fact, relative to last year, reported improvements in finding a new primary care provider. Other differences were small and not statistically significant.

Beneficiaries who are disabled and under age 65 face more access problems Beneficiaries under age 65 (entitled to Medicare on the basis of receiving Social Security Disability Insurance) reported much worse access to physician services and lower levels of overall satisfaction with their care. Some of these differences may be due to these beneficiaries' medical conditions, often multiple; the presence of behavioral health conditions; and their higher rates of poverty (about 45 percent of Medicare beneficiaries under age 65 are also entitled to Medicaid) (see text box, pp. 104–105).

In the 2013 MCBS, beneficiaries under age 65 were nearly three times more likely than Medicare beneficiaries overall to report difficulty obtaining care (16 percent vs. 6 percent, respectively) and delaying care because of cost (26 percent vs. 10 percent, respectively) (Centers for Medicare & Medicaid Services 2014). Beneficiaries under

age 65 reported higher levels of dissatisfaction with access to their doctor and were more than twice as likely to report having a problem for which they did not see the doctor (23 percent vs. 11 percent overall).

Nearly all beneficiaries have a regular source of care, with more use of advanced practice nurses and physician assistants in rural areas

Nearly all beneficiaries in our focus groups reported that they had a regular source of primary care. In the 2013 MCBS, 95 percent of Medicare beneficiaries reported that they had a usual source of medical care, with 85 percent citing a doctor's office or clinic (Centers for Medicare & Medicaid Services 2014). Fifty-five percent of beneficiaries reported that they had been associated with their usual source of care for five years or more.

In our telephone survey, 12 percent of beneficiaries responded that they saw a nurse practitioner (NP) or physician assistant (PA) for all or most of their primary care, and 25 percent said that they saw an NP or PA for some of their primary care. Similar to prior years, rural beneficiaries were more likely than urban beneficiaries to report seeing NPs and PAs for all or most of their primary care (16 percent for rural beneficiaries vs. 11 percent for urban beneficiaries). Beneficiaries in our focus groups also reported that they could often obtain care more quickly by seeing NPs and PAs in their primary care practice.

Beneficiaries were generally positive about retail clinics and urgent care clinics as a source of care, citing their convenience and accessibility.⁴ Some physicians were less enthusiastic, feeling that retail clinics in particular may be appropriate for single, common conditions (such as a rash or sore throat) but are less appropriate for rare conditions or ongoing primary care. Urgent care facilities provide a wider range of services, some offer X-ray and laboratory services on site, and some are affiliated with a hospital or health system. A few physicians said they like urgent care clinics because they relieve the pressure physicians feel to have weekend hours for patient appointments.

Clinician acceptance of Medicare beneficiaries

The National Electronic Health Records Survey reports that, in 2013, 84 percent of office-based physicians said they accept Medicare, similar to the share accepting private insurance (85 percent) (Hing et al. 2015). Physician surveys over the past decade have consistently shown higher rates of specialty than primary care physicians accepting Medicare (Hing and Schappert 2012). Most of

**TABLE
4-6**

Access to physician care for Medicare beneficiaries is similar to that for privately insured individuals in urban and rural areas, 2015

Survey question	Medicare (ages 65 or older)			Private insurance (ages 50-64)		
	All	Urban	Rural	All	Urban	Rural
Unwanted delay in getting an appointment: Among those who needed an appointment in the past 12 months, "How often did you have to wait longer than you wanted to get a doctor's appointment?"						
For routine care						
Never	72% ^a	71%	73%	69% ^a	69%	68%
Sometimes	19 ^a	19 ^a	18 ^a	23 ^a	23 ^a	25 ^a
Usually	4	5	4	4	5	3
Always	3	3	3	3	3	3
For illness or injury						
Never	82 ^a	81 ^a	82	77 ^a	77 ^a	78
Sometimes	13 ^a	12 ^a	13	17 ^a	18 ^a	16
Usually	3	3	3	3	3	3
Always	2	2	2	2	2	2
Not accessing a doctor for medical problems: "During the past 12 months, did you have any health problem or condition about which you think you should have seen a doctor or other medical person, but did not?"						
(Percent answering "Yes")	11	11	11	12	12	14
Looking for a new primary care physician: "In the past 12 months, have you tried to get a new...?" (Percent answering "Yes")						
Primary care physician	7 ^a	7 ^a	7	9 ^a	9 ^a	8
Specialist	16	17 ^b	14 ^b	18	19 ^b	15 ^b
Getting a new physician: Among those who tried to get an appointment with a new primary care physician or a specialist in the past 12 months, "How much of a problem was it finding a primary care doctor/specialist who would treat you? Was it..."						
Primary care physician						
No problem	67	64 ^b	79 ^b	63	63	68
Percent of total insurance group, by area	4.7	4.5 ^a	5.7	5.7	5.8 ^a	5.4
Small problem	18	20	10	18	18	17
Percent of total insurance group, by area	1.2	1.4	0.6	1.7	1.7	1.3
Big problem	14	15	9	17	17	15
Percent of total insurance group, by area	1.0	1.1	0.6	1.5	1.6	1.2
Specialist						
No problem	87 ^a	87	86	82 ^a	84	77
Percent of total insurance group, by area	14.2	14.7	11.9	14.8	15.7 ^b	11.8 ^b
Small problem	7	7	5	8	8	11
Percent of total insurance group, by area	1.1	1.3	0.6	1.5	1.4	1.8
Big problem	6	6	9	9	8	12
Percent of total insurance group, by area	1.0 ^a	1.0	1.1	1.7 ^a	1.7	1.8

Note: Numbers may not sum to 100 percent because missing responses ("Don't Know" or "Refused") are not included. Sample sizes for each group (Medicare and privately insured) were 4,000 in 2015. Sample sizes for individual questions varied. The Commission uses the Census Bureau definitions of "urban" and "rural." The Census Bureau classifies as urban all territory, population, and housing units located within an urbanized area (UA) or an urban cluster (UC). The Census Bureau's classification of rural consists of all territory, population, and housing units located outside of UAs and UCs.

^a Statistically significant difference between the Medicare and privately insured populations in a given year (at a 95 percent confidence level).

^b Statistically significant difference by area type within the same insurance category in a given year (at a 95 percent confidence level).

Source: MedPAC-sponsored telephone survey conducted in 2015.

Access to health care for beneficiaries with behavioral health conditions

The Commission has started to examine data on the ability of beneficiaries with mental or behavioral health conditions to access health care services. However, there does not appear to be a wide evidence base regarding access to health care services for Medicare beneficiaries who have behavioral health conditions. Specialized surveys such as the National Survey on Drug Use and Health, issued by the Substance Abuse and Mental Health Services Administration, are helpful in identifying the share of beneficiaries dealing with a behavioral health condition, but these surveys do not ask questions about access. The Medicare Current Beneficiary Survey (MCBS) and the National Health Interview Survey/Medical Expenditure Panel Survey do ask both sets of questions.⁵

Because the MCBS is Medicare-specific, we are able to extract the group of community-dwelling beneficiaries who reported that they had ever been diagnosed with mental retardation, Alzheimer's disease, dementia, depression, or another mental disorder. We looked at this group's responses to the MCBS Access to Care component (Table 4-7).⁶ Beneficiaries with one of the selected mental or behavioral health conditions were more likely to report trouble getting needed health care,

delaying care because of cost, or not seeing a doctor when they thought they should have.

In our focus groups, access to outpatient psychiatrists is often reported to be a challenge, and psychiatrists are the least likely of all physician specialties to accept insurance of any kind (including Medicare).

CMS could take steps to facilitate analysis of beneficiaries with mental and behavioral health conditions. For example, the agency could extend the Chronic Condition Warehouse (CCW) definitions developed for analysis of dual-eligible beneficiaries to all Medicare beneficiaries. The definitions are created from claims (often multiple years) using a set of rules regarding what types of diagnoses can qualify. Currently, CMS creates beneficiary flags for 27 different medical conditions in the entire Medicare population. However, there are only three mental and behavioral health conditions—Alzheimer's disease, a separate category for Alzheimer's disease and senile dementia, and depression. Separately, CMS has created a set of CCW flags for a suite of other chronic or disabling health conditions, including ones that are severe and costly for Medicare beneficiaries—schizophrenia, bipolar disorder, anxiety disorders, and intellectual disabilities—but only for dually eligible

(continued next page)

**TABLE
4-7**

Beneficiaries with mental or behavioral health conditions report more trouble accessing care, 2013

	Beneficiaries with a specified mental or behavioral health condition	All beneficiaries
Have you had trouble getting needed health care?	13%	6%
Last year, did you delay care due to cost?	17	11
Did you have a health problem that you thought you should see a doctor about, but didn't?	18	11
Did you go to the ER for care?	13	10

Note: ER (emergency room). Only community-dwelling respondents included. Respondents residing in institutions are not given this section of the Access to Care module. Thirty-two percent of respondents to the Medicare Current Beneficiary Survey had a specified mental or behavioral health condition, reporting that they were ever diagnosed with mental retardation, Alzheimer's disease, dementia, depression, or a mental disorder.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey 2013 Access to Care module.

Access to health care for beneficiaries with behavioral health conditions (cont.)

beneficiaries.⁷ Since CMS has already developed the coding requirements for these flags, they could be applied to the entire Medicare population with little extra effort. Once created, the flags would make it easier to identify incidence, spending, and utilization patterns and trends among Medicare beneficiaries with mental health conditions.

As a second step, CMS could release aggregate information about Medicare beneficiaries with substance abuse disorders. Because of a change in CMS

policy in 2013 to ensure compliance with regulations issued pursuant to the Drug Abuse Prevention, Treatment, and Rehabilitation Act, Medicare claims files for research purposes are redacted if there is any substance abuse diagnosis on the claim (Frakt and Bagley 2015). CMS could undertake an effort to make available aggregated information about the number and demographics of Medicare beneficiaries with substance abuse diagnoses, their benefit utilization and spending, outcome measures (such as drug-related mortality), and trends over time. ■

the physicians in our focus groups said that they accept Medicare, but that they may limit the number of new patients or restrict the types of Medicare Advantage plans they accept.

Supply of physicians and other health professionals billing Medicare has kept pace with enrollment growth, and most services are paid on assignment

Other indicators of access include the supply of providers billing Medicare, whether physicians and other health professionals are participating providers, and whether these providers take assignment (which means that they accept Medicare's payment as payment in full).

Supply of physicians and other health professionals billing Medicare has grown at rates similar to enrollment growth

Our analysis of Medicare FFS claims data for 2012 to 2014 shows that the number of physicians and other health professionals furnishing services to Medicare beneficiaries grew at rates similar to growth in the beneficiary population (Table 4-8, p. 106). In 2014, the ratio of physicians in primary care specialties to the number of beneficiaries was 3.7 per 1,000, unchanged from 2013. Between 2013 and 2014, the ratio of physicians in other specialties fell slightly, from 8.2 per 1,000 beneficiaries to 8.0 per 1,000. Meanwhile, the number of advanced practice registered nurses (APRNs) and PAs billing Medicare grew between 2012 and 2014, from 3.0 per 1,000 beneficiaries to 3.3 per 1,000.

Most physicians and other health professionals are part of Medicare's participating provider program, and nearly all claims are taken on assignment

In 2012, over 95 percent of physicians and other health professionals billing Medicare signed an agreement with Medicare to be part of the participating provider program. Participating providers agree to take assignment for all claims, which means they accept the fee schedule amount as payment in full (most claims are paid on assignment—99.5 percent in 2013). Providers who do not elect to participate receive a 5 percent lower payment amount and can choose whether to take assignment for their claims on a claim-by-claim basis. If they do not assign a claim, providers may “balance bill” up to 109.25 percent of the fee schedule amount, with the beneficiary paying the difference between 95 percent of the fee schedule amount and the amount billed.

CMS will make information available on opt-out clinicians

Physicians and other health professionals may opt out of the Medicare program by signing an affidavit with Medicare stating that they will not receive any payment from Medicare, directly or indirectly, for any Medicare patient they see. They must also enter into a contract with Medicare beneficiaries in order to treat them, which states that no payment will be made from Medicare either to the beneficiary or to the provider for services delivered by the opt-out clinician.

**TABLE
4-8****Physicians and other health professionals billing Medicare, 2012–2014**

Year	Physicians				Advanced practice registered nurses and physician assistants		Other practitioners	
	Primary care specialties		Other specialties					
	Number	Number per 1,000 beneficiaries	Number	Number per 1,000 beneficiaries	Number	Number per 1,000 beneficiaries	Number	Number per 1,000 beneficiaries
2012	174,848	3.8	388,237	8.4	138,184	3.0	146,396	3.2
2013	178,404	3.7	394,103	8.2	152,612	3.2	150,466	3.1
2014	180,165	3.7	396,289	8.0	165,164	3.3	150,037	3.0

Note: Primary care specialties are specialties eligible for the Primary Care Incentive Payment Program: family medicine, internal medicine, pediatric medicine, and geriatric medicine. "Other practitioners" includes physical and occupational therapists, chiropractors, optometrists, psychologists, social workers, and podiatrists. The number billing Medicare includes those with a caseload of more than 15 different beneficiaries during the year. Beneficiary counts used to calculate numbers per 1,000 include those in fee-for-service and Medicare Advantage on the assumption that professionals are furnishing services to both types. Figures exclude nonperson providers, such as suppliers or clinical laboratories.

Source: Medicare claims data for 100 percent of beneficiaries and the 2015 annual report of the Boards of Trustees of the Medicare trust funds.

Data on the number of clinicians who opt out of Medicare have been scarce, but one point-in-time estimate released by CMS in 2013 indicated that less than 1 percent of Medicare providers had opted out. MACRA makes two changes to the Medicare opt-out provisions. First, agreements between the opt-out clinician and Medicare are automatically renewed every two years unless the clinician elects to rejoin Medicare.⁸ Second, CMS must make publicly available a list of opt-out clinicians, their specialty, and their geographic location by February 1, 2016, and every year thereafter.

Physician affiliation with hospitals and health systems

In our physician focus groups this year, many of the respondents indicated that they were affiliated with hospitals and health systems, and nearly all of the physicians reported that they had been approached by a hospital or health system about affiliation. Physicians in our focus groups reported some trade-offs to hospital or health system ownership—autonomy of practice as compared with better negotiating power and more financial stability.

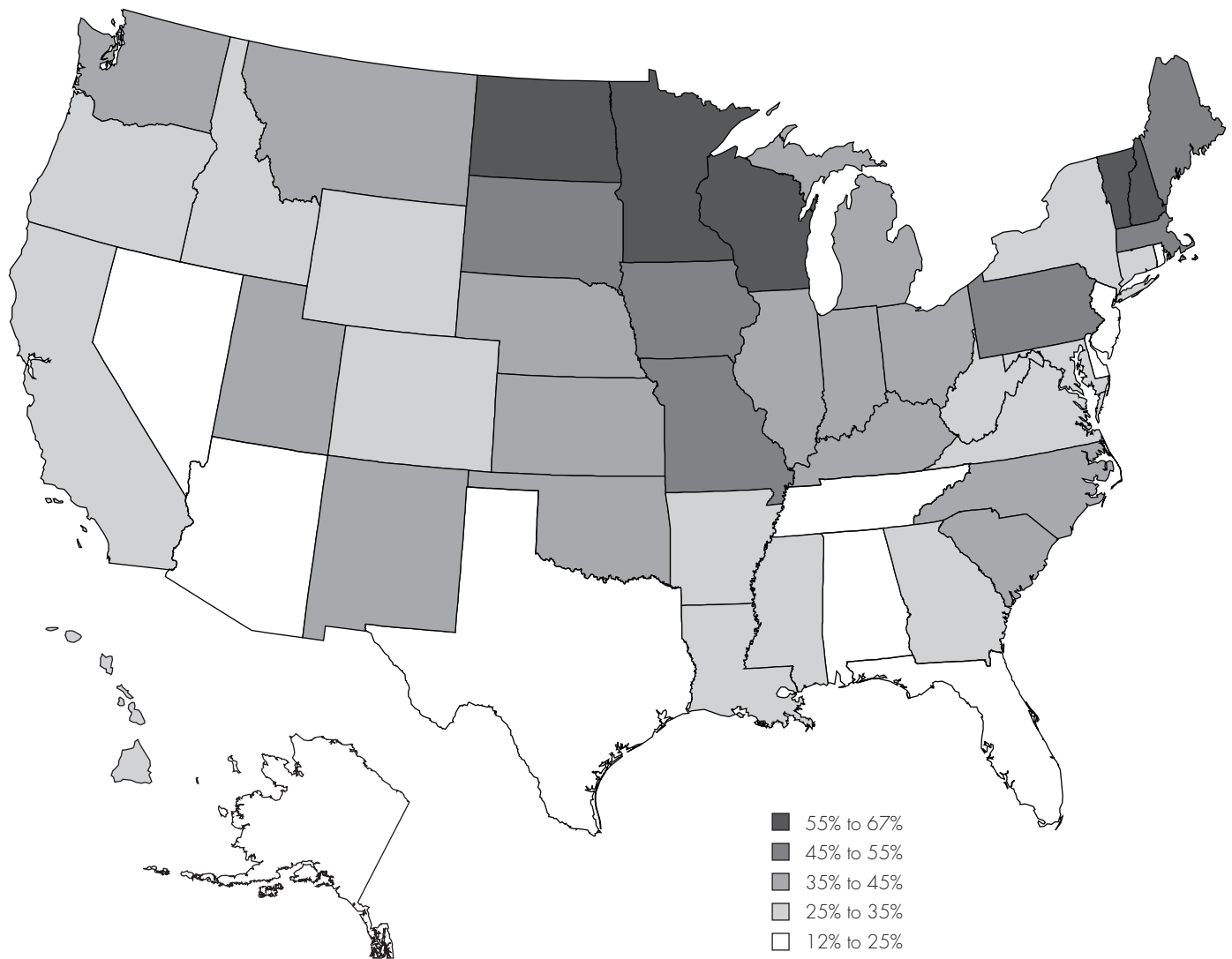
According to a commercial database of physician characteristics, in 2012, 33 percent of office-based physicians reported an affiliation with a hospital or health system, but this figure varied widely by geography (Figure 4-2).

Small increase in volume growth

We analyze annual changes in the use of services provided by physicians and other health professionals as another indicator of payment adequacy. However, we recommend caution in interpreting such data because factors unrelated to Medicare's payment rates can influence service volume. Evidence indicates that volume decreases may be related to the movement of services from freestanding offices to hospitals, general practice pattern changes, and concerns about overuse of imaging and tests. For example, the volume of coronary artery bypass grafting has been declining as other interventions substitute for this procedure. Increases in volume may signal overpricing if practitioners favor certain services because they are relatively profitable, but other factors—including changes in the population, disease prevalence, Medicare benefits, site of care, technology, and beneficiaries' preferences—can also explain volume increases. In addition, payments and other transfers of value from drug and device manufacturers to practitioners can influence the use of services. For example, studies have shown that physicians' financial interactions with manufacturers are associated with greater willingness to prescribe newer, more expensive drugs (Watkins et al. 2003, Wazana 2000). In response to such concerns, the Commission recommended that drug and device manufacturers be required to publicly report their financial relationships with a variety of health care providers and organizations (Medicare Payment Advisory Commission 2009). In 2010, the Congress required CMS to create a

**FIGURE
4-2**

Share of physicians reporting hospital or health system affiliation, 2012



Source: MedPAC analysis of SK&A database of physicians, IMS Health™.

public reporting program. Online Appendix 4-A, available at <http://www.medpac.gov>, contains a description of the data this program has collected on physician-industry ties.

We used claims data from 2009, 2013, and 2014 to analyze volume changes. We identified the services provided by physicians and other professionals billing under Medicare's fee schedule and calculated two measures of changes in service use: units of service per beneficiary and volume of services per beneficiary. Volume is measured as units of service multiplied by each service's relative value units (RVUs) from the fee schedule. Our volume growth

measure thus accounts for changes in both the number of services and the complexity, or intensity, of those services. For example, growth in the volume of imaging services would account not just for any change in the number of such services but also for any change in intensity (e.g., if providers substitute computed tomography scans for less complex X-rays). We used RVUs for 2014 to put service volume for all years on a common scale.

Our volume analysis also accounts for the policy changes that have occurred in payments for office and inpatient

**TABLE
4-9****Use of services provided by physicians and other health professionals, per FFS beneficiary**

Type of service	Change in units of service per beneficiary		Change in volume per beneficiary		Percent of 2014 allowed charges
	Average annual 2009-2013	2013-2014	Average annual 2009-2013	2013-2014	
All services	-0.1%	0.3%	N/A	0.4%	100.0%
Evaluation and management	0.3	-0.5	N/A	0.3	47.8
Office visit—new and established	0.6	-0.7	N/A	0.2	26.8
Inpatient visit—hospital and nursing facility	-0.6	-0.6	N/A	0.0	15.9
Emergency room visit	1.5	1.3	2.6%	1.9	3.3
Hospital visit—critical care	3.7	1.4	3.8	1.3	1.5
Home visit	2.2	-0.8	2.4	-0.9	0.4
Imaging	-0.9	-1.0	-2.3	-1.1	11.0
Advanced—CT: other	1.2	4.2	0.3	3.2	1.6
Echography—heart	1.0	-0.5	-4.1	-1.5	1.1
Advanced—MRI: other	0.1	2.0	-1.7	1.0	0.9
Echography—other	3.8	1.9	3.0	1.9	0.9
Standard—musculoskeletal	-0.2	0.2	-0.7	-0.6	0.9
Standard—nuclear medicine	-7.7	-5.8	-11.6	-7.9	0.8
Standard—breast	0.5	-2.3	-0.4	-2.6	0.7
Imaging/procedure—other	-5.8	-4.2	-1.7	-1.5	0.6
Advanced—MRI: brain	-1.2	1.2	-3.7	-0.8	0.4
Advanced—CT: head	0.2	2.2	-1.2	1.6	0.4
Standard—chest	-2.6	-3.6	-3.0	-4.0	0.4
Echography—abdomen and pelvis	0.5	-1.2	0.3	-1.2	0.4
Major procedures	-0.8	0.5	0.0	1.4	7.5
Cardiovascular—other	-3.5	-1.2	-2.2	-1.5	1.7
Orthopedic—other	0.2	3.3	1.1	3.6	1.1
Knee replacement	1.0	-0.7	1.4	-0.2	0.5
Hip replacement	3.1	2.4	3.6	2.9	0.3
Explore, decompress, or excise disc	1.3	3.6	2.6	4.6	0.3
Hip fracture repair	-1.6	-0.4	-1.5	-0.1	0.3
Coronary angioplasty	-1.2	0.3	-1.3	0.7	0.2
Coronary artery bypass graft	-6.2	-4.0	-6.3	-2.8	0.2
Other procedures	0.2	2.7	0.4	0.8	21.9
Skin—minor and ambulatory	0.5	2.6	0.7	1.4	4.8
Outpatient rehabilitation	0.6	6.9	1.4	7.3	3.4
Radiation therapy	-3.6	-1.4	-2.3	-1.9	1.9
Minor—other	-0.9	-4.0	-0.7	-4.1	1.9
Cataract removal/lens insertion	-0.5	-2.3	-0.4	-2.2	1.4
Minor—musculoskeletal	0.6	1.2	1.1	2.8	1.3
Eye—other	8.5	2.0	3.8	1.5	1.1
Colonoscopy	-0.7	-2.0	-0.5	-1.7	0.8
Upper gastrointestinal endoscopy	-0.2	-3.5	0.0	-3.2	0.4
Cystoscopy	0.0	-4.3	-0.3	-5.8	0.4
Tests	0.2	-0.7	-0.7	-0.6	4.4
Other tests	0.5	2.3	-0.5	-1.4	1.7
Laboratory tests—other	2.8	-1.9	2.8	-0.5	1.5
Electrocardiograms	-1.4	-2.8	-1.8	-2.4	0.4

Note: FFS (fee-for-service), N/A (not available), CT (computed tomography), MRI (magnetic resonance imaging). Volume is measured as units of service multiplied by each service's relative value unit (RVU) from the physician fee schedule. To put service use in each year on a common scale, we used the RVUs for 2014. For billing codes not used in 2014, we imputed RVUs based on the average change in RVUs for each type of service. If a service's billing code was revised, we crosswalked the code between type of service categories if necessary to ensure consistent measurement of volume growth. Some low-volume categories are not shown but are included in the summary calculations. Evaluation and management service volume is not reported for some types of service because a change in payment policy for consultations prevented assignment of RVUs to those services. For 2009, "units of service" for office visits and inpatient visits includes, respectively, office and inpatient consultations. "Laboratory tests" includes tests billable under the fee schedule for physicians and other health professionals and excludes services billable under the laboratory fee schedule.

Source: MedPAC analysis of claims data for 100 percent of Medicare beneficiaries.

consultations. As of 2010, CMS stopped recognizing the billing codes for consultations.⁹ Physicians and other health professionals now use codes for office visits and inpatient visits (hospital and nursing facility visits) instead of consultation codes. If we ignored this change in policy, the volume analysis would show a change in intensity of services—use of lower payment rate visits in place of higher payment rate consultations. Therefore, we show the change in units of service per beneficiary for office visits, inpatient visits, and emergency room visits from 2009 to 2013, but not the change in volume for these services during the same period (Table 4-9).

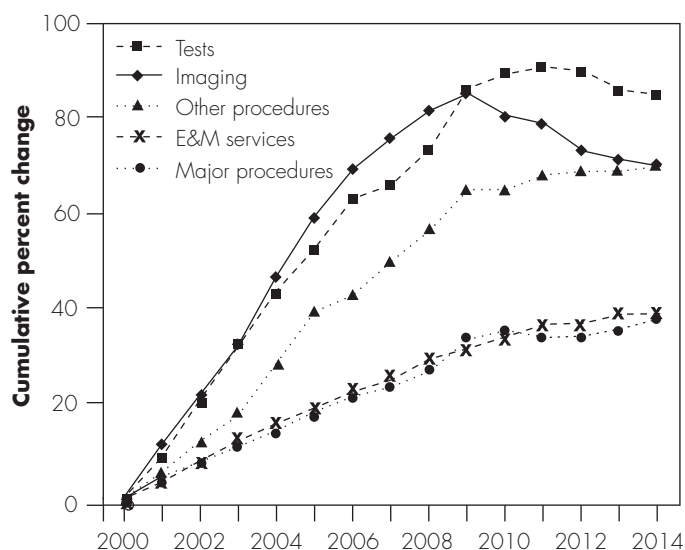
Between 2013 and 2014, across all services, volume per beneficiary grew by 0.4 percent (Table 4-9). Among broad categories of service, growth rates were 0.3 percent for evaluation and management (E&M), –1.1 percent for imaging services, 1.4 percent for major procedures, 0.8 percent for other procedures, and –0.6 percent for tests.

While the imaging decrease continues the downward trend since 2009, use of imaging services remains much higher than it was in 2000 (Figure 4-3). Cumulative growth in the volume of imaging per beneficiary from 2000 to 2009 totaled 85 percent, compared with a cumulative decrease in imaging volume since then of about 9 percent. The growth in imaging volume from 2000 to 2009 was exceeded only by the 86 percent growth in the use of tests (e.g., allergy tests) during those years. Such growth was more than double the cumulative growth rates during the same period for E&M services and major procedures, which were 32 percent and 34 percent, respectively.

The growth in use of imaging and tests has led to concerns about appropriate use of these services. Physicians have warned that diagnostic tests are often ordered without an understanding of how the results could change patient treatment (Hoffman and Cooper 2012, Redberg et al. 2011). Others have found that some clinicians routinely repeat tests and diagnostic procedures (Welch et al. 2012). When available, guidelines rarely specify how often to repeat these services. In response to concerns about overuse, the American Board of Internal Medicine (ABIM) Foundation developed the “Choosing Wisely” campaign. As part of this ongoing effort, more than 70 specialty societies have identified over 400 tests and procedures that are often overused (ABIM Foundation 2015a, ABIM Foundation 2015b). The goal of Choosing Wisely is to promote and inform conversations between clinicians and their patients about appropriate tests and treatments.

FIGURE 4-3

Growth in the volume of practitioner services per fee-for-service beneficiary, 2000–2014



Note: E&M (evaluation and management). Volume growth for E&M from 2009 to 2010 is not directly observable because of a change in payment policy for consultations. To compute cumulative volume growth for E&M through 2014, we used a growth rate for 2009 to 2010 of 1.85 percent, which is the average of the 2008 to 2009 growth rate of 1.7 percent and the 2010 to 2011 growth rate of 2.0 percent.

Source: MedPAC analysis of claims data for 100 percent of Medicare beneficiaries.

Volume changes reflect shift in billing from freestanding offices to hospitals

As a measure of growth in service use, volume growth has two advantages. First, it accounts not just for changes in the number of services but also any changes in the intensity of services (e.g., substitution of advanced imaging for X-rays). Second, together with changes in fees, volume growth has a significant impact on spending growth.

Volume growth, however, is sensitive to shifts in the site of care. The RVUs used to calculate volume include practice expense RVUs, which are often lower for services provided in a facility setting, such as a hospital, compared with services in a nonfacility setting, such as a freestanding physician’s office. In 2015, for example, the most common type of E&M office visit had an average total nonfacility fee of \$73.¹⁰ By contrast, when this visit is provided in a facility setting, the average total fee was \$51 because the practice expense RVUs were lower.

**TABLE
4-10****Cardiovascular imaging services
continue to shift from
freestanding physicians' offices
to HOPDs, 2013-2014**

	Share of services performed in HOPDs, 2014	Per beneficiary change in units of service	
		HOPD	Freestanding physician's office
Echocardiography	41.0%	7.0%	-5.7%
Nuclear cardiology	44.8	1.1	-9.6

Note: HOPD (hospital outpatient department). Echocardiography includes services in ambulatory payment classification (APC) 0269, APC 0270, and APC 0697. Nuclear cardiology includes services in APC 0377 and APC 0398.

Source: MedPAC analysis of outpatient claims and carrier claims for 100 percent of Medicare beneficiaries.

In recent years, there has been a trend toward billing for some services in hospitals instead of freestanding offices. This shift in billing patterns explains at least some of the drop in volume for imaging and tests. This shift in setting increases overall Medicare program spending and beneficiary cost-sharing because Medicare generally pays more for the same or similar services in hospital outpatient departments (HOPDs) than in freestanding offices.¹¹

Decrease in imaging volume includes shift in billing for cardiovascular imaging from freestanding offices to hospitals The decrease in volume of imaging services was influenced by a shift in billing for cardiovascular imaging from freestanding offices to HOPDs (Table 4-10). From 2013 to 2014, the number of echocardiograms per beneficiary administered in HOPDs rose by 7.0 percent, compared with a 5.7 percent decline in freestanding offices. Similarly, during that period, the number of nuclear cardiology studies per beneficiary provided in HOPDs increased by 1.1 percent, compared with a 9.6 percent decline in freestanding offices. These changes in billing patterns are consistent with reports of an increase in hospital-owned cardiology practices (American College of Cardiology 2012).

Across all services, volume growth has contributed to an increase in spending

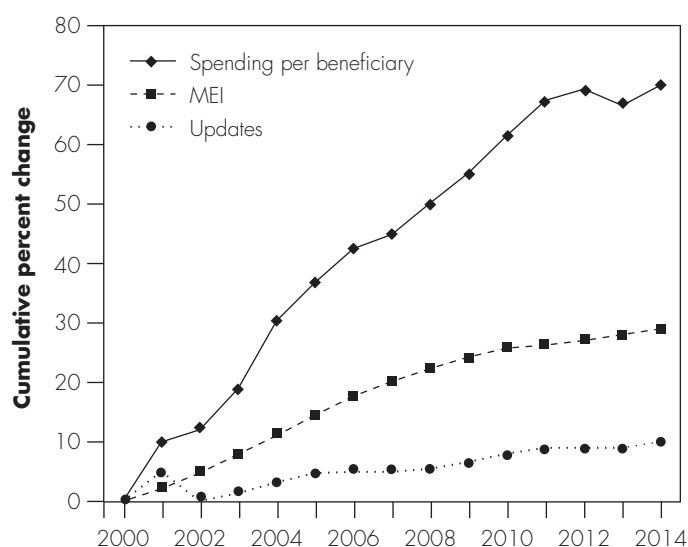
The growth in service volume has contributed significantly to an increase in spending for fee schedule services (Figure 4-4). From 2000 to 2014, payment updates for

these services increased cumulatively by 10 percent—less than the 29 percent cumulative increase in the Medicare Economic Index (MEI), which measures changes in input prices. However, spending per beneficiary for these services grew at a cumulative rate of 70 percent. Volume growth, which accounts for most of the difference between the payment updates and spending growth, may reflect changes in clinical practice, such as the diffusion of new technologies, as well as changes in the demographic and health status of beneficiaries.¹²

From 2013 to 2014, per beneficiary spending for fee schedule services increased by 1.8 percent. Several factors influenced this change: the small increase in volume, the small increase in the fee schedule conversion factor (0.5 percent), the federal budget sequester, and payment adjustments outside of the update process.

Quality of care

To date, the Medicare program has relied largely on process measures through the Physician Quality Reporting System (PQRS) to assess clinician quality. The Commission has, in the past, also used a set of claims-based quality measures that it developed to measure

**FIGURE
4-4****Volume growth has caused spending to increase faster than input prices and updates, 2000-2014**

Note: MEI (Medicare Economic Index).

Source: 2015 annual report of the Boards of Trustees of the Medicare trust funds and Office of the Actuary 2015.

**TABLE
4-11****Trends in selected Prevention Quality Indicators (inpatient admissions of FFS beneficiaries for ambulatory care-sensitive conditions), 2008–2013****Inpatient admissions per 100,000 FFS beneficiaries in age group**

Year	PQI 3: Diabetes long-term complications			PQI 8: Congestive heart failure			PQI 11: Bacterial pneumonia		
	Under 65	65–74	Over 75	Under 65	65–74	Over 75	Under 65	65–74	Over 75
2008	781	257	325	1,056	823	2,474	881	716	1,972
2009	774	243	301	1,047	809	2,408	901	682	1,776
2010	775	238	293	994	767	2,276	822	651	1,730
2011	751	229	275	935	710	2,139	804	631	1,708
2012	728	209	249	892	664	2,033	753	576	1,603
2013	704	200	235	867	637	1,964	695	535	1,525

Note: FFS (fee-for-service), PQI (Prevention Quality Indicator). Figures represent the number of hospital admissions for the identified condition for Medicare beneficiaries in each age range per 100,000 beneficiaries. Only FFS beneficiaries enrolled in Part A and Part B are included. Beneficiaries who were enrolled in a Medicare Advantage plan at any point during the year are excluded. Beneficiaries who died during the year are included.

Source: CMS, Data on Geographic Variation. Figures calculated by CMS from the Chronic Conditions Data Warehouse of 100 percent of claims.

underprovision of clinically indicated care. However, the Commission stopped reporting these measures in 2015 because clinical guidelines have changed since the measures were created. Overuse of services is also a significant issue in Medicare. For example, a Commission analysis found that between 21 percent and 37 percent of beneficiaries received at least one low-value service in 2012 (see text box, pp. 112–113).

More recently, the Commission has suggested that the Medicare program focus on a few key outcome measures of interest to patients in lieu of a large number of process measures. However, outcome measures such as readmissions, mortality, and avoidable hospitalizations are often unreliable at the individual clinician level; they become measureable with some certainty only when clinicians are organized into larger entities or practices.

On a separate track, CMS has established a large and growing system for collecting and reporting measures through PQRS and is carrying out a statutory requirement to develop an individual clinician-level value modifier (VM) for all physicians by 2017. The quality measures used in the VM include the over 300 measures in PQRS, plus claims-based outcome measures and 6 resource use measures. Every eligible practitioner must report at least nine PQRS measures to avoid a negative payment adjustment. Even among practices with groups of 100

clinicians or more, in the first year of the VM, CMS reported that the majority of clinicians could not be differentiated from average (Centers for Medicare & Medicaid Services 2015a). MACRA retains the general structure of the VM in the new payment adjustment, the Merit-based Incentive Payment System.

However, MACRA provides an opportunity to pause and reconsider Medicare's approach to measuring clinician quality. One approach could be to assess large groups (such as the size of an accountable care organization) for cost and quality. Individual clinicians could be assessed using a few claims-based measures (such as relative resource use or inpatient admissions for ambulatory care-sensitive conditions) using multiple years and robust reliability thresholds to identify persistent outliers.¹³ Such a policy would require deciding how beneficiaries would be attributed to providers, identifying the comparison groups, and interpreting differences.

CMS publishes data on one set of potentially avoidable hospitalization measures for the Medicare population—Prevention Quality Indicators (PQIs), developed by the Agency for Healthcare Research and Quality. Table 4-11 presents PQI results for three common conditions among the Medicare population—diabetes, congestive heart failure, and bacterial pneumonia. For each age category,

Research shows substantial use of low-value care in fee-for-service Medicare

Low-value care is the provision of a service that has little or no clinical benefit or care in which the risk of harm from the service outweighs its potential benefit (Chan et al. 2013, Kale et al. 2013). In addition to increasing health care spending, low-value care has the potential to harm patients by exposing them to the risks of injury from inappropriate tests or procedures and may lead to a cascade of additional services that contain risks but provide little or no benefit (Keyhani et al. 2013, Korenstein et al. 2012). The “Choosing Wisely” campaign, an initiative of the American Board of Internal Medicine Foundation, defines services that represent low-value care. In the latest iteration, over 70 specialty societies have identified more than 400 tests and procedures that are often overused (ABIM Foundation 2014, ABIM Foundation 2015a, ABIM Foundation 2015b).

A team of researchers, including two physicians, developed 26 measures of low-value care drawn from evidence-based lists—such as Choosing Wisely—and medical literature, which they applied to Medicare claims data from 2009 (Schwartz et al. 2014). The authors developed two versions of each measure: a broader one with higher sensitivity (and lower specificity) and a narrower one with lower sensitivity (and higher specificity). Increasing the sensitivity of a

measure captures more potentially inappropriate use, but is also more likely to misclassify some appropriate use as inappropriate. Increasing a measure’s specificity leads to less misclassification of appropriate use as inappropriate, at the expense of potentially missing some instances of inappropriate use.

The Commission contracted with the authors of this study to obtain the measures’ specifications and their algorithms, which we applied to Medicare claims data from 2012. Based on the original study, we calculated two versions of each measure: a broader version (more sensitive, less specific) and a narrower version (less sensitive, more specific). For each version, we calculated the number of low-value services per 100 beneficiaries, the share of beneficiaries who received at least one low-value service, and total spending across all fee-for-service (FFS) beneficiaries for each service.

Our results using 2012 data show substantial use of low-value care in FFS Medicare. Based on the broader version of each measure, there were 65 instances of low-value care per 100 beneficiaries, and 37 percent of beneficiaries received at least one low-value service. Medicare spending for these services in 2012 was \$5.8 billion, or 1.7 percent of total FFS Medicare spending for the beneficiaries in our sample. Based on the narrower

(continued next page)

between 2008 and 2013, there were declines in all three measures as well as most of the other PQI measures.

Medicare payments and providers’ costs

Because physicians and other health professionals do not report their costs to the Medicare program, we use other measures to assess the adequacy of Medicare payments relative to clinicians’ costs. The first measure is how Medicare’s payments compare with the fees paid by private insurers for covered services. The second measure is whether Medicare’s fee schedule contributes to differences in physician compensation across specialties—even after accounting for the cost of running a practice. The third measure assesses input prices for physicians

and other health professionals—the MEI. We also review payment adjustments made in addition to the conversion factor update.

Ratio of Medicare payments to private insurer payments is steady

Since 1999, Medicare’s physician and other health professional fees (including cost sharing) are about 80 percent of private insurer fees. In 2014, Medicare’s payments for physician and other health professional services were 78 percent of commercial rates for preferred provider organizations (PPOs). This analysis uses a data set of paid claims for PPO members of a large national insurer.

Research shows substantial use of low-value care in fee-for-service Medicare (cont.)

version of each measure, there were 28 instances of low-value care per 100 beneficiaries, and 21 percent of beneficiaries received at least one low-value service. Total Medicare spending for these services was \$1.9 billion, or 0.6 percent of total FFS Medicare spending for the beneficiaries in our sample. The differences between the broader and narrower versions of the measures demonstrate that the amount of low-value care detected varies substantially based on the measures' clinical specificity. We used claims data to measure low-value care, and claims do not include detailed clinical information. Therefore, our analysis likely represents a conservative estimate of the number of low-value services in Medicare. In addition, the spending estimates probably understate actual spending on low-value care because they do not include downstream services (e.g., follow-up tests and procedures) that may result from the initial low-value service.

Under the broader version of each measure, the measures with the highest volume were imaging for low back pain, prostate-specific antigen (PSA) screening for men ages 75 and over, and colon cancer screening for older adults. Those with the highest Medicare spending were stress testing for stable coronary disease (\$1.3 billion), percutaneous coronary intervention (PCI) with balloon angioplasty or stent placement for stable coronary disease (\$1.3 billion), and renal artery angioplasty or stenting (\$445 million).

Under the narrower version of each measure, the measures with the highest volume were PSA screening for men ages 75 and over, carotid artery disease screening in asymptomatic patients, and parathyroid hormone measurement for patients with early chronic kidney disease. Those with the highest Medicare spending were vertebroplasty or kyphoplasty for osteoporotic vertebral fractures (\$352 million), screening for carotid artery disease in asymptomatic adults (\$236 million), and PCI with balloon angioplasty or stent placement (\$204 million).

For more details on the volume and spending for individual measures, see the Commission's June 2015 data book (<http://medpac.gov/documents/data-book/june-2015-data-book-section-5-quality-of-care-in-the-medicare-program.pdf?sfvrsn=0>).

After grouping the 26 measures into 6 larger clinical categories, we found that imaging and cancer screening measures accounted for most of the volume of low-value care—about 70 percent of the instances of low-value care per 100 beneficiaries in both versions of the measures. However, cardiovascular testing and procedures and imaging accounted for most of the spending on low-value care, comprising between 60 percent and 72 percent of spending on low-value care, depending on the version of the measures. ■

Compensation differences between primary and specialty care

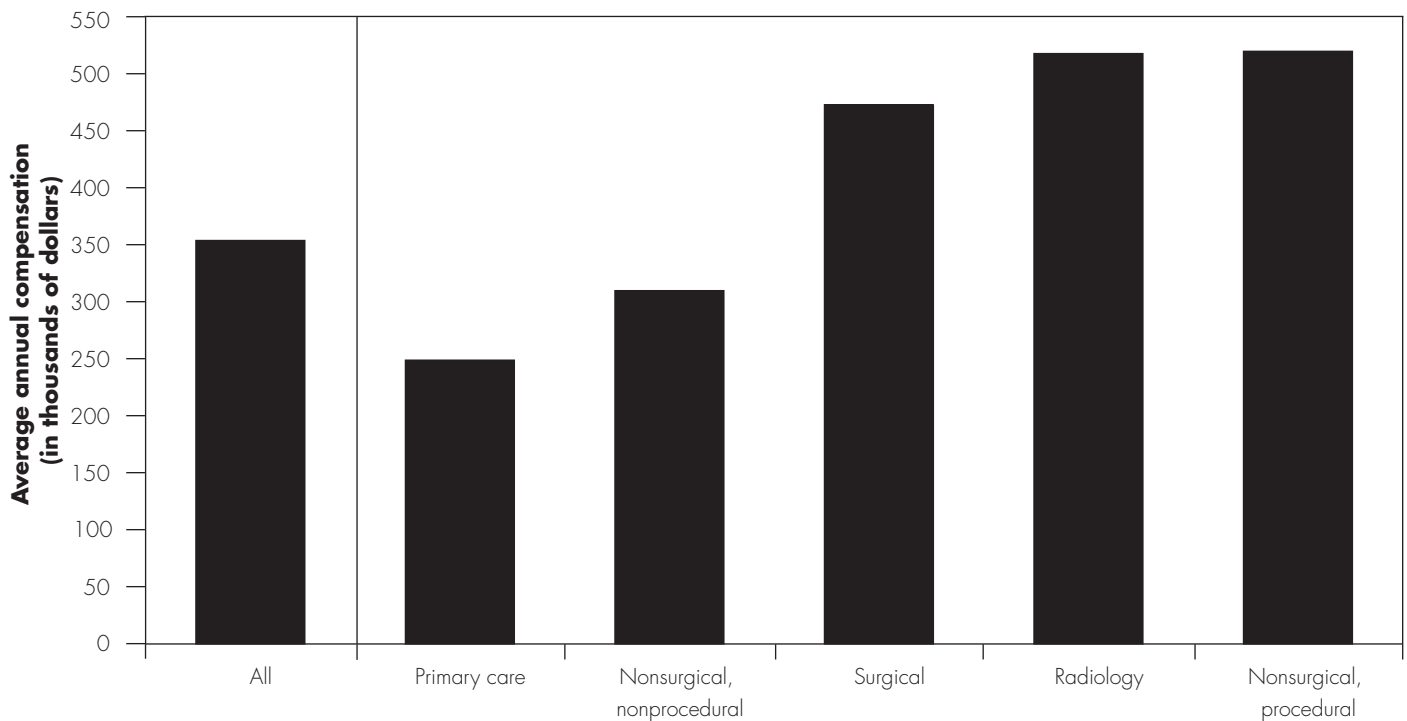
The Commission remains concerned that the fee schedule and the nature of FFS payment leads to an undervaluing of primary care and overvaluing of specialty care. First, the Commission has concerns that the resource-based relative value scale, which forms the basis for the fee schedule, includes mispriced services and that these mispriced services cause an income disparity between primary care and specialty physicians. Second, FFS payment allows some specialties to more easily increase the volume of services they provide (and therefore their revenue from Medicare), while such increases are less likely for other

specialties, particularly those that spend most of their time providing E&M services.

For an analysis of the compensation received by physicians—the largest subset of practitioners—we examined data from the Medical Group Management Association's (MGMA's) Physician Compensation and Production Survey from 2014. Averaged across all specialties, physician compensation was about \$354,000 per year. Within these averages, compensation was much higher for some specialties than others. The specialty groups with the highest compensation were the nonsurgical, procedural group (average compensation

**FIGURE
4-5**

Disparities in physician compensation are widest when primary care physicians are compared with radiologists and nonsurgical proceduralists, 2014



Source: MedPAC analysis of data from Medical Group Management Association's Physician Compensation and Production Survey, 2014.

of \$520,000) and radiology (average compensation of \$518,000) (Figure 4-5).¹⁴ Compensation for these groups was more than double the \$249,000 average for primary care physicians.¹⁵ Psychiatry—which is part of the nonsurgical, nonprocedural group—averaged \$264,000. Our analysis of 2012 data from MGMA showed similar differences. Previous Commission work using MGMA data showed that such disparities also existed when compensation was observed on an hourly basis, thus accounting for variation in hours worked per week.¹⁶ In addition, these disparities persist when compensation is simulated as if all services that physicians provide were paid under Medicare's fee schedule (Berenson et al. 2010). This finding suggests that the fee schedule is an important source of the disparities in compensation among specialties.

Validation of the fee schedule's RVUs can help correct the fee schedule's inaccuracies and ensure that physicians at the high end of the compensation scale are not overcompensated. CMS has a statutory mandate and resources to validate RVUs, and the Commission has

provided CMS with ideas on how to do so (Medicare Payment Advisory Commission 2015). In addition, the Commission made a recommendation last year for a per beneficiary payment for primary care that can also help redistribute Medicare spending to primary care from procedural services (see text box, p. 116).

Input costs for physicians and other health professionals are projected to increase from 2016 to 2017

The MEI measures the change in the market basket of input prices for physician and other health professional services and is adjusted for economy-wide productivity.¹⁷ CMS's current forecast is that the MEI will increase by 2.2 percent in 2017 (IHS Global Insight 2015).

Payment adjustments outside of the update process

Medicare spending for the services of physicians and other health professionals is also affected by bonuses, penalties,

**TABLE
4-12****Payment adjustments for clinicians billing Medicare, 2014**

Category	Adjustment	Number of providers	Spending impact (in millions)	Source and notes
Direct payment adjustments	HPSA payment adjustment	Not available	+\$136	Unpublished data from CMS, 2014
	Work GPCI floor	Not available	+400	CBO estimate of MACRA, 2014
	Sequester	All billing providers (about 900,000)	-1,400	Estimate, based on Medicare Trustees' report
	Primary Care Incentive Payment	194,000	+700	Estimate, based on CMS publication
Payment adjustments for incentive programs	PQRS incentive	494,619	+219	CMS experience report, for 2013 reporting year (2014 not available)
	eRx penalty	49,576	-65	Estimate from CMS experience report, 2014
	EHR incentive	225,710	+1,800	Estimate from CMS experience report, 2014

Note: HPSA (health professional shortage area), GPCI (geographic practice cost index), PQRS (Physician Quality Reporting System), eRx (electronic prescribing), EHR (electronic health record), CBO (Congressional Budget Office), MACRA (Medicare Access and CHIP Reauthorization Act of 2015). The providers receiving PQRS incentive payments include those who participated through the Comprehensive Primary Care Initiative, the Shared Savings Program, the Pioneer Accountable Care Organization program, and the Group Practice Reporting Option.

Source: CMS/Office of the Actuary, annual report of the Boards of Trustees of the Medicare trust funds, Congressional Budget Office, Department of Health and Human Services.

and other types of payment adjustments. The effect of these adjustments can be quite large and can help explain the portion of spending growth not explained by the update or volume growth.

Table 4-12 shows these adjustments in two categories: direct payment adjustments and payment adjustments for incentive programs. Some of the incentive programs are changing from payment incentives to payment penalties, and the eRx (electronic prescribing) penalty was sunset after 2014. In 2017, the PQRS and the electronic health record (EHR) meaningful-use program will consist of a payment penalty. The penalty is 2 percent for clinicians who do not successfully report PQRS measures and 4 percent for clinicians who do not meet the EHR meaningful-use standard. The VM in 2017 will be budget neutral by design.

In addition, the EHR meaningful-use requirement, PQRS, and the VM will be sunset at the end of 2018 and replaced by the MIPS. The PCIP also expired at the end of 2015, and the Commission has recommended replacing it with a per beneficiary payment (Medicare Payment Advisory Commission 2015).

How should Medicare payments change in 2017?

The Commission's deliberations on payment adequacy for physicians and other health professionals are informed by beneficiary access to services, volume growth, quality, and

Commission recommendation for a per beneficiary payment for primary care

The Commission has a long-standing concern that primary care is undervalued by the Medicare fee schedule for physicians and other health professionals compared with specialty care. The Commission has also become concerned that the fee schedule is an ill-suited payment mechanism for primary care. The Commission, in its March 2015 report, recommended that the Congress establish a per beneficiary payment for primary care to replace the expiring Primary Care Incentive Payment program (PCIP), which provides a 10 percent bonus payment on fee schedule payments for primary care visits provided by primary care providers (Medicare Payment Advisory Commission 2015). A monthly per beneficiary payment

based on PCIP payments would initially amount to about \$2.60.

The Commission recommended that the additional payments to primary care practitioners be in the form of a per beneficiary payment as a step away from the service-oriented fee-for-service payment approach. Funding for the per beneficiary payment would come from reducing fees for all services in the fee schedule other than PCIP-defined primary care services provided by any practitioner. This method of funding would be budget neutral and would help rebalance the fee schedule to achieve greater equity of payments between primary care and other services. ■

Medicare payments and providers' costs. On the basis of these indicators, we find that payments appear adequate.

On measures of access to the services of physicians and other health professionals, the Commission continues to find—consistent with our findings over many years—that beneficiary access to care is stable. Medicare beneficiaries generally have access comparable to privately insured individuals ages 50–64. Other beneficiary access surveys have consistent findings. The number of physicians per beneficiary has remained relatively constant, the number of APRNs and PAs per beneficiary has grown, and the share of providers accepting assignment and enrolled in Medicare's participating provider program remains high.

In 2014, across all services, volume per beneficiary grew by 0.4 percent. Among broad service categories, growth rates were 0.3 percent for E&M services, –1.1 percent for imaging services, 1.4 percent for major procedures, 0.8 percent for other procedures, and –0.6 percent for tests. Although the imaging decrease continues the downward trend since 2009, use of imaging services remains much higher than it was in 2000.

Input prices for physicians and other health professionals are projected to increase by 2.2 percent in 2017. In 2014, compensation was much lower for primary care physicians than for physicians in certain specialties, continuing to

raise concerns about fee schedule mispricing and its impact on primary care.

Update recommendation

In recommending an update for physicians and other health professionals, the Commission balanced the following objectives:

- maintain beneficiary access to physician and other health professional services,
- minimize the burden on the taxpayers and beneficiaries who finance the Medicare program, and
- ensure adequate payments for the efficient provision of services.

In balancing these objectives with the overall finding that payments appear adequate, the Commission recommends an update consistent with current law.

RECOMMENDATION 4

The Congress should increase payment rates for physician and other health professional services by the amount specified in current law for calendar year 2017.

RATIONALE 4

The Medicare Access and CHIP Reauthorization Act of 2015 changed the statute governing Medicare's payments for physicians and other health professionals, repealing

the SGR and establishing in its place a set of statutory updates. The actual update in 2017 for any given clinician will be the product of a number of factors, including the statutory update of 0.5 percent, a PQRS payment adjustment, a value modifier payment adjustment, and a potential adjustment based on misvalued codes.

Overall, access to physician and other health professional services appears stable and as good as (or better than) that of privately insured individuals. Other measures of payment adequacy are also stable and consistent with prior years. Given these indicators, the Commission does not see a reason to diverge from the current law update for 2017.

Spending

- No change as compared with current law.

Beneficiary and provider

- The Commission's recommendation of the current law update is unlikely to affect beneficiaries' access to care and providers' willingness and ability to furnish care. ■

Endnotes

- 1 For further information, see the Commission's *Payment Basics: Physician and Other Health Professionals Payment System* at <http://www.medpac.gov/documents/payment-basics/physician-and-other-health-professional-payment-system-15.pdf?sfvrsn=0>.
- 2 In 2011, the Commission recommended repeal of the SGR, and the recommendation had four components: repealing the SGR and replacing it with a set of statutory updates that were higher for primary care services than for other services, collecting data to improve the relative valuation of services, identifying overpriced services and rebalancing payments, and encouraging accountable care organizations by creating greater opportunities for shared savings (Medicare Payment Advisory Commission 2011).
- 3 Medicare beneficiaries in our focus groups have all types of coverage—supplemental coverage, Medicaid, and Medicare Advantage.
- 4 There is some overlap in the two categories, but generally retail clinics are clinics in retail settings, such as stores or pharmacies. Urgent care clinics could be freestanding or affiliated or part of a broader health care facility.
- 5 Another set of surveys, the Consumer Assessment of Healthcare Providers and Systems® Clinician and Group surveys, also ask about mental health and access to care, but the surveys do not target a representative sample.
- 6 Only community-dwelling beneficiaries are asked the access to care questions that are of interest in this analysis. We grouped these beneficiaries together because of concern about sample size. A total of 14,000 respondents completed the Access to Care component in the 2013 MCBS, and many of the questions were inapplicable for more than half the sample.
- 7 While the dual-eligible population makes up a large share of beneficiaries with behavioral health conditions, many beneficiaries with these conditions are not dually eligible.
- 8 Under prior law, opt-out agreements were in force for two years, and clinicians had to affirmatively renew it every two years.
- 9 CMS changed the policy on billing for consultations with the rationale that the relaxation of consultation documentation requirements over time had reduced the effort involved in consultations to levels comparable with those of routine evaluation and management visits.
- 10 The Current Procedural Terminology code for this visit is 99213. The total nonfacility fee includes work RVUs, practice expense RVUs, and professional liability insurance RVUs.
- 11 Medicare makes both a facility payment and a fee schedule payment when a service is provided in an HOPD, whereas the program makes only a fee schedule payment when a service is furnished in a freestanding office. The facility payment accounts for the cost of the service in an HOPD.
- 12 The effect of age and gender changes among beneficiaries on spending for physician and other health professional services has generally been small in the recent past, and physician spending varies less by age than spending for other services such as inpatient hospital and post-acute care.
- 13 Relative resource use is a measure of the costliness of a physician's practice style as compared with his or her peers.
- 14 The nonsurgical, procedural specialties in the analysis are cardiology, dermatology, gastroenterology, and pulmonary medicine.
- 15 The primary care specialties in the analysis are family medicine, internal medicine, and general pediatrics.
- 16 To account for differences among specialties in hours worked per week, an earlier analysis based on MGMA data from 2007 included comparisons of hourly compensation. The results were similar to those from the analysis of 2014 data on annual compensation: Hourly compensation for nonsurgical, procedural specialties and radiology was more than double the hourly compensation rate for primary care. Analysis of hourly compensation was not possible with the 2014 data because the newer MGMA survey did not include questions about hours worked.
- 17 The MEI measures the weighted average annual price change for various inputs used by physicians and other health professionals to furnish services.

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C H A P T E R

5

Ambulatory surgical center services

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

- 5** The Congress should eliminate the update to the payment rates for ambulatory surgical centers for calendar year 2017. The Congress should also require ambulatory surgical centers to submit cost data.

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

Ambulatory surgical center services

Chapter summary

Ambulatory surgical centers (ASCs) provide outpatient procedures to patients who do not require an overnight stay after the procedure. In 2014, over 5,400 ASCs treated 3.4 million fee-for-service (FFS) Medicare beneficiaries. Medicare program and beneficiary spending on ASC services was over \$3.8 billion.

Assessment of payment adequacy

Our results indicate that beneficiaries' access to ASC services is adequate: Most of the available indicators of payment adequacy for ASC services, discussed below, are positive. However, the volume of ASC services declined in 2014.

Beneficiaries' access to care—Our analysis of facility supply and volume of services indicates that beneficiaries' access to ASC services has generally been adequate.

- **Capacity and supply of providers**—From 2009 through 2013, the number of Medicare-certified ASCs grew by an average annual rate of 1.5 percent; in 2014, the number increased by 1.9 percent (the vast majority of new ASCs were for-profit facilities).
- **Volume of services**—From 2009 through 2013, the volume of services per beneficiary grew by an average annual rate of 1.3 percent. In 2014,

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volume decreased by 0.8 percent, in contrast to earlier years, when ASC volume growth was much higher. The growth in previous years appeared to be due, in part, to a shift of services from hospital outpatient departments (HOPDs) to ASCs. However, the data do not appear to indicate that the slower growth in ASC volume in recent years is due to a shift of services from ASCs to HOPDs. For example, ASC volume is heavily concentrated in a fairly small number of services. We examined the volume of these services provided in HOPDs as a percent of the volume provided in HOPDs and ASCs combined. We found the share provided in HOPDs has stayed fairly constant in recent years.

Quality of care—ASCs began submitting data on quality measures to CMS in October 2012. CMS has made data publicly available for two of these measures and intends to make data on five others publicly available in April 2016. We commend CMS for creating a system for ASCs to submit data on measures that reflect the quality of their care and for making these data available to the public. However, we are concerned that the data on the two measures that CMS has made publicly available are of limited value in assessing the quality of care in ASCs. In addition, for the data on the five quality measures that CMS intends to make publicly available in April 2016, the agency is allowing ASCs to suppress their data on these measures if they wish to, which may limit the usefulness of these data.

Providers' access to capital—Because the number of ASCs has continued to increase, access to capital appears to be adequate.

Medicare payments and providers' costs—From 2009 through 2013, Medicare payments per FFS beneficiary increased by an average of 2.6 percent per year and by 3.1 percent in 2014. Although volume per beneficiary decreased by 0.8 percent in 2014, Medicare payments per beneficiary increased because of increases in the ASC conversion factor and the average relative weight of the services provided. ASCs do not submit data on the cost of services they provide to Medicare beneficiaries. Therefore, we cannot calculate a Medicare margin like we do for other provider types to assist in assessing payment adequacy.

On the basis of these indicators, the Commission concludes that ASCs can continue to provide Medicare beneficiaries with access to ASC services with no update to the payment rates for 2017. In addition, it is vital that CMS begin collecting cost data from ASCs without further delay. ■

Background

An ambulatory surgical center (ASC) is a distinct entity that primarily provides outpatient procedures to patients who do not require an overnight stay after the procedure. In addition to ASCs, hospital outpatient departments (HOPDs) and, in some cases, physicians' offices perform outpatient surgical procedures.

Since 1982, Medicare has covered and paid for surgical procedures provided in ASCs. Medicare covers about 3,400 procedures under the ASC payment system. Physicians who perform procedures in ASCs or other facilities receive a separate payment for their professional services under the payment system for physicians and other health professionals, also known as the physician fee schedule (PFS). According to surveys, most ASCs have partial or complete physician ownership (Ambulatory Surgery Center Association 2011, Medical Group Management Association 2009b). Physicians who perform surgeries in ASCs they own receive a share of the ASC's facility payment in addition to payment for their professional services. To receive payments from Medicare, ASCs must meet Medicare's conditions of coverage, which specify standards for administration of anesthesia, quality evaluation, operating and recovery rooms, medical staff, nursing services, and other aspects of care.

Medicare pays for a bundle of facility services provided by ASCs—such as nursing, recovery care, anesthetics, and supplies—through a system that is primarily linked to the outpatient prospective payment system (OPPS), which Medicare uses to set payment rates for most services provided in HOPDs (a more detailed description of the ASC payment system can be found online at <http://www.medpac.gov/documents/payment-basics/ambulatory-surgical-center-services-payment-system-15.pdf?sfvrsn=0>). The ASC payment system is also partly linked to the PFS. The ASC system underwent substantial revisions in 2008 (see online Appendix 2C-A from Chapter 2C of our March 2010 report to the Congress at http://www.medpac.gov/documents/reports/Mar10_Ch02C_APPENDIX.pdf?sfvrsn=0). The most significant changes included a substantial increase in the number of surgical procedures covered, allowing ASCs to bill separately for certain ancillary services, and making large changes in payment rates for many procedures.¹

For most covered procedures, the ASC relative weight, which indicates the relative resource intensity of the

procedure, is based on its relative weight under the OPPS. Although the ASC payment system is linked to the OPPS, payment rates for all services covered under both systems are lower in ASCs for two reasons. First, the relative weights have been lower in the ASC system. CMS makes proportional adjustments to the relative weights from the OPPS to maintain budget neutrality in the ASC system. In 2016, this adjustment has reduced the ASC relative weights by 6.7 percent below the relative weights in the OPPS. Second, for most procedures covered under the ASC system, the payment rate is the product of its relative weight and a conversion factor, set at \$44.18 for 2016, which is lower than the OPPS conversion factor (\$73.73 for 2016).

The ASC conversion factor is lower than the OPPS conversion factor because the ASC conversion factor started at a lower level in 2008 and has been updated at a lower rate than the OPPS conversion factor since then. CMS set the initial ASC conversion factor in 2008 so that total ASC payments under the revised payment system would equal what they would have been under the previous ASC payment system. The resulting ASC conversion factor for 2008 was lower than the OPPS conversion factor in 2008. In addition, since 2008, CMS has updated the ASC conversion factor based on the consumer price index for all urban consumers (CPI-U), whereas it has used the hospital market basket to update the OPPS conversion factor. The CPI-U has generally been lower than the hospital market basket, so the updates to the ASC conversion factor have been smaller than the updates to the OPPS conversion factor.

We are concerned that the CPI-U may not reflect ASCs' cost structure (see text box, pp. 138–139). However, CMS does not collect ASC cost data, which we could use to determine whether an alternative input price index would be an appropriate proxy for ASC costs. The ASC industry has opposed the collection of cost information for this purpose (Ambulatory Surgery Center Association 2012). Nevertheless, the Commission has recommended that CMS collect cost data from ASCs to identify an alternative price index (Medicare Payment Advisory Commission 2010b).

CMS uses a method different from the one described above to determine payment rates for procedures that are predominantly performed in physicians' offices and were first covered under the ASC payment system in 2008 or later. Payment for these “office-based” procedures is

the lesser of the amount derived from the standard ASC method or the practice expense portion of the PFS rate that applies when the service is provided in a physician's office (this amount covers the equipment, supplies, nonphysician staff, and overhead costs of a service). CMS set this limit on the rate for office-based procedures to prevent migration of these services from physicians' offices to ASCs for financial reasons.² The Commission has investigated payment rate differences across multiple ambulatory settings, including ASCs, HOPDs, and physicians' offices (Medicare Payment Advisory Commission 2014b, Medicare Payment Advisory Commission 2013a, Medicare Payment Advisory Commission 2012).

The ASC payment system generally parallels the OPPS in terms of which ancillary services are paid separately and which are packaged into the payment of the associated surgical procedure. In 2015, however, CMS implemented comprehensive ambulatory payment classifications (C-APCs) for the OPPS but not for the ASC system. C-APCs largely combine all hospital services reported on a claim that are covered under Medicare Part B into a single payment, with a few exceptions. CMS chose not to implement C-APCs in the ASC system because the ASC claims processing system does not allow for the type of packaging of ancillaries necessary for creating C-APCs.

Starting in 2008, Medicare began making separate payments to ASCs for the following ancillary services:

- radiology services that are integral to a covered surgical procedure if separate payment is made for the radiology service in the OPPS;
- brachytherapy sources implanted during a surgical procedure;
- all drugs that are paid for separately under the OPPS when provided as part of a covered surgical procedure (pass-through and non-pass-through drugs); and
- devices with pass-through status under the OPPS.³

Although we do not have recent ASC cost data that would allow us to quantify cost differences between settings, some evidence suggests that ASCs are a lower cost setting than HOPDs. The Government Accountability Office (GAO) compared ASC cost data from 2004 with HOPD costs and found that costs were, on average, lower in ASCs than in HOPDs (Government Accountability Office 2006).⁴ In addition, studies that used data from the

National Survey of Ambulatory Surgery found that the average time for ambulatory surgical visits for Medicare patients was 25 percent to 39 percent lower in ASCs than HOPDs, which likely contributes to lower costs in ASCs (Hair et al. 2012, Munnich and Parente 2014). An additional study using data from a facility that has both an ASC and a hospital found that surgeries took 17 percent less time in the ASC (Trentman et al. 2010). Trentman and colleagues and Munnich and Parente estimated less time savings in ASCs than did Hair and colleagues, likely because Trentman and colleagues and Munnich and Parente accounted for differences in health status between patients treated in ASCs and those treated in HOPDs, while Hair and colleagues did not.

Are Medicare payments adequate in 2016?

To address whether payments for the current year (2016) are adequate to cover the costs of efficient providers and how much payments should change in the coming year (2017), we examine several measures of payment adequacy. We evaluate beneficiaries' access to care by examining the supply of ASC facilities and changes over time in the volume of services provided, providers' access to capital, and changes in ASC revenue from the Medicare program.

ASCs began submitting quality data to CMS in October 2012, and CMS's contractor released preliminary data for 2013. Data from two quality measures are now publicly available, but those data do not provide sufficient information to assess ASC quality or the change in quality over time. Moreover, CMS will allow ASCs to suppress data on five other quality measures on the website that displays these data. This policy may compromise the usefulness of the quality data. Also, we cannot examine Medicare payments relative to providers' costs because CMS does not require ASCs to submit cost data.⁵ Finally, we caution that the effect of Medicare payments on the financial health of ASCs may be limited. Existing studies suggest that Medicare accounts for about 20 percent of ASCs' revenue (Medical Group Management Association 2009b), and AmSurg Corp.—the largest owner of ASCs in the United States, with 250 facilities—indicates in its financial statements that Medicare accounted for approximately 13 percent of their revenues in 2014 (AmSurg Corp. 2014).

Differences in types of patients treated in ambulatory surgical centers and hospital outpatient departments

There is evidence that patients treated in ambulatory surgical centers (ASCs) are different in several ways from those in hospital outpatient departments (HOPDs). Our analysis of Medicare claims from 2014 found that the following groups are less likely to receive care in ASCs than in HOPDs: Medicare beneficiaries who also have Medicaid coverage (dual eligibles), African Americans (who are more likely to be dually eligible), beneficiaries who are eligible for Medicare because of disability (under age 65), and beneficiaries who are age 85 or older (Table 5-1).⁶ The smaller share of disabled and older beneficiaries treated in ASCs may reflect the healthier average profile of ASC patients relative to HOPD patients. In addition, the smaller share of African American patients in ASCs relative to HOPDs may be linked to differences in the geographic locations of ASCs and hospitals, the lower rate of supplemental coverage among African Americans, the higher proportion of African Americans who are dual eligibles, and the relatively high percentage of African Americans who use HOPDs or emergency departments (EDs) as their usual source of care (Centers for Medicare & Medicaid Services 2015a).

In a separate analysis, we found that patients in HOPDs in 2010 were, on average, more medically complex than patients treated in ASCs, as measured by differences in average patient risk scores (Medicare Payment Advisory Commission 2013b). We used risk scores from the CMS–hierarchical condition categories (CMS–HCC) risk adjustment model used in Medicare Advantage to measure patient severity. CMS–HCC risk scores predict beneficiaries’ relative costliness

TABLE 5-1

Medicare patients treated in ASCs differ from patients treated in HOPDs, 2014

Characteristic	Percent of beneficiaries	
	ASC	HOPD
Medicaid status		
Not Medicaid	86.4%	77.2%
Medicaid	13.6	22.8
Race/ethnicity		
White	87.0	83.8
African American	6.9	10.0
Other	6.0	6.1
Age		
Under 65	14.7	21.9
65 to 84	78.9	67.4
85 or older	6.4	10.7
Sex		
Male	42.8	44.7
Female	57.2	55.3

Note: ASC (ambulatory surgical center), HOPD (hospital outpatient department). All of the differences between ASC and HOPD beneficiaries are statistically significant ($p < 0.05$). The analysis excludes beneficiaries who received services that are not covered in the ASC payment system.

Source: MedPAC analysis of physician/supplier and outpatient standard analytic files, 2014.

(continued next page)

Most of our available indicators of payment adequacy in 2014 are positive. Beneficiaries have adequate access to care in ASCs, although some groups of beneficiaries—such as dual eligibles, African Americans, and beneficiaries under age 65—are less likely to receive care in ASCs than in HOPDs (see text box). In addition, ASCs have adequate access to capital, and Medicare payments to ASCs have continued to grow.

Beneficiaries’ access to care: Supply of ASCs and volume of services indicate adequate access

Increases in the number of Medicare-certified facilities and fairly stable volume of services provided to Medicare beneficiaries suggest that beneficiaries have adequate access to care in ASCs. Although growth in the number of ASCs may lead to an increase in the overall volume of

Differences in types of patients treated in ambulatory surgical centers and hospital outpatient departments (cont.)

based on their diagnoses from the prior year, whether they are dual eligible, whether they are currently age 65 or older but were originally eligible for Medicare because of disability, and their age and sex. The average risk score for HOPD patients across all procedures in 2010 was 1.64, compared with 1.23 for ASC patients. This difference is statistically significant ($p < 0.05$). Beneficiaries who have higher risk scores are likely to be sicker and may require more time and resources to treat. Sicker patients may be referred to HOPDs instead of ASCs because hospitals offer emergency services and access to onsite specialists if complications arise.

We also compared average patient risk scores from 2010 within each ambulatory payment classification (APC) group, which is a group of similar services. For 46 percent of the APCs in our analysis (representing 30 percent of ASC volume), the average HOPD risk score was statistically higher than the average ASC risk score ($p < 0.05$). However, for the remaining 54 percent of APCs (representing 70 percent of ASC volume), the severity of patients in HOPDs was similar to or less than the severity of patients in ASCs.

There is evidence that ASCs treat fewer Medicaid patients than HOPDs. According to data from Pennsylvania on Medicare and non-Medicare patients, ASCs are less likely than HOPDs to serve Medicaid patients (Pennsylvania Health Care Cost Containment Council 2015). In Pennsylvania in 2014, Medicaid patients accounted for 5.3 percent of ASCs' diagnostic and surgical procedures, compared with 12.0 percent of HOPDs' procedures.⁷ Commercially insured and Medicare patients represented a higher share of ASC procedures than HOPD procedures (86.8 percent vs. 77.4 percent, respectively). Although Pennsylvania data may not be nationally representative, national estimates from the National Survey of Ambulatory Surgery (NSAS), conducted by the Centers for Disease Control and Prevention, show that ASCs treated a smaller share of Medicaid patients than did hospitals in 2006. According to the NSAS data, ambulatory surgery visits by Medicaid patients accounted for 3.9 percent of total visits to freestanding ASCs, compared with 8.1 percent of total visits to hospital-based surgery centers.⁸

Several factors could explain why ASCs treat a smaller share of Medicaid patients (including dual eligibles) than HOPDs. A study by Strobe and colleagues indicates that people living in areas that have relatively low socioeconomic status (measured by median household income; value of owner-occupied housing; percentage of households with dividend or rental income; educational attainment; and percentage of residents employed in managerial, professional, and related occupations) are less likely to receive surgical services in ASCs than are people living in areas that have high socioeconomic status (Strobe et al. 2009b). Further, a study by Gabel and colleagues suggests that insurance coverage influences a physician's decision to refer a patient to an ASC or to a hospital (Gabel et al. 2008). This study found that physicians in Pennsylvania were much more likely to refer their commercially insured and Medicare patients than their Medicaid patients to a physician-owned ASC.

The location of ASCs may also lead to a smaller share of Medicaid patients. For example, ASC owners may choose to locate in areas with a high proportion of commercially insured patients. Also, research indicates that ASCs are most likely to enter markets that did not previously have an ASC if a market has relatively high per capita income (Suskind et al. 2015).⁹ In addition, many state Medicaid programs do not pay Medicare's cost sharing for dual eligibles if the Medicare rate for a service minus the cost sharing is higher than the Medicaid rate for the service (Medicare Payment Advisory Commission 2010a). In states that do not pay the cost sharing for ASC services used by dual eligibles, ASCs could be discouraged from treating these patients. Finally, dual-eligible beneficiaries are more likely to report that their usual source of care is an HOPD or ED than are Medicare beneficiaries who have other types of supplemental coverage (Centers for Medicare & Medicaid Services 2015a). If a patient's usual source of care is an HOPD or ED, physicians may be more likely to refer the patient to an HOPD for surgery than to another setting. The relatively low rate of ASC use among dual-eligible beneficiaries may partly explain the relatively low rate of ASC use among African Americans (Table 5-1, p. 127). ■

**TABLE
5-2**

Number of Medicare-certified ASCs grew by 8 percent, 2009–2014

Type of center	2000	2009	2013	2014	Average annual percent change		
					2000–2009	2009–2013	2013–2014
Total	3,028	5,039	5,343	5,446	5.8%	1.5%	1.9%
New	295	221	171	176			
Closed or merged	53	111	105	73			

Note: ASC (ambulatory surgical center).

Source: MedPAC analysis of Provider of Services file from CMS, 2015.

surgical procedures, access to ASCs may be beneficial to patients and physicians because ASCs can offer them greater convenience and efficiency compared with HOPDs, the provider type most similar to ASCs. For patients, ASCs can offer more convenient locations, shorter waiting times, and easier scheduling relative to HOPDs; for physicians, ASCs offer more control over their work environment and specialized staff. In addition, Medicare's payment rates and beneficiaries' cost sharing are generally lower in ASCs than in HOPDs.

Capacity and supply of providers: Number of ASCs is increasing

From 2013 through 2014, the number of Medicare-certified ASCs increased 1.9 percent, a rate comparable with recent years and slower than observed roughly a decade earlier (Table 5-2). By contrast, the number of ASCs increased 1.5 percent per year from 2009 to 2013 and 5.8 percent per year from 2000 to 2009. In 2014, 176 ASCs entered the market and 73 ASCs either closed or merged with other facilities. Through the first half of 2015, 43 additional ASCs entered the market and 13 closed or merged (data not shown). Since 2000, the number of new ASCs has outnumbered ASCs that have closed or merged, leading to an 80 percent increase in the number of ASCs from 2000 to 2014.

Several factors might explain the relatively slow growth of ASCs from 2009 through the first half of 2015:

- The ASC payment system underwent a substantial revision in 2008, and investors may have responded cautiously to the large changes in payment rates that occurred under that revision.

- To expand their outpatient surgery capacity, many hospitals have acquired and integrated ASCs into their hospitals or developed new surgery centers that are part of their hospitals, which may limit the market for new freestanding ASCs (Hirst 2010, Jacobson 2014, Kochman 2014, Levingston 2014, Moody 2014, North Carolina Department of Health and Human Services 2011, Sowa 2014, State of Connecticut 2011). Hospitals' decisions to increase their outpatient surgery capacity may be influenced by the higher rates Medicare pays for ambulatory surgical services provided in HOPDs relative to ASCs (in 2016, the Medicare rates are 79 percent higher in HOPDs than in ASCs).
- Physicians are increasingly choosing to be employed by hospitals rather than work in an independent practice (Berenson et al. 2012, Mathews 2012, Medicare Payment Advisory Commission 2013a, Physicians Foundation 2014). These physicians are more likely to provide ambulatory procedures in the hospitals that employ them than in freestanding ASCs.

To provide a more complete picture of capacity in ASCs, we also examined the change in the number of ASC operating rooms (ORs). In 2014, there were more than 16,000 ORs in ASCs, or an average of 2.9 per facility. From 2009 through 2014, the total number of ASC ORs increased 1.3 percent per year, a slightly slower rate than the growth in the number of ASCs (1.6 percent per year).

ASCs are concentrated geographically. In 2014, Maryland had the most ASCs per Part B fee-for-service (FFS) beneficiary, followed by Georgia and Idaho; each state had at least 30 ASCs per 100,000 Part B FFS beneficiaries.

**TABLE
5-3**

**Most Medicare-certified ASCs
are urban and for profit**

ASC type	Open in 2009	Open in 2014	New in 2014
Urban	92.0%	92.7%	94.7%
Rural	8.0	7.2	5.3
For profit	95.1	95.0	92.0
Nonprofit	3.3	3.1	5.7
Government	1.6	1.9	2.3

Note: ASC (ambulatory surgical center).

Source: MedPAC analysis of Provider of Services file from CMS, 2015.

Vermont had the fewest ASCs per FFS beneficiary, followed by West Virginia and Alabama; each had fewer than 5 per 100,000 FFS beneficiaries.¹⁰

In addition, in 2014, most Medicare-certified ASCs were for profit and located in urban areas, a pattern that has not changed over time. ASCs in 2014 were largely urban (about 93 percent), for profit (95 percent), and freestanding (99 percent, data not shown) (Table 5-3). The characteristics of ASCs that were open in 2009 were similar. In 2014, compared with existing ASCs, a slightly larger share of new ASCs was urban and nonprofit, perhaps due to the observed increase in the number of hospitals opening ASCs in recent years. Urban areas include cities and suburban areas. Beneficiaries who do not live near an ASC can obtain ambulatory surgical services in HOPDs and, in some cases, physicians' offices. In addition, beneficiaries who live in rural areas can travel to urban areas to receive care in ASCs.

Continued growth in the number of Medicare-certified ASCs suggests that Medicare's payment rates have been adequate. Other factors have also likely influenced the long-term growth in the number of Medicare-certified ASCs:

- Changes in clinical practice and health care technology have expanded the provision of surgical procedures in ambulatory settings.
- ASCs may offer patients greater convenience than HOPDs, such as the ability to schedule surgery more quickly.

- For most procedures covered under the ASC payment system, beneficiaries' coinsurance is lower in ASCs than in HOPDs.¹¹
- Physicians have greater autonomy in ASCs than in HOPDs, which enables them to design customized surgical environments and hire specialized staff.
- Physicians who invest in ASCs and perform surgery there can increase their revenue by receiving a share of ASC facility payments. The federal anti-self-referral law (also known as the Stark Law) does not apply to ASC services.
- Because physicians are able to perform more procedures in ASCs than in HOPDs in the same amount of time, they can earn more revenue from professional fees.

Number of beneficiaries treated and volume of services grew from 2009 to 2013 but decreased in 2014

We found that the number of FFS beneficiaries treated in ASCs and the volume of ASC surgical services per FFS beneficiary has been fairly stable in recent years. Because ASC services are covered under Part B, we limited our analysis to FFS beneficiaries who have Part B coverage. A factor we had to address to make a meaningful evaluation of volume growth over time is that CMS changed the status in the OPPS of many services from separately payable in 2013 to packaged when provided with another service in 2014. This packaging change carried over to the ASC payment system. In response, we made two estimates of ASC volume for 2013. One estimate reflects the actual 2013 volume that results from packaging rules that existed in 2013, and the other reflects the estimated 2013 volume that would have resulted had 2014 packaging rules been in place in 2013. If we had not made the latter estimate, we would not have been able to make a fair comparison between 2013 volume and 2014 volume. Table 5-4 includes both estimates of the 2013 volume. We estimate that the number of FFS beneficiaries who received ASC services grew by an average of 1.1 percent per year from 2009 through 2013 and *decreased* by 1.2 percent in 2014 (data not shown). The volume of services per FFS beneficiary increased by an average of 1.3 percent per year from 2009 through 2013 and *decreased* by 0.8 percent in 2014 (Table 5-4). Finally, the average number of services provided to beneficiaries who received services in ASCs increased at an annual rate of 1.2 percent from 2009 through 2013 and by 0.4 percent in 2014 (data not shown).

**TABLE
5-4****Volume of ASC services per FFS beneficiary declined slightly in 2014**

	2009	2010	2011	2012	2013 (actual)	2013* (adjusted)	2014
Volume of services (in millions)	6.3	6.5	6.7	6.9	6.9	6.3*	6.2
Volume per 1,000 FFS beneficiaries	199.3	202.6	206.1	209.2	210.3	189.7*	188.3
Percent change in volume per FFS beneficiary from previous year	3.6%	1.7%	1.7%	1.5%	0.5%		-0.8%

Note: ASC (ambulatory surgical center), FFS (fee-for-service).

*The adjusted 2013 values reflect adjustments we made to the larger actual values for 2013. The adjusted 2013 values reflect policies established in 2014 that changed the status of many services that had been separately payable in 2013 to packaged with another service in 2014. The purpose is to make the method for counting services in 2013 consistent with the method for counting services in 2014.

Source: MedPAC analysis of physician/supplier standard analytic files, 2009–2014.

The services that have historically contributed the most to overall volume continued to constitute a large share of the total in 2014. For example, we evaluated Healthcare Common Procedure Coding System (HCPCS) codes and found that cataract removal with intraocular lens insertion (HCPCS 66984) had the highest volume both in 2009 and 2014, accounting for about 20 percent of volume in 2009 and about 19 percent in 2014. Moreover, 18 of the 20 most frequently billed HCPCS codes in 2009 were among the 20 most frequently provided in 2014 (Table 5-5, p. 132). These services comprised about 72 percent of ASC Medicare volume in 2009 and about 70 percent in 2014.¹²

Services that were outside the 20 most frequently billed HCPCS codes composed about 28 percent of total ASC volume in 2009 and about 30 percent in 2014. We grouped the HCPCS codes for these services into broader service categories and found that eye procedures, nerve injections (for pain management), arthroscopy, and skin repair had the highest volume. These four categories composed 24 percent of total ASC volume in 2009 and 20 percent in 2014.

Outpatient surgical procedures grew faster in HOPDs than in ASCs in 2014

From 2009 through 2014, average annual growth in volume per FFS beneficiary of surgical services covered by the ASC payment system was 0.7 percent both in ASCs and HOPDs. However, in 2014, volume per FFS beneficiary decreased by 0.8 percent in ASCs and increased by 1.1 percent in HOPDs.

Through 2009, ASC volume growth was much higher than in more recent years. The higher growth through 2009 appears to have been due, in part, to a shift of services

from HOPDs to ASCs. That shift appears to have ended. One reason may be that Medicare payment rates have become much higher in HOPDs than in ASCs, which might make it less financially attractive to provide surgical services for Medicare patients in ASCs. For example, in 2016, Medicare payment rates for most surgical services are 79 percent higher in HOPDs than in ASCs. Another reason for the slower growth in ASC volume is that physicians continue to move away from working in private practices toward working for hospitals or medical groups (Physicians Foundation 2014). Physicians working for hospitals may be more inclined to perform procedures at the hospitals that employ them than at freestanding ASCs.

We emphasize, however, that even though surgical volume in 2014 decreased in ASCs and increased in HOPDs, data do not indicate that surgical services have shifted from ASCs to HOPDs. We examined whether a shift in setting occurred among the 27 most frequently provided ASC services, which account for about 75 percent of ASC surgical volume. If a shift had occurred from ASCs to HOPDs, the HOPD share of the combined ASC and HOPD volume for these 27 services should have increased, but it did not. The share of these services provided in HOPDs stayed fairly constant, in the range of 46 percent to 47 percent from 2011 through 2014. For example, the share of these services provided in HOPDs was 46.1 percent in 2013 and 46.3 percent in 2014. Moreover, the share provided in HOPDs was lower in 2014 than in 2011 for 15 of these HCPCS codes. Much of the increase in HOPD surgical volume from 2013 to 2014 occurred among services that are rarely provided in ASCs. Therefore, the data suggest a state of equilibrium between ASCs and HOPDs in recent years.

**TABLE
5-5****Most frequently provided ASC services in 2014 were similar to those provided in 2009**

Surgical service	2009		2014	
	Percent of volume	Rank	Percent of volume	Rank
Cataract surgery w/ IOL insert, 1 stage	19.7%	1	18.6%	1
Upper GI endoscopy, biopsy	8.7	2	8.5	2
Colonoscopy and biopsy	6.0	3	6.0	3
Diagnostic colonoscopy	5.0	4	2.6	9
After cataract laser surgery	4.8	5	4.5	6
Lesion removal colonoscopy	4.8	6	5.4	4
Injection spine: lumbar, sacral (caudal)	4.0	7	3.4	7
Inject foramen epidural: lumbar, sacral	4.0	8	4.6	5
Inject paravertebral: lumbar, sacral*	2.1	9	2.8	8
Colorectal screen, high-risk individual	1.7	10	2.1	10
Lesion remove colonoscopy	1.5	11	1.1	15
Colorectal screen, not high-risk individual	1.4	12	0.9	20
Upper GI endoscopy, diagnosis	1.4	13	1.9	11
Cystoscopy	1.3	14	1.2	13
Cataract surgery, complex	1.3	15	1.6	12
Revision of upper eyelid	1.1	16	1.0	18
Inject spine, cervical or thoracic	0.9	17	1.0	17
Upper GI endoscopy, insertion of guide wire	0.8	18	0.8	21
Injection procedure for sacroiliac joint, anesthetic	0.8	19	1.1	14
Carpal tunnel surgery	0.7	20	0.7	22
Total	71.9		70.5	

Note: ASC (ambulatory surgical center), IOL (intraocular lens), GI (gastrointestinal). The numbers listed in the "Percent of volume" columns may not sum to stated totals because of rounding.

*The description of this service changed in 2010 to include imaging guidance.

Source: MedPAC analysis of physician/supplier standard analytic files, 2009 and 2014.

The higher growth in HOPDs could be due to a shift of surgical services from freestanding physician offices to HOPDs. Such a shift would be consistent with evidence of hospitals purchasing physicians' practices and converting them to HOPDs. In prior reports, we have provided evidence of a shift of some nonsurgical services—office visits, echocardiograms, and nuclear cardiology—from freestanding offices to HOPDs, and it is plausible that surgical services also have shifted from freestanding offices to HOPDs (Medicare Payment Advisory Commission 2015, Medicare Payment Advisory Commission 2014b, Medicare Payment Advisory Commission 2013a, Medicare Payment Advisory Commission 2012). For example, some of the surgical services that had the largest volume increases in HOPDs

in 2014—wound debridement procedures—are frequently performed in freestanding offices. The growth of these services in freestanding offices was either negative or much slower than the growth in HOPDs.

It is desirable to maintain beneficiaries' access to ASCs because services provided in this setting are less costly to Medicare and beneficiaries than services delivered in HOPDs. For example, the most frequently provided service in ASCs is cataract surgery with intraocular lens insertion. The payment rate for these procedures in 2014 was \$976 in ASCs compared with \$1,766 in HOPDs. The lower payment rate in ASCs for this service has been financially beneficial to Medicare and beneficiaries, as the share of these procedures provided in ASCs rose from 69 percent in 2009 to 72 percent in 2014. Other recent studies

similarly find that ASCs are less costly than HOPDs in the Medicare and non-Medicare context and that the recent price growth at ASCs has been slower than price growth at HOPDs (Carey 2015, Robinson et al. 2015).

However, most ASCs have some degree of physician ownership, and this ownership could give physicians an incentive to perform more surgical services than if they provided outpatient surgery only in HOPDs. This additional volume could partially offset the effect of lower rates in ASCs on Medicare spending. Studies offer limited evidence that physicians with an ownership stake in an ASC perform a higher volume of certain procedures than non-owning physicians (Hollingsworth et al. 2010, Mitchell 2010, Strope et al. 2009a).

Other studies suggest that the presence of an ASC in a market is associated with a higher volume of outpatient surgical procedures (Hollenbeck et al. 2014, Hollingsworth et al. 2011, Koenig and Gu 2013). The most recent study may be the most convincing because it is based on a nationwide sample of Medicare beneficiaries and includes all surgical procedures (Hollenbeck et al. 2014). This study found that introducing ASCs into service areas that previously did not have any resulted in a larger rate of increase in ambulatory surgical procedures than in areas that already had at least one ASC or did not have any ASCs. However, this study found a smaller effect of ASCs on outpatient surgical volume than did the earlier studies. Although none of these studies assessed whether the additional procedures were inappropriate, they suggest that the presence of ASCs might increase overall surgical volume.

Quality of care: Insufficient data to evaluate quality of ASCs

CMS established the ASC Quality Reporting (ASCQR) Program in 2012 (Centers for Medicare & Medicaid Services 2011). Under this system, ASCs must submit data on quality measures to receive the full update to the payment rates in the ASC payment system each year. ASCs that do not successfully submit the data have their payment update reduced by 2.0 percentage points. Performance on these quality measures does not affect an ASC's payments; ASCs are required only to successfully submit the data to receive a full update. The Commission has recommended a value-based purchasing program for ASCs that would reward high-performing providers and penalize low-performing providers (see text box, p. 135).

CMS has identified 12 quality measures for which ASCs submit data. CMS adopted five of the measures that affected ASC payment updates in 2014 and subsequent years, two measures that affected ASC payment updates in 2015 and subsequent years, three measures that affect ASC payment updates in 2016 and subsequent years, one measure that will affect payment updates in 2018 and subsequent years, and one measure that is voluntary and does not affect payment updates (Table 5-6, p. 134) (Centers for Medicare & Medicaid Services 2015b).

CMS reports that the majority of ASCs participate in the ASCQR program and successfully reported the necessary quality data in the first three years of the program to avoid the 2 percentage point reduction to their annual payment update. For data collection that determined payments in 2014 and 2015, more than 98 percent of ASCs reported quality data to CMS. For data collection that determined payments in 2016, approximately 96 percent of ASCs reported their quality data to CMS. It is unclear exactly why there was a slight decline in reporting in 2016, but we will monitor this trend as the ASCQR program matures.

CMS has made data for two of the quality measures publicly available: whether ASCs use a safe-surgery checklist and the facility volume on selected ASC surgical procedures. CMS also plans to release data on five other measures in April 2016, which are the first through fifth measures listed in Table 5-6 (p. 134) (Quality Reporting Center 2015). We commend CMS for the steps taken to assess the quality of care provided by ASCs. Although we have some concerns about these initial steps, CMS is moving in the right direction, and we look forward to working with CMS to improve the reporting of ASC quality data.

A concern we have regarding the data on the two quality measures that CMS has made publicly available is that these data are of limited use in assessing the quality of care provided by ASCs. Nearly 99 percent of ASCs use a safe-surgery checklist, so this measure does little to differentiate performance among ASCs. The rationale for using a measure of volume of surgical procedures is based on research that found a correlation between higher volume of surgical procedures and better patient outcomes. However, this research is based on analyses of high-risk procedures that are not typically performed in ASCs. Moreover, adoption of this measure could lead ASCs to increase their volume to improve their performance on this measure (Medicare Payment Advisory Commission 2014a).

**TABLE
5-6**

Quality measures that CMS uses in the ASC Quality Reporting Program

Description of quality measure	First year measure used for payment determination
Patient burn	2014
Patient fall	2014
Wrong site, wrong side, wrong patient, wrong procedure, wrong implant	2014
Hospital transfer/admission	2014
Prophylactic intravenous antibiotic timing	2014
Safe-surgery checklist use	2015
ASC facility volume data on selected ASC surgical procedures	2015
Influenza vaccination coverage among health care personnel	2016
Endoscopy/polyp surveillance: Appropriate follow-up interval for normal colonoscopy in average-risk patients	2016
Endoscopy/polyp surveillance: Colonoscopy interval for patients with a history of adenomatous polyps—avoid inappropriate use	2016
Facility seven-day risk-standardized hospital visit rate after outpatient colonoscopy	2018
Cataracts: Improvement in patient's visual function within 90 days following cataract surgery	Voluntary

Note: ASC (ambulatory surgical center).

Source: Final rule for outpatient prospective payment system and ambulatory surgical center payment system, 2015.

Another concern is that CMS will allow ASCs to choose to have CMS suppress their information on the five quality measures that will be made publicly available in April 2016 (Quality Reporting Center 2015). Suppressing some ASCs' data has the potential to distort the data on ASCs' performance on these quality measures, which could diminish the usefulness of these data. CMS's rationale for allowing ASCs to suppress these data is that some ASCs experienced difficulties in implementing the changes to their billing processes that are necessary for these data to be collected. It appears that suppression of these data is applicable only to the data that will be made available in April 2016. Unless CMS decides to suppress data in the future, data on these five measures that are made publicly available after April 2016 will include all ASCs.

Providers' access to capital: Growth in number of ASCs suggests adequate access

Owners of ASCs require capital to establish new facilities and upgrade existing ones. The change in the number of ASCs is the best available indicator of ASCs' ability to obtain capital. The number of ASCs continued to increase in 2014 and the first two quarters of 2015. However, Medicare accounts for a small share—perhaps 20 percent—of ASCs' overall revenue, so other factors may

have a larger effect than Medicare payments on access to capital for this sector (Medical Group Management Association 2009a).

The company that owns and operates the largest number of ASCs in the country—AmSurg Corp.—appears to have adequate access to capital.¹³ In 2014, AmSurg was able to borrow \$1.7 billion from the debt markets to acquire Sheridan Healthcare, a physician outsourcing company (Moody's Investors Service 2014). AmSurg also continues to have robust earnings growth, which provides it with funds to acquire new ASCs and improve its existing facilities (Deutsche Bank 2015). A market research firm projects that AmSurg's earnings per share of stock in 2015 increased by nearly 50 percent over the 2014 level (Zacks Equity Research 2015, Zacks Equity Research 2014). We caution, however, that AmSurg includes only 5 percent of all Medicare-certified ASCs, so its experience may not represent the entire ASC sector.

Other recent activity in the ASC marketplace includes the consolidation of two large ASC entities owned by private equity firms. In November 2015, H.I.G. Capital, owner of the 50 ASCs associated with Surgery Partners, acquired the 50 ASCs associated with Symbion Holdings Corporation and owned by Crestview Partners. The

Creating a value-based purchasing program for ambulatory surgical centers

In 2012, the Commission recommended that the Congress authorize and CMS implement a value-based purchasing (VBP) program for ambulatory surgical centers (ASCs). A VBP would reward high-performing providers and penalize low-performing providers (Medicare Payment Advisory Commission 2012).¹⁴

CMS established a Quality Reporting Program for ASCs in 2012. However, Medicare payments to ASCs are not adjusted based on how they perform on quality measures, only on whether they successfully report the measures. The Commission supports the ASC Quality Reporting Program but believes that, eventually, high-performing ASCs should be rewarded and low-performing facilities should be penalized through the payment system.

The ASC Quality Reporting Program could lay the foundation for a VBP program. Consistent with the Commission's overall position on VBP (also known as pay-for-performance) programs in Medicare, an ASC VBP program should include a relatively small set of measures to reduce the administrative burden on ASCs and CMS. These measures should focus on clinical outcomes because Medicare's central concern should be improving patient outcomes across all ASCs. The program should also minimize the use of measures that require providers to extract data from patients' medical records. Several of the indicators that are reported through the ASC Quality Reporting Program could be used for an ASC VBP program.

An ASC VBP program should reward ASCs for improving their prior year performance and for exceeding quality benchmarks. In addition, funding for the VBP incentive payments should come from existing Medicare spending for ASC services. Initially, funding for the incentive payments should be set at 1 percent to 2 percent of aggregate ASC payments. The size of this pool should be expanded gradually as more measures are developed and ASCs become more familiar with the program.

CMS should consider incorporating the following patient safety and outcome measures into an ASC VBP program:

- patient fall in an ASC;
- patient burn (such as a chemical, thermal, or electrosurgical burn);
- wrong site, wrong side, wrong patient, wrong procedure, wrong implant;
- hospital transfer or admission after an ASC procedure because of a problem related to the procedure, whether a patient is transferred directly to a hospital from an ASC or admitted to a hospital after returning home from the procedure;¹⁵ and
- the rate of surgical site infections (SSIs).

The first three measures listed above are patient safety indicators that ASCs currently report under the ASC Quality Reporting Program. Because these indicators represent errors that are usually preventable, they could be measured against an absolute national benchmark that starts very low and is reduced over time to a rate that approaches zero.

By contrast, the last two indicators listed above (hospital transfer or admission after an ASC procedure and SSI rate) may occasionally occur even in the highest quality facilities. Therefore, an ASC's performance on these indicators should be measured against the performance of other ASCs rather than an absolute national benchmark. Because certain ASCs may report small numbers of cases for the calculation of these measures, the rates reported for these providers could vary substantially from one observation period to the next, due solely to random statistical variation. To address this issue, CMS could consider using composite measures that would aggregate the rates for several measures of rare events into a single rate or using data from multiple years for a single measure. ■

purchase price of this acquisition was \$792 million, and the purchase made Surgery Partners the second largest independent ASC operator in the United States, with 100

ASCs in 26 states. In 2014, Surgery Partners borrowed over \$1 billion from Jeffries Group LLC, an investment banking firm, to complete this acquisition (Tan 2014).

**TABLE
5-7****Medicare payments to ASCs have grown, 2009–2014**

	2009	2010	2011	2012	2013	2014
Medicare payments (in billions of dollars)	\$3.2	\$3.3	\$3.4	\$3.6	\$3.7	\$3.8
Medicare payments per FFS beneficiary	\$102	\$104	\$106	\$110	\$113	\$116
Percent change per FFS beneficiary from previous year	5.3%	2.0%	2.0%	4.2%	2.1%	3.1%

Note: ASC (ambulatory surgical center), FFS (fee-for-service). Medicare payments include program spending and beneficiary cost sharing for ASC facility services. Payments include spending for new technology intraocular lenses.

Source: MedPAC analysis of data from the Office of the Actuary at CMS and data from physician/supplier standard analytic files.

Medicare payments: Payments have increased steadily

In 2014, ASCs received over \$3.8 billion in Medicare payments and beneficiaries' cost sharing (Table 5-7). Spending per FFS beneficiary increased by an average of 2.6 percent per year from 2009 through 2013 and by 3.1 percent in 2014. Medicare payments per FFS beneficiary increased in 2014, despite a 0.8 percent decline in the volume of ASC services per FFS beneficiary and a 0.4 percent decrease in payments because of the sequester. These reductions were more than offset by a 1.3 percent increase in the ASC conversion factor and a 3.0 percent increase in the average relative weight of the ASC services provided to FFS beneficiaries. The 3.0 percent increase in the average relative weight largely reflects two factors: (1) an increase in 2014 in the packaging of ancillary services in the OPPS (especially add-on codes and clinical laboratory tests), which increases the relative weights in the ASC payment system and (2) an increase in services that have high relative weights (those related to implantation of neurostimulators, high-level eye procedures, and some types of arthroscopy) and a decrease in services that have low relative weights (colonoscopies and upper gastrointestinal procedures).

How should Medicare payments change in 2017?

Our payment adequacy analysis indicates that the number of Medicare-certified ASCs has increased, beneficiaries' use of ASCs has declined slightly, and access to capital has been adequate. Our information for assessing payment adequacy is limited because, unlike other types of facilities, Medicare does not require ASCs to submit cost

data. In addition, although some quality data are available, there is not yet sufficient information to assess the quality of care provided by ASCs or changes in quality over time.

Cost data would enable the Commission to examine the growth of ASCs' costs over time and analyze Medicare payments relative to the costs of efficient providers, which would help inform decisions about the ASC update. Cost data are also needed to examine whether an alternative input price index would be an appropriate proxy for ASC costs. The Commission has previously expressed concern that the price index that CMS uses to update ASC payments (the CPI-U) likely does not reflect ASCs' cost structure (Medicare Payment Advisory Commission 2010b) (see text box, pp. 138–139). CMS has also concluded that it needs data on ASC costs to determine whether there is an alternative to the CPI-U that better measures changes in ASCs' input costs (Centers for Medicare & Medicaid Services 2012). To date, however, CMS has not required ASCs to submit cost data.

Although CMS and ASCs have expressed concern that requiring ASCs to submit cost data may impose a burden on these facilities (Centers for Medicare & Medicaid Services 2011), we believe it is feasible for ASCs to provide a limited amount of cost information. Even though ASCs are generally small facilities that may have limited resources for collecting cost data, such businesses typically keep records of their costs for filing taxes and other purposes. Moreover, a Pennsylvania state agency is able to collect the cost and revenue data from ASCs in Pennsylvania and is able to estimate the margins for those ASCs. The cost and revenue data are from all sources. This agency estimates that ASCs in Pennsylvania had an average total margin of 25.8 percent in 2014 (Pennsylvania Health Care Cost Containment Council 2015).¹⁶

To minimize the burden on CMS and ASCs, CMS should create a streamlined process for ASCs to track and submit a limited amount of cost data. One such mechanism could be annual surveys of a random sample of ASCs, with mandatory response. CMS conducted cost surveys of a sample of ASCs in 1986 and 1994, and the Government Accountability Office conducted a survey of ASC costs in 2004. Another approach would be to require all ASCs to submit streamlined cost reports on an annual basis.

To enable the Commission to determine the relationship between Medicare payments and the costs of efficient ASCs, these facilities would optimally submit the following information:

- total costs for the facility;
- Medicare unallowable costs such as entertainment, promotion, and bad debt;
- the costs of clinical staff who bill Medicare separately, such as anesthesiologists and clinical nurse anesthetists (these costs would be excluded from the facility's costs because these clinicians are paid separately under Medicare);
- total charges across all payers and charges for Medicare patients (CMS could allocate total facility costs to Medicare based on Medicare's proportion of total charges); and
- total Medicare payments.

In addition to this information, CMS would need to collect data on specific cost categories to determine an appropriate input price index for ASCs. For example, CMS would need data on the share of ASCs' costs related to employee compensation, medical supplies, medical equipment, building expenses, and other professional expenses (such as legal, accounting, and billing services). CMS should use this information to examine the cost structure of ASCs and determine whether an existing Medicare price index is an appropriate proxy for ASC costs or an ASC-specific market basket should be developed.

CMS increased the ASC conversion factor by 0.7 percent in 2013, 1.3 percent in 2014, 1.4 percent in 2015, and 0.3 percent in 2016. The update for 2016 was based on a projected 0.8 percent increase in the CPI-U minus a 0.5 percent reduction for multifactor productivity growth, as mandated by the Patient Protection and Affordable Care Act of 2010 (PPACA).¹⁷

Update recommendation

In recommending an update to the ASC conversion factor for 2017, the Commission balanced the following objectives:

- maintain beneficiaries' access to ASC services;
- pay providers adequately;
- hold down the burden on the beneficiaries, workers, and firms who finance Medicare;
- maintain the sustainability of the Medicare program by appropriately restraining spending on ASC services;
- keep providers under financial pressure to constrain costs; and
- require ASCs to submit cost data.

In balancing these goals, the Commission concludes that the ASC update for 2017 should be eliminated and that the Congress should require ASCs to submit cost data.

RECOMMENDATION 5

The Congress should eliminate the update to the payment rates for ambulatory surgical centers for calendar year 2017. The Congress should also require ambulatory surgical centers to submit cost data.

RATIONALE 5

On the basis of our payment adequacy indicators and the importance of maintaining financial pressure on providers to constrain costs, we believe that ASC payment rates should not be increased for 2017. That is, the 2017 base payment rate under the ASC payment system should be the same as the base rate in 2016. The indicators of payment adequacy for which we have information are stable: The volume of services decreased slightly in 2014, while the number of Medicare-certified ASCs increased. Also, ASCs have adequate access to capital, and Medicare payments to ASCs have continued to grow. Moreover, even though we do not have cost data or sufficient information to assess quality, the indicators we have suggest that payments have been adequate.

As we have stated in prior reports, it is vital that CMS begin collecting cost data from ASCs without further delay. Cost data would enable the Commission to examine the growth of ASCs' costs over time and evaluate Medicare payments relative to the costs of an efficient

Revisiting the ambulatory surgical center market basket

CMS uses the consumer price index for all urban consumers (CPI-U) as the market basket to update ambulatory surgical center (ASC) payment rates. Because of our concern that the CPI-U likely does not reflect ASCs' cost structure, the Commission examined in 2010 whether an alternative market basket index would better measure changes in ASCs' input costs (Medicare Payment Advisory Commission 2010b). Using data from a Government Accountability Office (GAO) survey of ASC costs in 2004, we compared the distribution of ASC costs with the distribution of hospital and physician practice costs. We found that ASCs' cost structure is different from that of hospitals and physician offices.

Although CMS has historically used the CPI-U as the basis for Medicare's annual updates to ASC payments, the mix of goods and services in this price index likely does not reflect ASC inputs. The CPI-U is a measure of the average change in the price of consumer items that people buy for day-to-day living and is based on a wide range of goods and services, including food, housing, apparel, transportation, medical care, recreation, and education (Bureau of Labor Statistics 2015). The weight of each item is based on spending for that item

by a sample of urban consumers during the survey period. Although some of these items are probably used by ASCs, their share of spending on each item is likely very different from the CPI-U weight. For example, housing accounts for 42.2 percent of the entire CPI-U (Bureau of Labor Statistics 2015).

We explored whether one of two existing Medicare indexes would be an appropriate proxy for ASC input costs: the hospital market basket, which is used to update payments for inpatient and outpatient hospital services, or the practice expense component of the Medicare Economic Index (MEI), which measures changes in physicians' practice expenses. It is reasonable to expect that ASCs have many of the same types of costs as hospitals and physician offices, such as medical equipment, medical supplies, building-related expenses, clinical staff, administrative staff, and malpractice insurance.

We used ASC cost data from the GAO survey to compare the distribution of ASC costs with the distribution of hospital costs (derived from the hospital market basket) and physician practice expenses (derived from the practice expense portion of the MEI). Our March 2010 report details the method (Medicare

(continued next page)

provider, which would help inform decisions about the ASC payment update. Cost data are also needed to evaluate whether an alternative input price index would be an appropriate proxy for ASC costs.

IMPLICATIONS 5

Spending

- The Secretary has the authority to select an update mechanism for ASC payment rates and has decided to use the CPI-U as the basis for updating payments (Centers for Medicare & Medicaid Services 2007). PPACA requires that the update factor be reduced by a multifactor productivity measure. The currently projected CPI-U increase for 2017 is 2.2 percent, and the forecast of productivity growth for 2017 is 0.5 percent, resulting in a projected update of 1.7 percent

to the base payment rates for 2017 (IHS Global Insight 2015). However, we recommend that the update be eliminated. Therefore, relative to current Medicare law, our recommendation would decrease federal spending by less than \$50 million in the first year and by less than \$1 billion over five years.

Beneficiary and provider

- Because of the growth in the number of Medicare-certified ASCs and the increase in ASCs' revenue from Medicare, we do not anticipate that this recommendation will diminish beneficiaries' access to ASC services or providers' willingness or ability to provide those services.
- ASCs would incur some administrative costs to track and submit cost data. ■

Revisiting the ambulatory surgical center market basket (cont.)

Payment Advisory Commission 2010b). Although the GAO data are not sufficient for comparing each category of costs across settings, they suggest that ASCs have a cost structure different from hospitals and physician offices. ASCs appear to have a much higher share of expenses related to medical supplies and drugs than the other two settings, a much smaller share of employee compensation costs than hospitals, and a smaller share of all other costs (such as rent and capital costs) than physician offices.

Since our 2010 analysis, CMS has also considered whether the hospital market basket or the practice expense component of the MEI is a better proxy for ASC costs than the CPI-U (Centers for Medicare & Medicaid Services 2012). However, CMS believes that the hospital market basket does not align with the cost structure of ASCs because hospitals provide a much wider range of services than ASCs, such as room and board, emergency care, and inpatient care. Therefore, the agency concluded that it needs data on the cost inputs of ASCs to determine whether there is a better option than the CPI-U to measure changes in ASCs' input costs. CMS asked for public comment on the feasibility of collecting cost information from ASCs but did not propose a plan to collect cost data.

The ASC cost data from GAO used in our comparative analysis are 12 years old and do not contain information on several types of costs. Therefore, the Commission has recommended several times that the Congress require ASCs to submit new cost data to CMS (Medicare Payment Advisory Commission 2015, Medicare Payment Advisory Commission 2014b, Medicare Payment Advisory Commission 2013b, Medicare Payment Advisory Commission 2012, Medicare Payment Advisory Commission 2011b, Medicare Payment Advisory Commission 2010b). In 2013, 2014, and 2015, the Commission recommended eliminating the update to the ASC payment rates, meaning the ASC payment rates would not change from the previous year. In the future, the Commission may consider reductions in ASC payment rates from the previous year to motivate the collection of cost data. CMS should use cost data to examine whether an existing Medicare price index is an appropriate proxy for ASC costs or an ASC-specific market basket should be developed. A new ASC market basket could include the same types of costs that appear in the hospital market basket or MEI but with different cost weights that reflect the unique cost structure of ASCs. ■

Endnotes

- 1 For 84 percent of the Healthcare Common Procedure Coding System codes covered under the ASC payment system in 2007, payment rates were higher in 2008 than in 2007.
- 2 Because CMS updates payment rates in the OPPS and the PFS independently of each other, it is possible for the ASC payment rate for an office-based procedure to be based on the OPPS rate in one year and the PFS rate the next year (or vice versa).
- 3 ASCs and HOPDs have the same payment rates for drugs that are paid for separately under the OPPS and for devices that have pass-through status.
- 4 GAO surveyed a random sample of 600 ASCs to obtain cost data from 2004; they received reliable cost data from 290 facilities.
- 5 The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 eliminated a prior requirement that the Secretary collect cost data from ASCs every five years.
- 6 Because some states (Maryland, Idaho, and Georgia) have a disproportionately high number of ASCs per beneficiary, we produced these results by weighting beneficiaries so that in each state the percentage of beneficiaries receiving care in ASCs matched the national percentage. This process prevented idiosyncrasies in states that have high concentrations of ASCs from biasing the results. The analysis excluded beneficiaries who received services that Medicare does not cover in ASCs.
- 7 These results are based on data from 268 ASCs and 170 hospitals.
- 8 The sample of freestanding ASCs in the NSAS includes facilities listed in the 2005 Verispan Freestanding Outpatient Surgery Center Database and Medicare-certified ASCs from CMS's Provider of Services file (Cullen et al. 2009).
- 9 The study by Suskind and colleagues also found that ASCs are more likely to enter a market that did not previously have an ASC if the outpatient procedures in that market are concentrated among a relatively small number of providers, which implies relatively low competition in that market.
- 10 Whether a state has certificate-of-need (CON) laws for ASCs appears to affect the number of ASCs in the state. Twenty-seven states and the District of Columbia (DC) have CON laws for ASCs. Each of the 12 states with the fewest ASCs per FFS beneficiary, as well as DC, has a CON law, while only 3 of the 10 states that have the most ASCs per FFS beneficiary have CON laws. Among these three states, Maryland and Georgia have exceptions in their CON requirements that make it easier to establish new ASCs.
- 11 By statute, coinsurance for a service paid under the OPPS cannot exceed the hospital inpatient deductible (\$1,288 in 2016). The ASC payment system does not have the same limitation on coinsurance, and for a few services, the ASC coinsurance exceeds the inpatient deductible. In these instances, the ASC coinsurance exceeds the OPPS coinsurance.
- 12 For the 2014 payment year, CMS changed the status of many services covered under the ASC payment system from separately payable to packaged with a primary service. Three of the services in the 20 most frequently provided services in 2009 are in this category, and we excluded them from this analysis.
- 13 AmSurg Corp. owns 250 ASCs in 34 states and the District of Columbia in partnership with approximately 2,000 physicians. About 13 percent of AmSurg's ASC revenue is from Medicare, with another 75 percent from commercial and managed care payers (AmSurg Corp. 2014).
- 14 The Commission also described its principles for a VBP program for ASCs in a letter to the Congress commenting on the Secretary's report to the Congress on a VBP program for ASCs (Medicare Payment Advisory Commission 2011a).
- 15 The ASC Quality Reporting Program includes a measure of hospital transfer or admission after an ASC procedure when the patient is transferred directly to a hospital from an ASC. We are suggesting that the measure be expanded to include a hospital admission after the patient returns home from an ASC procedure.
- 16 The margins for ASCs have important differences from the margins in other sectors such as hospitals. In particular, the cost data used to determine margins for most ASCs do not include the compensation for physician owners or the taxes paid on that compensation.
- 17 Unlike update factors for other providers, such as the hospital market basket, the CPI-U is an output price index that already accounts for productivity changes (Centers for Medicare & Medicaid Services 2012). Nevertheless, CMS is mandated to subtract multifactor productivity growth from the ASC update factor.

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CHAPTER

6

Outpatient dialysis services

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

- 6** The Congress should increase the outpatient dialysis base payment rate by the update specified in current law for calendar year 2017.

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

.....
(Additionally, the Commission reiterates its March 2014 recommendation for redesigning the low-volume payment adjustment and auditing dialysis facilities' cost reports. See text box, p. 167.)

Outpatient dialysis services

Chapter summary

Outpatient dialysis services are used to treat the majority of individuals with end-stage renal disease (ESRD). In 2014, about 383,000 beneficiaries with ESRD on dialysis were covered under fee-for-service (FFS) Medicare and received dialysis from about 6,300 dialysis facilities. Since 2011, Medicare has paid for outpatient dialysis services using a prospective payment system (PPS) that is based on a bundle of services that includes certain dialysis drugs and ESRD-related clinical laboratory tests that were previously paid separately. In 2014, Medicare expenditures for outpatient dialysis services were \$11.2 billion, a 1 percent increase compared with 2013 Medicare dialysis expenditures.

Assessment of payment adequacy

Our payment adequacy indicators for outpatient dialysis services are generally positive.

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

- **Capacity and supply of providers**—Dialysis facilities appear to have the capacity to meet demand. Growth in the number of dialysis treatment stations has kept pace with growth in the number of dialysis beneficiaries.

In this chapter

- Are Medicare payments adequate in 2016?
.....
- How should Medicare payments change in 2017?
.....
- Regulatory improvements to the dialysis PPS
.....

- **Volume of services**—Between 2013 and 2014, the number of FFS dialysis beneficiaries and dialysis treatments each grew by 2 percent. At the same time, the per treatment use of most dialysis injectable drugs (including erythropoietin, which is used in anemia management) continued to decline, but at a slower rate than during the initial years of the PPS (2011 and 2012). The dialysis PPS created an incentive for providers to be more judicious about their provision of dialysis drugs.

Quality of care—Using CMS data, we looked at changes in quality indicators between 2010 and 2014. Rates of emergency department use modestly increased, while rates of mortality and hospitalization declined. With regard to anemia management, negative cardiovascular outcomes associated with high erythropoiesis-stimulating agent use have declined. Beneficiaries’ use of home dialysis, which is associated with improved patient satisfaction and quality of life, increased from 8 percent to 10 percent of dialysis beneficiaries. However, home dialysis growth slowed between September 2014 and the first three months of 2015 because of a shortage of the solutions needed for the predominant home method, peritoneal dialysis.

Providers’ access to capital—Information from investment analysts suggests that access to capital for dialysis providers continues to be adequate. The number of facilities, particularly for-profit facilities, continues to increase.

Medicare payments and providers’ costs—Our analysis of Medicare payments and costs is based on 2013 and 2014 claims and cost report data submitted to CMS by freestanding dialysis facilities. During this period, cost per treatment increased by 1 percent, while Medicare payment per treatment decreased by about 1 percent (accounting for the sequester). Taking into account the sequester, we estimate that the aggregate Medicare margin was 2.1 percent in 2014, and the rate of marginal profit—that is, the rate at which Medicare payments exceed providers’ marginal cost—was nearly 18 percent. The 2016 Medicare margin is projected at 0.8 percent. The evidence suggests that payments are adequate; the Commission recommends that the Congress increase the outpatient dialysis base payment rate by the update specified in current law for calendar year 2017.

Concerns about Medicare’s PPS to pay for dialysis services

The Commission continues to have two concerns about the dialysis PPS:

- The low-volume payment adjustment does not sufficiently target facilities that are both low volume and isolated. Consequently, some facilities that receive this payment adjustment are in close proximity to other facilities. Only low-volume

facilities that are necessary to maintain access—those located in isolated areas—should receive enhanced payment.

- CMS has not yet examined the appropriateness of the costs that facilities include in their cost reports, which could be determined through cost report audits, and has used unaudited data to refine the ESRD market basket and the PPS payment adjustment factors. If facilities' costs are overstated, the Medicare margin—which the Commission uses as an indicator of payment adequacy—will be understated. Historically, some facilities have overstated costs on their cost reports. Auditing dialysis facilities' cost reports is necessary for good fiscal management.

To address these concerns, the Commission reiterates its March 2014 recommendation applicable to redesigning the low-volume payment adjustment and auditing dialysis facilities' cost report data. ■

Dialysis treatment choices

Dialysis replaces the filtering function of the kidneys when they fail. The two types of dialysis—hemodialysis and peritoneal dialysis (PD)—remove waste products from the bloodstream differently. Within these two types of dialysis, patients may select various protocols.

Most dialysis patients travel to a treatment facility to undergo hemodialysis three times per week, although patients can also undergo hemodialysis at home. Hemodialysis uses an artificial membrane encased in a dialyzer to filter the patient's blood. Because of recent clinical findings, there is increased interest in more frequent hemodialysis, administered five or more times per week while the patient sleeps, and short (two to three hours per treatment) daily dialysis administered during the day. New research also has increased interest in the use of "every-other-day" hemodialysis; reducing the two-day gap in thrice-weekly hemodialysis could be linked to improved outcomes. See online Appendix 6-A to the Commission's March 2013 report for more discussion of the use of more frequent hemodialysis and home dialysis (available at http://www.medpac.gov/documents/reports/mar13_ch06_appendix.pdf?sfvrsn=0).

PD, the most common form of home dialysis, uses the lining of the abdomen (peritoneum) as a filter to clear wastes and extra fluid and is usually performed independently in the patient's home or workplace five to seven days a week. During treatments, a chemical solution (dialysate) is infused into the patient's abdomen through a catheter. This infusion process (an exchange) is done either manually (continuous ambulatory peritoneal dialysis) or using a machine (continuous cycler-assisted peritoneal dialysis).

Each dialysis method has advantages and disadvantages—no one method is best for everyone. People choose a particular dialysis method for many reasons, including quality of life, patients' awareness of different treatment methods and personal preferences, and physician training and recommendations. The use of home dialysis has grown modestly since 2009, a trend that has continued under the dialysis prospective payment system. Some patients switch methods when their conditions or needs change. Although most patients still undergo in-center dialysis, home dialysis remains a viable option for many patients because of advantages such as increased patient satisfaction, better health-related quality of life, and fewer transportation challenges compared with in-center dialysis. ■

Background

End-stage renal disease (ESRD) is the last stage of chronic kidney disease and is characterized by permanent, irreversible kidney failure. Patients with ESRD include those who are treated with dialysis—a process that removes wastes and fluid from the body—and those who have a functioning kidney transplant. Because of the limited number of kidneys available for transplantation and the variation in patients' suitability for transplantation, about 70 percent of ESRD patients undergo maintenance dialysis (see text box on dialysis treatment choices). Patients receive additional items and services related to their dialysis treatments, including dialysis drugs to treat conditions such as anemia and bone disease resulting from the loss of kidney function.¹

In 2014, about 383,000 ESRD beneficiaries on dialysis were covered under fee-for-service (FFS) Medicare and

received dialysis from nearly 6,300 dialysis facilities.² Since 2011, Medicare has been paying facilities using a prospective payment system (PPS) payment bundle that includes dialysis drugs (for which facilities previously received separate payments) and services for which other Medicare providers (such as clinical laboratories) previously received separate payments. In 2014, Medicare Part B expenditures for outpatient dialysis services included in the payment bundle were \$11.2 billion. In addition, Part D payments for dialysis drugs—calcimimetics and phosphate binders—that are not yet included in the PPS payment bundle totaled \$1.3 billion in 2013 (the most recent data available).

Characteristics of fee-for-service dialysis beneficiaries, 2014

Although Medicare generally does not provide disease-specific entitlement, the 1972 amendments to the Social Security Act extended Medicare benefits to people with

**TABLE
6-1****FFS dialysis beneficiaries are disproportionately younger, male, and African American compared with all Medicare FFS beneficiaries, 2014**

	Percent of FFS:	
	Dialysis beneficiaries	All beneficiaries
Age		
Under 45 years	12%	4%
45–64 years	38	13
65–74 years	26	47
75–84 years	18	23
85+ years	6	12
Sex		
Male	55	46
Female	45	54
Race		
White	48	81
African American	36	10
All others	16	8
Residence, by type of county		
Urban	82	78
Rural micropolitan	11	13
Rural, adjacent to urban	5	6
Rural, not adjacent to urban	2	4
Frontier	1	1

Note: FFS (fee-for-service). Urban counties contain a cluster of 50,000 or more people, rural micropolitan counties contain a cluster of 10,000 to 50,000 people, rural adjacent counties are adjacent to urban areas and without a city of at least 10,000 people, and rural nonadjacent counties are not adjacent to an urban area and do not have a city with at least 10,000 people. Frontier counties have six or fewer people per square mile. Totals may not sum to 100 percent due to rounding.

Source: Data compiled by MedPAC from 2014 claims submitted by dialysis facilities to CMS and the 2014 CMS denominator file.

ESRD, including those under age 65. To qualify for the ESRD program, an individual must be fully or currently insured under the Social Security or Railroad Retirement program, entitled to benefits (i.e., has met the required work credits) under the Social Security or Railroad Retirement program, or be the spouse or dependent child of an eligible beneficiary.

Most dialysis beneficiaries have FFS coverage. The statute prohibits enrollment of individuals with ESRD in

Medicare Advantage (MA) plans. However, beneficiaries who were enrolled in a managed care plan before an ESRD diagnosis can remain in the plan after they are diagnosed. In addition, CMS permits the enrollment of ESRD beneficiaries with a functioning kidney transplant in MA. In 2014, about 15 percent of ESRD beneficiaries were enrolled in MA plans; by comparison, about 30 percent of all Medicare beneficiaries were enrolled in MA plans. In 2000, the Commission recommended that the Congress lift the prohibition on ESRD beneficiaries enrolling in MA (Medicare Payment Advisory Commission 2000).

In 2014, a majority (nearly 90 percent) of FFS dialysis beneficiaries were enrolled in Part D or had other sources of creditable drug coverage. In 2014, about 70 percent of FFS dialysis beneficiaries with Part D coverage received the low-income subsidy, and about 11 percent of FFS dialysis beneficiaries in 2014 had either no Part D coverage or coverage less generous than Part D's standard benefit.

Compared with all Medicare FFS beneficiaries, FFS dialysis beneficiaries are disproportionately young, male, and African American, and they are more likely to reside in urban areas (Table 6-1). In 2014, 76 percent of FFS dialysis beneficiaries were less than 75 years old, 55 percent were male, and 36 percent were African American. By comparison, of all FFS Medicare beneficiaries, 65 percent were less than 75 years old, 46 percent were male, and 10 percent were African American. A greater share of dialysis beneficiaries reside in urban areas compared with all FFS beneficiaries (82 percent vs. 78 percent, respectively). In 2014, FFS dialysis beneficiaries were more likely to be dually eligible for Medicaid and Medicare, compared with all Medicare FFS beneficiaries (48 percent vs. 19 percent, respectively; data not shown).

Between 2003 and 2013 (most recent data available), the adjusted rate (or incidence) of new ESRD cases (which includes patients of all types of health coverage who initiate dialysis or receive a kidney transplant) decreased by 1 percent per year, from 386 per million people to 351 per million people (United States Renal Data System 2015). Between 2009 and 2013, the adjusted rate declined across all races and ethnicities (White, African American, Asian Americans, Native American, and Hispanic) and all age groups; overall, the decrease averaged 2 percent per year.³ In 2014, we estimate that approximately 82,000 FFS dialysis beneficiaries were new to dialysis, and nearly

half (45 percent) were under age 65 and thus entitled to Medicare based on ESRD (with or without disability).⁴

Better primary care management of the risk factors for kidney disease—particularly hypertension and diabetes, which together are the primary cause of 7 of 10 new ESRD cases—can help prevent or delay the illness’s onset (United States Renal Data System 2015). Although risk-factor control for hypertension and diabetes has improved for all racial and ethnic groups in Medicare, disparities remain between African Americans and other racial groups. The Commission has long argued that primary care providers are undervalued in Medicare’s fee schedule and has made recommendations to support primary care, which in turn could support better management of kidney disease risk factors.

Since 2011, CMS pays for dialysis services under the dialysis PPS

To treat ESRD, dialysis beneficiaries receive care from two principal providers: (1) the clinicians (typically nephrologists) who prescribe and manage the provision of dialysis and establish the beneficiary’s plan of care and (2) facilities that provide dialysis treatments in a dialysis center or support and supervise the care of beneficiaries on home dialysis. Medicare uses different methods to pay for ESRD clinician and facility services. Clinicians receive a monthly capitated payment established in the Part B physician fee schedule for outpatient dialysis-related management services, which varies based on the number of visits per month, the beneficiary’s age, and whether the beneficiary receives dialysis in a facility or at home. While this report section focuses on Medicare’s payments to facilities, it is important to recognize that facilities and clinicians collaborate to care for dialysis beneficiaries. One acknowledgment of the need for collaboration is Medicare’s Comprehensive ESRD Care Initiative, a shared savings program involving facilities and nephrologists that began in 2015.

To improve provider efficiency, in 2011, Medicare began a PPS for outpatient dialysis services that expanded the payment bundle to include dialysis drugs, laboratory tests, and other ESRD items and services that were previously separately billable. In addition, effective 2012, outpatient dialysis payments are linked to the quality of care that dialysis facilities provide. These changes, mandated by the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA), were based on the Commission’s recommendation to modernize the outpatient dialysis

payment system (Medicare Payment Advisory Commission 2001). We contended that Medicare could provide incentives for the efficient delivery of quality care by broadening the payment bundle (to include commonly furnished drugs and services that providers formerly billed separately) and by linking payment to quality. The PPS is designed to create incentives for facilities to provide services more efficiently by reducing previous incentives inherent in the former payment method to overuse drugs.

Under the outpatient dialysis PPS, the unit of payment is a single dialysis treatment. In 2015, the base payment rate was adjusted for patient-level characteristics (age, body measurement characteristics, onset of dialysis, and selected acute and chronic comorbidities) and facility-level factors (low treatment volume and local input prices).⁵ Medicare pays facilities furnishing dialysis treatments in-facility or in a patient’s home for up to three treatments per week, unless there is documented medical justification for more than three weekly treatments. In addition, in 2015, the ESRD Quality Incentive Program held facilities responsible for the quality of care they provided, using six clinical measures and four reporting measures. Up to 2 percent of a facility’s payment is linked to these quality measures. The Commission’s *Payment Basics* provides more information about Medicare’s method of paying for outpatient dialysis services (available at <http://medpac.gov/documents/payment-basics/outpatient-dialysis-services-payment-system-15.pdf?sfvrsn=0>).

Since its implementation in 2011, the dialysis PPS has undergone two significant changes. First, effective 2014, the base payment rate was rebased to account for the decline in dialysis drug use under the dialysis PPS. Based on statutory and regulatory changes, CMS set the 2014 base payment at \$239.02. The Commission’s March 2014 report to the Congress provides more information about the rebasing of the dialysis base payment rate (http://medpac.gov/documents/reports/mar14_ch06.pdf?sfvrsn=0).

Second, beginning in 2016, CMS uses recalibrated and redefined patient-level and facility-level payment adjustments to calculate each patient’s adjusted payment per treatment. These adjusters are applied to the base payment rate to account for factors that may affect treatment costs. Table 6-2 (p. 154) compares the payment adjusters implemented in 2011 and 2016, and a text box (p. 154) summarizes the changes to the dialysis PPS that began in 2016.

Beginning in 2016, the dialysis PPS uses refined payment adjusters

The American Taxpayer Relief Act of 2012 required that the Secretary, no later than January 1, 2016, analyze the case-mix payment adjustments that are applied to the base rate under the current dialysis prospective payment system (PPS) and make appropriate revisions to the adjustments. Through the rule-making process, CMS proposed and finalized recalibrated patient- and facility-level payment adjustment factors based on regression analyses of 2012 and 2013 dialysis facilities' cost reports and claims data (Table 6-2). Beginning in 2016, CMS uses the recalibrated payment adjusters to calculate each patient's adjusted payment rate; other major changes to the dialysis PPS that have begun in 2016 are:

- the removal of two comorbidity payment adjustment factors (bacterial pneumonia and monoclonal gammopathy) because of differences in diagnostic and medical documentation requirements;

- the use of a new rural payment adjuster that is applied to all facilities not located in urban areas. Medicare defines urban areas as a metropolitan statistical area or a metropolitan division; and
- the use of a revised definition of the low-volume payment adjuster.

In our comment letter to CMS on the dialysis PPS changes that CMS implemented in 2016, the Commission raised several methodological concerns about the refinements, including the specification of the regression model and the patient-level adjusters. The Commission's comment letter provides more information about our methodological concerns with the 2016 PPS (available at <http://medpac.gov/documents/comment-letters/medpac-comment-on-cms-s-proposed-rule-on-the-end-stage-renal-disease-prospective-payment-system-and-quality-incentive-program.pdf?sfvrsn=0>). ■

**TABLE
6-2**

Payment adjustment factors for the dialysis PPS implemented in 2011 and 2016

Payment adjuster	Value of payment adjusters	
	Implemented in CY 2011	Implemented in CY 2016
Age		
18–44 years	1.171	1.257
45–59 years	1.013	1.068
60–69 years	1.000	1.070
70–79 years	1.011	1.000
80+ years	1.016	1.109
Body surface area (per 0.1 m ²)	1.020	1.032
Underweight (body mass index < 18.5 kg/m ²)	1.025	1.017
Time since onset of dialysis (<4 months)	1.510	1.327
Comorbidities		
Pericarditis	1.114	1.040
Gastrointestinal tract bleeding	1.183	1.082
Bacterial pneumonia	1.135	—
Hereditary hemolytic/sickle cell anemia	1.072	1.192
Myelodysplastic syndrome	1.099	1.095
Monoclonal gammopathy	1.024	—
Facility low-volume status	1.189	1.239
Facility rural status	—	1.008

Note: PPS (prospective payment system), CY (calendar year). Payment adjustment factors are for ages 18 and older. Dashes denote that factor was not used to adjust payment.

Source: Center for Medicare & Medicaid Services 2015.

Are Medicare payments adequate in 2016?

To address whether payments for 2016 are adequate to cover the costs that efficient providers incur and how much providers' costs should change in the update year (2017), we examine several indicators of payment adequacy. We assess beneficiaries' access by examining the capacity of dialysis facilities and changes over time in the volume of services provided, quality of care, providers' access to capital, and the relationship between Medicare's payments and facilities' costs. Most of our payment adequacy indicators for dialysis services are positive:

- Provider capacity is sufficient.
- Volume growth as measured by the number of dialysis treatments has kept pace with growth in the number of beneficiaries.
- Some quality measures show improvement, while others need improvement.
- Provider access to capital is sufficient.
- The 2014 Medicare outpatient dialysis margin is estimated at 2.1 percent, and the rate of marginal profit is nearly 18 percent.

Beneficiaries' access to care: Indicators continue to be favorable

Our analysis of access indicators—including the capacity of providers to meet beneficiary demand and changes in the volume of services—shows that beneficiaries' access to care remains favorable.

Capacity has kept pace with patient demand

Growth in the number of dialysis facilities and treatment stations alongside growth in dialysis beneficiaries suggests that between 2009 and 2014, provider capacity kept up with demand for care. During that period, the number of facilities increased annually by 3 percent; facilities' capacity to provide care—as measured by dialysis treatment stations—also grew 3 percent annually (Table 6-3, p. 156). By contrast, between 2009 and 2014, the number of beneficiaries grew 2 percent annually (data not shown). Capacity at facilities that were freestanding and for profit each grew by 4 percent annually while capacity at facilities that were hospital based and nonprofit decreased annually (–5 percent and –2 percent,

respectively). Capacity at urban facilities grew at 3 percent per year while capacity at rural facilities grew at 2 percent per year. Dialysis capacity between 2013 and 2014 grew modestly faster, on average, relative to 2009 to 2014.

Providers of outpatient dialysis services

In 2014, there were roughly 6,300 dialysis facilities in the United States. Since the late 1980s, for-profit, freestanding facilities have provided the majority of dialysis treatments (Rettig and Levinsky 1991). In 2014, freestanding facilities furnished 94 percent of FFS treatments, and for-profit facilities furnished about 90 percent (Table 6-3, p. 156). In 2014, the capacity of facilities located in urban and rural areas was generally consistent with where FFS dialysis beneficiaries lived.

Two large dialysis organizations (LDOs) dominate the dialysis industry. In 2014, these two LDOs accounted for about 71 percent of all facilities and 75 percent of all Medicare treatments. In addition to operating most dialysis facilities, the two LDOs are each vertically integrated. One manufactures and distributes renal-related pharmaceutical products (e.g., phosphate binders), is the leading supplier of dialysis products (such as hemodialysis machines and dialyzers) to other dialysis companies, and operates a drug and device clinical development company that focuses on the clinical development of new renal therapies. Both organizations operate an ESRD-related laboratory, a pharmacy, and one or more centers that provide vascular access services; they provide ESRD-related disease management services; and they operate dialysis facilities internationally. Both organizations have, in recent years, acquired physician and hospital groups.

Together, both LDOs have grown faster after the PPS's implementation than before the PPS. Between 2011 and 2014, the total number of facilities operated by the LDOs grew in aggregate by about 21 percent. By comparison, before the PPS, between 2008 and 2011, the two LDOs grew in aggregate by about 18 percent.

Type of facilities that closed and their effect on beneficiaries' access to care

Each year, we assess the type of facilities that closed and whether certain groups of Medicare dialysis beneficiaries are disproportionately affected by facility closures. Using facilities' claims submitted to CMS and CMS's Dialysis Compare database and Provider of Services file, we compared the characteristics of beneficiaries treated by facilities that closed in 2013 with those treated by facilities

**TABLE
6-3****Increasing number and capacity of freestanding, for-profit, and large dialysis organizations**

	2014				Average annual percent change			
	Total number of FFS treatments (in millions)	Total number of facilities	Total number of stations	Mean number of stations	Number of facilities		Number of stations	
					2009–2013	2013–2014	2009–2013	2013–2014
All	44.9	6,300	110,700	18	3%	5%	3%	4%
	Percent of total							
Freestanding	94%	93%	94%	18	4	6	4	5
Hospital based	6	7	6	14	–5	–5	–5	–6
Urban	85	80	83	18	3	5	3	4
Rural, micropolitan	11	13	11	16	1	3	2	2
Rural, adjacent to urban	3	5	4	13	2	0	3	1
Rural, not adjacent to urban	1	3	2	12	1	3	2	3
Frontier	0.2	0.6	0.4	11	–1	6	3	6
For profit	90	87	88	18	4	6	4	5
Nonprofit	10	13	12	17	–3	–2	–2	–1
Two largest dialysis organizations	75	71	73	18	6	5	7	4
All others	25	29	27	17	–4	4	–4	3

Note: FFS (fee-for-service). Urban counties contain a cluster of 50,000 or more people, rural micropolitan counties contain a cluster of 10,000 to 50,000 people, rural adjacent counties are adjacent to urban areas and without a city of at least 10,000 people, and rural nonadjacent counties are not adjacent to an urban area and do not have a city with at least 10,000 people. Frontier counties have six or fewer people per square mile. Totals may not sum to 100 percent due to rounding.

Source: Compiled by MedPAC from the 2009, 2013, and 2014 Dialysis Compare database from CMS and 2014 claims submitted by freestanding and hospital-based dialysis facilities to CMS.

that provided dialysis in 2013 and 2014, the most current years for which complete data are available.

Between 2013 and 2014, the number of dialysis treatment stations—a measure of providers' capacity—increased by 4 percent (Table 6-3). Compared with facilities that treated beneficiaries in both years, facilities that closed in 2013 (about 40 facilities) were more likely to be hospital based, nonprofit, and smaller (as measured by the number of dialysis treatment stations), which is consistent with long-term trends in supply of dialysis providers.

Few dialysis beneficiaries (about 2,300 individuals) were affected by facility closures in 2013. Our analysis found that beneficiary groups who were disproportionately

affected included beneficiaries who were White and older. Our analysis of claims data suggests that beneficiaries affected by these closures obtained care elsewhere.

Volume of services

To assess changes in the volume of dialysis services, we examined recent trends in the number of dialysis treatments provided to beneficiaries and in the use of injectable drugs administered during dialysis.

Trends in number of dialysis treatments provided

Between 2013 and 2014, total dialysis treatments grew at an average annual rate that kept pace with the average annual growth in the number of total FFS dialysis beneficiaries—2 percent per year. During this period,

**TABLE
6-4**

Use per treatment of dialysis drugs has declined under the outpatient dialysis PPS

Dialysis drug	Mean units per treatment*			Aggregate percent change		
	2007	2010	2014	2007-2010	2010-2013	2013-2014
ESAs						
Erythropoietin	5,532	5,214	2,860	-6%	-44%	-2%
Darbepoetin alfa	1.52	1.26	0.75	-17	-55	33
Iron agents						
Sodium ferric gluconate	0.39	0.15	0.12	-62	-3	-14
Iron sucrose	12.3	16.0	12.9	30	-21	3
Ferumoxytol	N/A**	0.8	0.02	N/A**	-97	-29
Vitamin D agents						
Paricalcitol	2.3	2.3	0.4	-2	-40	-72
Doxercalciferol	0.8	0.9	1.9	8	38	59
Calcitriol	0.16	0.13	0.03	-17	-63	-29
Antibiotics						
Daptomycin	0.097	0.217	0.144	123	-29	-7
Vancomycin	0.029	0.024	0.017	-18	-22	-12
Other drugs						
Levocarnitine	0.017	0.010	0.003	-43	-68	-12
Alteplase	0.023	0.020	0.003	-12	-85	-17

Note: PPS (prospective payment system), ESA (erythropoiesis-stimulating agent), N/A (not available). Individual units per treatment are rounded; the aggregate percent change is calculated using unrounded units per treatment.

*Each drug is reported using its own drug units.

**Drug use not available because drug was not marketed in the United States in 2007, 2008, and 2009.

Source: MedPAC and Acumen analysis of 2007–2014 claims submitted by dialysis facilities to CMS.

the non-annualized number of dialysis treatments per beneficiary has remained steady at about 117 treatments.

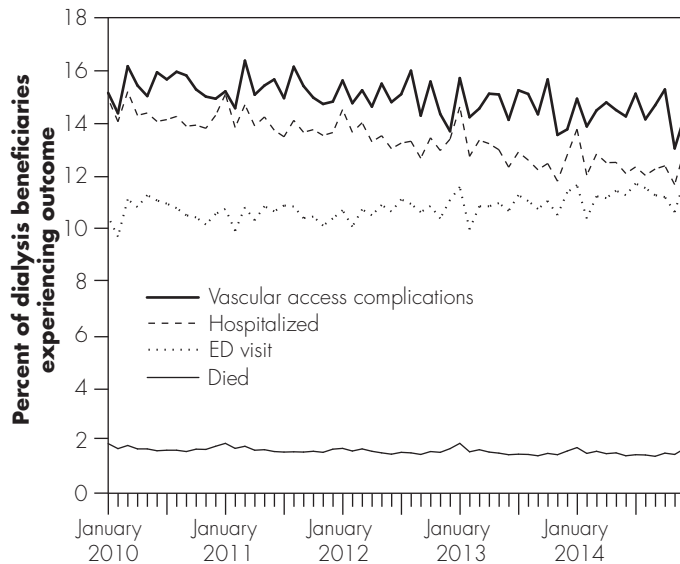
Use of most dialysis drugs has declined under the outpatient dialysis PPS Because CMS based the bundled payment rate in the dialysis PPS on a per treatment basis and on 2007 utilization data, we examined changes between 2007 and 2014 (the most current year for which complete data are available) in the use per treatment for the leading 12 dialysis drugs and aggregated them into 4 therapeutic classes—erythropoiesis-stimulating agents (ESAs), iron agents, vitamin D agents, and antibiotics.⁶ We also examined changes in the use of drugs between 2010 (the year before the start of the PPS) and 2013 and between 2013 and 2014.

The dialysis PPS increased the incentive for providers to be more judicious in providing dialysis drugs since those drugs are included in the payment bundle. Under the prior

payment method, dialysis drugs were paid according to the number of units of the drug administered—in other words, the more units of a drug provided, the higher the Medicare payment.

Between 2007 and 2014, the use of most dialysis drugs declined. During this period, use of eight drugs declined while three increased (ferumoxytol was not marketed in the United States in 2007) (Table 6-4). Between 2007 and 2014, the per treatment dose of both ESAs declined—erythropoietin by 48 percent and darbepoetin alfa by 50 percent.

However, most of the decline in the use of dialysis drugs has occurred under the PPS. For example, between 2010 and 2014, the mean per treatment units of both ESAs declined—erythropoietin by 45 percent and darbepoetin alfa by 40 percent. For ESAs, some of this decline may also have stemmed from clinical evidence showing that higher doses of these drugs led to increased risk of

**FIGURE
6-1****Changes in key outcomes for
dialysis beneficiaries, 2010–2014**

Note: ED (emergency department). Data are compiled on a monthly basis by CMS.

Source: CMS's end-stage renal disease prospective payment system overview of 2011–2014 claims-based monitoring program.

morbidity and mortality, which resulted in the Food and Drug Administration changing the ESA label in 2011.

Between 2013 and 2014, the use of most dialysis drugs continued to decline but at a lower rate than during the initial years of the PPS. The per treatment use of three drugs increased between 2013 and 2014: Use of darbepoetin alfa, an ESA, increased by 33 percent (from 0.56 mcg to 0.75 mcg per treatment); use of iron sucrose increased by 3 percent (from 12.55 mg to 12.90 mg per treatment); and use of doxercalciferol, a vitamin D agent, increased by 59 percent (from 1.2 mcg to 1.9 mcg per treatment) (Table 6-4, p. 157; 2013 data not shown).

Under the PPS, drug utilization and average sales price (ASP) data suggest increased competition between the two principal vitamin D agents, which are both in the PPS payment bundle. Between 2010 and 2014, per treatment use of paricalcitol, the more costly vitamin D drug (according to Medicare ASP data), declined while per treatment use of doxercalciferol, the less costly vitamin D drug, increased (Table 6-4, p. 157). Between 2010 and 2015 (the latest year pricing data are available), the ASP

price per unit for both of these two products declined by 60 percent. By contrast, for all drugs in the bundle, the price per unit increased by about 15 percent during this period.⁷

Quality of care

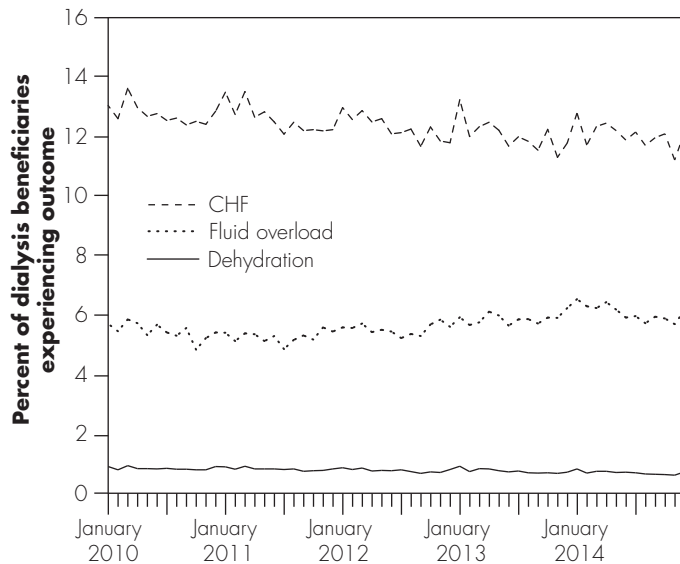
This year's quality analysis focuses on changes in quality indicators since CMS implemented the PPS in 2011 and, except where indicated, uses CMS's monthly monitoring data (Centers for Medicare & Medicaid Services 2014). From 2010 to 2014, monthly mortality and hospitalization rates modestly declined; emergency department (ED) use remained relatively unchanged. Regarding anemia management, negative cardiovascular outcomes associated with high ESA use generally declined. During this period, use of home dialysis, which is associated with improved patient satisfaction and quality of life, increased modestly. However, home dialysis growth slowed between 2014 and the first three months of 2015 because of a shortage of the solutions needed for the predominant home method, peritoneal dialysis (PD).

In assessing quality, we also examine the multiple factors that affect access to kidney transplantation. This procedure is widely regarded as a better ESRD treatment option than dialysis in terms of patients' clinical and quality of life outcomes, and demand far outstrips supply. We also discuss CMS's new payment model, which aims to improve the health outcomes of dialysis beneficiaries while lowering the total Medicare Part A and Part B per capita spending on these beneficiaries. Last, we discuss CMS's two quality measurement systems, the ESRD Quality Incentive Program (QIP) and the Dialysis Star Ratings Systems.

Quality under the PPS

Figure 6-1 presents changes in key patient outcomes between 2010 and 2014; during this period, the proportion of dialysis beneficiaries who:

- died declined from an average of 1.7 percent per month to 1.5 percent per month.
- used the ED increased modestly from an average of 10.7 percent per month to 11.3 percent per month.
- were hospitalized declined each year from an average of 14.3 percent per month to 12.5 percent. This finding is consistent with the trend of declining inpatient admissions for all Medicare FFS beneficiaries during this period.

**FIGURE
6-2****Changes in fluid
management, 2010–2014**

Note: CHF (congestive heart failure). Data are compiled on a monthly basis by CMS.

Source: CMS's end-stage renal disease prospective payment system overview of 2010–2014 claims-based monitoring program.

- experienced a vascular access complication on hemodialysis declined each year from an average of 15.4 percent to 14.4 percent per month.

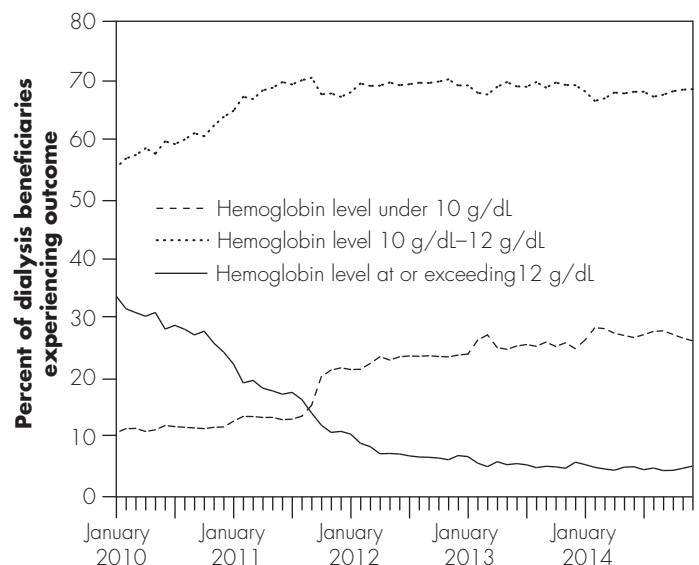
Beneficiaries' fluid management is related to factors such as the adequacy of the dialysis procedure and patient compliance. Figure 6-2 shows that, between 2010 and 2014, the share of dialysis beneficiaries diagnosed with congestive heart failure or dehydration declined slightly while the share of beneficiaries diagnosed with fluid overload increased slightly.

Process and health outcome measures reflect the change in anemia management under the PPS. From 2010 to 2014:

- Median monthly hemoglobin levels fell from 11.4 g/dl to 10.5 g/dL.⁸ According to the Commission's analysis, the proportion of dialysis beneficiaries with higher hemoglobin levels declined, and the proportion with lower hemoglobin levels increased (which is generally associated with lower ESA use) (Figure 6-3).

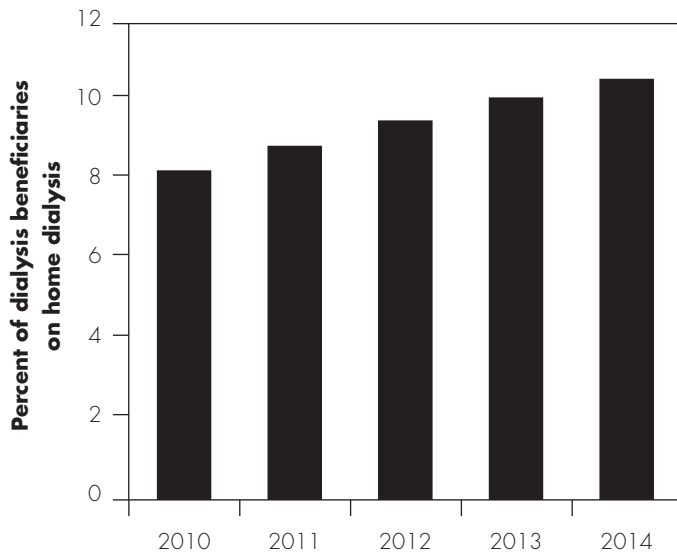
- The proportion of beneficiaries receiving blood transfusions increased from 2.7 percent to 3.4 percent per month in 2012 and then decreased to 3.0 percent per month.⁹
- The cumulative share of beneficiaries experiencing negative cardiovascular outcomes—stroke, acute myocardial infarction, and heart failure—associated with higher ESA use generally declined.

As discussed in our June 2014 report, clinical process measures (such as hemoglobin levels) may exacerbate the incentives in FFS to overprovide and overuse services, including overuse of ESAs before the PPS was implemented in 2011 (Medicare Payment Advisory Commission 2014b). In addition, some clinical process measures may be only weakly correlated with better health outcomes. A given hemoglobin level may reflect adequate anemia management for one patient, whereas the same level may lead to a different response in a different patient. Focusing on clinical outcomes, such as rates of stroke, is a better indicator of anemia management in the dialysis population. The Commission believes that Medicare should transition over the next decade to a quality-measurement system that uses a small number of population-based outcome measures.

**FIGURE
6-3****Changes in hemoglobin
levels, 2010–2014**

Note: Data are compiled on a monthly basis.

Source: MedPAC analysis of 2010–2014 claims submitted by dialysis facilities.

**FIGURE
6-4****Increasing use of home
dialysis, 2010–2014**

Note: Data represent yearly averages of data compiled by CMS on a monthly basis.

Source: CMS's end-stage renal disease prospective payment system overview of 2010–2014 claims-based monitoring program.

Under the dialysis PPS, adverse outcomes associated with bone and mineral disease management remain relatively rare. From 2010 to 2014, the proportion of beneficiaries experiencing a fracture or peptic ulcer disease remained steady at 2.1 percent and 0.02 percent per month, respectively, and the proportion of beneficiaries experiencing a kidney stone increased modestly from 0.39 percent to 0.45 percent per month.

Figure 6-4 shows that from 2010 through 2014, the share of beneficiaries dialyzing at home steadily increased from a monthly average of 8.3 percent to 10.6 percent, respectively. While we are encouraged by this modest increase, we are concerned that differences by race persist: African Americans are less likely to use home methods. According to the Commission's analysis, African Americans account for about 25 percent of home dialysis beneficiaries while they account for about 36 percent of all dialysis beneficiaries (data not shown).

Beginning September 2014, the growth in PD, the predominant home method, may have slowed because of a shortage of solutions needed to perform this type of dialysis.¹⁰ The proportion of beneficiaries dialyzing

at home peaked at 10.7 percent of dialysis beneficiaries between July and September 2014 and then declined to 10.3 percent in March 2015 (the most recent data available) (Centers for Medicare & Medicaid Services 2014). The supply shortage results from the product's leading manufacturer (Baxter) experiencing increased PD demand and limited manufacturing capacity (Baxter 2014, Neumann 2014).

Because of the shortage, beginning in August 2014, the manufacturer gave each dialysis provider an allocation for how many new patients could be started on PD based on the provider's history of growth during the first six months of 2014 (Seaborg 2015).¹¹ Although steps have been taken to increase the supply of PD solutions, the limitation on the number of new PD patients was maintained through the end of 2015.¹²

Access to kidney transplantation

Kidney transplantation is widely regarded as a better ESRD treatment option than dialysis in terms of patients' clinical and quality of life outcomes. However, demand for kidney transplantation exceeds supply. Factors that affect access to kidney transplantation include the clinical allocation process and donation rates; patients' health literacy, clinical characteristics, and preferences; the availability of patient educational efforts; clinician referral for transplant evaluation at a transplant center; and transplant center policies.

African Americans are less likely than Whites to receive kidney transplants despite their threefold greater likelihood of developing ESRD. According to Ephraim and colleagues (2012), the lower rates of kidney transplantation for African Americans are associated with multiple factors, including immunological incompatibility with deceased donor kidneys; lower rates of referral for transplantation; lower rates of cadaver kidney donation; and lack of knowledge and suboptimal discussions about kidney transplantation among recipients, their families, and health care providers (Ephraim et al. 2012).

In 2010, to help inform beneficiaries diagnosed with Stage IV chronic kidney disease (CKD) (the disease stage before ESRD) about managing CKD and related comorbidities and their options for care, MIPPA established Medicare payment of up to six sessions of kidney disease education (KDE) per beneficiary. Fewer beneficiaries were provided KDE services in 2014 than between 2011 and 2013—about 2,900 beneficiaries in 2014 compared with

about 4,200 beneficiaries in 2011 and 2012 and 3,600 beneficiaries in 2013. Medicare KDE spending in 2014 was about \$400,000.¹³

According to the Government Accountability Office, payment limitations on the providers who can furnish KDE services and the beneficiaries who are eligible might constrain the services' use (Government Accountability Office 2015). MIPPA specified the categories of providers who can furnish KDE services—physicians, physician assistants, nurse practitioners, clinical nurse specialists, and certain providers of services located in rural areas.¹⁴ MIPPA also specified that beneficiaries with Stage IV CKD are eligible for the benefit. Some stakeholders contend that other categories of beneficiaries, including those with Stage V ESRD but who have not started dialysis, might also benefit from Medicare coverage.

The ESRD Comprehensive Care Initiative

The relatively high resource use of dialysis beneficiaries, particularly rates of hospital admissions and hospital readmissions, suggests that further improvements in quality are needed and that some dialysis beneficiaries might benefit from better care coordination. In online Appendix 6-A, available at <http://www.medpac.gov>, we present dialysis beneficiaries' resource use for all Part A and Part B services in 2013. Under the authority of the Center for Medicare and Medicaid Innovation, the Comprehensive ESRD Care Initiative began October 1, 2015, and is testing whether a new payment model implemented in FFS Medicare can improve the outcomes of dialysis beneficiaries as well as lower their Medicare per capita spending.

Under this five-year initiative, ESRD Seamless Care Organizations (ESCOs), which consist of at least one dialysis facility and one nephrologist, will be held accountable for the clinical and financial (Part A and Part B) outcomes of prospectively matched dialysis beneficiaries. Of the 13 participating ESCOs, 12 are operated by 3 large dialysis organizations (Dialysis Clinic Inc., DaVita, and Fresenius), which CMS defines as organizations that operate more than 200 dialysis facilities, and one ESCO is operated by a small dialysis organization (Rogosin Institute), defined as one that operates less than 200 dialysis facilities.

The ESCOs operated by the three large dialysis organizations are held to two-sided risk-based payment, while the one small dialysis organization is held to one-sided risk-based payment. The initial agreement period

lasts for three years; thereafter, CMS and each ESCO has the option of extending the agreement for an additional two years based on the ESCO's performance. Selected features of the model include:

- **Attribution:** CMS will prospectively match eligible dialysis beneficiaries to an ESCO through a claims-based process based on first touch, meaning that a beneficiary's first visit to a facility during a particular period will prospectively match that beneficiary to the facility and by extension to the ESCO for the upcoming performance year. Like other accountable care organizations established by CMS, beneficiaries matched to an ESCO can seek care at any health care provider that accepts Medicare.
- **Shared savings:** The method to calculate potential shared savings or losses (for the large dialysis organizations) is similar to the Medicare Shared Savings Program. For each performance year, the ESCO's performance benchmark, which is based on the historical expenditure baseline incurred for beneficiaries who would have been aligned to the ESCO in each of the three years before the start of the first performance year for this model, will be compared with the ESCO's actual performance year average per capita expenditure amount.¹⁵ For optional performance years four and five, the performance benchmark will not be rebased using actual performance data from the first three years of the initiative. (That is, the benchmark for all five years of the initiative is based on pre-ESCO service use.)
- **Quality:** For each ESCO, CMS will calculate a total quality score using a set of standardized measures that covers five domains (patient safety, person- and caregiver-centered experience and outcome, communication and care coordination, clinical quality of care, and population health). An ESCO's performance in the ESRD QIP is reflected in the calculation of its total quality score. At the end of each performance year, shared savings or losses (if applicable) are adjusted based on the ESCO's quality performance.
- **Regulatory relief:** There are some limited waivers of the anti-kickback statute and the physician self-referral laws for ESCOs. The beneficiary inducement prohibition has been waived for certain incentives such as nonemergency transportation. The Commission previously raised concerns about the growth between 2007 and 2011 in dialysis beneficiaries' use of

nonemergency ambulance services to and from dialysis facilities and discussed the possibility of dialysis facilities providing complementary local transportation services to their beneficiaries by creating exceptions to these laws (Medicare Payment Advisory Commission 2013). In online Appendix 6-B, available at <http://www.medpac.gov>, we present updated findings that are consistent with our earlier conclusions.

The Commission has said that, if structured properly, a shared savings program—in this case, for ESRD providers—could present an opportunity to correct some of the undesirable incentives inherent in FFS payment and reward providers who are doing their part to control costs and improve quality.

In addition to the Comprehensive ESRD Care Initiative, dialysis beneficiaries in selected geographic areas also have access to ESRD special needs plans (SNPs). As of November 2015, there were about 2,700 dialysis beneficiaries enrolled in 5 SNPs operated by 3 plans in California and in Nevada. While the Comprehensive ESRD Care Initiative and ESRD SNPs enroll only dialysis beneficiaries, other accountable care organization models, such as those participating in the Medicare Shared Savings Program, might provide opportunities for beneficiaries with earlier stages of kidney disease to receive better care coordination, particularly in the management of kidney disease risk factors.

The ESRD QIP and the Dialysis Star Ratings System

CMS measures quality for each dialysis facility using two measurement systems, the ESRD QIP, which was mandated by MIPPA and implemented in 2012, and the Dialysis Star Ratings System, which CMS established through a subregulatory process in 2015. In its comment letter to CMS, the Commission questioned why CMS finds necessary a second quality system for dialysis facilities (Medicare Payment Advisory Commission 2014a). We also raised concerns that beneficiaries and their families might be confused if a facility's star and QIP scores diverge, which could occur because the measurement systems use different methods and measures to calculate a facility's performance score.

Providers' access to capital: Growth trends suggest access is adequate

Providers need access to capital to improve their equipment and open new facilities so they can accommodate the growing number of patients requiring

dialysis. The two largest dialysis organizations, as well as other renal companies, appeared to have had adequate access to capital in 2015. For example, in 2015:

- DaVita entered into an agreement to acquire Renal Ventures Limited LLC, which operates 36 dialysis facilities in 6 states, and multispecialty Physician Partners and Physician Venture Partners, divisions of Renal Ventures, which operate infusion centers and vascular centers, respectively, in 3 states (DaVita 2015a). DaVita announced its acquisition of the Everett Clinic, a physician group that operates 20 care sites in the Seattle area and offers primary and specialty care and clinic care. The company expanded its international presence by forming a joint-venture kidney care specialty hospital chain in China.
- Fresenius is partnering with the Heritage Provider Network, a managed care network, to develop coordinated care networks.¹⁶ Fresenius is expanding its participation in assuming risk for the complete care of ESRD beneficiaries by seeking CMS approval to offer an MA ESRD chronic special needs plan beginning 2016 and entering into subcapitation and other shared-savings arrangements with commercial payers to provide care to MA ESRD beneficiaries (Fresenius Medical Care 2015a).¹⁷ The company expanded its international presence by acquiring a dialysis chain in Israel.
- Two midsized organizations, U.S. Renal Care Inc. and DSI Renal, finalized the merger of their companies in January 2016. Since the merger, the company operates nearly 300 facilities and serves approximately 23,000 patients in 33 states and Guam (U.S. Renal Care 2015).¹⁸ In 2013, U.S. Renal Care acquired Ambulatory Services of America (which included Innovative Dialysis Systems).
- American Renal Associates, which operates about 180 dialysis facilities through joint ventures with physicians, filed its intent with the Securities and Exchange Commission to raise up to \$100 million in an initial public offering. According to investor analysts, the initial public offering could raise \$300 million (Renaissance Capital 2015). A private equity firm (Centerbridge Partners LP), which bought a majority stake in the company in 2010, would retain a majority of the company's common stock (Armental 2015).

In public financial filings, the two largest dialysis organizations reported positive financial performance

for 2014, including strong organic volume and revenue growth—that is, growth achieved apart from mergers and acquisitions.

Factors unrelated to Medicare’s payment policies could affect providers’ access to capital. In 2015, DaVita reached a final agreement to pay \$450 million to settle a whistle-blower lawsuit (without admitting liability) claiming that the company intentionally inflated Medicare billings for medication waste (DaVita 2015b).¹⁹ Despite this settlement, in 2015 assessments, investor analysts concluded that DaVita’s core dialysis segment continues to perform very well, and they anticipate solid growth in the dialysis sector.

In general, current trends in the profit status and consolidation among dialysis providers suggest that the dialysis industry is attractive to for-profit providers.

Medicare payments and providers’ costs

Each year, we examine the relationship between Medicare’s payments and providers’ costs as part of our assessment of payment adequacy. To make this assessment, we reviewed Medicare expenditures for outpatient dialysis services in 2014 and examined trends in spending under the PPS. We also reviewed evidence regarding providers’ costs under the PPS.

Medicare payments for outpatient dialysis services

Between 2013 and 2014, total Medicare spending increased by about 1 percent, from \$11.0 billion to \$11.2 billion, while per capita spending decreased by 0.5 percent, from about \$29,300 to about \$29,200 (annual percent change in spending is based on data that is not rounded). The small decline in per capita spending primarily reflects the rebasing of the base payment rate in 2014 (from \$240.36 per treatment to \$239.02 per treatment in 2013 and 2014, respectively) to reflect the decreased use of dialysis drugs. The change during this period in total and per capita spending also reflects the 2 percent sequester reduction on Medicare’s payment to providers that began in April 2013.

Part D spending for dialysis drugs

Between 2011 and 2013, the use of dialysis drugs included in the PPS payment bundle declined. By contrast, during this period, the use (as measured by Medicare spending) of Part D dialysis drugs that are not yet included in the PPS payment bundle increased. In 2013 (the most recent year data are available), Part D spending for two

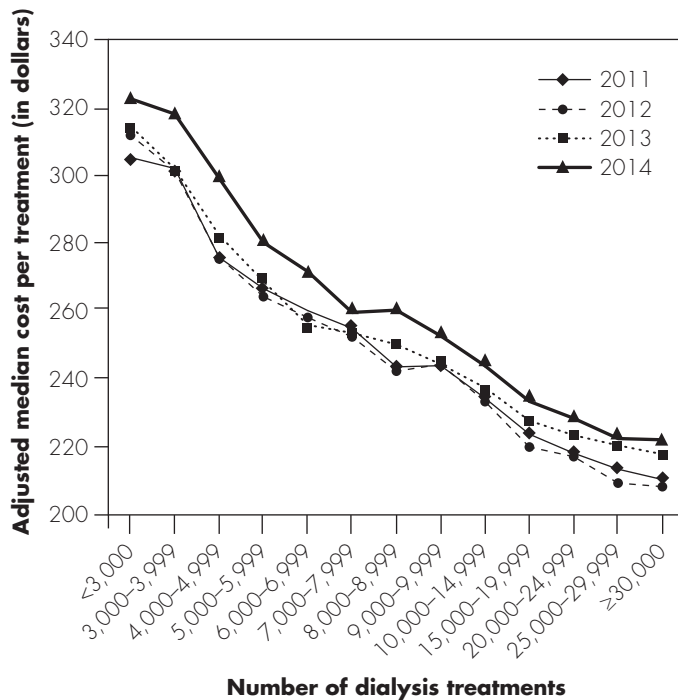
categories of dialysis drugs (calcimimetics and phosphate binders) totaled \$1.3 billion, an increase of 22 percent per year compared with 2011. During this period, on a per treatment basis, Part D spending for dialysis drugs increased by 19 percent per year.²⁰ In addition, between 2011 and 2013, total Part D spending for dialysis drugs grew more rapidly than total Part D spending for dialysis beneficiaries (22 percent vs. 13 percent, respectively). In 2013, Part D spending for dialysis drugs constituted 53 percent of dialysis beneficiaries’ gross Part D spending. Medicare spending for Part D dialysis drugs is not included in the Commission’s analysis of Medicare’s payments and costs for dialysis facilities.

The Secretary intended that the dialysis PPS payment bundle, beginning in 2014, include Part D dialysis drugs. Most recently, the Stephen Beck, Jr., Achieving a Better Life Experience Act of 2014 delayed bundling these drugs until 2025. However, if an injectable equivalent (or other form of administration rather than an oral form) of the oral-only drug is approved by the Food and Drug Administration before 2025, CMS will include both the oral and non-oral versions in the PPS payment bundle (Centers for Medicare & Medicaid Services 2015). Including dialysis drugs covered under Part D in the Part B payment bundle may lead to better management of drug therapy and improve beneficiaries’ access to these medications since some beneficiaries lack Part D coverage or have coverage less generous than the Part D standard benefit. Potential incentives to use a Part D drug instead of a drug covered under the bundle, a situation that might not result in the best care, would be eliminated. The decision-making process would be based on what is best for the patient.

Providers’ costs for outpatient dialysis services under the new PPS

To assess the appropriateness of costs for dialysis services paid for under the new PPS, we examine whether aggregate dialysis facility costs reflect costs that efficient providers would incur in furnishing high-quality care. For this analysis, we use 2013 and 2014 cost reports submitted to CMS by freestanding dialysis facilities. For those years, we look at the growth in the cost per treatment and how total treatment volume affects that cost.

Cost growth under the PPS Between 2013 and 2014, the cost per treatment rose by about 1 percent, from about \$240 per treatment to \$243 per treatment. Variation in cost growth across freestanding dialysis facilities shows that some facilities were able to hold their cost growth well below that of others. For example, between 2013

**FIGURE
6-5****Higher volume dialysis
facilities have lower cost per
treatment, 2011–2014**

Note: Cost per treatment is adjusted to remove differences in the cost of labor. Dialysis treatments include those paid for by all sources (not just Medicare-paid treatments).

Source: MedPAC analysis of 2011–2014 cost reports submitted by freestanding dialysis facilities to CMS and the end-stage renal disease wage index files.

and 2014, per treatment costs decreased by 4 percent for facilities in the 25th percentile of cost growth and increased by 5 percent for facilities in the 75th percentile.

Cost per treatment is correlated with facility service volume Cost per treatment is correlated with the total number of treatments a facility provides. For this analysis, we adjusted the cost per treatment to remove differences in the cost of labor across areas and included all treatments regardless of payer. Our analysis showed, in each year from 2011 through 2014, a statistically significant relationship between total treatments and cost per treatment (correlation coefficient equaled -0.5) (Figure 6-5). That is, the greater the facility’s service volume, the lower its costs per treatment.

Medicare margin for freestanding facilities in 2014

The Commission assesses current payments and costs for dialysis services for freestanding dialysis facilities by

comparing Medicare’s payments with facilities’ Medicare-allowable costs. The latest and most complete data available on payments and costs are from 2014.

For 2014, we estimate that the aggregate Medicare margin was 2.1 percent (Table 6-5). Margins decidedly vary by treatment volume. In 2014, facilities in the lowest volume quintile had margins at or below -15.4 percent, and facilities in the top volume quintile had margins of 8.1 percent or greater.

Urban facilities had higher margins than rural facilities (2.9 percent and -2.7 percent, respectively). Much of the difference in margin between urban and rural facilities is accounted for by differences in total treatment volume. Urban dialysis facilities are larger on average than rural facilities with respect to number of treatment stations and Medicare treatments provided. In 2014, urban facilities averaged 12,323 treatments while rural facilities averaged 7,720 treatments.

Another piece of information to consider in evaluating the adequacy of payments is to assess whether providers have a financial incentive to expand the number of Medicare beneficiaries they serve. In considering whether to treat an additional patient, the provider compares the marginal revenue it will receive (i.e., the Medicare payment) with its marginal costs—that is, the costs that vary with volume. If Medicare payments are larger than the marginal costs of treating an additional beneficiary, a provider has a financial incentive to increase its volume of Medicare beneficiaries. On the other hand, if marginal payments do not cover the marginal costs, the provider may have a disincentive to admit Medicare beneficiaries. To operationalize this concept, we compare payments for Medicare services with marginal costs, which is approximated as:

$$\text{Marginal profit} = (\text{payments for Medicare services} - (\text{total Medicare costs} - \text{fixed building and equipment costs})) / \text{Medicare payments}$$

This formula gives a lower bound on the marginal profit because we ignore any potential labor costs that are fixed. For dialysis facilities, we find that excluding capital costs lowers the cost per treatment by nearly \$40, and that Medicare payments exceed marginal costs by nearly 18 percent, suggesting facilities with available capacity have

**TABLE
6-5****Medicare margin in 2014 varied by type of freestanding dialysis facility**

Provider type	Medicare margin	Medicare marginal profit	Percent of freestanding dialysis facilities
All	2.1%	17.9%	100%
Urban	2.9	18.4	80
Rural	-2.7	15.1	20
Treatment volume (quintile)			
Lowest	-15.4	10.2	20
Second	-6.6	13.3	20
Third	-0.6	16.6	20
Fourth	3.8	18.9	20
Highest	8.1	20.7	20

Source: Compiled by MedPAC from 2014 cost report and outpatient claims submitted by facilities to CMS and the 2014 Dialysis Compare database.

an incentive to treat Medicare beneficiaries. This incentive is a positive indicator of patient access.

Projecting the Medicare margin for 2016

On the basis of 2014 payment and cost data, provider cost growth between 2013 and 2014, and policy changes that have gone into effect between 2014 (the year of our most recent margin estimates) and 2017, we project a 0.8 percent aggregate Medicare margin for dialysis facilities in 2016. The policy changes that are included in this projection include:

- statutory updates of 0 percent in 2015 and 0.2 percent in 2016;
- other regulatory changes that resulted in increased payments in 2015 of 0.3 percent;
- a reduction in payments due to the ESRD QIP in 2015 and 2016 of 0.17 percent in each year; and
- the sequester, which is now fully reflected in Medicare's payments to providers.

How should Medicare payments change in 2017?

The Protecting Access to Medicare Act of 2014 sets the update to the outpatient dialysis payment base rate equal to the ESRD market basket index, less an adjustment

for productivity (currently estimated at 0.5 percent) and 1.25 percentage points. Based on CMS's latest forecast of changes in the ESRD market basket costs for calendar year 2017 (2.3 percent), the update to the 2017 payment rate would be 0.55 percent. In addition to this statutory provision, the ESRD QIP is expected to decrease total payments by 0.13 percent in 2017.

Update recommendation

The evidence on payment adequacy suggests that outpatient dialysis payments are adequate. It appears that facilities have become more efficient under the PPS, as measured by declining use of most injectable dialysis drugs between 2010 and 2014.

RECOMMENDATION 6

The Congress should increase the outpatient dialysis base payment rate by the update specified in current law for calendar year 2017.

RATIONALE 6

Most of our indicators of payment adequacy are positive, including beneficiaries' access to care, the supply and capacity of providers, volume of services, quality of care, and access to capital. Providers have become more efficient in the use of dialysis drugs under the PPS. The Medicare margin was 2.1 percent in 2014 and is projected to be 0.8 percent in 2017.

Spending

- In 2017, the statute sets the payment update at the market basket, net of the productivity adjustment, minus 1.25 percentage points. The Commission's recommendation would have no effect on federal program spending relative to the statutory update.

Beneficiary and provider

- This recommendation is expected to have a minimal effect on reasonably efficient providers' willingness and ability to care for Medicare beneficiaries. We do not anticipate any negative effects on beneficiary access to care.

Regulatory improvements to the dialysis PPS

To address two concerns with the dialysis PPS, we are reiterating our prior recommendation that the Congress direct the Secretary to (1) focus the low-volume payment adjustment on protecting facilities critical to beneficiary access, and (2) examine the accuracy of dialysis cost report data under the PPS (see text box for recommendation language). The Secretary has the authority to make these regulatory changes.

The low-volume payment adjustment should focus on protecting only facilities critical to beneficiary access

The low-volume payment adjustment implemented in 2011 and in 2016 does not target facilities that might be critical to beneficiary access (Medicare Payment Advisory Commission 2014c). The distance requirement does not prevent facilities that are close to other facilities from receiving the payment adjustment to their base rate. Medicare and dialysis beneficiaries would be better served by an adjuster that targets low-volume facilities that are not close to another facility. Only low-volume facilities that are necessary to maintain access—those located in isolated areas—should receive enhanced payment.

Issues and analysis

For both of the low-volume adjustment factors implemented in 2011 and 2016, CMS defines a low-volume facility as one that provided fewer than 4,000 treatments (Medicare and non-Medicare) in each of the three years before the payment year and that has not opened, closed, or received a new provider number

because of a change in ownership. The refined low-volume payment adjustment (implemented in 2016) differs from the prior definition by:

- including, for the purposes of determining eligibility, treatments furnished by the facility in question and other facilities in common ownership that are within five road miles from the facility in question. Before 2016, a 25-mile criterion was applied.
- applying the five-mile distance criterion to all facilities (regardless of when the facility was certified). Before 2016, the 25-mile criterion applied only to facilities certified on or after January 1, 2011.

In addition to the low-treatment-volume adjuster, CMS in 2016 added a new payment adjuster for all facilities located in rural areas, regardless of a facility's geographic proximity to the closest facility and treatment volume. A rural area would be defined as any area outside of an urban area. The low-volume and rural adjustments are separate, meaning that a facility meeting both criteria could receive both payment adjustments.

The Commission is concerned that neither the low-volume adjustment nor the rural adjustment are targeting facilities that are critical to beneficiary access:

- The low-volume adjustment implemented in 2016 imposes only a distance requirement for facilities under common ownership. According to our analysis, about 47 percent of the facilities that would receive this adjustment are within five miles of the next closest facility. The median distance between the facility that would receive the adjustment and the next closest facility is six miles.
- The rural adjustment does not impose a distance requirement between a facility that would receive this adjustment and the next closest facility. About 28 percent of all rural facilities are within five miles of the next closest facility. We are also concerned that the rural adjustment does not consider facilities' total treatment volume. Nearly 20 percent of facilities located in rural areas are high volume, and total volume is correlated with cost per treatment.²¹ Thus, the fact that the facilities are designated rural does not in and of itself indicate that these facilities warrant special payment adjustments to ensure access to care. These findings suggest that there is great diversity among areas designated as rural.

The Commission reiterates its March 2014 recommendation for redesigning the low-volume payment adjustment and auditing dialysis facilities' cost reports

Recommendation 6-2, March 2014 report

The Congress should direct the Secretary to:

- redesign the low-volume payment adjustment to consider a facility's distance to the nearest facility and
- audit dialysis facilities' cost report data.

Rationale 6-2, March 2014 report

This recommendation would target the low-volume payment adjustment only at facilities that are isolated and would help ensure that dialysis facilities' cost reports are accurate.

Implications 6-2, March 2014 report

Spending

- This recommendation would redistribute payments to low-volume facilities. When this recommendation was made in March 2014, the spending implications were that it would be budget neutral relative to current law.

The Protecting Access to Medicare Act of 2014 required that the Secretary of Health and Human Services conduct audits of Medicare cost reports beginning in 2012 for a representative sample of providers of services and renal dialysis facilities furnishing renal dialysis services. To support this effort, the law authorized the Secretary to transfer \$18 million (in fiscal year 2014) from the Federal Supplementary Medical Insurance Trust Fund to CMS's program management. As of January 2016, CMS has not announced results from this audit.

Beneficiary and provider

- This recommendation should help ensure that beneficiaries' access to care is maintained at isolated, low-volume facilities under the prospective payment system. The recommendation is not expected to affect providers' willingness or ability to serve beneficiaries. Payments would decrease for facilities who currently receive the low-volume payment adjustment but are in close proximity to other facilities and would increase for facilities that have lower treatment volumes and are not in close proximity to other facilities, but that currently do not receive the low-volume payment adjustment. ■

CMS should design a single payment adjustment that targets low-volume isolated facilities instead of two separate adjustments for low volume and rural location. Dialysis beneficiaries and Medicare would be better served by a single adjuster that targets low-volume facilities that are not close to another facility.

As suggested by the Government Accountability Office, CMS should consider designing an adjustment that does not give facilities an incentive to limit services to avoid reaching the low-volume treatment threshold (the so-called cliff effect) (Government Accountability Office 2013). A payment approach that decreases the payment adjustment as facility volume increases might reduce this incentive.

Dialysis facilities' cost report data under the PPS should be examined for accuracy

In the Commission's 2014 report to the Congress, we raised concerns that CMS had not yet examined the

appropriateness of the costs that facilities include in their cost reports under the PPS (Medicare Payment Advisory Commission 2014c). In our comment letters to CMS, we raised concerns that CMS used unaudited cost reports to recalibrate the dialysis market basket (in 2015) and refine the payment adjustment factors (in 2016).

Based on our 2014 recommendation, the Protecting Access to Medicare Act of 2014 funded CMS to audit a representative sample of ESRD facility cost reports beginning in 2012.

Issues and analysis

It is important to examine the accuracy of facilities' cost reports for several reasons. First, it is basic fiscal management to ensure that facilities' cost reports are accurate. The Medicare margin is calculated from this data source, and policymakers consider the margin (and other factors) when assessing the adequacy of Medicare's

payments for dialysis services. If providers overstate costs, analysis will understate the Medicare margin. Medicare cost principles are designed to ensure that Medicare pays reasonable expenses related to patient care. Second, it has been more than 10 years since cost reports were audited, and in 2011, the outpatient dialysis payment system underwent a significant change. The Commission's analysis of 2014 freestanding facilities' cost reports shows significant variation across facilities in the level and the distribution of cost per treatment.

Third, historically, unaudited cost reports have included costs that Medicare does not allow. Analysis of previous audits (in 1988, 1991, 1996, and 2001) of dialysis facilities' cost reports found that facilities' allowable costs ranged from 90 percent to 96 percent of costs submitted. CMS's recent audit of a sample of 100 home health agency cost reports demonstrates the importance of validating these data. The agency found that agencies

in the audit sample overstated their costs by an average of about 8 percent (Centers for Medicare & Medicaid Services 2013).

Medicare's contractors (e.g., Medicare administrative contractors) and the Department of Health and Human Services' Office of Inspector General have conducted past audits of dialysis facilities' cost reports (Government Accountability Office 1993). Medicare administrative contractors conducted the recent audit of cost reports submitted by home health agencies. To ensure that audits are thorough and complete, auditors should (1) evaluate whether the reported costs are supported by facilities' accounting records, (2) assess whether the costs are reasonable and related to patient care, and (3) assess the appropriateness of transactions with affiliated entities—called related organizations—that are under common ownership or control. ■

Endnotes

- 1 The term *dialysis drugs* refers to the medications used to treat ESRD.
- 2 In this chapter, the term *beneficiaries* refers to individuals covered by Medicare, and *patients* refers to individuals who may or may not be covered by Medicare.
- 3 Age groups are 19 years or younger, 20 to 44 years, 45 to 64 years, 65 to 74 years, and 75 years or older.
- 4 For individuals entitled to Medicare based on ESRD, Medicare coverage does not begin until the fourth month after the start of dialysis, unless the individual had a kidney transplant or began training for self-care, including dialyzing at home.
- 5 Medicare pays dialysis facilities for uncollected deductibles and coinsurance (bad debt). In fiscal year 2015 and beyond, Medicare paid 65 percent of allowable bad debt.
- 6 These drug classes accounted for nearly all dialysis drug spending (about 97 percent) in 2010, the year before the start of the dialysis PPS.
- 7 Price growth across all dialysis drugs is calculated by multiplying the change in each drug's price per unit by the drug's share of total 2014 volume.
- 8 Anemia is measured by a blood test to check the level of hemoglobin, the protein that carries oxygen in red blood cells.
- 9 Blood transfusions are of concern to patients because they (1) carry a small risk of transmitting blood-borne infections to the patient, (2) may cause some patients to develop a reaction, and (3) are costly and inconvenient to patients. Blood transfusions are of particular concern for patients seeking kidney transplantation because they increase a patient's alloantigen sensitization, which can require a patient to wait longer to receive a transplant.
- 10 PD is the dominant home method; about 85 percent of patients dialyzing at home receive PD (United States Renal Data System 2015).
- 11 Press accounts also report that the manufacturer has limited the size of shipments sent to existing PD patients (Pfeifer and Terhune 2014).
- 12 To alleviate the shortage, Baxter (1) received Food and Drug Administration approval to import PD solutions from Ireland, (2) bought PD solutions from Fresenius to distribute to its customers (Seaborg 2015), and (3) announced additional manufacturing capacity in 2015 (Baxter 2014). In addition, Fresenius announced its PD manufacturing facility would be operational in early 2017 and announced in November 2015 its partnership with a Swiss manufacturer to develop a portfolio of peritoneal technologies (Fresenius Medical Care 2015b, Zumoff 2015).
- 13 This analysis used 100 percent of 2011 through 2014 carrier and outpatient claims submitted for KDE services.
- 14 MIPPA does not permit other providers (including registered nurses, social workers, and dieticians) and dialysis facilities to bill for KDE services. In 2014, KDE services were most frequently provided by nephrologists, nurse practitioners, or physician assistants in an office setting.
- 15 In each year of the initiative, the ESCO's performance benchmark is calculated by adjusting the historical expenditure baseline for changes in medical spending and risk adjusted for changes in case mix. In addition, for the large ESCOs, a discount will be applied to the nondialysis component of their performance-year benchmark: 1 percent in year 2, 2 percent in year 3, and 3 percent in years 4 and beyond.
- 16 Heritage will acquire or build coordinated care networks, and Fresenius will furnish renal, vascular, and related services for covered members.
- 17 Under these arrangements, Fresenius and the payer establish a baseline per patient per month amount, and Fresenius retains the difference if the company provides care for less than the baseline. If the cost of complete care exceeds the baseline, Fresenius owes the payer the difference (Fresenius Medical Care 2015a).
- 18 In 2015, U.S. Renal Care operated 198 facilities in 20 states and Guam, and DSI operated 100 facilities in 22 states (U.S. Renal Care 2015).
- 19 The lawsuit, filed in 2007, said DaVita violated the False Claims Act by using dosing guidelines designed to maximize the medication waste (intentionally inflating its claims for discarded medications) for a vitamin D drug (Zemplar), and an iron agent (Venofer).

20 Part D spending per dialysis treatment is calculated by dividing total Part D spending for dialysis drugs by the total number of Part B dialysis treatments furnished by dialysis facilities to Medicare beneficiaries with and without Part D.

21 Using 2013 cost reports submitted by freestanding ESRD facilities and CMS's impact file, high-volume facilities located in rural areas had lower total adjusted cost per treatment for PPS payment bundle services than low-volume facilities located in rural areas (median cost of \$239 per treatment and \$312 per treatment, respectively).

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C H A P T E R

7

Skilled nursing facility services

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

- 7** The Congress should eliminate the market basket update for 2017 and 2018 and direct the Secretary to revise the prospective payment system (PPS) for skilled nursing facilities. In 2019, the Secretary should report to the Congress on the effects of the reformed PPS and make any additional adjustments to payments needed to more closely align payments with costs.

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

Skilled nursing facility services

Chapter summary

Skilled nursing facilities (SNFs) provide short-term skilled nursing and rehabilitation services to beneficiaries after a stay in an acute care hospital. In 2014, about 15,000 SNFs furnished 2.4 million Medicare-covered stays to 1.7 million fee-for-service (FFS) beneficiaries. Medicare FFS spending on SNF services was \$28.6 billion in 2014.

Assessment of payment adequacy

To examine the adequacy of Medicare's payments, we analyze beneficiaries' access to care (including the supply of providers and volume of services), quality of care, provider access to capital, and Medicare payments in relation to providers' costs to treat Medicare beneficiaries. Key measures indicate Medicare payments to SNFs are more than adequate. We also find that relatively efficient SNFs—facilities identified as providing relatively high-quality care at relatively low costs—had very high Medicare margins, suggesting that opportunities remain for other SNFs to achieve greater efficiencies.

Beneficiaries' access to care—Access to SNF services remains adequate for most beneficiaries.

- **Capacity and supply of providers**—The number of SNFs participating in the Medicare program is stable. Over 90 percent of beneficiaries live in a county with three or more SNFs, and less than 1 percent live in a county without one. Available bed days increased slightly between 2013 and

In this chapter

- Are Medicare payments adequate in 2016?
.....
- How should Medicare payments change in 2017?
.....
- Medicaid trends
.....

2014. In 2014, the median occupancy rate remained at 86 percent, with one-quarter of SNFs having rates at or below 76 percent.

- ***Volume of services***—Days and admissions per FFS beneficiary declined between 2013 and 2014, consistent with declines in inpatient hospital admissions (a three-day inpatient stay is required for Medicare coverage of SNF services).

Quality of care—Quality measures show mixed performance. Between 2013 and 2014, the community discharge rate and the rate of hospital readmissions occurring during SNF stays improved slightly. The rate of readmissions that occurred in the 30-day period after discharge from the SNF increased slightly (got worse), and the functional change measures were essentially unchanged.

Providers' access to capital—Because most SNFs are part of nursing homes, we examine nursing homes' access to capital. Access to capital was adequate and is expected to remain so. Medicare is regarded as a preferred payer of SNF services.

Medicare payments and providers' costs—In 2014, the average Medicare margin was 12.5 percent—the 15th year in a row that the average was above 10 percent. Margins continued to vary greatly across facilities and reflect shortcomings in the SNF prospective payment system (PPS), the resulting favorable selection of rehabilitation patients (over medically complex patients), differences in costs per day, and the cost control exhibited by some providers. The marginal profit (a comparison of Medicare payments to the marginal costs of Medicare patients) was 20.4 percent. The projected Medicare margin for 2016 is 10.7 percent.

Several pieces of evidence indicate that Medicare needs to revise the PPS. Over time, Medicare's payments have grown more inaccurate despite the many changes made to the payment system. The overpayments for therapy services have gotten larger, strengthening the existing incentive to furnish therapy services, regardless of clinical value. At the same time, the payments for nontherapy ancillary services are unrelated to these services' costs, making payments even more poorly targeted than they had been. As broad payment reforms (such as bundled payments and accountable care organizations) are implemented, SNF use may increase because it is a lower cost alternative to inpatient rehabilitation facilities and long-term care hospitals for some patients. Therefore, the importance of the accuracy of FFS payments to SNFs has increased.

Regarding the need to rebase payments, the Commission has found:

- Medicare margins above 10 percent for 15 years;
- marginal profits in 2014 of 20 percent;

- widely varying costs unrelated to case mix and wages;
- cost growth above the market basket that reflects little fiscal pressure from the Medicare program;
- the ability of many SNFs (almost 900, or 8 percent of the facilities included in the analysis) to have consistently relatively low costs and relative high quality;
- the continued ability of the industry to maintain high margins despite changing policies; and
- in some cases, Medicare Advantage (managed care) payments to SNFs that are considerably lower than the program's FFS payments.

Given the continued need to revise the SNF PPS and rebase Medicare's level of payments, the Commission recommends that the Congress freeze Medicare's payments for 2017 and 2018, direct the Secretary to revise the payment system, and require the Secretary to report to the Congress on whether any additional adjustments are needed to align payments with costs.

Medicaid trends

As required by the Patient Protection and Affordable Care Act of 2010, we report on Medicaid use, spending, and non-Medicare (private payer and Medicaid) margins. Medicaid finances mostly long-term care services provided in nursing homes, but also covers copayments for low-income Medicare beneficiaries (known as dual-eligible beneficiaries) who stay more than 20 days in a SNF. The number of Medicaid-certified facilities remained essentially unchanged between 2014 and 2015. In 2014, the average total margin, reflecting all payers (including managed care, Medicaid, and private insurers) and all lines of business (such as hospice, ancillary services, home health care, and investment income) was 1.9 percent, the same total margin as in 2013. The average non-Medicare margin (that reflects all services except SNF services for Medicare beneficiaries) was -1.5 percent, a slight improvement from 2013. ■

**TABLE
7-1****Freestanding SNFs and for-profit SNFs account for the majority of facilities, Medicare stays, and Medicare spending**

Type of SNF	Facilities		Medicare-covered stays		Medicare spending	
	2006	2014	2006	2014	2006	2014
Total number	15,178	15,005	2,454,263	2,344,173	\$19.5 billion	\$27.0 billion
Freestanding	92%	95%	89%	95%	94%	97%
Hospital based	8	5	11	5	6	3
Urban	67	72	79	83	81	85
Rural	33	28	21	17	19	15
For profit	68	70	67	72	73	76
Nonprofit	26	24	29	24	24	21
Government	5	5	4	3	3	3

Note: SNF (skilled nursing facility). Totals may not sum to 100 percent due to rounding and missing values. The spending numbers included here are slightly lower than those reported by the Office of the Actuary. The count of SNFs is slightly lower than what is reported in CMS's Survey and Certification Providing Data Quickly system.

Source: MedPAC analysis of the Provider of Services and Medicare Provider Analysis and Review files for 2006 and 2014.

Background

Skilled nursing facilities (SNFs) provide short-term skilled nursing care and rehabilitation services such as physical and occupational therapy and speech–language pathology services. Examples of SNF patients include those recovering from surgical procedures such as hip and knee replacements or from medical conditions such as stroke and pneumonia. In 2014, almost 1.7 million fee-for-service (FFS) beneficiaries (4.5 percent) used SNF services at least once; program spending on SNF services was \$28.6 billion, or about 8 percent of FFS spending (Boards of Trustees 2015, Office of the Actuary 2015b).¹ Medicare's median payment per day was \$454, and Medicare's median payment per stay was \$18,499. Typically about 20 percent of hospitalized beneficiaries were discharged to SNFs.

Medicare covers up to 100 days of SNF care per spell of illness after a medically necessary inpatient hospital stay of at least 3 days.² For beneficiaries who qualify for a covered stay, Medicare pays 100 percent of the payment for the first 20 days of care. Beginning with day 21, beneficiaries are responsible for copayments. For 2017, the copayment is \$161 per day.

A skilled nursing facility must meet Medicare requirements for Part A coverage.³ Most SNFs (more than 90 percent) are dually certified as SNFs and nursing homes (which typically provide less intensive, long-term care services). Thus, a facility that provides skilled care often also provides long-term care services that Medicare does not cover. Medicaid pays for the majority of nursing facility days.

The mix of facilities where beneficiaries seek skilled nursing care has shifted over time toward freestanding and for-profit facilities (Table 7-1). In 2014, freestanding facilities and for-profit facilities accounted for larger shares of Medicare stays and spending than in 2006. After a steady decline in the number of hospital-based facilities over a decade, that share has been stable since 2011. In 2014, 70 percent of SNFs were for profit; they accounted for a slightly higher share of stays (72 percent) and Medicare payments (76 percent), both small increases from 2013.

Medicare-covered SNF days typically comprise a small share of a facility's total patient days but a disproportionately larger share of the facility's revenues. In freestanding facilities in 2014, the median Medicare

share of total facility days was 12 percent, but Medicare accounted for 21 percent of facility revenue.

The most frequent hospital conditions of patients referred to SNFs for post-acute care are joint replacement, septicemia, kidney and urinary tract infections, hip and femur procedures (except major joint replacement), pneumonia, and heart failure and shock. Compared with other beneficiaries, SNF users are older, frailer, and disproportionately female, disabled, living in an institution, and dually eligible for both Medicare and Medicaid (Medicare Payment Advisory Commission 2013).

SNF prospective payment system and its shortcomings

Medicare uses a prospective payment system (PPS) to pay SNFs for each day of service.⁴ Information gathered from a standardized patient assessment instrument—the Minimum Data Set—is used to classify patients into case-mix categories, called resource utilization groups (RUGs). RUGs differ depending on the services SNFs provide to a patient (such as the amount and type of rehabilitation therapy and the use of respiratory therapy and specialized feeding), the patient’s clinical condition (such as whether the patient has pneumonia), and the patient’s need for assistance in performing activities of daily living (ADLs). Medicare’s payment system for SNF services is described in the Commission’s *Payment Basics*, available on the Commission’s website (<http://medpac.gov/documents/payment-basics/skilled-nursing-facility-services-payment-system-15.pdf?sfvrsn=0>). Although the payment system is referred to as “prospective,” two features undermine how prospective it is: The system makes payments for each day of care (rather than set a payment for the entire stay), and it bases payments partly on the minutes of rehabilitation therapy furnished to a patient. Both features result in providers having some control over how much Medicare will pay them for their services.

Almost since its inception, the SNF PPS has been criticized for encouraging the provision of unnecessary rehabilitation therapy services and not accurately targeting payments for nontherapy ancillary (NTA) services such as drugs (Government Accountability Office 2002, Government Accountability Office 1999, White et al. 2002). Under current policy, therapy payments are not proportional to costs but, instead, rise faster than providers’ therapy costs increase (Medicare Payment Advisory Commission and the Urban Institute 2014). The Office of Inspector General (OIG) of the

Department of Health and Human Services also found that the difference between the payments for and the costs of therapy services increased as the amount of therapy provided per day increased (Office of Inspector General 2015b). Payments for NTA services are included in the nursing component, even though NTA costs vary much more than nursing care costs and are not correlated with them.

In 2008, the Commission recommended revising the PPS to base therapy payments on patient characteristics (not service provision), remove payments for NTA services from the nursing component, establish a separate component within the PPS that adjusts payments for NTA services, and implement an outlier payment policy. An outlier policy would offer some financial protection by partly compensating providers that treat exceptionally costly patients. An outlier case would be defined on a stay basis, not on a day basis, because the financial risk to a facility is determined by its losses over the stay, not a given day. In 2012, the Commission recommended revising and rebasing the SNF PPS to address both the distribution and level of payments (Medicare Payment Advisory Commission 2012).

The Commission’s recommended revisions to the PPS would greatly improve the accuracy of payments for therapy and NTA services (Medicare Payment Advisory Commission and the Urban Institute 2014). Assuming no other changes in patient mix or care delivery, the recommendations would not change payments in aggregate but would result in considerable redistribution of payments. In 2014, payments would have increased 32 percent for facilities with relatively low shares of intensive therapy and 12 percent for facilities with relatively high NTA costs per day; payments would have decreased 7 percent for facilities with high shares of intensive therapy and 2 percent for facilities with low NTA costs per day.⁵ Based on the mix of patients and therapy practices, payments would have increased 21 percent for hospital-based facilities, 4 percent for nonprofit facilities, and 4 percent for rural facilities and would have decreased only 1 percent for for-profit facilities. The effects on individual facilities could have varied substantially depending on their mix of patients and current therapy practices.

The American Health Care Association (AHCA), an organization representing long-term care and post-acute care (PAC) providers, has also developed a proposal to revise the SNF PPS, basing payments on a SNF stay (Moran Company 2015). The proposal’s design uses

broadly defined clinical groups based on the patient's condition and reason for SNF care, but not the amount of therapy furnished to a patient. Payments would be adjusted for factors that increase the costs of care, such as having dementia or being over the age of 85 years. The clinical groups and adjusters would be determined by the Secretary of Health and Human Services. The proposal would replace the current rural adjusters (separate base rates for the components) with a 10 percent add-on for geographically isolated facilities and would include short-stay and high-cost outlier policies. Consistent with the Commission's recommended changes to the SNF PPS, AHCA's proposal would lower payments to for-profit facilities (because they furnish more intensive therapy and their stays are longer) and would raise payments to nonprofit facilities (because they furnish less intensive therapy and their stays are shorter).

Based on its work examining SNFs' billing practices and analysis of therapy costs and payments, OIG recommended that CMS evaluate the extent to which therapy payments should be reduced, change the method for paying for therapy, adjust Medicare payments to eliminate any increases unrelated to patient characteristics, and strengthen the oversight of SNF billing (Office of Inspector General 2015b). CMS concurred with these recommendations and stated it was working on an alternative to the current PPS design. In its 2016 work plan, OIG outlined new work to review compliance with documentation requirements to support claims that SNF care is reasonable and necessary (Office of Inspector General 2015a).

In 2015, the Department of Justice continued its enforcement of the False Claims Act, investigating fraud and abuse of therapy billings in SNFs (Noller and Rubin 2015). The inquiries focus on providers that assign large shares of days to case-mix groups with the most intense levels of therapy, the practice of furnishing the minimum number of minutes to assign days to a case-mix group, billing for more minutes than actually provided, billing group therapy as individual therapy, and other issues related to billing and documentation requirements that can maximize reimbursement.

CMS's revisions of the SNF PPS

Although CMS has taken steps to enhance payments for medically complex care, it has not revised the basic design of the PPS to pay more accurately for NTAs or to base payments for rehabilitation therapy services on

patient care needs. In 2010, CMS changed the definitions of the existing case-mix groups and added 13 case-mix groups for medically complex days.⁶ At the same time, CMS shifted program dollars from therapy care toward medically complex care (Centers for Medicare & Medicaid Services 2010). After these changes, the share of days classified into medically complex groups between 2010 and 2011 increased from 5 percent to 7 percent. However, by 2013, the share had decreased to 6 percent, where it remained in 2014. In 2010 and 2011, CMS also lowered payments for therapy furnished to multiple beneficiaries at the same time rather than in one-on-one sessions, and it required providers to reassess patients when the provision of therapy changed or stopped (which would, in turn, change assignments in case-mix groups).⁷ Despite these changes, we found that Medicare's payments for therapy services continue to exceed the cost of these services, and its payments for NTA services bear no relationship to the cost of these services (Medicare Payment Advisory Commission and the Urban Institute 2014).

CMS's work on alternative designs for the SNF PPS began 15 years ago in response to a legislative requirement (Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000) to conduct research on potential refinements of the SNF PPS (Liu et al. 2007, Maxwell et al. 2003, Urban Institute 2004). Yet, to date, CMS continues to evaluate alternative ways to pay for NTA and therapy services and has not revised the basic PPS design. In 2014, CMS reviewed alternative ways to pay for therapy and later that year announced it was expanding the scope of its research to consider revisions of the entire PPS. In 2015, it held two expert panels to discuss various aspects of alternative designs. It plans additional outreach activities, including another panel in 2016, before it proposes an alternative design.

Are Medicare payments adequate in 2016?

To examine the adequacy of Medicare's payments, we analyze beneficiaries' access to care (including the supply of providers and volume of services), quality of care, providers' access to capital, Medicare payments in relation to costs to treat Medicare beneficiaries, and changes in payments and costs. We also compare the performance of SNFs that have relatively high and low Medicare margins and compare relatively efficient SNFs with other SNFs.

**TABLE
7-2****SNF service use declined between 2013 and 2014**

Volume measure	2008	2010	2012	2013	2014	Percent change 2013-2014
Covered admissions per 1,000 FFS beneficiaries	73	72	68	67	66	-1.4%
Covered days per 1,000 FFS beneficiaries	1,977	1,938	1,861	1,835	1,808	-1.5
Covered days per admission	27.0	27.1	27.4	27.6	27.6	0.0

Note: SNF (skilled nursing facility), FFS (fee-for-service). FFS beneficiaries include users and nonusers of SNF services. Data include 50 states and the District of Columbia.

Source: Centers for Medicare & Medicaid Services 2015b.

Beneficiaries' access to care: Access is stable for most beneficiaries

We do not have direct measures of access, in part because the need for SNF care, as opposed to other PAC or no PAC, is not well defined. Instead, we consider the supply and capacity of providers and evaluate changes in service volume. We also examine the mix of SNF days to assess PPS shortcomings that can result in delayed admission for certain types of patients.

Capacity and supply of providers: Supply remains stable

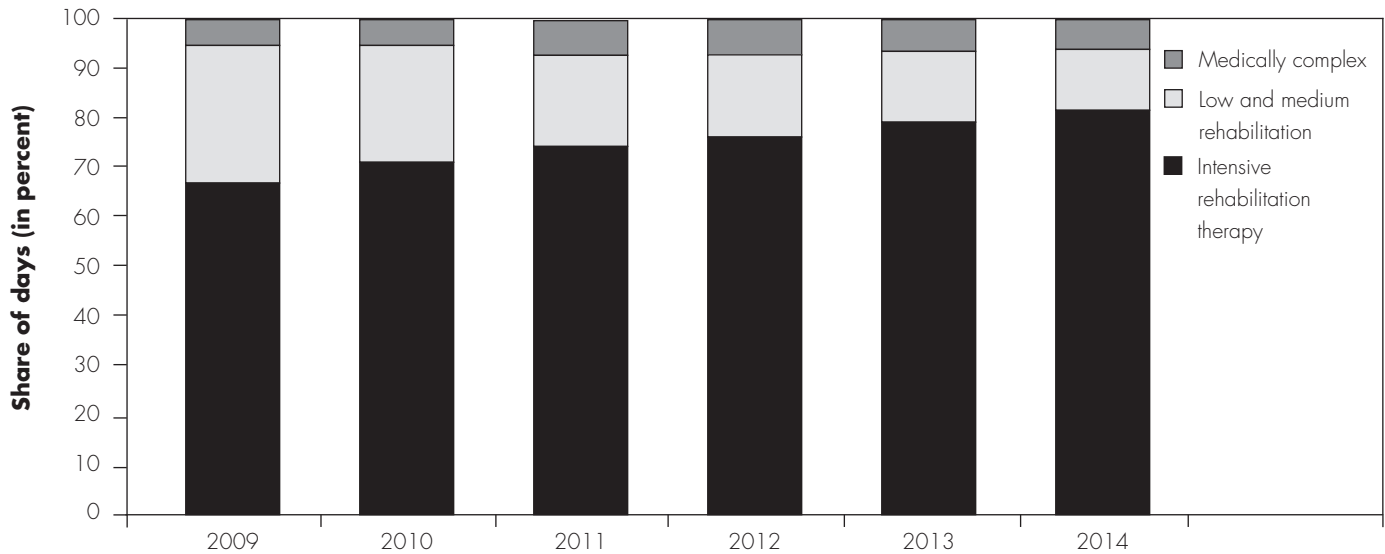
The number of SNFs participating in the Medicare program has been stable for the past 10 years, with just over 15,000 providers. In 2014, there were 92 facilities new to the program, the majority of which were for profit (Centers for Medicare & Medicaid Services 2015a). In 2014, over 90 percent of beneficiaries lived in counties with three or more SNFs or swing bed facilities (a rural hospital with beds that can serve as SNF or acute care beds). Less than 1 percent of beneficiaries lived in a county without a SNF or a swing bed facility, and another 8 percent lived in counties with one or two skilled nursing or swing bed facilities. Between 2013 and 2014, median occupancy rates for freestanding SNFs remained the same (86 percent) and increased slightly for hospital-based facilities (from 81 percent to 82 percent). Although these averages are high, one-quarter of freestanding facilities had occupancy rates at or below 76 percent, indicating capacity for more admissions. The median occupancy rate for freestanding SNFs in rural areas was lower than average (83 percent), and facilities located in areas with small populations (fewer than 2,500 people) had lower median occupancy rates (81 percent).

SNF volume was slightly lower in 2014 than in 2013

In 2013, 4.5 percent of FFS beneficiaries used SNF services, the same share as in 2013. Between 2013 and 2014, SNF volume per FFS beneficiary declined slightly. We examine service use for FFS beneficiaries because the CMS data on users, days, and admissions do not include service use by beneficiaries enrolled in Medicare Advantage (MA) plans. Admissions and days per 1,000 FFS beneficiaries both declined slightly, but there was no change in the average covered length of stay (27.6 days, Table 7-2). Declines in hospital admissions (and, to a lesser extent, readmissions) are the key driver of the decline in SNF stays. As hospital admissions declined, the average patient complexity increased and these patients continued to require PAC. The share of hospital discharges going to SNFs, home health agencies (HHAs), and inpatient rehabilitation facilities (IRFs) increased between 2013 and 2014. As a result, the decline in SNF use was smaller than the decline in inpatient hospital use. The increase in observation days, which do not count toward qualifying as an inpatient admission, may be a small factor, but because the count of observations stays is low relative to the total number of SNF admissions, observation days do not account for a large share of the decline in admissions.

Service mix reflects biases in PPS design

Between 2002 and 2014, the share of days classified into rehabilitation case-mix groups in freestanding facilities increased from 78 percent to 93 percent.⁸ During the same period, the share of intensive therapy days as a share of total days rose from 29 percent to 81 percent. The most recent changes indicate the continued intensification of

**FIGURE
7-1****The share of intensive therapy days in SNFs continues to increase**

Note: SNF (skilled nursing facility). “Medically complex” includes days assigned to clinically complex and special care case-mix groups. “Intensive rehabilitation therapy” includes days assigned to ultra-high and very high rehabilitation case-mix groups.

Source: MedPAC analysis of freestanding cost reports 2009–2014.

therapy provision (Figure 7-1). Between 2011 and 2014, the share of intensive therapy days increased from 74 percent to 81 percent, and the share of days assigned to the highest rehabilitation case-mix groups (the ultra-high groups) increased from 47 percent to 56 percent. Facilities differed in the amount of intensive therapy they provided. In 2014, for-profit facilities and facilities located in urban areas had higher shares of intensive therapy (83 percent for each group) compared with nonprofit facilities (78 percent) and facilities in rural and frontier areas (75 percent and 53 percent, respectively). Hospital-based facilities had lower shares of intensive therapy days (59 percent) compared with freestanding facilities (82 percent). The presence of IRFs in the county did not appear to influence the share of intensive therapy days at SNFs.

Changes in the frailty of beneficiaries at admission to a SNF do not explain the increases in therapy. Compared with the average SNF user in 2011, the average SNF user in 2014 had slightly less ability (5 percent lower score) to perform ADLs (as measured by a modified Barthel score), a 5 percent lower risk score (which measures a patient’s comorbidities), and was the same age. Over the

same period, for the 10 ADLs we examined, the shares of SNF users requiring the most help decreased for 9 activities.⁹ OIG also concluded that SNFs had increased their billing for the highest levels of therapy even though beneficiary characteristics—including age and reasons for and the severity levels of the prior hospital stay—remained unchanged (Office of Inspector General 2015b). Shorter hospital stays could have shifted some therapy provision from the hospital to the SNF setting. However, OIG found that the lengths of stay of the preceding hospitalizations had changed very little between 2011 and 2013 (Office of Inspector General 2015b).

The share of medically complex days (those assigned to the clinically complex or special care case-mix groups) continued to be low (6 percent). Most SNFs admitted medically complex and special care cases: 84 percent of SNFs admitted clinically complex patients and 91 percent admitted special care patients, both up slightly from 2013. Hospital-based units were disproportionately represented in the group of SNFs with the highest shares (defined as the top quartile) of medically complex admissions. Although the payment rates for medically complex

Measures of skilled nursing facility quality

The measures the Commission examines regarding skilled nursing facility (SNF) quality are risk-adjusted rates of readmission, discharge back to the community, and change in functional status during the SNF stay.

The community discharge measure includes beneficiaries discharged to a community setting (including assisted living) and excludes those discharged to an inpatient setting (e.g., an acute care hospital or nursing home) within one day of the SNF discharge. The measure also excludes beneficiaries who die within 1 day of the SNF discharge and beneficiaries who are readmitted to an acute care hospital within 30 days of admission to the SNF (Kramer et al. 2015). Beneficiaries who are discharged to a nursing home are not counted as community discharges, although the risk adjustment method (and the comorbidities) captures some of the differences in patient health status between beneficiaries discharged home and those discharged to a nursing home.

The readmission measures count patients whose primary diagnosis for rehospitalization was considered potentially avoidable; that is, the condition should have been managed in the SNF setting. The potentially avoidable conditions include congestive

heart failure, electrolyte imbalance/dehydration, respiratory infection, septicemia, urinary tract or kidney infection, hypoglycemia and diabetic complications, anticoagulant complications, fractures and musculoskeletal injuries, acute delirium, adverse drug reactions, cellulitis/wound infection, pressure ulcers, and blood pressure management. The count excludes readmissions that were likely to have been planned (e.g., inpatient chemotherapy or radiation therapy) and readmissions that signal a premature discharge from the hospital. We separately measure readmissions that occur during the SNF stay and those that occur within 30 days of discharge from the SNF.

The observed readmission and community discharge rates were risk adjusted for medical comorbidity, cognitive comorbidity, mental health comorbidity, function, and clinical conditions (e.g., surgical wounds and shortness of breath). The rates reported are the average risk-adjusted readmission rates for all facilities with 25 or more stays (20 stays for the postdischarge readmission measure). Demographics (including race, gender, and age categories except younger than age 65 years) were not important in explaining differences in readmission and community discharge rates after controlling for beneficiaries' comorbidities, mental illness, and functional status (Kramer et al. 2014).¹⁰

(continued next page)

days were increased recently, rehabilitation days remain highly profitable, and the PPS continues to encourage providers to furnish enough therapy to convert medically complex days to rehabilitation days. The presence of a long-term care hospital in the county does not appear to influence the share of medically complex days in SNFs. The Commission's recommended design would increase payments for medically complex patients.

Though access does not appear to be an issue in general, industry representatives and patient advocates report that patients with high NTA costs (such as those requiring expensive antibiotics) can be hard to place. In addition, patients who are more likely to require long stays and exhaust their Medicare benefits are also avoided by some

facilities because either a facility's daily payments decline if the patient is eligible for Medicaid or the stay results in bad debt.

Quality of care: Mixed performance

The Commission tracks three broad categories of SNF quality indicators: risk-adjusted rates of readmission, discharge back to the community, and change in functional status during the SNF stay.¹¹ Between 2013 and 2014, these quality measures showed mixed performance: The rates of readmissions and discharge to the community improved slightly, the readmission rate during the 30 days after discharge from SNFs increased (got worse), and the two measures of functional change were essentially unchanged.

Measures of skilled nursing facility quality (cont.)

Two risk-adjusted measures of functional change gauge the percentage of a facility's stays during which patients' function improves (the rate of improvement in one, two, or three mobility measures—bed mobility, transfer, and ambulation) and the percentage of stays during which patients' functioning does not decline (including stays with improvement and stays with no change), given the prognosis of the facility's patients. Change is measured by comparing initial and discharge assessments. For stays that go on to use long-term nursing home care, the assessment closest to the end of Medicare coverage is used, as long as it is within 30 days of the end of the SNF stay. Although the initial assessment often occurs toward the end of the first week of the stay, the Minimum Data Set information pertains to the number of times over the past week that assistance was provided, rather than the recorded functional status at a single point in time. Therefore, any measurement error due to the reliance on an assessment conducted at the end of the first week of the stay is unlikely and would not affect our ability

to examine quality trends over time, unless changes occur from year to year when initial assessments are conducted.

Each stay's initial assessment is used to assign the patient to 1 of 22 case-mix groups using 3 measures of mobility—bed mobility, transfer, and ambulation (Kramer et al. 2014). This classification system acts as a form of risk adjustment, differentiating patients based on their expected ability to perform the three mobility-related activities of daily living (ADLs). A patient's prognosis is measured using the patient's ability to eat and dress because these two ADLs encompass cognitive functioning and other dimensions of physical functioning that facilitate rehabilitation.

Each risk-adjusted rate compares a facility's observed rate with its expected rate ((actual rate/expected rate) × the national average rate) based on the mix of patients across functional outcome groups. Each facility-level measure combines the functional status information for the three mobility measures. ■

Between 2013 and 2014, the rate of readmissions during the SNF stay and the community discharge rate improved slightly, but the rate of readmissions after discharge from the SNF worsened slightly

After about 10 years of almost no improvement, both the rate of potentially avoidable readmission for SNF patients and the rate of discharge to the community have started to improve (see text box on measures of SNF quality). Between 2011 and 2014, readmission rates during the SNF stay declined (consistent with declines in the hospital readmission rate) and community discharge rates increased (Table 7-3, p. 186).¹² The improvements in both measures between 2013 and 2014 were small. However, between 2013 and 2014, readmissions during the 30 days after discharge from the SNF increased slightly (from 5.5 percent to 5.6 percent). The post-period measure indicates how well facilities prepare beneficiaries and their caregivers for safe and appropriate transitions to the next health care setting (or home). So while SNFs have improved the quality they furnished, the post-period

measure indicates opportunities for SNFs to improve the handoffs to the next setting and, when subsequent PAC providers are involved, to partner with higher quality providers. Across the three measures, the trends over four years are encouraging. Readmission rates have declined, and rates of discharge to the community have increased.

The lower readmission rates during the SNF stay reflect increased attention from hospitals to avoid readmission penalties by partnering with SNFs with low readmission rates. Hospitals are increasingly establishing preferred provider networks with higher quality SNFs, hoping to lower their own readmission rates in exchange for increased referrals from SNFs (Evans 2015). In addition, many SNFs want to secure volume from MA plans and accountable care organizations by demonstrating improvements in their readmission rates. The AHCA had a goal for its members to lower their 30-day all-cause, all-patient readmission rate 15 percent by 2015. AHCA reported that, between the last quarter of 2011 and the first quarter of 2015, its members lowered readmissions

**TABLE
7-3****Changes in risk-adjusted rates of community discharge
and potentially avoidable readmissions, 2011–2014**

Measure	2011	2012	2013	2014
Discharged to the community	33.1%	35.6%	37.5%	37.6%
Potentially avoidable readmissions:				
During SNF stay	12.4	11.5	11.2	10.9
During 30 days after discharge from SNF	5.9	5.7	5.5	5.6

Note: SNF (skilled nursing facility). Higher rates of discharge to the community indicate better quality. Higher readmission rates indicate worse quality. Rates are the average of facility rates and calculated for all facilities with 25 or more stays, except the rate of potentially avoidable readmissions during the 30 days after discharge, which is reported for all facilities with 20 or more stays.

Source: Analysis of fiscal year 2011 through fiscal year 2014 Minimum Data Set and hospital claims data.

by 4.9 percent in the aggregate (from 18.2 percent to 17.3 percent) and that over one-third of its members met the 15 percent target (across all patients, not just Medicare) (American Healthcare Association 2015).

As part of the Protecting Access to Medicare Act of 2014, the Congress enacted a SNF readmission policy, with facilities to begin publicly reporting in October 2017. The law requires the Secretary to develop an all-condition, risk-adjusted, potentially preventable readmission measure by October 2016. A value-based purchasing program will adjust a facility's payments based on its readmission rate beginning in October 2018.

No improvement in managing patients' functional status

Most beneficiaries receive rehabilitation therapy, and the amount of therapy furnished to them has steadily increased over time. Yet patients vary considerably in their expected

improvement during the SNF stay. Some patients are likely to improve in several ADLs during their SNF stay, while others with chronic and degenerative diseases may expect, at best, to maintain their function. We measure SNF performance on both aspects of patient function on a risk-adjusted basis (see text box on SNF quality measures, p. 184–185).

The average risk-adjusted rates of functional change—rate of improvement in one, two, or three mobility ADLs (bed mobility, transfer, and ambulation) and the rate of no decline in mobility—were essentially unchanged between 2011 and 2014 (Table 7-4). These risk-adjusted rates consider the likelihood that a patient's functionality will change, given the functional ability at admission. Even though the program paid for more therapy during this period, the average functional status of beneficiaries did not improve.

**TABLE
7-4****Mean risk-adjusted functional outcomes in SNFs
show little change between 2011 and 2014**

Composite measure	2011	2012	2013	2014
Rate of improvement in one or more mobility ADLs	43.6%	43.5%	43.7%	43.5%
Rate of no decline in mobility	87.3	87.2	87.2	87.1

Note: SNF (skilled nursing facility), ADL (activity of daily living). The three ADLs include bed mobility, transfer, and ambulation. The rate of mobility improvement is the average rates of improvement in bed mobility, transfer, and ambulation, weighted by the number of stays included in each measure. Stays with improvement in one, two, or three ADLs are counted in the improvement measure. The rate of stays with no decline in mobility is the percentage of stays with no decline in any of the three ADLs. Rates are the average of facility rates and calculated for all facilities with 25 or more stays.

Source: Analysis of fiscal year 2011 through fiscal year 2014 Minimum Data Set data.

**TABLE
7-5****SNF quality measures varied considerably across SNFs, 2014**

Quality measure	Risk-adjusted rate			Ratio of 75th to 25th percentile
	Mean	25th percentile	75th percentile	
Discharged to the community	37.6%	29.4%	46.5%	1.6
Potentially avoidable readmissions during SNF stay	10.9	7.8	13.6	1.7
Potentially avoidable readmissions within 30 days after discharge from SNF	5.6	3.6	7.3	2.0
Average mobility improvement across the three mobility ADLs	43.5	35.5	52.1	1.5
No decline in mobility during SNF stay	87.1	82.7	92.7	1.1

Note: SNF (skilled nursing facility), ADL (activity of daily living). Higher rates of discharge to community indicate better quality. Higher readmission rates indicate worse quality. "Mobility improvement" is the average of the rates of improvement in bed mobility, transfer, and ambulation, weighted by the number of stays included in each measure. "No decline in mobility" is the share of stays with no decline in any of the three ADLs. Rates are the average of facility rates and calculated for all facilities with 25 or more stays, except the rates of potentially avoidable readmissions during the 30 days after discharge, which are reported for all facilities with 20 or more stays.

Source: Analysis of fiscal year 2014 Minimum Data Set and hospital claims data.

Large variation in quality measures indicates considerable room for improvement

Considerable variation exists across the industry in the five quality measures we track. We found one-quarter of facilities in 2014 had risk-adjusted community discharge rates lower than 29.4 percent, whereas the best-performing quarter of facilities had rates of 46.5 percent or higher (Table 7-5). Similar variation was seen in the readmission rates: The worst-performing quartile had rates of potentially avoidable readmissions at or above 13.6 percent, whereas the best quartile had rates at or below 7.8 percent. Finally, rates of readmission in the 30 days after discharge from the SNF varied most—a twofold difference between the 25th percentile and the 75th percentile. The amount of variation across and within the groups suggests considerable room for improvement, all else being equal. There was less variation in the mobility measures.

Medicare is increasingly focused on measuring the value of the care it purchases and, in the future, may establish a unified payment system for all PAC. To facilitate both, the program is developing cross-setting outcome measures. The Commission also has work under way to develop uniformly defined readmission measures that will facilitate the comparison of rates across settings.

Providers' access to capital: Lending in 2015

A vast majority of SNFs operate within nursing homes; therefore, in assessing SNFs' access to capital, we look

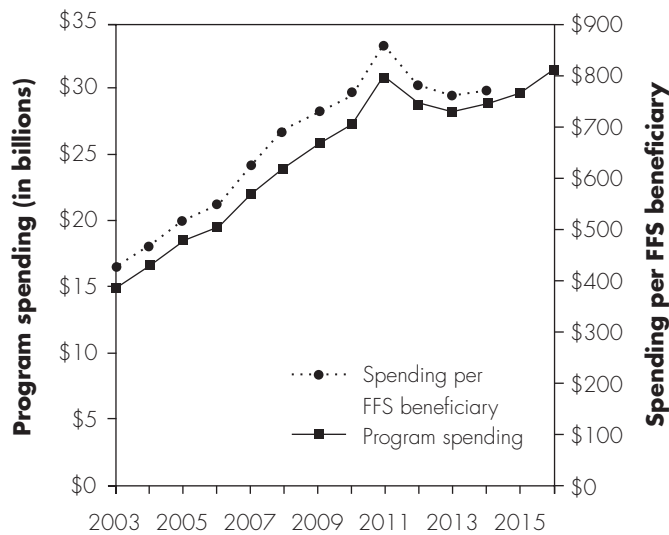
at the availability of capital for nursing homes. Although Medicare makes up the minority share of almost all facilities' revenues, many operators see Medicare as their best payer.

Market analysts we spoke with reported that capital is generally available and expected to remain so. Over time, lenders have gotten more selective about the facilities they lend to and have increased the due diligence conducted on potential borrowers. Lenders review the quality of the potential borrower's management team, its cash flow and amount of debt, operating trends (volume, occupancy, payer mix, and patient mix), quality of care, its ability to carry out strategic plans to shift payer or service mix, and the specificity of the facility's plans to meet performance goals. Lenders continue to focus on facilities with high Medicare and private-payer mixes and the potential to expand both. For the last several years, we have heard about the bifurcation of this industry into providers seeking the high acuity-subacute patients and other nursing facilities maintaining their focus on the long-term care population. One analyst opined that while the future of SNFs is to be the low-cost operator of PAC, not all providers are interested in or capable of playing that role.

Consolidation continued in 2015 as health care companies sought more integration across the PAC continuum (Ensign Group 2015, Genesis HealthCare 2015b, Kindred Healthcare 2015b). Strategies include expanding holdings to include multiple PAC service lines (such as home health

**FIGURE
7-2**

**After a temporary slowdown,
SNF spending growth returns
to prior pace, 2003–2016**



Note: SNF (skilled nursing facility), FFS (fee-for-service). Fiscal year spending is shown. Program spending data for 2015 and 2016 are estimates.

Source: Spending data are from Office of the Actuary 2015b; FFS counts are from the 2015 annual report of the Boards of Trustees of the Medicare trust funds.

and hospice) and solidifying presence across the continuum within select markets. For example, Kindred purchased Gentiva, a home health care company, and Centerre, a small chain of IRFs, in 2015. Lenders look favorably at a diversified earning stream as a way to spread risk.

The SNF industry set a record number of merger and acquisition transactions in 2014, with 165 publicly recorded sales and a 4 percent increase from 2013 in the price per bed, following a 21 percent increase the year before (Irving Levin Associates Inc. 2015). Some market analysts note that the fragmented SNF industry represents an opportunity for consolidation. Two publicly traded for-profit chains report an acquisition strategy to purchase underperforming SNFs and turn around their quality and financial performance (DiversiCare 2015, Ensign Group 2015). Other chains seek out high-performing facilities, with high-acuity and high-revenue stays (Irving Levin Associates Inc. 2015). Reflecting the continued viability of the SNF market, Genesis purchased another SNF chain (Skilled HealthCare) in 2015.

The Department of Housing and Urban Development (HUD) continues to be an important lending source. In

fiscal year 2015, HUD financed 291 projects, with the insured amount totaling \$2.7 billion (Department of Housing and Urban Development 2015). Both the number of projects and the total amount of lending declined substantially from 2014, in large part because low-cost borrowing and widely available capital sources have made HUD only one of many alternative lenders (Swett 2015). Refinancing makes up the majority of loans, while new and major construction comprise the minority of projects.

Analysts note that, in addition to a long-standing wariness about potential budget cuts, increased scrutiny by OIG, lower volume, and concerns about the increased expectations for providers to assume risk (through accountable care organizations, bundling, and value-based purchasing) have increased the hesitancy among some lenders. That said, lenders' reluctance is not a statement about the adequacy of Medicare's payments to SNFs. Medicare continues to be a preferred payer.

Medicare payments and providers' costs: Medicare margins remained high in 2014

In 2014, the aggregate Medicare margin was 12.5 percent—the 15th consecutive year that Medicare margins were above 10 percent. Margins for individual facilities continue to be highly variable, depending on the facility's share of intensive therapy days, size, and cost per day. The variations in Medicare margins and costs per day were not attributable to differences in patient demographics: High-margin facilities had higher case-mix indexes and higher shares of dual-eligible and minority beneficiaries. Differences by ownership were considerable, with for-profit facilities having much higher Medicare margins than nonprofit facilities. Eight percent of freestanding facilities defined as relatively efficient consistently furnished relatively low-cost, higher quality care and had substantial Medicare margins over three consecutive years. Some MA plans' payments were considerably lower than Medicare's FFS payments, and the disparity is unlikely to be explained by differences in patient mix. These points strongly suggest that SNFs can provide high-quality care at lower payment rates.

Trends in spending and cost growth

In 2014, Medicare spending was \$28.6 billion, a slight increase over 2013 (\$28.4 billion). The CMS Office of the Actuary projects program FFS spending for SNF services in fiscal year 2015 to be \$30 billion (Figure 7-2) (Office of the Actuary 2015b). In 2011, payments were unusually high because the rates for the new case-mix classification

system included an adjustment that was too large for the mix of therapy modalities assumed in setting the rates. The industry responded to the payment incentive afforded by the new policies and quickly shifted its mix of modalities, and payments increased by 14 percent in 2011. To correct for the excessive payment, CMS revised the adjustment downward, and total payments were lower in 2012. Since then, the growth in spending has risen in line with previous trends and is projected to increase 3.9 percent in 2015. On a per FFS beneficiary basis, spending in 2014 (\$767) was about the same as in 2013. CMS projects spending in fiscal year 2016 to be \$31.5 billion.

From 2003 to 2014, the cumulative increase in payments per day outpaced the increase in cost per day (Figure 7-3). During this period, costs per day rose 44 percent while payments grew 46 percent. The cost increases were larger than the market basket updates in every year except one (2012), but payments rose even more. As a result, SNFs remained highly profitable on average. When Medicare lowered its rates by 11 percent in 2012 to correct for the previous year's overpayments, providers kept their cost growth in that year below the market basket increases.

Since 2011, costs have grown more quickly for nonprofit SNFs compared with for-profit SNFs. Cumulatively, costs grew 7.7 percent for nonprofit facilities compared with 5.2 percent for for-profit SNFs. Nonprofit facilities also had a standardized cost per day (adjusted for differences in wages and case mix) that was about 10 percent higher than the cost per day in for-profit facilities.

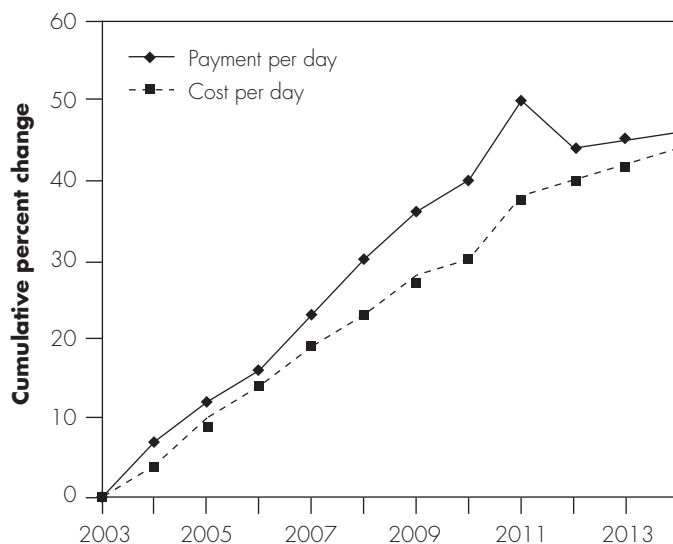
SNF Medicare margins remain high

The Medicare margin is a key measure of the adequacy of the program's payments because it compares Medicare's payments with providers' costs to treat beneficiaries. An all-payer total margin, in contrast, reflects the financial performance of the entire facility across all lines of business (such as ancillary and therapy services, hospice, and home health care) and all payers (including Medicaid, private insurers, and managed care) and is presented as context for the Commission's update recommendation.

In 2014, the aggregate Medicare margin for freestanding SNFs was 12.5 percent, the 15th consecutive year of Medicare margins above 10 percent (Figure 7-4, p. 190). The 2014 margin was lower than the 2013 margin for two reasons. First, current law requires market basket increases to be offset by a productivity adjustment. Second, the federal budget sequester began lowering payments in

FIGURE 7-3

Cumulative growth in Medicare cost and payments per SNF day, 2003-2014

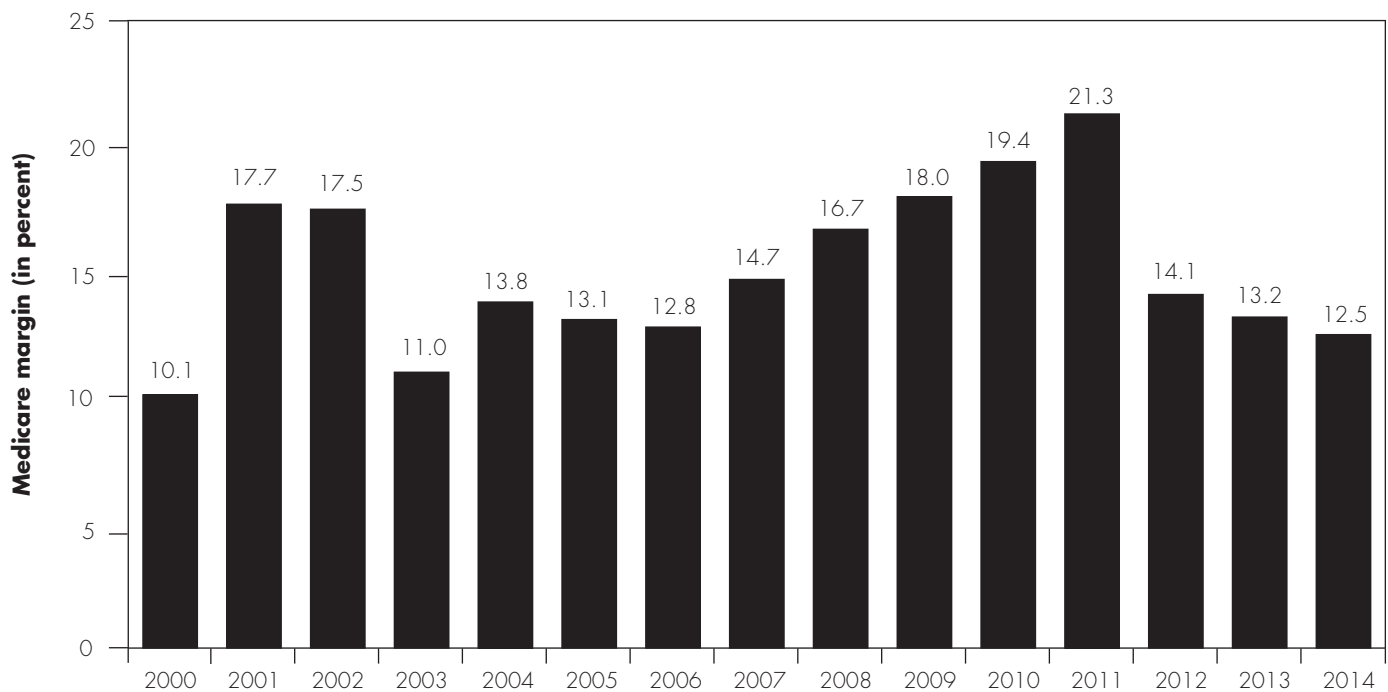


Note: SNF (skilled nursing facility).

Source: MedPAC analysis of freestanding SNF Medicare cost reports from 2003-2014.

April 2013 by 2 percent on an annualized basis so that the year's data reflected its impact for only part of the year.¹³ The combined impact of these policies would have been greater but was offset by the continued increase in the share of cases assigned to the highest payment case-mix groups, the ultra-high therapy groups. In 2011, the Medicare margin was 21.3 percent, reflecting the large increase in payments because of the implementation of the new case-mix groups and an incorrect adjustment factor. Despite reductions to correct SNF payments the following year, Medicare margins remained high in 2012 (14.1 percent).

In 2014, hospital-based facilities (3 percent of program spending on SNFs) continued to have extremely negative Medicare margins (-70 percent), in part because of the higher cost per day reported by hospitals. Previous analysis by the Commission found that routine costs in hospital-based SNFs were higher, reflecting more staffing, higher skilled staffing, and shorter stays (over which to allocate costs) (Medicare Payment Advisory Commission 2007). However, hospital administrators consider their SNF units in the context of the hospital's overall financial

**FIGURE
7-4****Aggregate freestanding SNF Medicare margins have been above 10 percent since 2000**

Note: SNF (skilled nursing facility).

Source: MedPAC analysis of freestanding SNF cost reports, 2000–2014.

performance and mission. Hospitals with SNFs can lower their inpatient lengths of stay by transferring patients to their SNF beds, thus making inpatient beds available to treat additional inpatient admissions. As a result, hospital-based SNFs can contribute to the bottom-line financial performance of hospitals: Hospitals with SNFs had lower inpatient costs per case and higher inpatient Medicare margins than hospitals without SNFs.

Marginal profit: A measure of the attractiveness of Medicare patients

Another consideration in evaluating the adequacy of Medicare payments is the assessment of whether providers have a financial incentive to expand the number of Medicare beneficiaries they serve. In considering whether to treat a patient, the provider compares the marginal revenue it will receive for treating one additional patient (i.e., the Medicare payment) with its marginal costs—that is, the costs that vary with volume, in this case, to treat one additional patient. If Medicare payments do

not cover a facility's marginal costs, the provider could have a disincentive to admit Medicare beneficiaries. To operationalize this concept, we compare payments for Medicare services to marginal costs, approximated as:

$$\text{Marginal profit} = (\text{payments for Medicare services} - (\text{total Medicare costs} - \text{fixed building and equipment costs})) / \text{Medicare payments}$$

This comparison is a lower bound on the marginal profit because we ignore any potential labor costs that are fixed. For providers with available data, the marginal profit in 2014 was 20.4 percent; Medicare payments far exceed the marginal costs, which suggests that facilities with available beds have an incentive to admit Medicare patients and represents a positive indicator of patient access.

High and widely varying SNF Medicare margins indicate reforms to the PPS are still needed

The persistently high Medicare margins and their wide variation indicate that the PPS needs to be revised and rebased so that payments more closely match patient characteristics, not the services provided to them. In 2014, one-quarter of freestanding SNFs had Medicare margins of 21.2 percent or higher, while another quarter of freestanding SNFs had margins of 2.4 percent or lower (Table 7-6). One-fifth (about the same share as last year) of SNFs had negative Medicare margins (not shown).

Over the past 10 years, Medicare margins for for-profit facilities have ranged from 9 percentage points to almost 13 percentage points higher than the margins for nonprofit facilities. In 2014, the disparity continued; nonprofit facilities had an average Medicare margin of 3.9 percent, while the average for-profit margin was 14.9 percent. The disparity reflects differences in facilities' costs, size, and service provision. Nonprofit facilities have higher costs per day and since 2012 have had higher cost growth compared with for-profit facilities. The higher costs for nonprofit facilities are partly due to their smaller size. In 2014, the median nonprofit facility had 85 beds compared with 104 beds for the median for-profit facility; therefore, the nonprofits may not be able to achieve the same economies of scale as larger facilities. On the revenue side, in 2014, nonprofits had lower shares of the more profitable ultra-high and very high therapy days compared with for-profit facilities (78 percent compared with 83 percent, respectively).

Facilities with the highest SNF margins had high shares of intensive rehabilitation therapy and low shares of medically complex days. Despite the payment increases for medically complex cases in October 2010, the relative financial performance in 2014 of facilities with high shares of these cases did not improve, and there was almost a 3 percentage point difference in the Medicare margins between facilities with high and low shares. Lower cost SNFs and larger SNFs had higher Medicare margins than higher cost SNFs and smaller SNFs. The SNF Medicare margin for facilities with the lowest cost per day (the bottom quartile of cost per day) was 26.3 percent, while the margin for facilities with the highest cost per day (the top quartile of cost per day) was 2.1 percent.

Differences in costs and revenues between freestanding facilities in the top and bottom quartiles of Medicare margins underscore the need to revise the PPS and more closely align payments with costs. The highest margin

**TABLE
7-6**

Variation in freestanding SNF Medicare margins reflects the mix of cases and cost per day, 2014

Subgroup	Medicare margin
All	12.5%
For profit	14.9
Nonprofit	3.9
Rural	10.6
Urban	12.9
Frontier	5.2
25th percentile of Medicare margins	2.4
75th percentile of Medicare margins	21.2
Intensive therapy: High share of days	14.5
Intensive therapy: Low share of days	7.3
Medically complex: High share of days	10.8
Medically complex: Low share of days	13.7
Small (20–50 beds)	2.8
Large (100–199 beds)	13.8
Standardized cost per day: High	2.1
Standardized cost per day: Low	26.3
Standardized cost per discharge: High	9.2
Standardized cost per discharge: Low	14.6

Note: SNF (skilled nursing facility). The margins are aggregates for the facilities included in the group. "Low" is defined as facilities in the lowest 25th percentile; "high" is defined as facilities in the highest 25th percentile. "Standardized costs per day" are Medicare costs adjusted for differences in area wages and the case mix (using the nursing component's relative weights) of Medicare beneficiaries.

Source: MedPAC analysis of 2014 freestanding SNF Medicare cost reports.

SNFs had lower daily costs (their costs were 70 percent of the costs of low-margin SNFs) and their revenues were 10 percent higher, driven partly by having higher shares of intensive therapy days (Table 7-7, p. 192). Compared with lower margin SNFs, higher margin SNFs had higher shares of dually eligible beneficiaries, minority beneficiaries, and Medicaid days. It is possible that given their higher Medicaid shares, these facilities keep their costs low and consequently have higher margins. Facilities with higher margins also treated more complex patients (as measured by the relative weights associated with the

**TABLE
7-7****Cost and revenue differences explain variation in Medicare margins for freestanding SNFs in 2014**

Characteristic	SNFs in the top margin quartile	SNFs in the bottom margin quartile	Ratio of SNFs in the top margin quartile to SNFs in the bottom margin quartile
Cost measures			
Standardized cost per day	\$254	\$369	0.7
Standardized ancillary cost per day	\$115	\$158	0.7
Standardized routine cost per day	\$142	\$204	0.7
Average daily census (patients)	89	67	1.3
Average length of stay (days)	45	37	1.2
Revenue measures			
Medicare payment per day	\$489	\$428	1.1
Share of days in intensive therapy	85%	77%	1.1
Share of medically complex days	4%	5%	0.8
Medicare share of facility revenue	25%	15%	1.7
Patient characteristics			
Case-mix index	1.40	1.31	1.1
Share dual-eligible beneficiaries	39%	27%	1.4
Share minority beneficiaries	13%	5%	2.6
Share very old beneficiaries	29%	34%	0.9
Medicaid share of days	65%	58%	1.1
Facility mix			
Share for profit	90%	58%	N/A
Share urban	78%	67%	N/A

Note: SNF (skilled nursing facility), N/A (not applicable). Values shown are medians for the quartile. Top margin quartile SNFs ($n=3,186$) were in the top 25 percent of the distribution of Medicare margins. Bottom margin quartile SNFs ($n=3,186$) were in the bottom 25 percent of the distribution of Medicare margins. "Standardized costs per day" are Medicare costs adjusted for differences in area wages and the case mix (using the nursing component's relative weights) of Medicare beneficiaries. "Intensive therapy" days are days classified into ultra-high and very high rehabilitation case-mix groups. "Medically complex" includes days assigned to clinically complex and special care case-mix groups. "Very old beneficiaries" are 85 years or older.

Source: MedPAC analysis of freestanding 2014 SNF cost reports.

nursing component of the case-mix groups) and had lower shares of patients classified into medically complex case-mix groups.¹⁴ (Because the nursing weights for intensive therapy are relatively high, a facility can have both a high case-mix index and a moderate or low share of medically complex patients.)

These differences in financial performance illustrate why the PPS needs to be revised. Even after CMS expanded the number of medically complex case-mix groups and shifted spending away from therapy care, the PPS continues to result in higher Medicare margins for facilities providing

higher amounts of intensive therapy. A PPS design based on patient characteristics (such as the one recommended by the Commission) would redistribute Medicare spending to SNFs according to their mix of patients, not the amount of therapy provided.

Ownership of low-margin and high-margin facilities did not mirror the industry mix. Although for-profit facilities made up 70 percent of SNFs overall, they comprised a smaller share (58 percent) of the low-margin facilities and a higher share (90 percent) of the high-margin group.

Identifying relatively efficient skilled nursing facilities

We defined relatively efficient skilled nursing facilities (SNFs) as those with relatively low costs per day and good quality care for three years in a row, 2011 through 2013. The cost per day was calculated using cost report data and was adjusted for differences in case mix (using the nursing component relative weights) and wages. Quality measures were risk-adjusted rates of community discharge and potentially avoidable readmissions during the SNF stay. Only facilities with at least 25 stays were included in the quality measures.

The method we used to assess performance attempts to limit drawing incorrect conclusions about performance based on poor data. Using three years to categorize SNFs as efficient (rather than just one year) avoids categorizing providers based on random variation or on

one “bad” year. In addition, by first assigning a SNF to a group and then examining the group’s performance in the next year, we avoided having a facility’s poor data affect both its own categorization and the assessment of the group’s performance. Thus, a SNF’s erroneous data could result in its inaccurate assignment to a group, but because the group’s performance is assessed with data from later years, these “bad” data would not affect the assessment of the group’s performance.

Of the 892 facilities identified as efficient in 2014, three-quarters of SNFs were not in the best third for both a quality measure and the cost measure. Over half (52 percent) met only one best quality measure and another 23 percent were in the best third for only the cost measure. Only 4 percent of SNFs were in the best third on all three measures. ■

High margins achieved by relatively efficient SNFs

The Commission is required by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 to consider the costs associated with efficient providers. The Commission follows two principles when selecting a set of efficient providers. First, the providers must do relatively well both on cost and quality metrics. Second, the performance has to be consistent, meaning that the provider cannot have poor performance on any metric over the previous three years. The Commission’s approach is to develop a set of criteria and then examine how many providers meet them. It does not establish a set share (for example, 10 percent) of providers to be considered efficient and then define criteria to meet that pool size.

Periodically, we review the set of criteria used to define efficient providers and evaluate the potential for improvements in our methodology. This year, we tested the effect of using different selection criteria such as adjusting the threshold of minimum acceptable quality or relaxing the consistency requirement. The Commission concluded that, while the alternative methods could change the number efficient providers by varying degrees, those methods did not result in greater distinction between the efficient and average providers, and in some cases the differences were reduced. Most fundamentally, the

clarity of the information obtained in assessing payment adequacy would not improve significantly with any of the new methods tested. Therefore, the Commission will continue to use its previous definition of an efficient provider in this year’s report. In the future, we will continue to look for improvements in our methods, including using new quality metrics as better indicators of patient outcomes are developed.

To identify efficient SNFs, we examined the financial performance of freestanding SNFs with consistent cost and quality performance on two measures (see text box on identifying efficient providers). To measure costs, we looked at costs per day that were adjusted for differences in area wages and case mix. To assess quality, we examined risk-adjusted rates of community discharge and potentially avoidable readmissions that occurred during the SNF stay. To be included in the relatively efficient group, a SNF had to be in the best third of the distribution of at least one measure and not in the bottom third on any measure for three consecutive years. According to this definition, 8 percent (892 of the 11,637 facilities included in the analysis for 2014) provided relatively low-cost, high-quality care, an increase from the 7 percent in 2013. Of those identified as efficient in 2014, 42 percent were also identified as efficient in 2013.

**TABLE
7-8****Financial performance of relatively efficient SNFs is a combination
of lower cost per day and higher revenues per day**

Performance in 2014	Type of SNF		Ratio of relatively efficient to other SNFs
	Relatively efficient	Other SNFs	
Community discharge rate	47.3%	37.3%	1.27
Readmission rate	9.2%	10.9%	0.84
Standardized cost per day	\$277	\$303	0.92
Medicare revenue per day	\$492	\$450	1.09
Medicare margin	20.0%	11.8%	1.69
Total margin	3.5%	1.7%	2.01
Facility case-mix index	1.43	1.35	1.06
Medicare average length of stay	35 days	40 days	0.86
Occupancy rate	89%	87%	1.02
Number of beds	120	100	1.20
Share ultra-high days	63%	52%	1.22
Share medically complex days	4.7%	4.6%	1.04
Medicaid share of facility days	58%	61%	0.94
Share urban	78%	66%	N/A
Share for profit	83%	70%	N/A
Share nonprofit	11%	20%	N/A

Note: SNF (skilled nursing facility), N/A (not applicable). The number of freestanding facilities included in the analysis was 11,637. SNFs were identified as “relatively efficient” based on their cost per day and two quality measures (community discharge and readmission rates) between 2011 and 2013. Relatively efficient SNFs were those in the best third of the distribution for one measure and not in the worst third for any measure in each of three years. Costs per day were standardized for differences in case mix (using the nursing component relative weights) and wages. Quality measures were rates of risk-adjusted community discharge and readmission during the SNF stay for patients with potentially avoidable conditions. Quality measures were calculated for all facilities with at least 25 stays. “Ultra-high days” include days assigned to ultra-high case-mix groups. “Medically complex” includes days assigned to clinically complex and special care case-mix groups. Table shows the medians for the measure.

Source: MedPAC analysis of quality measures and Medicare cost report data for 2011–2014.

Our analyses found that SNFs can have relatively low costs and provide relatively good quality of care while maintaining high margins (Table 7-8). Compared with other SNFs in 2014, relatively efficient SNFs had community discharge rates that were 27 percent higher and readmission rates that were 16 percent lower. Standardized costs per day were 8 percent lower than other SNFs’. We did not find significant differences between relatively efficient and other SNFs in terms of occupancy rates, but efficient SNFs were larger (120 beds compared with 100 beds). Efficient facilities had more complex case mixes (driven in part by higher therapy intensity) but shorter stays. In terms of case-mix days, efficient providers had higher shares of the most intensive therapy days and comparable shares of medically complex days.

The higher therapy intensity raised their daily Medicare payments relative to all SNFs, indicating that, in addition to controlling their costs, efficient providers pursued revenue strategies to maximize their Medicare payments. The median Medicare margin for efficient SNFs was 20.0 percent, and their total margin (for all payers and all lines of business) was 3.5 percent. The median marginal profit for efficient providers was 26.1 percent. Relatively efficient facilities were more likely to be urban and for profit. Efficient SNFs were located in 43 states, including 2 SNFs in frontier locations.

We recognize that a SNF may appear to be efficient with respect to the care it provides but may not be when considering a patient’s entire episode of care. For example,

**TABLE
7-9****Comparison of Medicare fee-for-service and managed care/
MA daily payments in 2015 for four companies**

Company	Medicare payment		Ratio of FFS to MA payment
	FFS	MA	
Diversicare	\$452	\$383	1.18
Ensign Group	566	418	1.35
Kindred	570	450	1.27
Genesis	502	448	1.12

Note: FFS (fee-for-service), MA (Medicare Advantage). In the companies' 10-Q reports, Diversicare and Ensign Group report "managed care payments." Genesis reports "insurance rates," which includes managed care and commercial insurance but excludes Medicaid managed care. Kindred separately reports MA rates.

Source: Third quarter 10-Q 2015 reports available at each company's website.

SNFs that discharge patients to other post-acute care providers may keep their own costs low but shift costs to other settings, thus increasing total Medicare program spending. In the future, we may compare providers' costs for an episode of care.

FFS payments for SNF care are considerably higher than managed care/MA payments for four publicly traded nursing home companies

Another indicator that Medicare's payments under the SNF PPS are too high is the comparison of FFS and managed care/MA payments that exclude Medicaid managed care. (We created a combined term to indicate that MA and managed care rates are often combined in the reporting of payment rates. However, Medicare Advantage plans typically cover the majority of SNF service use among managed care plans.) We compared Medicare FFS and managed care/MA payments at four nursing home companies where such information was publicly available. Medicare's FFS payments averaged 23 percent higher than MA rates (Table 7-9). MA makes up the majority of the managed care business at most SNFs. It is possible that smaller MA companies have less leverage and do not negotiate similarly low rates. We also do not know how these rates compare to those paid to smaller chains and independent facilities.

We compared the patient characteristics of beneficiaries enrolled in FFS and MA plans in 2014 and found small differences that do not explain the payment differences between the two. Compared with FFS beneficiaries, MA enrollees were the same age, had slightly higher Barthel scores (less than two points, indicating slightly more independence), and had slightly lower (5 percent) risk

scores (indicating fewer comorbidities). The considerably lower MA payments indicate some facilities accept much lower payments to treat MA enrollees who are not much different in terms of case-mix from FFS beneficiaries. Some publicly traded firms report seeking managed care patients as a business strategy, indicating that the rates are attractive.

Total margins remained the same in 2014 as in 2013 despite sequester reductions

The average total margin for freestanding SNFs in 2014 was 1.9 percent, the same as in 2013 even though the sequester reductions were in place for a full year. A total margin reflects services to all patients (public and private, including managed care) across all lines of business (for example, long-term care, hospice, home health care, and ancillary services) and revenue sources (for example, including investment income). Total margins are driven in large part by state policies regarding the level of Medicaid payments and the ease of entry into a market (e.g., whether there is a requirement for a certificate of need).

The publicly traded companies we examined report several trends in revenues. Companies try to grow their high-acuity business because they report it to be more profitable. They also spread their risk by expanding into other businesses, including home health care, hospice, home care, and outpatient therapy (DiversiCare 2015, Ensign Group 2015, Genesis HealthCare 2015b, Kindred Healthcare 2015a). Geographic diversification also spreads their risk. In addition, companies try to increase their managed care and private-payer business (DiversiCare 2015, Ensign Group 2015). Even though these shifts may lower their revenues because these payment rates and lengths of stay are typically lower, they are preferred to

Medicare's skilled nursing facility payments should not subsidize payments from Medicaid or other payers

Industry representatives contend that Medicare payments should continue to subsidize payments from other payers, most notably from Medicaid. However, high Medicare payments could also subsidize payments from private payers. The Commission believes such cross-subsidization is not advisable for several reasons. First, this strategy results in poorly targeted subsidies. Facilities with high shares of Medicare payments would receive the most in subsidies from higher Medicare payments, while facilities with low Medicare shares—presumably the facilities with the greatest need—would receive the smallest subsidies. Shares of Medicare and Medicaid patients vary widely across facilities (Table 7-10). As a result, the impact of the Medicare subsidy would vary considerably across facilities, putting more dollars into facilities with high Medicare use (and low Medicaid use), which are likely to have higher Medicare margins than other facilities.

In addition, Medicare's subsidy does not discriminate among states with relatively high and low Medicaid payments. If Medicare raises or maintains its high payment levels, states could be encouraged to further reduce their Medicaid payments and, in turn, create pressure to raise Medicare rates. Higher Medicare payments could further encourage providers to select patients based on payer source or to rehospitalize dual-eligible patients to qualify them for a Medicare-covered, higher payment stay. Finally, Medicare's high payments represent a subsidy of Trust Fund dollars (and its taxpayer support) to the low payments made by states and private payers. If the Congress wishes to help certain nursing facilities (such as those with high Medicaid shares), it would be more efficient to do so through a separate, targeted policy. ■

**TABLE
7-10**

Medicare and Medicaid shares vary widely across freestanding skilled nursing facilities, 2014

Payer	Percentile of facility days				
	10th	25th	Median	75th	90th
Medicare share	5%	8%	11%	17%	26%
Medicaid share	0	42	61	74	82

Note: SNF (skilled nursing facility).

Source: MedPAC analysis of SNF Medicare cost reports, 2014.

Medicaid admissions. Further, the average daily payments from Medicaid increased between 2014 and 2015 (third quarter 2015 10-Q filings from DiversiCare, The Ensign Group, Genesis, and Kindred; second quarter filing from AdCare).

Companies also report several strategies to attract the higher paying (and more profitable) stays (Medicare, private pay, and managed care). Some SNFs are increasing

their quality (and their performance) to secure referrals (DiversiCare 2015, Ensign Group 2015, Genesis HealthCare 2015a). Some SNFs report increasing the skill mix and competencies of their staff (such as the ability to manage intravenous medications and pain) to care for a higher acuity mix of patients (DiversiCare 2015, Genesis HealthCare 2015b). One company reported increasing their internal operating efficiencies by lowering staff turnover and using contract labor (Ensign Group 2015).

Because Medicaid payments are lower than Medicare payments, some in the industry argue that high Medicare payments are needed to subsidize losses on Medicaid residents. This strategy is ill advised for several reasons (see text box on not subsidizing Medicaid payments). In addition to Medicare's share of facility revenues, other factors that shape a facility's total financial performance are its share of revenues from private payers (generally considered favorable), its other lines of business (such as ancillary, home health, and hospice services), and nonpatient sources of income (such as investment income).

Payments and costs for 2016

In assessing the payment update for 2016, the Commission considers the estimated relationship between SNF costs and Medicare payments in 2015. To estimate costs for 2015 and 2016, we assumed cost growth of the market basket. To estimate 2015 payments, we began with reported 2014 payments and increased payments by the market basket net of the productivity adjustment (as required by the Patient Protection and Affordable Care Act of 2010). We also factored in the program's reduced payments for bad debt, as required by the Middle Class Tax Relief and Job Creation Act of 2012. For 2016, estimated 2015 payments were increased by the market basket and offset by the productivity adjustment and the forecast error correction. Projected payments for 2015 and 2016 fully reflect the impact of the sequester. The projected 2016 Medicare margin is 10.7 percent.

How should Medicare payments change in 2017?

In considering how payments should change for 2017, we note that the broad circumstances of SNFs have not changed since the Commission made its recommendation in 2012 to revise the SNF PPS and rebase the level of payments. In terms of the need to revise the PPS, our analysis of the payment system has found that, over time, its payments are increasingly inaccurate despite the many changes made to the payment system. The overpayments for therapy services have gotten larger, strengthening the existing incentive to furnish therapy services. At the same time, the payments for NTA services are unrelated to these services' costs, making payments even more poorly targeted than they had been. As broad payment reforms (such as bundled payments, accountable care organizations, and a unified PAC PPS) are implemented,

SNF use may increase because it is a lower cost alternative to IRFs and long-term care hospitals for some patients. Therefore, the importance of the accuracy of FFS payments to SNFs has increased.

Regarding the need to rebase payments, the Commission has found:

- Aggregate Medicare margins for SNFs have been above 10 percent since 2000. In 2014, the marginal profit was 20 percent, indicating facilities with an available bed have an incentive to admit Medicare patients.
- Variation in Medicare margins is not related to differences in patient characteristics but rather, in part, reflect the amount of therapy furnished to patients, differences in costs per day, and cost control.
- Cost differences remain after adjusting for differences in wages, case mix, and beneficiary demographics.
- Relatively efficient SNFs, with relatively low costs and high quality, have Medicare margins of 20 percent.
- FFS payments were considerably higher than some MA payments, suggesting some facilities are willing to accept much lower rates than FFS payments to treat Medicare beneficiaries.
- The industry has shown it is nimble at responding to the level of Medicare's payments. Even in years when CMS lowered payments, providers tempered the effects with longer stays, better cost control, and the assignment of days into higher payment case-mix groups.

These factors show that the PPS continues to exert too little pressure on providers. Moreover, Medicare payments, which are financed by taxpayer contributions to the Trust Fund, currently subsidize payments from other payers, most notably Medicaid. If the Congress wishes to help nursing homes with high Medicaid payer mix, a better targeted and separately financed program could be established to do so.

For 2017, there are no policy changes known at this time, aside from the required update offset by the productivity adjustment. The payment update in current law for fiscal year 2017 is the forecasted change in input prices, as measured by the SNF market basket minus the productivity factor. The market basket in 2017 is projected

to rise 2.7 percent, and the productivity adjustment is estimated to be 0.5 percent, but CMS will update both before establishing the payment rates for 2017.

The evidence for the continued need to revise and rebase the SNF PPS is compelling, yet there has been little movement from CMS and the Congress to implement changes. Last year, the Commission expressed its growing impatience with the lack of progress in redesigning and rebasing SNF payment. The structure of the Commission's recommendation may have contributed to the delay because it called for the PPS to be revised *before* the rebasing (a 4 percent reduction) would begin. This order was made to protect low-margin, typically nonprofit SNFs. The large disparities in Medicare margins (e.g., over the past seven years, the Medicare margin for nonprofit SNFs has averaged 8 percentage points lower than the average for all SNFs) made the Commission reluctant to recommend large reductions in payments without *first* revising the PPS to redirect payments to the low-margin SNFs.

An alternative approach is to set much smaller rebasing steps in motion while the PPS is revised. This approach would begin the process of lowering payments at the same time that the PPS was being revised, but because the steps are small, most SNFs would be able to adjust their practices. Beginning the rebasing process before the implementation of a revised PPS is intended to accomplish three objectives: begin the alignment of payments and costs sooner than would otherwise occur, move cautiously in the short-term to protect low-margin SNFs, and exert pressure on the industry and CMS to make essential changes to the payment system that are long overdue. (Freezing rates for two years effectively lowers the update because rates would otherwise be updated by the market basket minus productivity.) The Commission underscores the importance of restructuring the payment system away from rewarding the provision of therapy services and toward basing payments on the care needs of beneficiaries.

The revised design would have the effect of moving payments from SNFs with high Medicare margins to those with lower Medicare margins—nonprofit SNFs, rural SNFs, and hospital-based SNFs. Although there would continue to be disparities in Medicare financial performance, the differences would be smaller. For example, nonprofit SNFs would continue to have lower margins than for-profit SNFs because nonprofit SNFs have higher costs per day and recently have had higher cost growth.

RECOMMENDATION 7

The Congress should eliminate the market basket update for 2017 and 2018 and direct the Secretary to revise the prospective payment system (PPS) for skilled nursing facilities. In 2019, the Secretary should report to the Congress on the effects of the reformed PPS and make any additional adjustments to payments needed to more closely align payments with costs.

RATIONALE 7

Under this recommendation, payments would not be updated for 2017 and 2018. The evidence indicates that Medicare beneficiaries continue to have access to SNF services, and Medicare payments are well above Medicare costs. Under current law policies for 2015 and 2016, we project the Medicare margin to be 10.7 percent in 2016. SNF payments appear to be more than adequate to accommodate cost growth without updates in 2017 and 2018. The Commission recognizes the need to proceed cautiously but deliberately to help ensure there are no unintended disruptions caused by rebasing. Therefore, a final adjustment to the level of payments would not be considered until initial effects can be assessed.

The recommendation considers the distribution of payments and variability in financial performance that results from shortcomings in the current PPS. It requires the Secretary to revise the PPS, and we believe that 2018 is a feasible implementation date. The Commission first proposed an alternative design in 2008 and has continued to work on possible refinements since then. Further, CMS has work under way to consider alternative PPS designs. A revised design would direct payments away from intensive therapy that is unrelated to patient care needs while continuing high payments for patients with high care needs and directing payments toward medically complex care. A needs-based design would improve the accuracy of payments and narrow the disparities in financial performance that result from the mix of cases facilities treat and their therapy practices. The design would not, and should not, address disparities that result from inefficiencies.

The Commission is focused on ensuring beneficiaries' access to SNF care. Some variation in financial performance reflects patient selection and the provision of services that are unrelated to patients' characteristics. The recommended changes should not impair beneficiary access; in fact, they should improve access to services for beneficiaries who are disadvantaged by the design of the current payment system. At the same time, the

**TABLE
7-11****The number of nursing homes treating Medicaid enrollees stayed relatively stable in 2015**

	2005	2007	2009	2011	2013	2014	2015	Percent change 2014–2015
Number of facilities	15,484	15,254	15,118	15,074	15,043	15,031	14,985	–0.3%

Source: Certification and Survey Provider Enhanced Reporting on CMS's Survey and Certification Providing Data Quickly system, 2005–2015.

industry should be able to furnish services while having positive Medicare margins, including facilities with higher concentrations of medically complex patients. The Commission will continue to monitor beneficiary access, quality of care, and financial performance and may consider future recommendations based on industry performance.

IMPLICATIONS 7**Spending**

- Relative to current law, this recommendation would lower program spending by between \$750 million and \$2 billion for fiscal year 2017 and between \$5 billion and \$10 billion over five years. Savings occur because current law requires market basket increases for 2017 and 2018 (offset by a productivity adjustment, as required by the Patient Protection and Affordable Care Act of 2010).

Beneficiary and provider

- We do not expect an adverse effect on beneficiary access. Revising the prospective payment system would raise payments for medically complex cases, making providers more likely to admit and treat beneficiaries with such care needs. Even if a low-performing SNF were to close, most beneficiaries live in counties with multiple providers and therefore would continue to have a SNF in the county. We do not expect the recommendation to affect providers' willingness or ability to care for Medicare beneficiaries. Provider payments would be lower, but the recommendation would reduce the disparities in Medicare margins across providers. Effects on individual providers would be a function of their mix of patients and current practice patterns. The recommendation would not eliminate all of the differences in Medicare margins across providers because of their large cost differences.

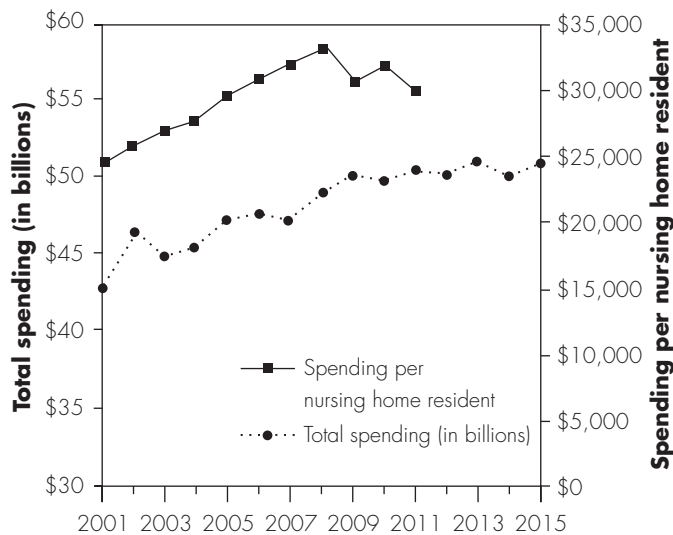
Medicaid trends

Section 2801 of the Patient Protection and Affordable Care Act of 2010 (PPACA) requires the Commission to examine spending, use, and financial performance trends in the Medicaid program for providers with a significant portion of revenues or services associated with the Medicaid program. We do not have more updated information on Medicaid utilization than was reported last year and therefore have not included that information in this year's report. We report nursing home spending trends for Medicaid and financial performance for non-Medicare payers. Medicaid revenues and costs are not reported in the Medicare cost reports. In a joint publication with the Medicaid and CHIP Payment Access Commission, we report on characteristics, service use, and spending for dual-eligible beneficiaries (Medicare Payment Advisory Commission and the Medicaid and CHIP Payment and Access Commission 2016).

Medicaid covers nursing home (long-term care) and skilled nursing care provided in nursing facilities. Medicaid pays for long-term care services that Medicare does not cover. For beneficiaries who are dually eligible for Medicaid and Medicare, Medicaid pays the Medicare copayments required of beneficiaries beginning on day 21 of a SNF stay.

Count of Medicaid-certified nursing homes

The number of nursing facilities certified as Medicaid providers has stayed relatively stable, with a small decline between 2014 and 2015 (Table 7-11). The decline in facilities may reflect the expansion in some states of home- and community-based services (HCBS), which allow beneficiaries to remain in their homes rather than in an institution. State HCBS waivers and federal initiatives have accelerated the trend toward HCBS. In fiscal years 2015 and 2016, 46 states expanded the number of

**FIGURE
7-5****Total and per user Medicaid
spending on nursing home services**

Note: Resident counts (and therefore per resident spending) are not available for 2012 through 2015.

Source: Office of the Actuary 2015a.

beneficiaries served by HCBS, an increase from 42 states in fiscal year 2014 and 33 states in fiscal year 2013 (Smith et al. 2015).

The data source for the counts of users of Medicaid-financed nursing home services was not updated this year, so we do not have more current information than was reported last year.

Spending

CMS estimates that about \$51 billion was spent in 2015 on Medicaid-funded nursing home services (combined

state and federal funds) (Office of the Actuary 2015a) (Figure 7-5). Between 2014 and 2015, Medicaid spending on nursing home services increased by 1.5 percent. CMS projects that spending will grow by 1.7 percent in 2016. Spending increases averaged 1.3 percent annually between 2001 and 2015, for a total of 17.9 percent over the period. Year-to-year changes in spending were variable, increasing in some years and decreasing in others. On a per user basis, spending per nursing home resident averaged \$29,855 in 2011, the most recent year for resident counts. Although spending per resident decreased between 2009 and 2010, the level in 2011 was 32 percent higher than it was in 2000 (Centers for Medicare & Medicaid Services 2013).

Analysis of Medicaid rate-setting trends found that 14 states restricted (froze or reduced) rates paid to nursing homes in 2015, while 36 states and the District of Columbia increased rates (Smith et al. 2015). In 2016, 28 states and the District of Columbia plan to increase rates, and 21 states plan to restrict them (Illinois was not determined at the time the article was published). This trend represents a steady improvement in the Medicaid revenues for nursing homes. In 2014, 12 states restricted payments for nursing homes and 38 states and the District of Columbia increased payments. States continue to use provider taxes to raise federal matching funds. In fiscal year 2015, 44 states levied provider taxes on nursing homes, and all plan to continue to do so in fiscal year 2016.

Because the care needs of the average Medicare beneficiary are considerably higher than those of the average Medicaid resident, the average daily Medicare payment is higher than the average Medicaid payment. Using data from 2011, we previously estimated that the differences in the care needs (as measured by the average

**TABLE
7-12**

In the past eight years, non-Medicare margins have been negative, but total margins were positive in freestanding SNFs

Type of margin	2007	2009	2010	2011	2012	2013	2014
Non-Medicare margin	-1.2%	-1.2%	-1.5%	-2.6%	-2.0%	-1.9%	-1.5%
Total margin	2.5	3.5	3.5	3.8	1.8	1.9	1.9

Note: SNF (skilled nursing facility). "Non-Medicare margin" reflects the profitability of all services and all payers except Medicare-funded SNF services. "Total margins" reflects the profitability of all services and all payers, including Medicare.

Source: MedPAC analysis of freestanding 2007–2014 SNF cost reports.

nursing case-mix index) between the average Medicaid nursing home resident and the average Medicare SNF patient would translate to payments that would be 84 percent higher for Medicare patients, thus explaining most of the difference between Medicare and Medicaid payments.

Non-Medicare and total margins in nursing homes

Total margins reflect all payers (including Medicaid, private insurers, and managed care) across all lines of business (for example, nursing home care, hospice care, ancillary services, home health care, and investment income). In 2014, total margins were positive (1.9 percent). The median total margin was 1.8 percent, with

margins at the 25th and 75th percentiles ranging from –3.2 percent to 6.5 percent. Total margins have declined since 2011, reflecting the impact of PPACA reductions to Medicare payments and the growing share of managed care payments that are lower than Medicare’s FFS payments.

Non-Medicare margins reflect the profitability of all services and all payers except Medicare-funded SNF services. The aggregate non-Medicare margin in 2014 was –1.5 percent (Table 7-12). Non-Medicare margins improved from 2013, mostly reflecting increases in state Medicaid payment rates. ■

Endnotes

- 1 Throughout this section, *beneficiary* refers to an individual whose SNF stay coverage (Part A) is paid for by Medicare. Some beneficiaries who no longer qualify for Medicare coverage remain in the facility to receive long-term care services, which are not covered by Medicare. During long-term care stays, beneficiaries may receive services such as physician services, outpatient therapy, and prescription drugs that are paid for separately under the Part B and Part D benefits. Services furnished outside the Part A–covered stay are not paid under the SNF PPS and are not considered in this section. Except where specifically noted, the chapter examines FFS Medicare spending and service use and excludes services and spending for SNF services furnished to beneficiaries enrolled in Medicare Advantage plans. Some beneficiaries also qualify for Medicaid and are referred to as dual-eligible beneficiaries.
- 2 A spell of illness begins when a beneficiary has not had hospital care or skilled care in a SNF for 60 consecutive days. Observation days and emergency room stays do not count toward the three-day requirement.
- 3 For services to be covered, the SNF must meet Medicare’s requirements of participation and agree to accept Medicare’s payment rates. Medicare’s requirements relate to many aspects of staffing and care delivery, such as requiring a registered nurse in the facility for 8 consecutive hours per day and licensed nurse coverage 24 hours a day, providing physical and occupational therapy services and speech–language pathology services as delineated in each patient’s plan of care, and providing or arranging for physician services 24 hours a day in case of an emergency.
- 4 The program pays separately for some services, including certain chemotherapy drugs, certain customized prosthetics, certain ambulance services, Part B dialysis, emergency services, and certain outpatient services provided in a hospital (such as computed tomography, MRI, radiation therapy, and cardiac catheterizations).
- 5 Intensive therapy days are those classified in the ultra-high and very high rehabilitation case-mix groups. Rehabilitation groups are based on minutes of rehabilitation provided per week. *Ultra-high rehabilitation* includes patients who receive more than 720 minutes per week; *very high rehabilitation* includes patients who receive 500–719 minutes per week.
- 6 There are two broad categories of medically complex case-mix groups: clinically complex and special care. Clinically complex groups include patients who have burns, surgical wounds, hemiplegia, or pneumonia or who receive chemotherapy, oxygen therapy, intravenous medications, or transfusions while a SNF patient. Special care groups include patients who are comatose; have quadriplegia, chronic obstructive pulmonary disease, septicemia, diabetes requiring daily injections, fever with specific other conditions, cerebral palsy, multiple sclerosis, Parkinson’s disease, respiratory failure, a feeding tube, pressure ulcers of specific sizes, or foot infections; receive radiation therapy or dialysis while a resident; or require parenteral or intravenous feedings or respiratory therapy for seven days.
- 7 In 2010 (for fiscal year 2011), CMS revised how the therapy time for concurrent therapy (two patients engaged in different therapy activities at the same time) was to be allocated between the two patients treated, which effectively lowered the payment for this modality. It also required end-of-therapy assessments to prevent paying for therapy services after they have been discontinued. In 2011 (for fiscal year 2012), CMS revised how the time spent in group therapy (therapy provided in groups with up to four patients engaged in the same therapy activities at the same time) was to be allocated across the four patients in the group, again effectively lowering payments for this modality.
- 8 Medically complex days make up the other 7 percent of days. See endnote 6 for the definition of *medically complex*.
- 9 The nine ADLs include bowel control, bladder control, transfer, walk in the facility corridor, self-feeding, toileting, dressing, performing personal hygiene, and bed mobility. The share of the most dependent increased for bathing.
- 10 With inclusion of the other covariates, age categories were not found to be significant in explaining variation in outcomes and were dropped from the models, except for the model explaining differences in readmission during the 30 days postdischarge for community-residing beneficiaries younger than 65.
- 11 We use these measures because they reflect the goals of post-acute care: to return home, avoid a rehospitalization, and improve or maintain function. The Commission does not use CMS’s nursing home 5-star rating system for two reasons. First, until it was recently overhauled in response to criticism, the rating system reflected self-reported data that was hard to verify. Second, 8 of the 11 quality measures focus on long-stay care, and of the 3 short-stay measures (the share of residents with pressure sores that are new or worsened, the share of residents who self-report moderate or severe pain, and the share of residents who newly received antipsychotic medication), none capture the main goals of SNF care.

- 12 Readmission rates of patients during their SNF stay and in the period after discharge cannot simply be added to get a combined rate because, in the combined measure, a stay is counted only once, even if the patient was readmitted during the SNF stay and in the post-stay period. In contrast, each relevant stay is counted separately in each measure.
- 13 Almost three-quarters of freestanding SNFs (and the same share of Medicare payments) are on a calendar year cost reporting period. In 2013, the sequester lowered payments to these SNFs for nine months.
- 14 We use the nursing component (as opposed to the payment weight of the case-mix group) to avoid distorting the measure of patient complexity by the amount of therapy furnished, which could be unrelated to patient care needs. We used the indexes adjusted for CMS's policy decisions to shift payments toward certain case-mix groups and away from others (White 2012). Because the nursing weights for intensive therapy are relatively high, a facility can have both a high case-mix index and a moderate or low share of medically complex patients.

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CHAPTER

8

Home health care services

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

- 8** The Congress should direct the Secretary to eliminate the payment update for 2017 and implement a two-year rebasing of the payment system beginning in 2018. The Congress should direct the Secretary to revise the prospective payment system to eliminate the use of therapy visits as a factor in payment determinations, concurrent with rebasing.

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

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(Additionally, the Commission reiterates its March 2011 recommendations on improving the home health care benefit. See text box, pp. 218–219.)

Home health care services

Chapter summary

Home health agencies provide services to beneficiaries who are homebound and need skilled nursing or therapy. In 2014, about 3.4 million Medicare beneficiaries received care, and the program spent about \$17.7 billion on home health care services. Over 12,400 agencies participated in Medicare in 2014.

Assessment of payment adequacy

The indicators of payment adequacy for home health care are generally positive.

Beneficiaries' access to care—Access to home health care is generally adequate: Over 99 percent of beneficiaries live in a ZIP code where a Medicare home health agency operates, and 82 percent live in a ZIP code with five or more agencies.

- **Capacity and supply of providers**—In 2014, the number of agencies decreased by 1.2 percent after over a decade of continuous growth. From 2004 to 2014, the number of agencies increased by 65 percent. The decline in 2014 was concentrated in areas that experienced sharp increases in supply in prior years.
- **Volume of services**—In 2014, the volume of services declined slightly. The total number of users decreased slightly (–1.3 percent), while the

In this chapter

- Are Medicare payments adequate in 2016?
.....
- How should Medicare payments change in 2017?
.....

average number of episodes per home health user declined by 0.8 percent. This trend is not surprising because spending growth for all health care (including both public and private payers) has slowed in recent years, and Medicare inpatient admissions, an important source of referrals, have declined. These decreases for home health care follow several years of rapid increases; between 2002 and 2014, the total number of episodes increased by 60 percent, and the episodes per home health user increased from 1.6 to 1.9. Episodes not preceded by a prior hospitalization account for most of the growth in this period, and between 2001 and 2013, these episodes increased from 53 percent to 66 percent of total episodes.

Quality of care—In 2014, performance on quality measures did not change significantly. The share of beneficiaries reporting improvement in walking and transferring increased slightly; the share of beneficiaries hospitalized during their home health spell was 27.8 percent, similar to the rate in prior years.

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

Medicare payments and providers' costs—From 2013 to 2014, Medicare spending declined by 1.6 percent to \$17.7 billion but increased by 84 percent since 2002. For more than a decade, payments have consistently and substantially exceeded costs in the home health prospective payment system. In 2014, Medicare margins for freestanding agencies averaged 10.8 percent and averaged 16.5 percent between 2001 and 2014. The marginal profit, excluding certain fixed costs, for home health agencies equaled 13.3 percent, indicating that agencies have an incentive to serve additional patients. The Commission projects a margin of 8.8 percent for 2016. Two factors have contributed to payments exceeding costs: Fewer visits are delivered in an episode than what is assumed in Medicare's rates, and cost growth has been lower than the annual payment updates for home health care.

The high margins of home health agencies have led the Commission to recommend eliminating the payment update for 2017 and implementing a two-year rebasing beginning in 2018. These two actions should help to better align payments with actual costs, ensuring better value for beneficiaries and the taxpayer.

We are also recommending that, beginning in 2018, Medicare eliminate the use of therapy as a payment factor in the home health prospective payment system (PPS). A review of utilization trends and other materials by the Commission and others suggests that this feature of the PPS may create financial incentives that distract agencies from focusing on patient characteristics when setting plans of care. Eliminating therapy as a factor would base home health payment solely on patient characteristics, a more patient-focused approach to payment. ■

Background

Medicare home health care consists of skilled nursing, physical therapy, occupational therapy, speech therapy, aide services, and medical social work provided to beneficiaries in their homes. To be eligible for Medicare's home health benefit, beneficiaries must need part-time (fewer than eight hours per day) or intermittent skilled care to treat their illnesses or injuries and must be unable to leave their homes without considerable effort. Medicare requires that a physician certify a patient's eligibility for home health care and that a patient receiving service be under the care of a physician. In contrast to coverage for skilled nursing facility services, Medicare does not require a preceding hospital stay to qualify for home health care. Unlike for most services, Medicare does not require copayments or a deductible for home health services. In 2014, about 3.4 million Medicare beneficiaries received home care, and the program spent \$17.7 billion on home health services. Medicare spending for home health care has doubled between 2001 and 2014, and in 2014 accounts for about 4 percent of fee-for-service (FFS) spending.

Medicare pays for home health care in 60-day episodes. Payments for an episode are adjusted for patient severity based on patients' clinical and functional characteristics and some of the services they use. If beneficiaries need additional covered home health services at the end of the initial 60-day episode, another episode commences and Medicare pays for an additional episode. Episodes delivered to beneficiaries in rural areas receive a 3 percent payment increase through 2017. (An overview of the home health prospective payment system (PPS) is available at <http://www.medpac.gov/documents/payment-basics/home-health-care-services-payment-system-15.pdf?sfvrsn=0>.) Coverage for additional episodes generally has the same requirements (e.g., the beneficiary must be homebound and need skilled care) as the initial episode.

In 2011, Medicare implemented a requirement that a beneficiary have a face-to-face encounter with the physician ordering home health care. The encounter must take place in the 90 days preceding or 30 days following the initiation of home health care. Contacts through nonphysician practitioners or authorized telehealth services may be used to satisfy the requirement.

Use and growth of home health benefit has varied substantially due to changes in coverage and payment policy

The home health benefit has changed substantially since the 1980s. Implementation of the inpatient PPS in 1983 led to increased use of home health services as hospital lengths of stay decreased. Medicare tightened coverage of some services, but the courts overturned these curbs in 1988. After this change, the number of agencies, users, and services expanded rapidly in the early 1990s. Between 1990 and 1995, the number of annual users increased by 75 percent and the number of visits more than tripled to about 250 million a year. Spending increased more than fourfold in the five years between 1990 and 1995, from \$3.7 billion to \$15.4 billion. As the rates of use and lengths of stay increased, there was concern that the benefit was serving more as a long-term care benefit (Government Accountability Office 1996). Further, many of the services provided were believed to be improper. For example, in one analysis of data from 1995 to 1996, the Office of Inspector General found that about 40 percent of the services in a sample of Medicare claims did not meet Medicare requirements for reimbursement, mostly because services did not meet Medicare's standards for a reasonable and necessary service, patients did not meet the homebound coverage requirement, or the medical record did not document that a billed service was provided (Office of Inspector General 1997).

The trends of the early 1990s prompted increased program integrity actions, refinements to coverage standards, temporary spending caps through an interim payment system (IPS), and replacement of the cost-based payment system with a PPS in 2000.¹ Between 1997 and 2000, the number of beneficiaries using home health services fell by about 1 million, and the number of visits fell by 65 percent (Table 8-1, p. 214). The mix of services changed from predominantly aide services in 1997 to predominantly nursing visits in 2000, and therapy visits increased between 1997 and 2014 from 10 percent of visits to 36 percent. Between 1997 and 2000, total spending for home health services declined by 52 percent. The reduction in payments had a swift effect on the supply of agencies, and by 2000, the number of agencies had fallen by 31 percent. However, after this period, the PPS was implemented, and service use and agency supply rebounded at a rapid pace. Between 2001 and 2014, the number of home health episodes rose from 3.9 million to 6.7 million (data not shown). The number of agencies in 2014 was 12,461.

**TABLE
8-1****Changes in supply and utilization of home health care, 1997-2014**

	1997	2000	2013	2014	Percent change		
					1997-2000	2000-2013	2013-2014
Agencies	10,917	7,528	12,613	12,461	-31%	64%	-1%
Total spending (in billions)	\$17.7	\$8.5	\$17.9	\$17.7	-52	111	-2
Users (in millions)	3.6	2.5	3.5	3.4	-31	39	-1
Number of visits (in millions)	258.2	90.6	114.1	115.1	-65	26	1
Visit type (percent of total)							
Skilled nursing	41%	49%	53%	52%	20	8	-3
Home health aide	48	31	13	12	-37	-57	-13
Therapy	10	19	35	36	101	85	2
Medical social services	1	1	1	1	1	-22	-13
Number of visits per user	73	37	33	34	-49	-11	2
Percent of FFS beneficiaries who used home health services	11%	7%	9%	9%	-30	26	-3

Note: FFS (fee-for-service). Medicare did not pay on a per episode basis before October 2000. Yearly figures presented in the table are rounded, but percent change columns were calculated using unrounded data.

Source: Home health standard analytical file 2014; *Health Care Financing Review*, Medicare and Medicaid Statistical Supplement 2002.

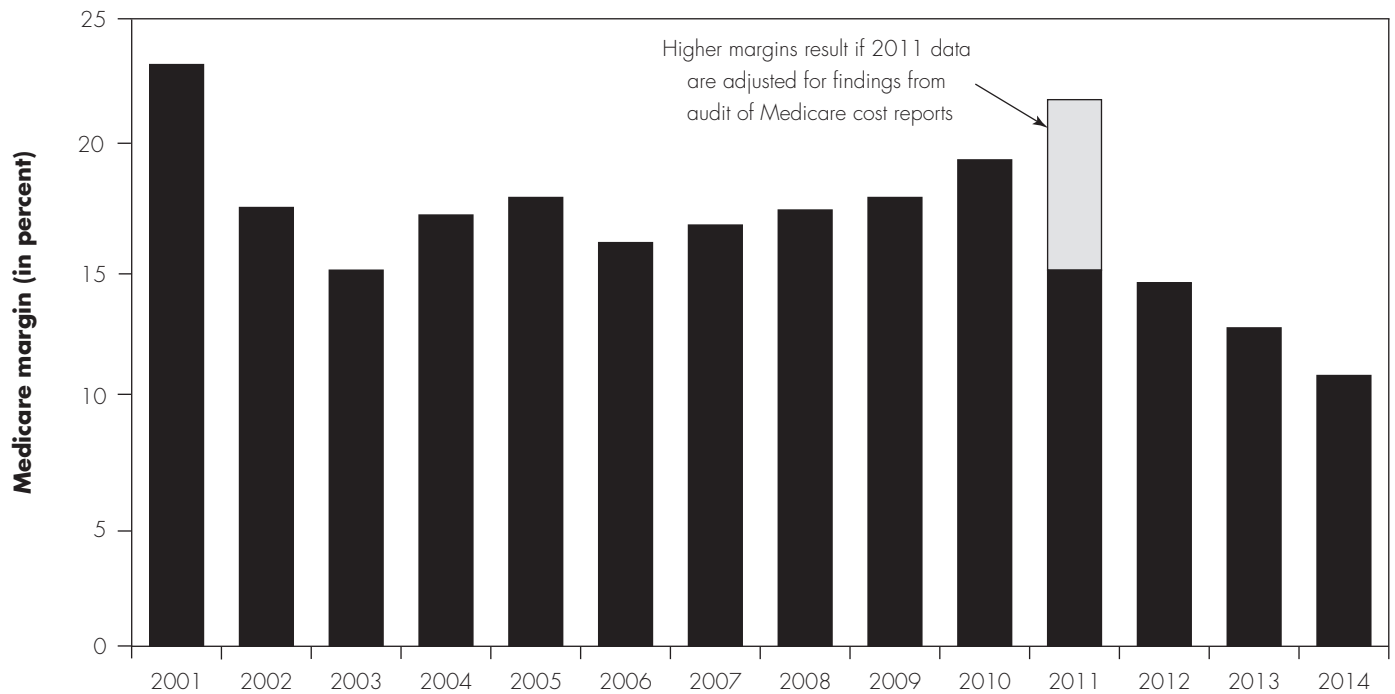
Almost all the new agencies since implementation of the PPS have been for-profit providers.

The steep declines in services under the IPS did not appear to have adversely affected the quality of care beneficiaries received; one analysis found that patient satisfaction with home health services was mostly unchanged in this period (McCall et al. 2004, McCall et al. 2003). A study by the Commission also concluded that the quality of care did not decline between the IPS and the implementation of the PPS (Medicare Payment Advisory Commission 2004). The similarity in quality of care under the IPS and the PPS suggests that the payment reductions in the Balanced Budget Act of 1997 led agencies to reduce costs and utilization without a measurable difference in the quality of patient care.

Medicare has paid more than costs for home health services under PPS

Payments for home health care have substantially exceeded operating costs since Medicare established the

PPS. In 2001, the first year of the PPS, average Medicare margins equaled 23 percent (Figure 8-1). The high margins in the first year suggest that the PPS established a base rate well in excess of costs. The base rate assumed that the average number of visits per episode would decline about 15 percent between 1998 and 2001, but the actual decline was about 32 percent (Table 8-2). In addition, agencies have been able to hold the rate of episode cost growth below 1 percent in many years, lower than the rate of inflation assumed in the home health payment update. Consequently, home health agencies (HHAs) were able to garner extremely high average payments relative to the services provided. Since 2001, agencies have been able to reduce visits further, and margins have averaged 16.5 percent between 2001 and 2014. In addition, there is the possibility that these reported margins may be low. An audit of 100 sample cost reports from 2011 by CMS found that agencies overstated their costs by about 8 percent; with this adjustment, their margins would have been in excess of 20 percent in that year (Figure 8-1).

**FIGURE
8-1****Medicare margins of freestanding home health agencies since 2001**

Source: Medicare cost reports, 2001–2014.

Patient Protection and Affordable Care Act of 2010 changes to payment for home health services

In 2010, the Commission recommended that Medicare lower home health payments to make them more consistent with costs, a process referred to as payment

rebasings. The Patient Protection and Affordable Care Act of 2010 (PPACA) included several reductions intended to address home health care's high Medicare payments, including rebasing the payment system. However, these policies may not achieve the Commission's goal of making payments more consistent with actual costs.

**TABLE
8-2****Medicare visits per episode before and after implementation of PPS**

Type of visit	Visits per episode				Percent change in:		
	1998	2001	2013	2014	1998–2001	2001–2013	2013–2014
Skilled nursing	14.1	10.5	9.4	9.8	–25%	–10%	4.3%
Therapy (physical, occupational, and speech–language pathology)	3.8	5.2	6.4	6.7	39	23	4.7
Home health aide	13.4	5.5	2.4	2.2	–59	–57	–8.3
Medical social services	0.3	0.2	0.1	0.1	–36	–32	–26.0
Total	31.6	21.4	18.3	18.8	–32	–15	2.7

Note: PPS (prospective payment system). The PPS was implemented in October 2000. Data exclude low-utilization episodes. Yearly figures presented in the table are rounded, but percent change columns were calculated using unrounded data.

Source: Home health standard analytic file.

**TABLE
8-3****Impact of PPACA rebasing on payments for 60-day episodes**

	Annual percent change				Cumulative change, 2014-2017
	2014	2015	2016	2017	
Rebasing adjustment	-2.8%	-2.7%	-2.7%	-2.8%	-11.4%
Legislated payment update	2.3	2.1	1.9	1.9	8.5
Net annual payment reduction	-0.6	-0.7	-0.8	-0.9	-3.0

Note: PPACA (Patient Protection and Affordable Care Act of 2010). Payment update estimates are based on the second-quarter 2015 forecast of the home health market basket. Effects of payment changes are multiplicative.

Source: MedPAC analysis based on data from CMS.

PPACA calls for the annual rebasing adjustment to be offset by the payment update for each year in 2014 through 2017. CMS set the rebasing reduction to the maximum amount permitted under the PPACA formula, which was equal to 3.5 percent of the 2010 base rate, or an annual reduction of \$81 per 60-day episode. However, the size of the base rate has increased since 2010, so this payment reduction will actually be less than 3.5 percent, and in fact will average about 2.8 percent in each year from 2014 through 2017. In addition, over this period, the payment update will offset these reductions, resulting in a cumulative net payment reduction of 3 percent (Table 8-3). This modest reduction will likely leave substantial margins for HHAs, which have exceeded 10 percent since the implementation of the PPS.

PPACA required the Commission to assess the impact of these payment changes on quality of care and beneficiary access (Medicare Payment Advisory Commission 2014). To meet this mandate, the Commission examined the historical relationship between changes in payment and changes in quality and access between 2001 and 2012. The volume of episodes grew substantially in this period, even in years that Medicare reduced home health payments. From 2001 through 2010, episode volume for urban, rural, for-profit, and nonprofit providers grew on a per beneficiary basis. These increases in utilization occurred not only in years in which the average episode payment decreased but also in years in which the average payment increased, suggesting that changes in access are not directly correlated with changes in payment. Utilization decreased slightly in 2011 and 2012, but these declines coincided with policies intended to address potential overuse such as the face-to-face visit requirement and

anti-fraud efforts in several high-use areas. The slowdown also coincided with an economy-wide slowdown in health spending and utilization.

The Commission examined three quality measures to assess the relationship between past payment reductions and quality, and the results suggest that payment changes during this period did not have a significant effect. During this period, HHAs' overall rate of unexpected hospitalization during the home health episode—an indicator of poor quality—remained steady at about 28 percent, while average payment per episode increased in most years.² This finding suggests that hospitalization was not sensitive to changes in payments; that is, higher payments to HHAs did not lead to fewer hospitalizations. Also during this period, performance on two functional measures of quality—the share of patients demonstrating improvement in walking and the share of patients demonstrating improvement in transferring—generally increased. These increases in quality occurred not only in years in which the average payment per episode decreased but also in years in which the average payment per episode increased, suggesting that changes in payment have little direct relationship to rates of functional improvement.

The Commission will continue to review access to care and quality as data for additional years become available. However, experience suggests that the small PPACA rebasing reductions will not change average episode payments significantly. HHA margins are likely to remain high under the current rebasing policy, and quality of care and beneficiary access to care are unlikely to be negatively affected.

Ensuring appropriate use of home health care is challenging

Policymakers have long struggled to define the role of the home health benefit in Medicare (Benjamin 1993). From the outset, there was a concern that setting a narrow policy could result in beneficiaries using other, more expensive services, while a policy that was too broad could lead to wasteful or ineffective use of home health care (Feder and Lambrew 1996). Medicare relies on the skilled care and homebound requirements as primary determinants of home health eligibility, but these broad coverage criteria permit beneficiaries to receive services in the home even when they are capable of leaving home for medical care, which most home health beneficiaries do (Wolff et al. 2008). Medicare does not provide any incentives for beneficiaries or providers to consider alternatives to home health care such as outpatient services. Beneficiaries who meet program coverage requirements can receive an unlimited number of home health episodes and face no cost sharing. In addition, the program relies on agencies and physicians to follow program requirements for determining beneficiary needs, but there is some evidence that they do not consistently follow Medicare's standards (Cheh et al. 2007, Office of Inspector General 2001). Concerns about ensuring the appropriate use of home health episodes not preceded by a hospitalization led the Commission to recommend a copay for these episodes (see text box on reiterated recommendations, pp. 218–219).

Even when enforced, the standards permit a broad range of services. For example, the skilled care requirement mandates that a beneficiary need therapy or nursing care to be eligible for the home health benefit. The intent of the skilled services requirement is that the home health benefit serves a clear medical purpose and is not an unskilled personal care benefit. However, Medicare's coverage standards do not require that skilled visits compose the majority of the home health services a patient receives. For example, in about 6 percent of episodes in 2014, most services provided were visits from an unskilled home health aide. These episodes raise questions about whether Medicare's broad standards for coverage are adequate to ensure that skilled care remains the focus of the home health benefit.

Fraud and abuse are continuing challenges in home health care

In 2010, the Commission made a recommendation to curb wasteful and fraudulent home health services

(Medicare Payment Advisory Commission 2010).

This recommendation calls on the Secretary to use her authorities under current law to examine providers with aberrant patterns of utilization for possible fraud and abuse. PPACA permits Medicare to implement temporary moratoriums on the enrollment of new agencies in areas believed to have a high incidence of fraud. In July 2013, Medicare implemented this moratorium authority for HHAs in the Chicago, Dallas, Detroit, Houston, and Miami-Dade areas (Fort Lauderdale was later included in the moratorium). There have also been numerous criminal prosecutions for home health fraud, most notably in Detroit and Miami. However, the Commission still observes many areas with aberrant patterns of utilization. For example, even though Miami has been an area of concentrated effort by CMS and law enforcement agencies, this area still has a utilization rate well in excess of other areas. The persistence of aberrant patterns of utilization suggests that continued, or perhaps even expanded, efforts by all enforcement agencies are needed to address the scope of fraud in many areas. In addition, Medicare has the authority to require HHAs to hold surety bonds, but has not exercised this authority.³ Another approach, so far unexplored by Medicare, would be to set performance thresholds on quality measures for HHAs as part of the conditions of participation. Agencies that could not meet these thresholds could be removed from the program or placed on a probationary review that scrutinizes their operations.

Are Medicare payments adequate in 2016?

The Commission reviews several indicators to determine the level at which payments will be adequate to cover the costs of an efficient provider in 2016. We assess beneficiary access to care by examining the supply of home health providers and annual changes in the volume of services. The review also examines quality of care, access to capital, and the relationship between Medicare's payments and providers' costs. Overall, the Medicare payment adequacy indicators for HHAs are positive.

Beneficiaries' access to care: Almost all beneficiaries live in an area served by home health care

Supply and volume indicators show that almost all beneficiaries have access to home health services. In 2014, over 99 percent of beneficiaries lived in a ZIP code served

The Commission reiterates its March 2011 recommendations on the home health care benefit

In 2011, the Commission noted several problems with the home health care benefit and made several recommendations to reduce fraud and address beneficiary incentives. Two of those recommendations are included here with updated commentary and rationales.

Recommendation 8-1, March 2011 report

The Secretary, with the Office of Inspector General, should conduct medical review activities in counties that have aberrant home health utilization. The Secretary should implement the new authorities to suspend payment and the enrollment of new providers if they indicate significant fraud.

For many years, the Commission has published a list of counties with questionable utilization patterns (see Table 8-7, p. 223). As the Commission recommended in its March 2011 report, these counties would be appropriate areas for the Secretary to exercise new Patient Protection and Affordable Care Act of 2010 (PPACA) authorities for investigating and interdicting home health fraud. The Department of Health and Human Services began exercising some of these authorities in 2013 when it announced a moratorium on the enrollment of new agencies in several areas of the country, and some of the decline in agencies observed in 2014 is likely attributable to these efforts.

Medicare and the law enforcement community have made some progress in closing questionable agencies. However, the continued high utilization in many areas, including areas that have experienced significant law enforcement activity, suggests that expanded efforts are warranted. These efforts could include expanded enforcement activity or use of the program's administrative authority. For example, PPACA permits Medicare to suspend payments if CMS, in consultation with the Office of Inspector General (OIG), finds credible evidence of fraud at a provider, though CMS has yet to use the authority. Medicare and the other enforcement entities should continue to review home health care spending and pursue providers that appear to engage in behavior that is potentially fraudulent or wasteful.

Implications 8-1

Spending

- The Congressional Budget Office has scored savings from the PPACA provision, so its baseline assumes savings based on the new authority. Implementing this authority would lower home health spending if fraud were discovered. CMS and OIG would incur some administrative expenses.

Beneficiary and provider

- Appropriately targeted reviews would not affect beneficiary access to care or provider willingness to serve beneficiaries. Any reduction in provider supply is likely to occur in areas that have experienced rapid growth in the number of providers.

Recommendation 8-4, March 2011 report

The Congress should direct the Secretary to establish a per episode copay for home health episodes that are not preceded by hospitalization or post-acute care use.

Health services literature has generally found that beneficiaries consume more services when cost sharing is limited or nonexistent, and some evidence suggests that the additional services do not always contribute to better health. The lack of cost sharing is a particular concern for home health care because the prospective payment system pays for care on a per episode basis that rewards additional volume. The lack of a cost-sharing requirement stands in contrast to most other Medicare services, which generally require the beneficiary to bear some of the costs of Medicare services.

One concern with cost sharing is that it can lead beneficiaries to reduce their use of effective as well as ineffective care. Although some studies have found evidence of adverse effects of reduced care due to cost sharing (Chandra et al. 2010, Rice and Matsuoka 2004), the RAND health insurance experiment concluded that, on average, non-elderly patients who consumed less health care because of cost sharing suffered no net adverse effects (Newhouse 1993). The Commission's

(continued next page)

The Commission reiterates its March 2011 recommendations on the home health care benefit (cont.)

review of the impact of medigap insurance generally found that beneficiaries with this insurance had higher total Medicare spending (Medicare Payment Advisory Commission 2009). The results of the RAND health insurance experiment and the Commission's study suggest that a home health care copayment would decrease use of home health care and result in lower overall Medicare spending.

To encourage appropriate use, the Commission recommended that Medicare add an episode copayment for services not preceded by a hospitalization or other post-acute use.⁴ The high growth rates for these types of episodes, which have more than doubled since 2001, suggest there is significant potential for overuse. The addition of a copayment would allow beneficiary cost consciousness to counterbalance the broad nature of the

benefit's use criteria and the volume-rewarding aspects of Medicare's per episode payment policies.

Implications 8-4

Spending

- A copay of \$150 per episode (excluding low-use and posthospital episodes) would reduce Medicare spending.

Beneficiary and provider

- Some beneficiaries might seek services through outpatient or ambulatory care for which Medicare already has cost-sharing requirements. Some beneficiaries who need relatively few services would have lower cost sharing if they substituted ambulatory care for home health care. ■

by at least one HHA, 95 percent lived in a ZIP code served by two or more HHAs, and 82 percent lived in a ZIP code served by five or more agencies. These findings are consistent with our review of access from prior years.⁵

Supply of providers: Agency supply surpasses previous peak

In 2014, the number of HHAs in Medicare had increased 65 percent since 2002, reaching 12,461 agencies (Table 8-4). The number of agencies declined slightly in 2014 relative to the prior year, but even with this decline, nationwide the number of agencies is now higher than the previous peak in the 1990s when supply exceeded 10,900 agencies.

The decline was concentrated in areas that experience higher than average increases in supply: Florida, Michigan, and Texas. These states have been targeted by a myriad of antifraud measures, including criminal investigations and moratoriums on the entry of new agencies in some parts of the three states. The number of agencies exiting the program has increased in recent years in these states, and the moratoriums have likely slowed the entry of new agencies. Even with the declines in these states, however, the supply of agencies in the three states is more than three times the supply of agencies that were available in 2002—over 4,500 agencies in 2014.

**TABLE
8-4**

Number of participating home health agencies has increased significantly since 2004

	2004	2008	2012	2013	2014	Percent change	
						2004-2012	2013-2014
Active agencies	7,651	9,787	12,311	12,613	12,461	65%	-1.2%
Number of agencies per 10,000 FFS beneficiaries	2.1	2.8	3.3	3.4	3.3	61	-2.1

Note: FFS (fee-for-service). "Active agencies" includes all agencies operating during a year, including agencies that closed or opened.

Source: CMS's Provider of Services file and 2015 annual report of the Boards of Trustees of the Medicare trust funds.

**TABLE
8-5****Spending and utilization changes in home health care, 2002-2014**

	2002	2010	2011	2012	2013	2014	Percent change		Cumulative change, 2002-2014
							2002-2013	2013-2014	
Home health users (in millions)	2.5	3.4	3.4	3.4	3.5	3.4	37.8%	-1.3%	36.0%
Share of beneficiaries using home health care	7.2%	9.4%	9.4%	9.2%	9.3%	9.1%	28.9	-2.2	26.0
Episodes (in millions):	4.1	6.8	6.8	6.7	6.7	6.6	63.6	-2.1	60.1
Per home health user	1.6	2.0	2.0	2.0	1.9	1.9	18.7	-0.8	17.7
Per FFS beneficiary	0.12	0.19	0.19	0.18	0.18	0.17	53.0	-3.0	48.4
Payments (in billions)	\$9.6	\$18.4	\$18.4	\$18.0	\$17.9	\$17.7	87.3	-1.6	84.4
Per home health user	\$3,803	\$5,679	\$5,347	\$5,247	\$5,169	\$5,156	35.9	-0.3	35.6
Per FFS beneficiary	\$274	\$540	\$504	\$484	\$479	\$468	75.2	-2.5	70.8

Note: FFS (fee-for-service). Percent change is calculated on numbers that have not been rounded.

Source: MedPAC analysis of home health standard analytical file.

From 2004—when 99 percent of beneficiaries lived in a ZIP code served by an HHA—to 2014, the number of agencies per 10,000 FFS beneficiaries rose 61 percent, from 2.1 to 3.3 (Table 8-4, p. 219). Most of the new agencies were for profit. However, supply varies significantly among states. In 2013, Texas averaged 10.5 agencies per 10,000 beneficiaries, while New Jersey averaged less than 1 agency per 10,000 beneficiaries. Some of this variation was likely due to differences in agency size; for example, in New Jersey, the average agency provided 2,909 episodes compared with 354 episodes per agency for Texas. The extreme variation demonstrates that the number of providers is a limited measure of capacity because agencies can vary in size. Also, because home health care is not provided in a medical facility, agencies can adjust their service areas as local conditions change. Even the number of employees may not be an effective metric because agencies can use contract staff people to meet their patients' needs.

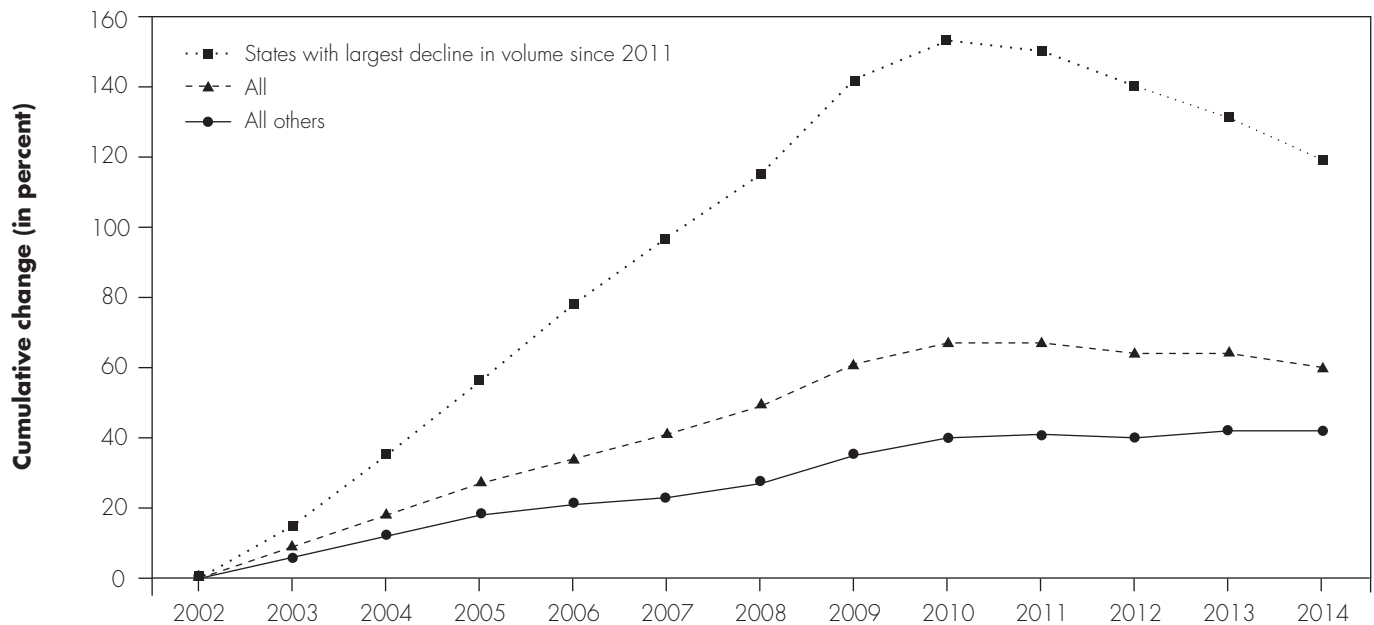
Growth in episode volume slows after many years of rapid growth

Episode volume has declined since 2011, but this decline was preceded by a period of rapid growth (Table 8-5 and Figure 8-2). Between 2002 and 2011, total episodes increased by 67 percent from 4.1 million episodes to 6.8 million episodes. The decline since 2011 has been concentrated in a few states, with five states (Florida, Illinois, Louisiana, Tennessee, and Texas) accounting for

about 70 percent of the decline in episodes. However, volume in these five states grew by more than double in the 2002 to 2011 period, higher than most other areas (Figure 8-2).

Although average payment per episode has declined since 2011, the declines in home health utilization likely reflect changes in both the demand for home health services, and, most recently, the decline in the supply of agencies in 2014. The number of hospital discharges, a common source of referrals, has declined since 2009, mitigating the demand for post-acute services. The period has also seen relatively low growth in economy-wide health care spending. In addition, several actions have been taken to curb fraud, waste, and abuse in Medicare home health care. The Department of Justice and other enforcement agencies have launched a number of investigative efforts that scrutinize Medicare HHAs. CMS has implemented moratoriums on new agencies in several areas that have seen rapid growth in supply and utilization. In 2011, Medicare implemented a PPACA requirement that a physician have a face-to-face encounter with the beneficiary. These factors likely affected spending and utilization in recent years.

The Commission has long been concerned about the incentives in the home health PPS. Throughout the history of the payment system, Medicare has used the number of therapy visits as a factor in payment, and

**FIGURE
8-2****Cumulative change in home health episode volume since 2002 for different groups of states**

Note: States with largest decline since 2011 include Florida, Illinois, Louisiana, Tennessee, and Texas.

Source: MedPAC analysis of home health standard analytic file from CMS.

the number of episodes that qualify for these payments has increased faster than other types of episodes. In the current PPS, episodes with six or more therapy visits qualify for additional payments, with the exact amount determined by the number of therapy visits provided beyond this threshold. In past work, the Commission has found that agencies that provide more therapy episodes tend to be more profitable. The higher profitability and rapid growth in the number of therapy episodes suggest that financial incentives may be causing agencies to favor therapy services when possible. In 2011, the Commission recommended that Medicare eliminate the use of the number of therapy visits provided in an episode as a payment factor, a recommendation that has yet to be implemented (Medicare Payment Advisory Commission 2011a). CMS has made several efforts to tighten therapy utilization, such as requiring periodic reassessments and lowering payments for therapy episodes. However, even with these changes the incentive remains, with additional therapy visits yielding higher per episode payments.

Utilization trends since 2011 indicate that the number of therapy episodes has declined by 2 percent in the five states mentioned earlier, most of which have been

the focus of numerous anti-fraud initiatives.⁶ However, therapy episodes have increased by 11 percent in the other states that were not the primary focus of many of the anti-fraud activities. Without the growth of therapy episodes in the 45 other states in this period, home health utilization would have been 200,000 episodes lower in 2014.

Since 2002, home health care stays have grown longer and less focused on post-acute care

Between 2002 and 2014, the average number of episodes per user increased by 18 percent, rising from 1.6 to 1.9 episodes per user. The increase indicates that beneficiaries are receiving home health care for longer periods and suggests that home health care is serving more as a long-term care benefit for some beneficiaries. This concern is similar to those in the mid-1990s that led to major program integrity activities and payment reductions. The increase in episodes coincides with Medicare's PPS incentives that encourage additional volume: the unit of payment per episode encourages more service (more episodes per beneficiary), and the PPS makes higher payments for the third and later episodes in a consecutive spell of home health episodes.

**TABLE
8-6****Home health episodes not preceded by hospitalization or PAC stay increased at a higher rate than other episodes**

	Number of episodes (in millions)		Cumulative growth	Share of episodes	
	2001	2013		2001	2013
Episodes not preceded by a hospitalization or PAC stay:					
First	0.8	1.4	80%	20%	21%
Subsequent	<u>1.3</u>	<u>3.0</u>	137	<u>32</u>	<u>45</u>
Subtotal	2.1	4.5	115	53	66
Episodes preceded by a hospitalization or PAC stay:					
First	1.6	1.9	18%	40	27
Subsequent	<u>0.3</u>	<u>0.5</u>	60	<u>8</u>	<u>7</u>
Subtotal	1.9	2.4	25	47	34
Total	3.9	6.9	72	100	100

Note: PAC (post-acute care). "First" and "subsequent" refer to the timing of an episode relative to other home health episodes. "First" indicates no home health episode in the 60 days preceding the episode. "Subsequent" indicates the episode started within 60 days of the end of a preceding episode. "Episodes preceded by a hospitalization or PAC stay" indicates the episode occurred fewer than 15 days after a stay in a hospital (including long-term care hospitals), skilled nursing facility, or inpatient rehabilitation facility. "Episodes not preceded by a hospitalization or PAC stay" indicates that there was no hospitalization or PAC stay in the 15 days before the episode began. Some data have been rounded, which may affect subtotals and totals.

Source: CMS Datalink file, 2013.

The rise in the average number of episodes per beneficiary also coincides with a relative shift away from using home health care as a post-acute care (PAC) service. Over the 2001–2013 period, the number of episodes not preceded by a hospitalization or PAC stay (in an inpatient rehabilitation facility, skilled nursing facility, or long-term care hospital) increased by 115 percent compared with a 25 percent increase in episodes that were preceded by a hospitalization or PAC stay (Table 8-6). During that period, the share of all episodes not preceded by a hospitalization or PAC stay rose from about 53 percent to 66 percent.

The Commission examined the characteristics of beneficiaries based on how they most frequently used home health care. Beneficiaries were classified into two categories based on their home health utilization: beneficiaries for whom the majority of home health episodes in 2013 were preceded by a hospitalization or other post-acute stay were classified as PAC users of home health, while beneficiaries for whom the majority of episodes for 2013 were not preceded by a hospital or PAC stay were classified as community-admitted users.

This cross-sectional analysis suggests that Medicare is serving distinct populations within the home health benefit. In 2013, PAC users averaged 1.4 episodes, while community-admitted users averaged 2.5 episodes. About 40 percent of the episodes provided to community-admitted users were for dual-eligible Medicare and Medicaid beneficiaries; in contrast, the comparable share for PAC users was 24 percent. Community-admitted users also had a larger share of episodes with high numbers of visits from home health aides; for example, aide services were the majority of services provided in 14 percent of the episodes for community-admitted users compared with 5 percent for PAC users. Community-admitted users generally had fewer chronic conditions, but had higher rates of dementia and Alzheimer's disease.

Rural add-on payments are poorly targeted and most payments benefit areas that do not have low utilization

An add-on payment of 3 percent for each home health care episode provided to beneficiaries in rural areas expires in 2017. The intent of the add-on is presumably to bolster access, but the high level of utilization in many

**TABLE
8-7****Most counties with the highest rates of beneficiaries using home health in 2014 were rural**

State	County	Share of FFS beneficiaries using home health services	Episodes per user	Episodes per 100 FFS beneficiaries
TX	Duval	35%	4.5	157
TX	Brooks	33	4.1	136
TX	Willacy	28	3.7	103
TX	Jim Hogg	28	4.4	122
TX	Zapata	27	4.0	109
TX	Jim Wells	26	3.9	103
FL	Miami-Dade*	26	2.3	60
TX	Starr	25	3.7	95
LA	East Carroll	25	3.9	100
OK	Choctaw	24	4.2	101
MS	Claiborne	23	2.6	61
TX	Foard	22	3.6	77
LA	Madison	22	4.1	89
TX	Webb*	21	3.8	83
TX	Throckmorton	21	3.9	82
TX	Baylor	21	3.2	65
OK	Coal	20	3.4	69
MS	Yazoo*	20	3.1	62
TX	Falls*	20	3.5	70
TX	Culberson	20	3.5	69
MS	Holmes	20	3.1	61
OK	McCurtain	19	4.2	82
OK	Atoka	19	3.6	70
KY	Cumberland	19	3.6	69
TX	Hidalgo*	19	3.4	66

Note: FFS (fee-for-service). Counties with fewer than 100 home health users have been excluded.

*Urban county; all others rural.

Source: MedPAC analysis of the 2014 home health standard analytical file and the 2014 Medicare denominator file.

rural areas results in Medicare's per episode add-on being poorly targeted, with most payments made to areas with higher than average utilization. The use of such a broadly applied add-on, providing the same payment for all rural areas regardless of access, results in rural areas with the highest utilization drawing a disproportionate share of the add-on payments. For example, 76 percent of the episodes that received the add-on payments in 2014 were in rural counties with higher utilization than the median utilization for all counties. Rural counties in the lowest fifth of utilization accounted for less than 5 percent of the episodes eligible for the rural add-on payment. Relatively few of the add-on payments were made to areas with low utilization.

In its June 2012 report to the Congress, the Commission noted that Medicare should target rural payment adjustments to those areas that have access challenges (Medicare Payment Advisory Commission 2012). The large share of payments made to rural areas with above-average utilization does nothing to improve access to care in those areas and raises payments in markets that appear to be more than adequately served by HHAs. Some of the counties with aberrant patterns of utilization suggestive of fraud and abuse are rural; for example, 20 of the 25 top-use counties in 2014 were rural areas (Table 8-7). Higher payments in areas without access problems can encourage the entry or expanded operations of agencies that seek

**TABLE
8-8****Average home health agency performance on select quality measures**

	2004	2008	2012	2013	2014
Hospitalization rate	27.7%	28.8%	27.5%	26.5%	27.8%
Share of an agency's beneficiaries with improvement in:					
Walking	37.2%	45.0%	59.0%	61.2%	63.6%
Transferring	51.0	53.1	55.2	57.1	58.9

Note: All data are for fee-for-service beneficiaries only and are risk adjusted for differences in patient condition among home health patients. The measures for walking and transferring changed in 2011 and are not comparable with data from prior years.

Source: MedPAC analysis of data provided by the University of Colorado.

to exploit Medicare's financial incentives. More targeted approaches that limit rural add-on payments to areas with access problems should be pursued.

The counties listed in Table 8-7 (p. 223) all have the highest utilization rates, but high utilization is not confined solely to these areas. Counties in the top quintile have an average utilization of 31 episodes per 100 beneficiaries, 78 percent higher than the national average. These counties include 211 urban counties and 428 rural counties, indicating that high utilization is prevalent in both geographic categories (81 percent of the Medicare beneficiaries residing in the top quintile counties reside in urban counties). In 2014, the county at the 75th percentile used 17.3 episodes per 100 beneficiaries, while the county at the 25th percentile used 7.6 episodes per 100 beneficiaries. In the Commission's review of geographic variation in Medicare spending, post-acute care services had the greatest variation in spending among areas, and variation in home health services contributed to the wide spread of spending (Medicare Payment Advisory Commission 2011b). This wide distribution suggests that reducing use and spending in many high-spending areas, beyond those listed in Table 8-7 (p. 223), could lower program costs.

Quality of care: Quality measures generally held steady or improved

Medicare reports several quality measures on its Home Health Compare website, from which we identified recent trends for measures associated with function and hospitalization (Table 8-8). In general, the share of beneficiaries showing improvement on the functional

measures has increased since 2004. The rate of hospitalization has not changed significantly. In 2014, the share of patients improving in walking and transferring increased slightly relative to the prior year. Functional improvement data are collected only for beneficiaries who do not have their home health care stays terminated by a hospitalization, which means that the beneficiaries included in the measure are probably healthier and more likely to have positive outcomes. In 2016, Medicare will begin to phase in a value-based purchasing model for home health care (see text box, pp. 226–227).

The trends in functional improvement reported above raise concerns about the nature of these measures. For practical and economic reasons, these data are collected by agencies at the start and end of care. It is difficult to independently confirm these data, unlike hospitalizations or emergency department use. Although functional outcomes are important for a significant share of home health care patients, the rates should be interpreted carefully. It may be appropriate to place less emphasis on these measures compared with measures that can be correlated with other sources of data such as Medicare claims.

A limitation of the measures reported in this section is that they are silo-specific to home health care and are not designed to compare quality across post-acute settings. Legislation passed in 2014, the Improving Medicare Post-Acute Care Transformation Act of 2014 (IMPACT), required CMS to develop cross-sector quality measures for post-acute care, and CMS has begun action to develop these measures. The Commission is also developing cross-sector measures of rehospitalization and plans to report them in 2016.

**TABLE
8-9****Common reasons for hospitalization reported at end of home health care, 2010**

Reason for hospitalization	Share of all reported hospitalizations in 2010
Urinary tract infection	4.5%
Respiratory infection	4.4
Heart failure	3.6
Uncontrolled pain	3.4
Injury caused by fall	2.3
Dehydration/malnutrition	2.0
Hypo/hyperglycemia	2.0
Wound infection/deterioration	1.9
Myocardial infarction	1.9

Source: MedPAC analysis of data provided by the University of Colorado.

Focusing on hospitalization may be particularly important for home health care because avoiding hospitalization is a primary goal of the service. Despite this focus, and as the data in Table 8-8 indicate, hospitalization is a common outcome for many patients, and the rate has not changed significantly since Medicare initiated a measure for it. The common clinical reasons reported for hospitalization would be those expected of the frail, community-dwelling elderly population (Table 8-9). Additional studies have identified factors associated with hospitalization risk such as polypharmacy, wound deterioration, falling in home, functional limitations, and others that should be manageable through quality home health care (Flaherty et al. 2000, Fortinsky et al. 2006, Rosati et al. 2003, Taft et al. 2005).

The care practices of HHAs, in addition to the clinical conditions of HHAs, are also a factor in the hospitalization of home health patients. Studies of adverse events in home health and related settings have found a range of care practices that contribute to poor outcomes, including poor assessment of beneficiary care needs, inadequate plans of care for identified needs, poor communication among providers, and ineffective patient education activities (Coleman et al. 2006, Masotti et al. 2010, Silver et al. 2010). Agencies that can improve their performance in these areas could be able to prevent or reduce hospitalizations for their patient populations. In general, larger agencies, which may have greater resources, have better outcomes than smaller agencies (Table 8-10).

Providers' access to capital: Access to capital for expansion is adequate

Few HHAs access capital through publicly traded shares or through public debt (actions such as issuing bonds). HHAs are not as capital intensive as other providers because they do not require extensive physical infrastructure, and most are too small to attract interest from capital markets. Information on publicly traded home health care companies provides some insight into access to capital but has limitations. Publicly traded companies may have other lines of business in addition to Medicare home health care, such as hospice, Medicaid, and private-duty nursing. Also, publicly traded companies are a small portion of the total number of agencies in the industry. For these reasons, access to capital is a smaller consideration for home health than for other health care sectors receiving Medicare payment.

Analysis of for-profit companies indicates that they had adequate access to capital in 2015. While the large publicly traded home health firms divested or closed

**TABLE
8-10****Larger home health agencies have lower rates of hospitalization, 2010**

Quintile, by size	Mean hospitalization rate for agencies in quintile	Share of home health cases
First (smallest agencies)	35%	1%
Second	34	3
Third	31	7
Fourth	29	17
Fifth (largest agencies)	27	72

Source: MedPAC analysis of data provided by the University of Colorado.

Medicare initiated a value-based purchasing program for HHAs in 2016

In 2016, Medicare initiated a value-based purchasing (VBP) model for home health care. The model will test whether home health agencies (HHAs) in nine states (Arizona, Florida, Iowa, Maryland, Massachusetts, Nebraska, North Carolina, Tennessee, and Washington) improve or maintain high quality when they are subject to a VBP incentive. Under the demonstration, agencies with higher performance will receive bonuses while those with lower scores will receive lower payments relative to current levels. Agency performance will be evaluated against separate improvement and attainment scores, with payment tied to the higher of these two scores. The demonstration commenced in 2016 by providing HHAs quarterly reporting of their performance on the measures in the demonstration.

CMS will use calendar year 2015 as the baseline year for performance, with calendar year 2016 as the first year for performance measurement. The first payment adjustment would begin January 1, 2018, applied to that calendar year based on 2016 performance data. The payment withhold would increase from 3 percent in 2018 to 8 percent in 2022. Agencies that do not have the number of episodes (20) required to produce

data for at least 5 measures will not be subject to the payment adjustment.

CMS's home health VBP (HHVBP) model has adopted a scoring approach similar to that used in the hospital VBP program, including allocating points based on achievement or improvement and calculating those points based on industry benchmarks and thresholds. For each measure, agencies will receive points along an achievement range, a scale between the achievement threshold and a benchmark.

CMS proposes to calculate the achievement threshold as the median of all agencies' performance on the specified quality measure during the baseline period and to calculate the benchmark as the mean of the top decile of all agencies' performance on the specified quality measure during the baseline period. In a departure from the hospital VBP program approach, in which CMS uses a national sample to calculate the achievement thresholds and benchmarks, CMS proposes for the HHVBP model to calculate the achievement thresholds and benchmarks separately for each selected state and for cohorts of similarly sized agencies.

(continued next page)

some agencies in 2015, there was also major investment to expand operations. For example, in 2015, Kindred Healthcare Incorporated purchased Gentiva, the second largest publicly traded home health care company. Amedisys and Almost Family made several acquisitions to expand their operations. The HealthSouth Corporation, which operates inpatient rehabilitation facilities, purchased a regional home health care company for \$750 million. Interest by investors suggests that access to capital remains adequate.

Medicare payments and providers' costs: Payments decreased in 2014 while cost growth has been low historically

In 2014, average Medicare payments per episode increased by about 0.5 percent for freestanding agencies. Total spending declined by 1.6 percent to \$17.7 billion.

However, this decline is modest compared with the growth the home health benefit has experienced in prior years; since 2002, Medicare spending has increased by over 80 percent.

The average cost per episode increased 2.7 percent in 2014, higher relative to the average of about 0.5 percent annual increase for the last five years. Low or no cost growth has been typical for home health care, and in some years, cost per episode declined (in 2012, by 1.3 percent). The ability of HHAs to keep costs low in most years has contributed to their high margins under the Medicare PPS.

Medicare margins in 2014 declined slightly

In 2014, HHA margins in aggregate were 10.8 percent for freestanding agencies (Table 8-11, p. 228). Financial performance varied from -3.8 percent for an agency at the

Medicare initiated a value-based purchasing program for HHAs in 2016 (cont.)

Likewise, under the HHVBP model, CMS will calculate improvement points for each measure by assigning points along an improvement range, a scale indicating change between an agency's performance during the performance period and the baseline period. As in the HHVBP achievement calculation, the improvement benchmark and threshold will be calculated separately for each state and for cohorts of similarly sized agencies. CMS proposed this approach to ensure that agencies would be competing only with similarly sized agencies in their state.

An agency will be rated on a scale of 1–10 both in improvement and achievement for the 25 measures in the starter set that are already in use. The improvement or achievement result for each of the 25 measures—whichever is highest—will be summed; that sum will constitute 90 percent of the agency's Total Performance Score (TPS) under the HHVBP program. The remaining 10 percent of the TPS will be based on whether the agency reports some or all of the four new measures proposed for the starter set.

The VBP program is an important step forward for moving Medicare away from volume-rewarding fee-for-service incentives, and the Commission has recommended a rehospitalization penalty for HHAs. Compared with its predecessor demonstration, the HHVBP design has been strengthened, in that participation is compulsory for the agencies active in the nine states selected. The prior VBP demonstration was voluntary, and agencies with low quality could

avoid penalties by not participating. In addition, the demonstration places a significant portion of payments at risk, 8 percent by 2022. This risk factor should ensure that even agencies with relatively high margins have an incentive to maintain or improve quality.

However, there are some improvements that could be made that would strengthen Medicare's ability to assess the quality of home health care. The program uses 26 quality measures: 13 outcome measures, 8 process measures, and 5 patient experience measures. The plethora of measures complicates administration of the program and makes it difficult for agencies to focus quality improvement efforts.

In comments on CMS's HHVBP proposed rule, the Commission suggested that CMS trim the measures involved to focus more on outcomes. The Commission also recommended that the program focus on rewarding attainment (or the absolute level of performance) and not improvement. An agency's absolute level of performance matters most to a beneficiary, and rewarding attainment is the best way to recognize this achievement. In addition, rewarding improvement creates potential inequities in that agencies with equal or better achievement scores receive smaller incentive payments than agencies with lower attainment scores but higher improvement scores. The greatest rewards in a VBP program should flow to the agencies with the best quality, and attainment-based scoring better achieves this goal. ■

25th percentile of the margin distribution to 20.1 percent for an agency at the 75th percentile (not shown in table). For-profit agencies had higher margins than nonprofit agencies, and urban agencies had slightly higher margins than rural agencies. (These margins include the effects of the budget sequester in effect since 2013.)

The Commission includes hospital-based HHAs in the analysis of inpatient hospital margins because these agencies operate in the financial context of hospital operations. Margins for hospital-based agencies in 2014 were –22.4 percent. The lower margins of hospital-based

agencies are chiefly because of their higher costs, some of which may be due to overhead costs allocated to the HHA from their parent hospitals. Despite these low margins, hospital-based HHAs may help their parent institutions if they help shorten inpatient stays, lowering expenses in the most costly setting.

Another consideration in evaluating the adequacy of payments is to assess whether providers have a financial incentive to expand the number of Medicare beneficiaries they serve. In considering whether to treat a patient, the provider compares the marginal revenue it will receive

**TABLE
8-11****Medicare margins for freestanding home health agencies, 2013 and 2014**

	Medicare margin		Percent of agencies, 2014	Percent of episodes, 2014
	2013	2014		
All	12.7%	10.8%	100%	100%
Geography				
Majority urban	13.1	11.2	85	84
Majority rural	11.0	8.5	15	16
Type of ownership				
For profit	13.7	12.2	89	79
Nonprofit	10.0	6.4	11	21
Government*	N/A	N/A	N/A	N/A
Volume quintile				
First (smallest)	6.1	4.0	20	3
Second	7.8	5.4	20	6
Third	8.9	7.6	20	11
Fourth	11.2	10.0	20	19
Fifth (largest)	14.8	12.5	20	61

Note: N/A (not available). Agencies were classified as majority urban if they provided more than 50 percent of episodes to beneficiaries in urban counties and were classified as majority rural if they provided more than 50 percent of episodes to beneficiaries in rural counties.

*Government-owned providers operate in a different context from other providers, so their margins are not necessarily comparable.

Source: MedPAC analysis of Home Health Cost Report files from CMS.

(i.e., the Medicare payment) with its marginal costs—that is, the costs that vary with volume. If Medicare payments are larger than the marginal costs of treating an additional beneficiary, a provider has a financial incentive to increase its volume of Medicare patients. However, if marginal payments do not cover the marginal costs, the provider may have a disincentive to serve Medicare beneficiaries. To operationalize this concept, we compare payments for Medicare services with marginal costs, which is approximated as the following:

Marginal profit = (payments for Medicare services – (total Medicare costs – fixed building and equipment costs)) / Medicare payments

The Commission estimates the marginal profit of HHAs to be 13.3 percent in 2014, about 20 percent higher than the overall Medicare margin. This estimate is a lower bound on the marginal profit because we ignore any potential labor costs that are fixed. For providers with available

data, we find that Medicare payments exceed marginal costs, suggesting that HHAs have a significant incentive to service additional patients.

Relatively efficient HHAs serve patients similar to patients in all other HHAs

Across all sectors, the Commission follows two principles when selecting a set of efficient providers. First, the providers must do relatively well across cost and quality metrics. Second, the performance has to be consistent, meaning that the provider cannot have poor performance on any metric over the past three years. The Commission's approach is to develop a set of criteria and then examine how many providers meet them. It does not establish a set share (for example, 10 percent) of providers to be considered efficient and then define criteria to meet that pool size.

Periodically, we review the set of criteria used to define efficient providers and evaluate the potential for improvements to our methodology. This year, we tested our methodology under selection criteria that had different thresholds of minimum acceptable quality or that relaxed

the consistency requirement. The Commission concluded that while the alternative methods could change the number of efficient providers by varying degrees, the alternative methods did not result in greater distinction between the efficient and average providers, and in some cases the differences were reduced. Most fundamentally, the clarity of the information provided for assessing payment adequacy would not improve significantly with any of the new methods tested. Therefore, the Commission will continue to use its previous definition of an efficient provider in this year's report. In the future, we will continue to look for improvements in our methods, including using new quality metrics as better indicators of patient outcomes are developed.

We examined the quality and cost efficiency of freestanding HHAs to identify a cohort that demonstrated better performance on these metrics relative to its peers (Table 8-12, p. 230). The measure of cost was a risk-adjusted and wage-adjusted cost per episode, and the measure of quality was a risk-adjusted measure of hospitalization (the hospitalization measure included hospital stays that occurred during or up to 30 days after a home health episode of care). Our approach categorized an HHA as relatively efficient if the agency was in the lowest third on at least one measure (either low cost per episode or a low hospitalization rate) and was not in the highest (worst) third of any measure for three consecutive years (2011 to 2013). About 15 percent of agencies met these criteria in this period.

Relatively efficient agencies had median margins that were 11.8 percentage points higher in 2013, and a median hospitalization rate that was 7 percentage points lower compared with other HHAs in 2013, and the median cost per visit was 11 percent lower compared with other HHAs. Relatively efficient HHAs provided more episodes but about 1.6 fewer visits per episode. On most measures of patient attributes, there was generally no significant difference between the relatively efficient providers and other agencies, with the exception of the episodes provided to rural beneficiaries and the share of episodes admitted from the community. Efficient providers tended to provide fewer episodes in rural areas and had a lower share of episodes admitted from the community.

Medicare margins remain high in 2016

In modeling 2016 payments and costs, we incorporate policy changes that will go into effect between the year of

our most recent data, 2014, and the year for which we are making margin predictions, 2016. The major changes are:

- –0.5 percent base rate payment changes in 2015 and 2016, the net impact of the PPACA rebasing adjustments, partially offset by the payment updates for each year;
- coding adjustment of –0.97 percent in 2016 consistent with CMS's policy;
- assumed nominal case-mix growth of 0.5 percent in 2015 and 2016 to reflect recent trend;
- 3 percent add-on in effect for episodes provided in rural areas in 2015 and 2016; and
- assumed episode cost growth of 0.5 percent per year.

On the basis of these policies and assumptions, the Commission projects a margin of 8.8 percent in 2016. This projection assumes that the sequester reduction of 2 percent remains in effect through 2016.

How should Medicare payments change in 2017?

Our review of the Medicare home health benefit indicates that access is more than adequate in most areas and that Medicare payments are substantially in excess of costs. On the basis of these findings, the Commission has concluded that home health payments need to be significantly reduced. In addition to payment adequacy, the Commission is concerned that the current payment system provides a financial incentive for agencies to favor therapy services when delivering care. Although PPACA includes a provision intended to lower payments, the reductions under this provision are modest, and substantial margins for many agencies are likely to remain, particularly for those that are efficient or focus on higher paying services.

RECOMMENDATION 8

The Congress should direct the Secretary to eliminate the payment update for 2017 and implement a two-year rebasing of the payment system beginning in 2018. The Congress should direct the Secretary to revise the prospective payment system to eliminate the use of therapy visits as a factor in payment determinations, concurrent with rebasing.

**TABLE
8-12****Performance of relatively efficient home health agencies**

Provider characteristics	All	Relatively efficient providers	All other providers
Number of agencies	4,840	702	4,138
Share of for-profit agencies	85%	73%	86%
Medicare margin (median)			
2013	11.5%	21.8%	10.0%
2012	12.4%	20.5%	11.0%
Quality (median)			
Hospitalization rate (2013)	26%	20%	27%
Costs and payments (median)			
Cost per visit, standardized for wages (2013)	\$145	\$132	\$148
Patient severity case-mix index	1.00	1.03	1.00
Visits per episode			
Total visits per episode (2013)	16.8	15.5	17.1
Share of visits by type			
Skilled nursing visits	51%	54%	51%
Aide visits	12%	10%	12%
MSS visits	1%	1%	1%
Therapy visits	36%	35%	37%
Size, 2013 (number of 60-day payment episodes)			
Median	461.5	573	447
Mean	841	1,134	791
Share of episodes, 2013			
Low-use episode	9%	11%	8%
Outlier episode	2%	3%	2%
Community-admitted episodes	66%	55%	70%
Therapy episodes	42%	40%	42%
Beneficiary demographics, 2013			
Share of episodes provided to dual-eligible Medicare/Medicaid beneficiaries	36%	33%	37%
Average age	77	77	77
Share of episodes provided to rural beneficiaries	22%	8%	25%

Note: MSS (medical social services). Sample includes freestanding agencies with complete data for three consecutive years (2011–2013). A home health agency is classified as relatively efficient if it is in the best third of performance of quality or cost and is not in the bottom third of either measure for three consecutive years. Quality is measured using a risk-adjusted measure of hospitalization, and cost is measured using risk-adjusted cost per episode. Low-use episodes are those with 4 or fewer visits in a 60-day episode. Outlier episodes are those that received a very high number of visits and qualified for outlier payments. Community-admitted episodes are those episodes that were not preceded by a hospitalization or prior post-acute care stay. Therapy episodes are those with six or more therapy visits.

Source: Medicare cost reports and standard analytic file.

RATIONALE 8

This recommendation addresses two problems with the home health PPS: the high level of payments and the incentives created by the use of therapy thresholds in the PPS. The payment level recommendation begins with eliminating the market basket update for 2017 and then implements a two-year rebasing beginning in 2018.

Under the rebasing policy, CMS would assess the average margins of HHAs in the most recent year of data available (using audited cost reports to the extent feasible) and reduce payments accordingly in 2018 and 2019. In determining the amount by which payments would be reduced, CMS could also use information on the costs of efficient providers, not just the average provider, since data suggest that efficient providers can provide adequate service for lower costs. With these adjustments, payments should be better aligned with costs compared with current policy.

The recommendation also calls for an end to the use of the number of therapy visits as a payment factor in the PPS when rebasing begins in 2018. The current system relies on a series of visit-number thresholds that increase payments beginning with 6 or more therapy visits and topping out at 20 visits per episode. Increasing the number of therapy visits increases payments significantly,

sometimes increasing payment by hundreds of dollars for a single additional visit. A Senate Finance Committee investigation of the therapy management practices of publicly traded home health companies concluded that CMS needs to eliminate the therapy thresholds in the home health PPS (Committee on Finance 2011). The continued use of these thresholds distorts the incentives of the payment system and distracts HHAs from focusing on patient needs and characteristics when delivering services.

IMPLICATIONS 8

Spending

- The spending recommendations would lower payment relative to current law.

Beneficiary and provider

- Appropriately targeted reviews would not affect beneficiary access to care or provider willingness to serve beneficiaries. The elimination of therapy thresholds would redistribute payments among providers, generally raising payments for providers that provide therapy less frequently and lowering them for providers that deliver relatively more therapy. In practice, payments would increase for nonprofit and facility-based agencies and would decrease for for-profit and freestanding agencies. ■

Endnotes

- 1 The Balanced Budget Act of 1997 ended coverage of home health care solely for the purpose of venipuncture services.
- 2 The rate is risk adjusted and excludes hospitalizations that were not planned in advance or part of a normal course of treatment (for instance, organ transplant).
- 3 Surety bond firms review the organizational and financial integrity of an HHA and agree to cover the Medicare obligations, up to a set amount, for those agencies that the surety bond firm believes are low risk. A surety bond would cover liabilities that occur when an agency does not repay funds it owes Medicare (for example, when an agency is found to have improperly billed for services) (Government Accountability Office 1999). A requirement for a surety bond would prevent agencies judged to be high risk by a surety firm from participating in the Medicare program.
- 4 The recommendation would apply only to full episodes—those that included five or more visits.
- 5 As of November 2014, our measure of access is based on data collected and maintained as part of CMS’s Home Health Compare database. The service areas listed are postal ZIP codes where an agency has provided services in the past 12 months. This definition may overestimate access because agencies need not serve the entire ZIP code to be counted as serving it. At the same time, the definition may understate access if HHAs are willing to serve a ZIP code but did not receive a request in the previous 12 months. The analysis excludes beneficiaries with unknown ZIP codes.
- 6 Since 2008, the PPS has increased payments for episodes with more than five therapy visits in an episode, with payments increasing as the number of visits rises after this threshold.

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CHAPTER

9

Inpatient rehabilitation facility services

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

- 9-1** The Congress should eliminate the update to the Medicare payment rate for inpatient rehabilitation facilities in fiscal year 2017.

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

-
- 9-2** The Secretary should conduct focused medical record review of inpatient rehabilitation facilities that have unusual patterns of case mix and coding.

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

-
- 9-3** The Secretary should expand the inpatient rehabilitation facility outlier pool to redistribute payments more equitably across cases and providers.

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

Inpatient rehabilitation facility services

Chapter summary

Inpatient rehabilitation facilities (IRFs) provide intensive rehabilitation services to patients after an illness, injury, or surgery. Rehabilitation programs at IRFs are supervised by rehabilitation physicians and include services such as physical and occupational therapy, rehabilitation nursing, and speech–language pathology, as well as prosthetic and orthotic devices. In 2014, Medicare spent \$7 billion on fee-for-service (FFS) IRF care provided in about 1,180 IRFs nationwide. About 339,000 beneficiaries had almost 376,000 IRF stays. On average, Medicare accounts for about 60 percent of IRFs’ discharges.

Assessment of payment adequacy

Our indicators of Medicare payment adequacy for IRFs are generally positive.

Beneficiaries’ access to care—Our analysis of IRF supply and volume of services provided suggests that capacity remains adequate to meet demand.

- **Capacity and supply of providers**—Between 2013 and 2014, the number of IRFs nationwide grew 1.4 percent, reaching almost 1,180 providers. After declining for several years, the number of hospital-based IRFs and nonprofit IRFs grew slightly during this period, though the rate of growth continued to be outpaced by that of freestanding and for-profit IRFs. The average IRF occupancy rate was 64 percent in 2014. This rate has

In this chapter

- Are Medicare payments adequate in 2016?
- How should Medicare payments change in 2017?
- Case mix, patient characteristics, and profitability in IRFs

remained relatively unchanged for several years and indicates that capacity is more than adequate to handle current demand for IRF services.

- ***Volume of services***—Between 2013 and 2014, the number of Medicare FFS cases treated in IRFs grew by less than 1 percent to almost 376,000 cases total.

Quality of care—The Commission tracks three broad categories of IRF quality indicators: risk-adjusted facility-level change in motor and cognitive function during the IRF stay, rates of discharge to the community and skilled nursing facilities, and rates of readmission. Between 2013 and 2014, there were small improvements in two measures of functional change and in the rate of discharge to the community. The rates of readmission remained unchanged.

Providers' access to capital—The parent institutions of hospital-based IRFs continue to have good access to capital. The major freestanding IRF chain, which accounted for 41 percent of all freestanding IRFs in 2014 and about a quarter of IRF discharges, also has very good access to capital. We were not able to determine the ability of other freestanding facilities to raise capital.

Medicare payments and providers' costs—In 2014, the aggregate Medicare margin increased almost 1 percentage point to 12.5 percent. The aggregate margin has risen steadily since 2009. Financial performance continued to vary across IRFs, with margins of freestanding IRFs far exceeding those of hospital-based IRFs. Higher margins were largely driven by lower unit costs. The lower costs are due in part to greater economies of scale. But freestanding IRFs are also far more likely than hospital-based units to be for-profit facilities and therefore may be more focused on controlling costs. Further, there are notable differences in hospital-based and freestanding IRFs' mix of cases. Given the difference in financial performance across IRFs, we examined freestanding and hospital-based IRFs' marginal profit to assess whether both types of providers have a financial incentive to expand the number of Medicare beneficiaries they serve. We found that hospital-based IRFs' marginal profit—a measure of providers' financial incentive to expand the number of Medicare beneficiaries they serve—in 2014 was 19.0 percent, while freestanding IRFs' marginal profit was 40.6 percent.

We project that IRFs' aggregate Medicare margin will be 13.9 percent in 2016.

On the basis of these indicators, the Commission believes that IRFs can continue to provide Medicare beneficiaries with access to safe and effective care with no update to the payment rates in fiscal year 2017.

Case mix, coding, and profitability in IRFs

The Commission has found that the mix of case types in IRFs is correlated with profitability. We found that IRFs with the highest margins had a higher share of neurological cases and a lower share of stroke cases. Further, we observed differences in the types of stroke and neurological cases admitted to high- and low-margin IRFs. Stroke cases in the highest margin IRFs were more than two-and-a-half times more likely than those in the lowest margin IRFs to have no paralysis. Likewise, cases with neurological conditions in the highest margin IRFs were almost three times more likely than those in the lowest margin IRFs to have a neuromuscular disorder (such as amyotrophic lateral sclerosis or muscular dystrophy).

In addition, Commission analyses of acute care hospital claims for beneficiaries admitted to IRFs in 2013 found that patients cared for by high-margin IRFs, compared with those in low-margin IRFs, were less severely ill during the preceding acute care hospitalization but appeared to be more functionally disabled upon assessment in the IRF. Patients in high-margin IRFs had, on average, a lower case-mix index in the acute care hospital, as well as a lower level of severity of illness and a shorter length of stay; they also were less likely to have been high-cost outliers in the acute care hospital or to have spent four or more days in the hospital intensive care or coronary care unit. Once patients were admitted to and assessed by the IRF, however, the average patient profile changed, with patients treated in high-margin IRFs appearing to be more disabled than those in low-margin IRFs. This pattern persisted across case types (e.g., stroke).

Though differences in profitability across IRFs are driven in part by differences in underlying costs, the consistent finding that high-margin IRFs have patients who are, on average, less severely ill in the acute care hospital but appear more functionally disabled upon admission to the IRF suggests the possibility that assessment and coding practices may contribute to greater revenues in some IRFs. Providers may differ in their assessment of patients' motor and cognitive function, resulting in payments for some IRFs that are too high relative to the costs incurred in treating their patients. To ensure payment accuracy and help improve program integrity, analyses of IRF coding and reassessment of the inter-rater reliability of the IRF–Patient Assessment Instrument are necessary. Such analyses should start with focused medical record review and comparison of patients across providers, with particular focus on those IRFs that exhibit unusual patterns of case mix and coding. These focused medical reviews could help identify necessary reforms to the IRF payment system.

At the same time, the variation in the mix of case types by IRF profitability warrants further attention. The Commission has found that more costly cases, such as strokes, are disproportionately admitted by lower margin IRFs. Though the variation in margins across IRFs is due in part to differences in efficiency, we cannot rule out the possibility that high-cost cases are less profitable. In the near term, CMS should effect changes to reduce potential misalignments between IRF payments and costs by redistributing payments within the IRF prospective payment system through an expanded high-cost outlier pool. Expanding the outlier pool would increase outlier payments for the most costly cases, thereby ameliorating the financial burden for IRFs that have a relatively high share of these cases. To maintain budget neutrality, the expanded outlier pool should be funded by reducing the base payment amount for all IRF cases. We recognize that, by increasing payments for the most costly cases, Medicare may increase payments for providers who are less efficient as well as for providers who care for patients whose acuity is not well captured by the case-mix system. While this outcome is not desirable, the Commission's concern about the accuracy of Medicare's payments for resource-intensive cases warrants this approach in the near term. Over the longer term, research is needed to assess variation in costs within the IRF case-mix groups and differences in relative profitability across case-mix groups. Identifying and reducing variation within case-mix groups and properly calibrating payments with costs for each group is necessary to avoid overpayments and reduce incentives for providers to admit certain types of cases and avoid others. In the future, CMS may enact payment system reforms that warrant reassessment of IRF outlier payments and adjustments to the outlier policy, including a return to a smaller outlier pool. Ultimately, rebasing IRF payments may be necessary to prevent overpayments and help protect the long-run sustainability of the Medicare program. ■

Background

After illness, injury, or surgery, some patients need intensive, inpatient rehabilitative care, such as physical, occupational, or speech therapy. Such services are sometimes provided in inpatient rehabilitation facilities (IRFs).¹ To qualify as an IRF, a facility must meet Medicare's conditions of participation for acute care hospitals and must be primarily focused on treating conditions that typically require intensive rehabilitation, among other requirements. IRFs can be freestanding facilities or specialized units within acute care hospitals. To qualify for a covered IRF stay, a beneficiary must be able to tolerate and benefit from intensive therapy and must have a condition that requires frequent and face-to-face supervision by a rehabilitation physician. Other patient admission criteria also apply. In 2014, Medicare spent \$7.0 billion on IRF care provided in about 1,180 IRFs nationwide. About 339,000 beneficiaries had more than 375,000 IRF stays. On average, Medicare accounts for about 60 percent of IRFs' discharges.

Since January 2002, Medicare has paid IRFs under a per discharge prospective payment system (PPS).² Under the IRF PPS, Medicare patients are assigned to case-mix groups (CMGs) based on the patient's primary reason for inpatient rehabilitation, age, and level of motor and cognitive function. Within each of these CMGs, patients are further categorized into one of four tiers based on the presence of specific comorbidities that have been found to increase the cost of care. Each CMG tier has a designated weight that reflects the average relative costliness of cases in the group compared with that of the average Medicare IRF case.³ The CMG weight is multiplied by a base payment rate and then adjusted to reflect geographic differences in the wages IRFs pay. The payment is further adjusted based on the IRF's share of low-income patients. Additional adjustments are made for IRFs that are teaching facilities and for IRFs located in rural areas. The IRF PPS has outlier payments for patients who are extraordinarily costly.

Medicare facility requirements for IRFs

To qualify as an IRF for Medicare payment, facilities must meet the Medicare IRF classification criteria. The first criterion is that providers must meet the Medicare conditions of participation for acute care hospitals. They must also:

- have a preadmission screening process to determine that each prospective patient is likely to benefit significantly from an intensive inpatient rehabilitation program;
- ensure that the patient receives close medical supervision and provide—through qualified personnel—rehabilitation, nursing, physical therapy, and occupational therapy and, as needed, speech—language pathology and psychological (including neuropsychological) services, social services, and orthotic and prosthetic devices;
- have a medical director of rehabilitation with training or experience in rehabilitation who provides services in the facility on a full-time basis for freestanding IRFs or at least 20 hours per week for hospital-based IRF units;
- use a coordinated interdisciplinary team approach led by a rehabilitation physician that includes a rehabilitation nurse, a social worker or case manager, and a licensed therapist from each therapy discipline involved in the patient's treatment; and
- meet the compliance threshold, which requires that no less than 60 percent of all patients admitted to an IRF have as a primary diagnosis or comorbidity at least 1 of 13 conditions specified by CMS (see text box on the IRF compliance threshold, pp. 242–243).

Medicare coverage criteria for beneficiaries

Medicare applies additional criteria that govern whether IRF services are covered for an individual Medicare beneficiary. In 2010, CMS clarified coverage criteria regarding which patients are appropriate to be treated in an IRF, when therapy must begin, and how and when beneficiaries are evaluated. For an IRF claim to be considered reasonable and necessary, the patient must be reasonably expected to meet the following requirements at admission:

- The patient requires active and ongoing therapy in at least two modalities, one of which must be physical or occupational therapy.
- The patient can actively participate in and benefit from intensive therapy that most typically consists of three hours of therapy a day at least five days a week.

The IRF compliance threshold (“60 percent rule”)

The inpatient rehabilitation facility (IRF) compliance threshold requires that no less than 60 percent of all patients (Medicare and other) admitted to an IRF have as a primary diagnosis or comorbidity at least 1 of 13 conditions specified by CMS.⁴ The intent of the compliance threshold is to distinguish IRFs from acute care hospitals. If an IRF does not meet the compliance threshold, Medicare pays for all its cases on the basis of the inpatient hospital prospective payment system rather than the IRF prospective payment system (PPS).

Compliance is determined annually at the beginning of each facility’s cost reporting period. Determining compliance can be complex. A case is first evaluated for compliance based on the impairment group code (IGC), which describes the primary reason for inpatient rehabilitation.⁵ (IGCs are also used to assign cases to case-mix groups for payment purposes.) If compliance cannot be determined based on the IGC, the case is evaluated for compliance based on the patient’s International Classification of Diseases, Tenth Revision, Clinical Modification (ICD–10–CM) diagnosis codes. Compliance is evaluated by Medicare’s administrative contractors either through review of a random sample of medical records or, more commonly, through the less resource-intensive “presumptive” method, developed by CMS. The presumptive method uses a computer program to compare a facility’s Inpatient Rehabilitation Facility–Patient Assessment Instrument (IRF–PAI) assessments for all Medicare patients (fee-for-service and Medicare Advantage) for the year with a list of eligible codes. The diagnosis codes included on the list are ones that CMS believes demonstrate either that the patient meets criteria for the medical conditions that may be counted toward an IRF’s compliance percentage or that the patient has a comorbidity that could cause significant decline in function such that the patient would require intensive rehabilitation (Centers for Medicare & Medicaid Services 2014). The presumptive method was designed to approximate medical record review; however, in practice, the method generally overestimates an IRF’s compliance percentage.

The compliance threshold was originally set at 75 percent of an IRF’s cases. But analysis of proprietary

data from eRehabData[®] for a sample of IRFs suggests that, before implementation of the IRF PPS, many facilities fell short of that threshold. Using medical record review, eRehabData estimated that, in 2002, the share of Medicare IRF cases with one of the specified conditions that count toward the compliance percentage was 42 percent. CMS suspended enforcement of the rule in 2002 because of inconsistent enforcement patterns among Medicare’s administrative contractors, but it began consistently enforcing compliance in 2004 and enacted revisions to some of the qualifying conditions.⁶ The combination of renewed enforcement of the threshold and additional restrictions resulted—as intended—in a substantial decline in the volume of Medicare patients treated in IRFs. As volume declined, occupancy rates, the number of IRF beds, and the number of facilities also fell. Average case-mix severity and cost per case increased as IRFs shifted their mix of cases to more complex conditions that counted toward the threshold. The compliance threshold was permanently capped at 60 percent in 2007 by the Medicare, Medicaid, and SCHIP Extension Act of 2007. Since then, the industry has stabilized.

Using the presumptive method, the Commission estimates that, overall, 75 percent of Medicare IRF cases were compliant in 2013 (Table 9-1). Among the most common conditions in IRFs, the share of compliant cases ranged from 100 percent of stroke cases to 21 percent of cases with cardiac conditions. In a similar analysis, eRehabData used the presumptive method to analyze IRF claims from a subset of IRFs and estimated that 71 percent of the Medicare cases in the sample counted toward the compliance threshold in 2013. But when the medical records associated with those claims were reviewed, eRehabData found that only 60.3 percent of the Medicare IRF cases in the sample could be counted toward the compliance threshold. Thus rates of compliance found under the presumptive method must be viewed in light of the method’s overestimation of IRFs’ compliance percentage.

Beginning in fiscal year 2016, CMS has removed a large number of ICD–10–CM codes from the list used

(continued next page)

The IRF compliance threshold ("60 percent rule") (cont.)

to qualify for presumptive compliance with the 60 percent rule because the codes alone do not provide sufficient information to indicate that the patient would reasonably require intensive inpatient rehabilitation (Centers for Medicare & Medicaid Services 2014). Examples include nonspecific or miscellaneous diagnosis codes and codes for arthritis conditions that would meet the compliance criteria only if severity and prior treatment criteria are met, which can be determined only through medical review. Using the presumptive method, the Commission applied the new compliance criteria to 2013 IRF–PAI records to estimate the effect on compliance rates, assuming no behavioral changes. Based on this analysis, we project that the share of Medicare cases that are compliant under the new rules will fall to 66 percent (from 75 percent), assuming no behavioral change (Table 9-1). Among the most common conditions in IRFs, cases

admitted for rehabilitation following hip or knee replacement will be most affected; under the new rules, we estimate that the share of cases of lower extremity joint replacement that are compliant will fall from 83 percent to 33 percent. As for facility-level compliance percentages, we estimate that, without behavioral change, the average IRF presumptive compliance percentage for Medicare cases will fall to 69 percent (from 77 percent), and almost one-quarter of IRFs will see their presumptive compliance percentages drop below 60 percent (data not shown).

The Commission has supported CMS's effort to tighten the requirements for compliance to ensure that IRF payments are made only to providers that furnish IRF-level services to beneficiaries who need and can tolerate that level of care. We encourage the agency to explore further refinements to the 60 percent rule. ■

**TABLE
9-1**

Absent behavioral change, the share of IRF cases that count toward the compliance threshold will decline in 2016

Condition	Share of Medicare cases in 2013	Share of cases that count toward presumptive compliance	
		2013	2016*
Stroke	21%	100%	100%
Neurological conditions	12	91	86
Fracture of the lower extremity	12	88	86
Debility	10	28	14
Major joint replacement of the lower extremity	9	83	33
Brain injury	8	99	99
Other orthopedic conditions	7	29	14
Cardiac conditions	5	21	10
Spinal cord injury	5	88	88
All other	10	61	52
Total	100	75	66

Note: IRF (inpatient rehabilitation facility). Medicare cases include cases paid for under both fee-for-service Medicare and Medicare Advantage in calendar year 2013. "Neurological conditions" includes multiple sclerosis, Parkinson's disease, polyneuropathy, and neuromuscular disorders. "Fracture of the lower extremity" includes hip, pelvis, and femur fractures. Patients with debility have generalized deconditioning not attributable to other conditions. "Other orthopedic conditions" excludes fractures of the hip, pelvis, and femur, and hip and knee replacements. "All other" includes conditions such as amputations, arthritis, and pain syndrome. The compliance threshold requires that at least 60 percent of all of an IRF's patients have 1 of 13 specified diagnoses or have a comorbidity that could cause significant decline in functional ability such that the patient requires intensive rehabilitation. Case compliance was determined using CMS's presumptive method, which does not require medical record review. The presumptive method generally overestimates the share of cases that are compliant. Case compliance for 2016 was simulated using CMS's new compliance criteria applied to IRF assessment data from 2013, assuming no behavioral change.

*Simulated

Source: Analysis of Inpatient Rehabilitation Facility–Patient Assessment Instruments from CMS.

**TABLE
9-2**

The number and share of IRF cases with neurological conditions continues to grow

Condition	Percent of IRF Medicare FFS cases				Meets compliance threshold	Percentage point change		
	2004	2009	2013	2014		2004–2009	2009–2013	2013–2014
Stroke	16.6%	20.5%	19.4%	19.5%	yes	3.9	–1.1	0.1
Neurological conditions	5.2	9.0	12.4	13.1	yes	3.8	3.4	0.7
Fracture of the lower extremity	13.1	15.1	12.5	12.2	yes	2.0	–2.6	–0.3
Debility	6.2	9.3	10.2	10.3	no	3.1	0.9	0.0
Brain injury	3.9	7.3	8.2	8.7	yes	3.4	0.8	0.5
Major joint replacement of the lower extremity	24.1	11.7	9.0	7.8	*	–12.4	–2.7	–1.2
Other orthopedic conditions	5.2	6.4	7.7	7.7	no	1.3	1.3	0.0
Cardiac conditions	5.3	4.9	5.4	5.6	no	–0.3	0.4	0.2
Spinal cord injury	4.2	4.4	4.6	4.6	yes	0.2	0.2	0.0
All other	16.3	11.3	10.6	10.6	**	–5.0	–0.7	0.0

Note: IRF (inpatient rehabilitation facility), FFS (fee-for-service). “Neurological conditions” includes multiple sclerosis, Parkinson’s disease, polyneuropathy, and neuromuscular disorders. “Fracture of the lower extremity” includes hip, pelvis, and femur fractures. Patients with debility have generalized deconditioning not attributable to other conditions. “Other orthopedic conditions” excludes fractures of the hip, pelvis, and femur, and hip and knee replacements. “All other” includes conditions such as amputations, arthritis, and pain syndrome. The compliance threshold requires that at least 60 percent of all patients have 1 of 13 specified diagnoses or have a comorbidity that could cause significant decline in functional ability such that the patient requires intensive rehabilitation.

*Cases admitted for rehabilitation following major joint replacement of the lower extremity count toward the compliance threshold if joint replacement was bilateral, if the patient had a body mass index of 50 or greater, or if the patient was age 85 or older.

**Case types in the “all other” category that meet the compliance threshold include congenital deformity, amputation, major multiple trauma, burns, and certain arthritis cases.

Source: MedPAC analysis of Inpatient Rehabilitation Facility–Patient Assessment Instrument data from CMS.

- The patient is sufficiently stable at the time of admission to actively participate in the intensive rehabilitation program.
- The patient requires supervision by a rehabilitation physician. This requirement is satisfied by physician face-to-face visits with a patient at least three days a week.

Patterns of use in IRFs

Beginning in 2004, after CMS’s renewed enforcement of the compliance threshold and restrictions on some of the qualifying conditions, the total number of IRF cases fell and the mix of cases treated by IRFs shifted markedly. IRFs began to admit a higher share of patients with diagnoses that met the revised compliance threshold, such as stroke, brain injury, and neurological conditions. The growth in neurological cases—including multiple sclerosis, Parkinson’s disease, neuromuscular disorders, and polyneuropathy—has been particularly striking. Between 2004 and 2014, the number of IRF cases with neurological conditions grew 93 percent, even as the

total number of Medicare IRF cases declined 23 percent. The number of cases with brain injuries (traumatic and nontraumatic combined) rose 69 percent over the same period. (Notably, the number of cases with other orthopedic conditions and debility also rose, though neither is among the 13 conditions that count toward the compliance threshold.⁷) As a result, in 2014, neurological conditions made up 13.1 percent of all IRF cases, compared with 5.2 percent in 2004; brain injuries made up 8.7 percent of all IRF cases, up from 3.9 percent in 2004 (Table 9-2). The most common case type in IRFs in 2014 was stroke, accounting for 19.5 percent of Medicare cases.

The distribution of case types differs by type of IRF (Table 9-3). For example, in 2014, only 15 percent of cases in freestanding for-profit IRFs were admitted for rehabilitation following a stroke, compared with 24 percent of cases in hospital-based nonprofit IRFs. Further, the types of stroke differ. In 2014, almost a quarter of the stroke cases admitted to freestanding for-profit IRFs had no paralysis, compared with 8 percent of stroke cases in hospital-based IRFs (regardless of ownership) (data not shown). Likewise, 20 percent of cases admitted

**TABLE
9-3****IRF patient mix differs by provider type, selected conditions, 2014**

Condition	All IRFs	Freestanding		Hospital based	
		For profit	Nonprofit	For profit	Nonprofit
Stroke	19%	15%	23%	19%	24%
Neurological conditions	13	20	7	10	8
Fracture of the lower extremity	12	11	11	16	13

Note: IRF (inpatient rehabilitation facility). "Neurological conditions" includes multiple sclerosis, Parkinson's disease, polyneuropathy, and neuromuscular disorders. "Fracture of the lower extremity" includes hip, pelvis, and femur fractures.

Source: MedPAC analysis of Inpatient Rehabilitation Facility–Patient Assessment Instrument data from CMS.

to freestanding for-profit IRFs were admitted with neurological conditions, more than double the share in nonprofit IRFs and in hospital-based IRFs (regardless of ownership), with the types of neurological conditions differing markedly. Almost 70 percent of the neurological cases admitted to freestanding for-profit IRFs had neuromuscular disorders, compared with 35 percent of neurological cases in hospital-based nonprofit IRFs (data not shown).

Are Medicare payments adequate in 2016?

To assess whether payments for fiscal year 2016 are adequate to cover the costs providers incur and how much providers' costs are expected to change in the coming year (2017), we examine several indicators of payment adequacy. Specifically, we assess beneficiaries' access to care by examining the capacity and supply of IRFs and changes over time in the volume of services provided, quality of care, providers' access to capital, and the relationship between Medicare payments and providers' costs.

Beneficiaries' access to care: IRF supply and service volume suggest sufficient access

We have no direct indicator of beneficiaries' access to IRF care. Although there are criteria for admission to an IRF, it is not clear when IRF care is necessary or beneficial for a given patient or when another, lower cost post-acute care provider (such as a skilled nursing facility) could provide appropriate care. The absence of IRFs in some

areas of the country makes it particularly difficult to assess the need for IRF care since beneficiaries in areas without IRFs presumably receive similar services in other settings. Nevertheless, our analysis of IRF supply and volume of services provided suggests that capacity remains adequate to meet demand.

Number of IRFs and occupancy rates suggest adequate capacity and supply

After declining for several years, the number of IRFs grew 1.4 percent between 2013 and 2014, reaching 1,177 IRFs nationwide (Table 9-4, p. 246); each state and the District of Columbia had at least 1 IRF. In general, IRFs are concentrated in highly populated states that have large Medicare populations. More than two-thirds of beneficiaries live in a county that has at least one IRF. IRFs are not the sole provider of rehabilitation services in communities; skilled nursing facilities (SNFs), home health agencies, comprehensive outpatient rehabilitation facilities, and independent therapy providers also furnish rehabilitation services (though not all provide inpatient care). Given the number and distribution of these other rehabilitation therapy providers, it is unlikely that many areas exist where IRFs are the only provider of rehabilitation therapy services available to Medicare beneficiaries.

In 2014, about 79 percent of IRFs were distinct units in acute care hospitals; the remaining 21 percent were freestanding facilities. However, because hospital-based units tend to have fewer beds, they accounted for only 52 percent of Medicare discharges from IRFs. Overall, 29 percent of IRFs were for-profit entities. Freestanding IRFs were far more likely to be for-profit than hospital-based IRFs (69 percent vs. 18 percent, respectively). About 50

**TABLE
9-4****The number of for-profit and freestanding IRFs continues to grow**

Type of IRF	Share of Medicare FFS discharges								Average annual change		
		2004	2006	2008	2010	2012	2013	2014	2004–2006	2006–2013	2013–2014
All IRFs	100%	1,221	1,225	1,202	1,179	1,166	1,161	1,177	0.2%	–0.9%	1.4%
Urban	93	1,024	1,018	1,001	981	973	977	1,013	–0.3	–0.7	3.7
Rural	7	197	207	201	198	193	184	164	2.5	–1.9	–10.9
Freestanding	48	217	217	221	233	239	243	251	0.0	1.9	3.3
Hospital based	52	1,004	1,008	981	946	927	918	926	0.2	–1.5	0.9
Nonprofit	43	768	758	738	729	698	677	681	–0.7	–1.9	0.6
For profit	50	292	299	291	294	307	322	338	1.2	1.2	5.0
Government	7	161	168	173	156	157	155	149	2.2	–1.3	–3.9

Note: IRF (inpatient rehabilitation facility), FFS (fee-for-service). The number of facilities are for the calendar year. The large decline in the number of rural IRFs between 2013 and 2014 is due primarily to changes in the core-based statistical areas (CBSAs), as defined by the Office of Management and Budget, which determine whether geographic areas are considered urban or rural. Because of these changes, 19 IRFs that were previously considered rural are now designated urban. Controlling for these changes, the number of rural IRFs declined by 2 percent.

Source: MedPAC analysis of Provider of Services data and Medicare cost report data from CMS.

percent of Medicare IRF discharges in 2014 were from for-profit facilities. Over time, the number of hospital-based and nonprofit IRFs has declined, while the number of freestanding and for-profit IRFs has increased. Between 2004 and 2014, the number of hospital-based IRFs fell by 8 percent, while the number of freestanding IRFs rose by 16 percent.

Between 2013 and 2014, the number of rural IRFs fell by 11 percent. However, the drop was due primarily to changes in the core-based statistical areas (CBSAs), as defined by the Office of Management and Budget, which determine whether geographic areas are considered urban or rural (Centers for Medicare & Medicaid Services 2015). Because of these changes, 19 IRFs that were previously considered rural were designated urban in 2014. At the same time, two IRFs that previously were considered urban were designated rural. Seven rural IRFs closed in 2014, while five new IRFs opened in rural areas. Without the changes in the CBSA definitions, the number of rural IRFs between 2013 and 2014 fell 2 percent.

In 2014, 19 IRFs closed; most were hospital-based units. At the same time, 35 new IRFs opened, three-quarters of which were hospital-based units. Acute care hospitals may

find that IRF units help reduce inpatient lengths of stay. Previous Commission analyses have found that hospitals with IRF units have higher inpatient Medicare margins than hospitals without such units (Medicare Payment Advisory Commission 2015).

In 2014, the average IRF occupancy rate was 64 percent. This rate has remained relatively unchanged for several years and indicates that capacity is more than adequate to meet demand for IRF services. Because average occupancy rates were higher in larger IRFs, freestanding IRFs and IRFs in urban areas had somewhat higher average occupancy rates than did their hospital-based and rural counterparts (which tend to have fewer beds).

IRF volume holding steady

The number of Medicare fee-for-service (FFS) IRF cases grew rapidly throughout the 1990s and the early years of the IRF PPS, reaching a peak of about 495,000 in 2004 (Table 9-5). After CMS renewed its enforcement of the compliance threshold in 2004, IRF volume declined substantially, falling almost 8 percent per year from 2004 to 2008. At that point, volume began to increase slowly. Between 2013 and 2014, volume grew by less than 1 percent to 376,000 cases.

**TABLE
9-5****The number of IRF cases per FFS beneficiary is holding steady**

	2004	2006	2008	2010	2012	2013	2014	Average annual change		
								2004–2008	2008–2013	2013–2014
Number of cases	495,349	404,633	356,312	359,307	373,284	373,118	375,590	–7.9 %	0.9%	0.7%
Cases per 10,000 FFS beneficiaries	135.6	111.9	100.4	99.7	100.1	99.7	99.9	–7.2	–0.1	0.2
Payment per case	\$13,290	\$15,380	\$16,646	\$17,085	\$17,995	\$18,258	\$18,632	5.8	1.9	2.0
ALOS (in days)	12.7	13.0	13.3	13.1	12.9	12.9	12.8	1.3	–0.7	–0.4
Users	449,362	369,269	323,897	325,506	339,087	337,704	338,887	–7.9	0.8	0.4

Note: IRF (inpatient rehabilitation facility), FFS (fee-for-service), ALOS (average length of stay).

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

From 2008 to 2014, the number of IRF cases per 10,000 FFS beneficiaries held steady at around 100. Relatively few Medicare beneficiaries use IRF services because, to qualify for Medicare coverage, IRF patients must be able both to tolerate and benefit from intensive rehabilitation therapy, which is typically interpreted to mean at least three hours of therapy a day for at least five days a week. Still, compared with all Medicare beneficiaries, those admitted to IRFs in 2014 were disproportionately over age 85. Almost a quarter of IRFs' Medicare cases were for beneficiaries age 85 or older. The use rate of IRFs among Medicare's FFS population continues to be more than twice that of the Medicare Advantage population (see text box, pp. 248–249).

Quality of care: Little change between 2013 and 2014

The Commission tracks three broad categories of IRF quality indicators: risk-adjusted facility-level change in functional and cognitive status during the IRF stay, rates of discharge to the community and to SNFs, and rates of readmission. Between 2013 and 2014, the rates of readmission remained unchanged. There were slight improvements in the rate of discharge to the community and in two measures of functional change.

Risk-adjusted rates of potentially avoidable rehospitalization, discharge to community, and discharge to SNF

Avoidable rehospitalizations expose beneficiaries to hospital-acquired infections and increase the number of transitions between settings, which are disruptive to patients and can result in medical errors (such as medication errors). In addition, they unnecessarily increase spending for the Medicare program. There has been relatively little research on rehospitalization of IRF patients in aggregate, though some studies have focused on one or more rehabilitation impairment categories (Dejong et al. 2009, Galloway et al. 2013, Ottenbacher et al. 2014, Schneider et al. 2013, Schneider et al. 2012). However, research regarding rehospitalization of SNF and nursing home patients has identified several contributing factors that may be within a post-acute care facility's control. These factors include staffing level, skill mix, and frequency of staff turnover; drug management; and adherence to transitional care protocols, such as discharge counseling, medication reconciliation, patient education regarding self-care, and communication among providers, staff, and patient's family (Grabowski et al. 2008, Kane et al. 2003, Konetzka et al. 2008a, Konetzka et al. 2008b, Lau et al. 2005, Mustard and Mayer 1997).

Comparison of Medicare Advantage and Medicare fee-for-service patients' use of inpatient rehabilitation facility services

Patients who reside in areas with inpatient rehabilitation facilities (IRFs) typically have alternatives for rehabilitation care, including skilled nursing facilities and home health agencies. Alternative post-acute care settings are generally less costly but typically offer less intensive rehabilitation and medical services. For many patients, any number of settings could provide appropriate care for their conditions. Because Medicare Advantage (MA) plans have incentives to manage care for beneficiaries in a cost-efficient manner, we examined how the population characteristics and use rates of the higher cost IRF services in the MA population compared with use in the fee-for-service (FFS) population.

Medicare requires IRFs to submit patient assessment data for both FFS and MA patients. We examined 2014 data from the IRF–Patient Assessment Instrument and found that the use rate of IRFs among the FFS

population in 2014 was more than double the rate of MA patients (Table 9-6). On average, MA enrollees who used IRFs were slightly younger than FFS IRF users (73.7 years of age vs. 75.3 years, respectively) and had similar functional status at admission, as measured by average Functional Independence Measure™ motor and cognitive scores. MA enrollees who used IRFs were more likely than FFS beneficiaries to be admitted to hospital-based IRFs (61 percent vs. 52 percent, respectively).

On average, as measured by the IRF case-mix weight, MA IRF patients were more complex than their FFS counterparts, and their average length of stay was a day longer. At the same time, MA IRF patients were slightly more likely to be discharged home and less likely to be discharged to a SNF.

(continued next page)

**TABLE
9-6**

FFS beneficiaries have higher IRF use rate, lower severity than MA enrollees, 2014

	FFS patients	MA patients
Cases per 1,000 beneficiaries	10.2	3.7
Share:		
Admitted to hospital-based IRF	52.0%	61.0%
Admitted from acute unit of same facility	37.8	42.3
Case-mix weight	1.32	1.40
Average:		
LOS (in days)	12.8	13.8
Age	75.3	73.7
FIM™ motor score at admission	28.9	28.5
FIM™ cognitive score at admission	22.3	21.9
Share:		
Discharged home	72.6%	74.5%
Discharged home with home health	49.8	49.6
Discharged to SNF	12.5	9.5

Note: FFS (fee-for-service), IRF (inpatient rehabilitation facility), MA (Medicare Advantage), LOS (length of stay), FIM™ (Functional Independence Measure™), SNF (skilled nursing facility). The motor FIM measures the level of disability in motor functioning at IRF admission on a 91-point scale. The cognitive FIM measures the level of cognitive impairment at IRF admission on a 35-point scale. Higher FIM scores indicate higher levels of function. Discharge destinations do not total 100 percent because patients in the “discharged home” category also appear in the “discharged home with home health” category. Some discharge destinations are not shown.

Source: MedPAC analysis of Inpatient Rehabilitation Facility–Patient Assessment Instrument data from CMS.

Comparison of Medicare Advantage and Medicare fee-for-service patients' use of inpatient rehabilitation facility services (cont.)

The mix of case types among MA IRF cases was different from that among FFS IRF cases (Table 9-7). A much larger share of MA IRF patients were admitted for rehabilitation after a stroke—35 percent versus 19 percent for FFS IRF patients. FFS IRF patients were more likely than MA patients to be admitted for rehabilitation for neurological conditions (13 percent vs. 9 percent, respectively), fractures of the lower extremity (12 percent vs. 9 percent, respectively) and debility (10 percent vs. 6 percent, respectively).

The disparity in use rates suggests that MA plans are more selective in the types of cases they authorize to

receive care in IRFs, with more complex rehabilitation cases such as strokes and spinal cord injuries being more likely to use IRFs. However, a few caveats must be noted. First, this analysis did not control for the availability of IRFs in areas with high MA market penetration. In addition, the IRF use rate could be affected by potential differences in the need for rehabilitation services in the MA population. Finally, we cannot rule out the possibility that reporting bias affects our results. Though CMS requires IRFs to submit patient assessment data for MA patients, it is not known whether all IRFs do so for all their MA patients. ■

**TABLE
9-7**

Mix of case types among FFS IRF cases differs from that of MA IRF cases, 2014

Type of case	Share of all cases	
	FFS patients	MA patients
Stroke	19%	35%
Neurological conditions	13	9
Fracture of the lower extremity	12	9
Debility	10	6
Brain injury	9	10
Major joint replacement of the lower extremity	8	7
Other orthopedic	8	4
Cardiac conditions	6	4
Spinal cord injury	5	7
Amputation	3	4
All other	8	6

Note: FFS (fee-for-service), IRF (inpatient rehabilitation facility), MA (Medicare Advantage). "Neurological conditions" includes multiple sclerosis, Parkinson's disease, neuromuscular disorders, and polyneuropathy. "Fracture of the lower extremity" includes hip, pelvis, and femur fractures. Patients with debility have generalized deconditioning not attributable to other conditions. "Other orthopedic conditions" excludes fractures of the hip, pelvis, and femur, and hip and knee replacements. "All other" includes conditions such as arthritis and pain syndrome. Columns may not sum to 100 percent due to rounding.

Source: MedPAC analysis of Inpatient Rehabilitation Facility–Patient Assessment Instrument data from CMS.

The Commission's rates of rehospitalization during the IRF stay and during the 30 days after discharge are risk adjusted and reflect those readmissions that are potentially avoidable with adequate care in the IRF setting (Kramer et al. 2015).⁸ The measure of readmission in the 30 days after discharge reflects how well facilities prepare beneficiaries and their caregivers for safe and appropriate transitions to the home or the next health care setting.

Between 2011 and 2013, the national average rate of risk-adjusted potentially avoidable readmissions during the IRF stay declined, from 2.9 percent to 2.5 percent (Table 9-8, p. 250). (Lower rates are better.) That rate remained unchanged in 2014. A similar pattern was observed in the rate of risk-adjusted potentially avoidable readmissions within 30 days after discharge from an IRF: the national average declined between 2011 and 2013 (from 5.0 percent to 4.5 percent) and remained unchanged in 2014.

**TABLE
9–8****Improvements in risk-adjusted rates of discharge to the community and potentially avoidable rehospitalizations**

Measure	2011	2012	2013	2014
Potentially avoidable rehospitalizations during IRF stay	2.9%	2.6%	2.5%	2.5%
Discharged to a SNF	6.9	6.7	6.8	6.9
Discharged to the community	73.9	75.1	75.7	76.1
Potentially avoidable rehospitalizations during 30 days after discharge from IRF	5.0	4.6	4.5	4.5

Note: IRF (inpatient rehabilitation facility), SNF (skilled nursing facility). High rates of discharge to the community indicate better quality. High rates of rehospitalization and discharge to SNF indicate worse quality. Rates are the average of facility rates and calculated for all facilities with 25 or more stays.

Source: Analysis of Inpatient Rehabilitation Facility–Patient Assessment Instruments from CMS.

We also examined rates of discharge to the community and to SNFs. We found that between 2013 and 2014, the national average risk-adjusted community discharge rate increased slightly from 75.7 percent to 76.1 percent. (Higher rates are better.)⁹ The national average risk-adjusted rate of discharge to SNFs was essentially unchanged.

Risk-adjusted gains in motor function and cognition

To qualify for coverage of IRF care, beneficiaries must require, be able to participate in, and benefit from intensive rehabilitation therapy. To observe the extent to which IRFs help improve the motor function and cognition of the beneficiaries they treat, we use a risk-adjusted measure of gains in these areas. Our measures reflect the extent to which patients' motor skills and cognition improved during the IRF stay, given their level of function at admission and how much improvement they would

be expected to make. Some patients, such as a relatively healthy 68-year-old recovering from an elective hip replacement, are likely to improve across several activities of daily living during their IRF stay. Other patients, such as an 85-year-old suffering from debility following a prolonged acute care hospital stay, may be expected to make only modest improvements during the IRF stay.

Functional status at admission and discharge is measured using the motor and cognitive scores on the Inpatient Rehabilitation Facility–Patient Assessment Instrument (IRF–PAI). The IRF–PAI incorporates the 18-item Functional Independence Measure™ (FIM™) scale to assess the level of disability in motor and cognitive functioning and the burden of care for a patient's caregivers (Deutsch et al. 2005). Scores for each of the 18 FIM items can be summed to calculate a motor score (based on 13 FIM items) and a cognitive score (based on 5 FIM items). The motor score at discharge can range from 13 to 91, while the cognitive score can range from

**TABLE
9–9****Mean risk-adjusted functional outcomes in IRFs rose between 2011 and 2014**

Measure	Risk-adjusted gain in function			
	2011	2012	2013	2014
Motor FIM™ gain	22.2	22.7	23.1	23.5
Cognitive FIM™ gain	3.6	3.7	3.8	3.9

Note: IRF (inpatient rehabilitation facility), FIM™ (Functional Independence Measure™). The motor FIM measures the level of disability in motor functioning on a 91-point scale. The cognitive FIM measures the level of cognitive impairment on a 35-point scale. FIM gain is calculated as the FIM score at discharge minus the FIM score at admission. Mean FIM gain averages the change of all facilities with 25 or more stays.

Source: Analysis of Inpatient Rehabilitation Facility–Patient Assessment Instruments from CMS.

**TABLE
9-10****Performance on risk-adjusted quality measures varied across IRFs in 2014**

Measure	Risk-adjusted rate		
	Mean	25th percentile	75th percentile
Motor FIM™ gain	23.5	20.8	25.9
Cognitive FIM™ gain	3.9	3.0	4.7
Potentially avoidable rehospitalizations during IRF stay	2.5%	1.6%	3.3%
Discharged to a SNF	6.9	4.4	9.0
Discharged to the community	76.1	72.9	79.4
Potentially avoidable rehospitalizations during 30 days after discharge from IRF	4.5	3.2	5.6

Note: IRF (inpatient rehabilitation facility), FIM™ (Functional Independence Measure™), SNF (skilled nursing facility). The motor FIM measures the level of disability in motor functioning on a 91-point scale. The cognitive FIM measures the level of cognitive impairment on a 35-point scale. FIM gain is calculated as the FIM score at discharge minus the FIM score at admission. Higher FIM gains indicate more improvement. High rates of discharge to the community indicate better quality. High rates of rehospitalization and discharge to SNF indicate worse quality. Mean rates are calculated for all facilities with 25 or more stays.

Source: Analysis of Inpatient Rehabilitation Facility–Patient Assessment Instruments from CMS.

5 to 35, with higher scores indicating more functional independence. To measure observed improvement in motor function and cognition, we subtracted the respective FIM scores at admission from the FIM scores at discharge to calculate FIM motor and cognitive gains (Kramer et al. 2015). A larger number indicates more improvement in functional independence and cognition between admission and discharge. Each risk-adjusted rate was calculated by comparing a facility's observed rate with its expected rate and multiplying this ratio by the national rate.

In 2014, the mean gain (positive change) in the motor FIM score during an IRF stay was 23.5, while the mean gain in the cognitive FIM score was 3.9 (Table 9-9). (Bigger gains are better.) The average risk-adjusted gain in IRF patients' motor and cognitive FIM scores increased from 2011 to 2014. However, changes in motor function and cognition must be interpreted with caution. Because payment is based in part on patients' functional status at admission—with higher payments associated with lower functional status—providers have a financial incentive to improve their documentation and coding to more fully account for each patient's rehabilitation needs. While improvements in documentation and coding can appropriately improve measurement of patients' motor and cognitive function, resulting changes in reported FIM scores may not reflect real change in patients' level of disability. If IRFs improve their documentation and coding at admission more than at

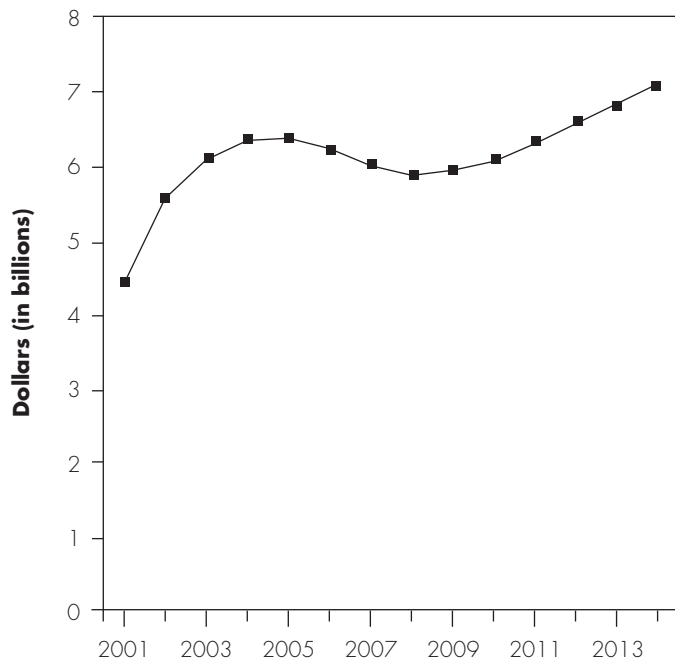
discharge, FIM gains may increase over time but may not reflect real improvements in patients' motor and cognitive gains. As a result, reported gains in motor and cognitive function may be overstated.

Variation in quality measures across providers

The measures we examined varied across providers (Table 9-10). We found one-quarter of IRFs had a risk-adjusted rate of discharge to a SNF higher than 9.0 percent, whereas the best performing quarter of providers had rates of 4.4 percent or less. (A lower rate of discharge to a SNF is better.) Risk-adjusted rates of discharge to the community varied less: One-quarter of IRFs had a community discharge rate lower than 72.9 percent, while the best performing quarter of providers had rates of 79.4 percent or more. (A higher rate of discharge to the community is better.) Variation was also seen in rehospitalization rates: The worst performing quartile had risk-adjusted rates of potentially avoidable readmissions during the IRF stay that were at or above 3.3 percent, whereas the best quarter had rates at or below 1.6 percent. (A lower rate of readmissions is better.)

Providers' access to capital: IRFs appear to have adequate access to capital

More than three-quarters of IRF providers are hospital-based units that would access any necessary capital through their parent institutions. Overall, as detailed in

FIGURE 9-1**Program spending for IRF services has grown steadily since 2009**

Note: IRF (inpatient rehabilitation facility).

Source: CMS, Office of the Actuary, 2015.

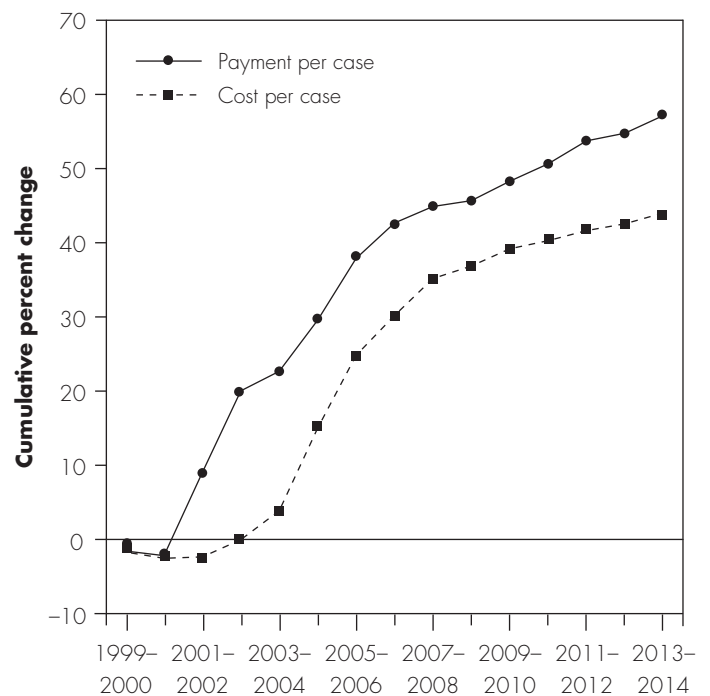
the hospital chapter, hospitals' access to capital remained strong in 2014 and 2015 because of continued low interest rates and hospitals' overall high level of profitability. The three major bond ratings agencies report that the financial outlook for nonprofit hospitals has improved from 2014 to 2015, citing improved financial measures such as number of days cash on hand, the ratio of revenues to expenses, and the ratio of cash to debt (Fitch Ratings 2015a, Moody's Investors Service 2015a, Standard & Poor's Ratings Services 2015). The agencies cite improvements in all-payer volumes due to pent-up demand, the aging population, and the general expansion of insurance coverage. The ratings agencies have all upgraded more hospital bonds than they have downgraded in 2015 for the first time since 2006 (Fitch Ratings 2015a, Moody's Investors Service 2015b, Standard & Poor's Ratings Services 2015). The level of bond offerings may remain below the historic highs seen earlier in the decade (\$30+ billion) because nonprofit hospitals are focused on less expensive capital investments, such as outpatient and ambulatory capacity and information technology, as

opposed to more costly inpatient capacity (Fitch Ratings 2015b). However, of the roughly 25 new hospital-based IRFs that entered the market in 2014, about two-thirds were nonprofit.

As for freestanding IRFs, market analysts we spoke to continue to rate access to capital for the industry's largest chain, which owned 41 percent of all freestanding IRFs in 2014 and accounted for 25 percent of all Medicare discharges from IRFs, as good. Continued acquisition of other post-acute care providers and expansion of capacity through construction of new IRFs reflect good access to capital for this chain. Most other freestanding IRFs are independent or are local chains with a small number of facilities. The extent to which these providers can access capital is less clear.

Medicare payments and providers' costs: Medicare margins remained high in 2014

In 2014, the aggregate Medicare margin increased almost 1 percentage point to 12.5 percent. The aggregate margin

FIGURE 9-2**IRFs' payments per case have increased cumulatively more than costs, 1999-2014**

Note: IRF (inpatient rehabilitation facility). Percent changes are calculated based on consistent two-year cohorts.

Source: MedPAC analysis of Medicare cost report data from CMS.

has risen steadily since 2009. Financial performance continued to vary across IRFs, with margins of freestanding IRFs far exceeding those of hospital-based IRFs. Higher margins were largely driven by lower unit costs. The lower costs may stem from greater economies of scale. But freestanding IRFs are also far more likely than hospital-based units to be for profit and therefore may be more focused on controlling costs. Further, there are notable differences in hospital-based and freestanding IRFs' mix of cases. Given the difference in financial performance across IRFs, we examined freestanding and hospital-based IRFs' marginal profit to assess whether both types of providers have a financial incentive to expand the number of Medicare beneficiaries they serve. We found that in 2014, hospital-based IRFs' marginal profit was 19.0 percent, while freestanding IRFs' marginal profit was 40.6 percent. These rates suggest that IRFs with available beds continue to have an incentive to admit Medicare patients to cover their variable costs—a positive indicator of patient access, even in IRFs with lower margins.

Trends in spending and cost growth

The Office of the Actuary projects that Medicare FFS spending for IRF services in fiscal year 2014 was \$7.1 billion (Figure 9-1). Program spending has been growing, on average, 3 percent per year since 2008, reversing a trend that began in 2004. Beginning that year, renewed enforcement of the compliance threshold and restrictions of some of the qualifying conditions resulted in a substantial reduction in the number of Medicare patients treated in IRFs. (This reduction was consistent with the underlying reason for the compliance threshold—to direct only the most clinically appropriate cases to this intensive, costly post-acute care setting.) Between 2005 and 2008, program spending for IRF services fell 8 percent.¹⁰ The decline in volume slowed in 2008 and reversed in 2009, after the Congress permanently capped the compliance threshold at 60 percent. Medicare spending for IRF services began to grow again at that point.

As the IRF patient population shifted to patients with more severe conditions who counted toward the compliance threshold, case-mix severity and cost per case increased. However, from 1999 to 2014, the cumulative increase in payments per case outpaced the increases in costs per case (Figure 9-2). Payments per case grew 57 percent during this period, while costs per case rose 44 percent. Between 2013 and 2014, payments per case increased 2.3 percent, while costs per case increased 1.4 percent.

**TABLE
9-11**

IRFs with fewer beds have much higher standardized costs per case, 2014

Type of IRF	Mean adjusted cost per discharge
All IRFs	\$15,330
Hospital based	16,325
Freestanding	11,883
Nonprofit	16,565
For profit	13,044
Government	16,317
Urban	15,034
Rural	17,036
Number of beds	
1 to 10	18,875
11 to 24	15,606
25 to 64	14,867
65 or more	12,164

Note: IRF (inpatient rehabilitation facility). Cost per discharge is standardized for differences in area wages, mix of cases, and prevalence of high-cost outliers, short-stay outliers, and transfer cases. Government-owned facilities operate in a different financial context from other facilities, so their costs are not necessarily comparable. Standardized costs per discharge reported in the Commission's 2014 March report were not adjusted for high-cost outliers and therefore are not comparable with the standardized costs reported here.

Source: MedPAC analysis of Medicare cost report and Medicare Provider Analysis and Review data from CMS.

Differences in standardized costs suggest economies of scale

Adjusting IRF costs per discharge for differences in wages, case mix, high-cost outliers, and short-stay cases permits a standardized comparison of costs across types of IRFs nationwide. The mean standardized cost per discharge for all IRFs in 2014 was \$15,330 (Table 9-11).¹¹ Costs were inversely related to the size of the IRF. IRFs with 10 or fewer beds had a mean standardized cost per discharge that was 55 percent higher than that of IRFs with 65 or more beds (\$18,875 vs. \$12,164, respectively). Still, even controlling for number of beds, hospital-based IRFs had higher standardized costs (data not shown). Commission analyses suggest the possibility that assessment and coding practices contribute to profitability in IRFs. Providers may differ in their assessment of patients' motor and cognitive function. To the extent that this occurs, some providers may have an average case mix that is higher than warranted. Because case mix is

**TABLE
9-12****Low standardized costs lead to high margins for both hospital-based and freestanding IRFs, 2014**

Characteristic	Quartile	
	Lowest cost	Highest cost
Median cost per discharge		
All	\$10,583	\$18,888
Hospital based	10,992	18,881
Freestanding	10,437	19,833
Median Medicare margin		
All	26.1%	-21.3%
Hospital based	19.5	-21.3
Freestanding	31.1	-21.7
Median		
Number of beds	42	18
Occupancy rate	70%	50%
Case-mix index	1.29	1.21
Share of facilities that are:		
Hospital based	43%	95%
Freestanding	57	5
Nonprofit	30	65
For profit	66	18
Government	4	17
Urban	94	70
Rural	6	30

Note: IRF (inpatient rehabilitation facility). Cost per discharge is standardized for differences in area wages, mix of cases, and prevalence of high-cost outliers, short-stay outliers, and transfer cases. Government-owned facilities operate in a different financial context from other facilities, so their costs are not necessarily comparable.

Source: MedPAC analysis of Medicare cost report and Medicare Provider Analysis and Review data from CMS.

one factor the Commission uses to standardize facilities' costs, our estimate of these costs also will be affected by differences in patient assessment and coding practices. Facilities with an average case mix that is higher than warranted will have lower standardized costs than they otherwise would.

We stratified IRFs into quartiles of standardized costs to compare the characteristics of facilities with the lowest and highest costs in 2014 (Table 9-12). IRFs in the lowest cost

quartile had a median standardized cost per discharge that was 44 percent less than that of IRFs in the highest cost quartile (\$10,583 vs. \$18,888, respectively). The difference in Medicare margins between low-cost and high-cost IRFs was very large. IRFs in the lowest cost quartile had a median Medicare margin of 26.1 percent compared with -21.3 percent for IRFs in the highest cost quartile.

IRFs with the lowest costs tended to be larger. The median number of beds was 42 compared with 18 in the highest cost quartile. IRFs with the lowest costs also had a higher median occupancy rate than IRFs in the highest cost quartile (70 percent vs. 50 percent, respectively). These results suggest that low-cost IRFs benefit from economies of scale. Low-cost facilities were disproportionately freestanding and for profit. Still, 43 percent of the IRFs in the lowest cost quartile were hospital based, and 30 percent of the IRFs in this group were nonprofit. By contrast, in the highest cost quartile, 95 percent were hospital based and almost two-thirds were nonprofit.

Margins vary widely

Between 2013 and 2014, the aggregate IRF Medicare margin rose from 11.6 percent to 12.5 percent, including the effects of the budget sequester (Table 9-13). From 2009 to 2014, the aggregate margin rose steadily after a period of declining, although healthy, margins.

Financial performance in 2014 varied across IRFs. Medicare margins in freestanding IRFs far exceeded those of hospital-based facilities. In 2014, the aggregate margin for freestanding IRFs (which accounted for 48 percent of Medicare discharges from IRFs) was 25.3 percent, while hospital-based IRFs (accounting for 52 percent of Medicare IRF stays) had an aggregate margin of 1.0 percent. Higher unit costs were the primary driver of differences in financial performance between hospital-based and freestanding IRFs. Hospital-based IRFs had an average standardized cost per discharge that was 37 percent higher than that of freestanding IRFs (\$16,325 vs. \$11,883, respectively) (Table 9-11, p. 253). Previous Commission analysis of underlying cost components found that hospital-based IRFs had higher costs across all cost categories, with the biggest difference in routine costs.

Nevertheless, one-fourth of hospital-based IRFs had Medicare margins greater than 11 percent, indicating that many hospitals can manage their IRF units profitably. Further, despite the comparatively low average margin in hospital-based IRFs, evidence suggests that these units make a positive financial contribution to their parent

**TABLE
9-13****IRF Medicare margins increased in 2014**

Type of IRF	Share of Medicare discharges, 2014	Margins							
		2004	2006	2008	2010	2011	2012	2013	2014
All IRFs	100%	16.7%	12.4%	9.3%	8.7%	9.7%	11.2%	11.6%	12.5%
Urban	93	17.0	12.6	9.5	9.0	10.2	11.6	12.0	13.0
Rural	7	13.2	10.1	6.9	4.7	4.8	6.5	6.5	6.4
Freestanding	48	24.7	17.5	18.2	21.4	23.1	23.9	24.4	25.3
Hospital based	52	12.2	9.6	3.8	-0.5	-0.6	0.8	0.2	1.0
Nonprofit	43	12.8	10.6	5.2	2.1	2.6	2.4	1.4	2.1
For profit	50	24.4	16.3	16.9	19.6	20.7	23.1	23.6	24.3
Government	7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of beds									
1 to 10	2	3.7	-3.5	-4.9	-10.1	-7.2	-6.7	-10.7	-10.7
11 to 24	22	10.5	7.3	1.2	-3.3	-3.4	-1.0	-0.5	-0.5
25 to 64	47	18.3	13.7	10.1	10.6	11.5	12.4	13.1	14.4
65 or more	28	21.5	17.2	17.2	17.5	19.0	20.8	20.2	21.0

Note: IRF (inpatient rehabilitation facility), N/A (not applicable). Government-owned facilities operate in a different financial context from other facilities, so their margins are not necessarily comparable. Their margins are not presented separately here, although they are included in the margins for other groups (e.g., "all IRFs"), where applicable.

Source: MedPAC analysis of cost report data from CMS.

hospitals. Commission analysis found that in 2013, the aggregate Medicare margin for inpatient hospitals with IRF units was a percentage point higher than that of hospitals without IRF units.

Margins varied by ownership, with for-profit IRFs having a higher aggregate Medicare margin than nonprofit IRFs (24.3 percent vs. 2.1 percent, respectively). Among freestanding IRFs, nonprofit facilities (which accounted for 7 percent of all IRF discharges) had an aggregate margin of 11.7 percent (data not shown). By comparison, freestanding for-profit IRFs (which accounted for 41 percent of all IRF discharges) had an aggregate margin of 28.4 percent. Likewise, among hospital-based IRFs, the aggregate margin for nonprofit units (which accounted for 36 percent of all IRF discharges) was 0.1 percent, while that margin for for-profit units (9 percent of all IRF discharges) was 7.9 percent. Between 2013 and 2014, total (all-payer) margins across all lines of business for freestanding IRFs remained almost static, rising from 10.5 percent to 10.6 percent.¹²

Several factors may account for the disparity in margins between hospital-based and freestanding IRFs. First, hospital-based IRFs are typically small units operating within a much larger financial entity (the host hospital) and may be less stringent in their cost control (since any efficiencies gained can have only a small impact on the hospital's overall profitability). At the same time, freestanding IRFs are far more likely than hospital-based IRFs to be for-profit and therefore may be more focused on controlling costs to maximize returns to investors. Commission analysis of cost growth for consistent two-year cohorts of freestanding IRFs found that the cumulative increase in costs per case for nonprofit IRFs has far outstripped that for for-profit IRFs: From 1999 to 2014, costs per case for freestanding nonprofit IRFs grew 45 percent, while costs per case for freestanding for-profit IRFs grew 18 percent. In addition, hospital-based IRFs likely achieve fewer economies of scale than their freestanding counterparts since they tend to be smaller and have fewer total cases. In 2014, 66 percent of hospital-based IRFs had fewer than 25 beds, compared with 7 percent

of freestanding IRFs. Only 3 percent of hospital-based IRFs had 65 or more beds compared with 35 percent of freestanding IRFs. Further, occupancy rates were lower in hospital-based IRFs than in their freestanding counterparts (59 percent vs. 68 percent, respectively). As a result, hospital-based IRFs had, on average, about 400 cases each (all-payer) in 2014 compared with almost 1,150, on average, for each freestanding IRF.

In general, hospital-based IRFs have a much larger share of cases with extraordinarily high costs. In 2014, 12 percent of hospital-based IRF cases qualified for high-cost outlier payments, compared with just 3 percent of freestanding IRF cases. Indeed, 84 percent of IRF outlier payments were made to hospital-based facilities. Though these payments diminish per case losses, they do not completely cover per case costs. It is not clear whether the large number of outlier cases in hospital-based IRFs stems from differences in efficiency, unmeasured case complexity, or both.

Finally, there are notable differences in hospital-based and freestanding IRFs' mix of cases. A larger share of hospital-based IRFs' patients than those of freestanding IRFs were admitted with stroke as the primary reason for rehabilitation (23 percent vs. 16 percent, respectively). Compared with freestanding IRFs, hospital-based IRFs also admitted a larger share of patients needing rehabilitation after fracture of a lower extremity (14 percent vs. 11 percent, respectively). Freestanding IRFs admitted larger shares than hospital-based IRFs of cases with neurological conditions (18 percent vs. 8 percent, respectively) and other orthopedic conditions (10 percent vs. 6 percent, respectively). Notably, the impairment groups of neurological conditions and other orthopedic conditions encompass a broader range of conditions than do many of the other impairment groups. This clinical heterogeneity may allow favorable selection of patients within these groups based on their likely costs of care. Cases with neurological conditions also count toward the compliance threshold, so IRFs with higher shares of these cases may be able to more easily meet the requirements of the 60 percent rule while keeping down costs. Further, some case types may be more profitable than others, resulting in higher margins for facilities that admit large shares of these cases. At the same time, providers may differ in their assessment and coding of patients' motor and cognitive function, resulting in payments for some IRFs that are too high relative to the costs incurred in treating their patients. (Likewise, payments for some IRFs may be too low.)

Given the difference in financial performance across IRFs, it is useful to consider whether IRFs generally have a financial incentive to expand the number of Medicare beneficiaries they serve. In considering whether to treat a patient, a provider compares the additional revenue it will receive (i.e., the Medicare payment) with its marginal costs—that is, the costs that vary with volume. If Medicare's per case payment is larger than the marginal cost of treating an additional beneficiary, a provider has a financial incentive to increase its volume of Medicare patients. On the other hand, if marginal payments do not cover the marginal costs, the provider may have a disincentive to admit Medicare beneficiaries. To operationalize this concept, we compare payments for Medicare services with marginal costs, which is approximated as:

Marginal profit = (payments for Medicare services – (total Medicare costs – fixed building and equipment costs)) / Medicare payments

The result is a lower bound on the marginal profit because we ignore any potential labor costs that are fixed. For IRFs with available data, we find that Medicare payments exceed marginal costs by a substantial amount—19.0 percent for hospital-based IRFs and 40.6 percent for freestanding IRFs—suggesting that IRFs with available beds have an incentive to admit Medicare patients. The aggregate marginal profit for all IRFs combined was 30.4 percent. This is a positive indicator of patient access, even in IRFs with lower margins.

How should Medicare payments change in 2017?

To estimate 2016 payments, costs, and margins with 2014 data, the Commission considers policy changes effective in 2015 and 2016, including those in the Patient Protection and Affordable Care Act of 2010 (PPACA). Those changes that affect our estimate of the 2016 margin include:

- a market basket increase of 2.9 percent for fiscal year 2015, offset by PPACA-required reductions totaling 0.7 percentage point, for a net update of 2.2 percent;
- a market basket increase of 2.4 percent for fiscal year 2016, offset by PPACA-required reductions totaling 0.7 percentage point, for a net update of 1.7 percent;

- changes to the high-cost outlier fixed loss amount in 2015 and 2016, which will increase payments; and
- the application of the federal budget sequester, which will decrease payments.

Given historical trends, we expect cost growth to be below market basket levels. Though the sequester will decrease payments, we expect growth in payments to exceed cost growth. Based on these assumptions, we project a margin of 13.9 percent in 2016.

On the basis of our review of payment adequacy for IRFs, the Commission recommends that the Congress eliminate the update to the IRF payment rate in 2017.

RECOMMENDATION 9-1

The Congress should eliminate the update to the Medicare payment rate for inpatient rehabilitation facilities in fiscal year 2017.

RATIONALE 9-1

Our indicators of Medicare payment adequacy for IRFs are positive. Relatively stable volume, low occupancy rates, and availability of other rehabilitation alternatives suggest that capacity remains adequate to meet demand. Quality trends are stable. Medicare margins for 2014 were positive. We conclude that IRFs should be able to accommodate cost changes in fiscal year 2017 with the base payment rate held at 2016 levels. Therefore, the 2017 IRF base payment rate should be the same as the 2016 rate.

IMPLICATIONS 9-1

Spending

- The payment update for IRFs in fiscal year 2017 consists of a forecasted 2.7 percent market basket update, a forecasted –0.5 percent productivity adjustment of the market basket update, and a –0.75 percent market basket reduction per PPACA.¹³ This recommendation would decrease federal program spending relative to the statutory update by between \$50 million and \$250 million in 2017 and by less than \$1 billion over five years.

Beneficiary and provider:

- We do not expect this recommendation to have adverse effects on Medicare beneficiaries with respect to access to care or out-of-pocket spending. This recommendation may increase the financial pressure on some providers, but overall we expect a minimal

effect on relatively efficient providers' willingness and ability to care for Medicare beneficiaries.

Case mix, patient characteristics, and profitability in IRFs

The high margin for IRFs in 2014 (12.5 percent) indicates that, in aggregate, Medicare payments substantially exceed the costs of caring for beneficiaries. But margins differ considerably across IRFs. Since 2009, the aggregate margin for hospital-based IRFs—which account for 52 percent of IRF discharges—has been at or below 1 percent, while the aggregate margin for freestanding IRFs has been 20 percent or more. Further, since 2006, the disparity between hospital-based and freestanding IRFs' margins has been widening. The growing disparity is in large part due to differences in cost growth. Since 2006, costs per case in hospital-based IRFs have grown, on average, 3.9 percent per year, while those in freestanding IRFs have grown, on average, less than 1.0 percent per year.¹⁴ By contrast, over the same period, payments per case in hospital-based IRFs have grown, on average, 2.5 percent per year, while those in freestanding IRFs have grown 2.3 percent per year.

Freestanding IRFs likely have lower costs—and higher margins—than hospital-based IRFs in part because they are more cost-efficient in the provision of care. Hospital-based IRFs may achieve fewer economies of scale because they are smaller and have lower occupancy rates, resulting in fewer total cases over which to spread costs. If the disparity in margins across IRFs were due solely to differences in costs, rebasing Medicare payment rates to a level that supports the efficient provider might be necessary to prevent overpayments and to help protect the long-run sustainability of the program. The Commission has recommended this approach in other settings when payments have substantially exceeded costs (Medicare Payment Advisory Commission 2012, Medicare Payment Advisory Commission 2011).

However, Commission analysis of the relationship between IRFs' mix of cases, patient characteristics, and financial performance suggests the possibility that patient selection and assessment and coding practices may contribute to differences in profitability across providers. (See text box, pp. 258–260, for a description of our methodology.) When we compared patient characteristics (in the IRF and during patients' preceding acute care

Examining the relationship between inpatient rehabilitation facilities' mix of cases, patient characteristics, and financial performance

To look more closely at the relationship between providers' mix of cases, patient characteristics, and financial performance, the Commission analyzed inpatient rehabilitation facility (IRF) patient assessment data, administrative data, and cost reports, as well as administrative data from IRF patients' immediately preceding acute care hospital stays. We matched fee-for-service IRF claims and assessment data from 2013 to claims for IRF patients' preceding acute care hospital services. About 87 percent of IRF claims in 2013 could be linked to an acute care hospital discharge within 30 days before the IRF admission date. The vast majority of these post-acute IRF cases

(96 percent) had an acute care hospital discharge within three days of the IRF admission. IRF cases that did not have an acute care hospital discharge within 30 days before the IRF admission were excluded from the analysis. Excluding IRF cases that were not recently discharged from an acute care hospital was important because post-acute cases in IRFs may differ from cases that are admitted from the community, and freestanding IRFs typically have a higher share of cases admitted from the community than hospital-based IRFs do.

To control for differences in the mix of case types across IRFs, we examined patient characteristics

(continued next page)

TABLE 9-14 Examining the relationship between IRFs' mix of cases, patient characteristics, and financial performance: Characteristics of the margin quintiles, 2013

	Margin quintile group				
	1 (Lowest margin)	2	3	4	5 (Highest margin)
Mean margin	-36.6%	-10.3%	2.2%	14.2%	31.1%
Median standardized cost per discharge	\$19,560	\$16,736	\$14,871	\$13,156	\$10,812
Average CMI	1.28	1.28	1.27	1.31	1.35
Share of facilities in quintile that are:					
Hospital based	97%	93%	90%	80%	36%
Freestanding	3	7	10	20	64
Nonprofit	60	72	66	59	27
For profit	21	17	23	29	68
Government	19	11	10	12	5
1 to 10 beds	24	12	9	4	3
11 to 24 beds	49	56	53	40	21
25 to 64 beds	24	26	33	44	49
65+ beds	4	6	5	11	27

Note: IRF (inpatient rehabilitation facility), CMI (case-mix index). IRFs were ranked by their 2013 Medicare margins and then sorted into five equal-sized groups (quintiles). Cost per discharge is standardized for differences in area wages, mix of cases, and prevalence of high-cost outliers, short-stay outliers, and transfer cases. Average CMI was calculated using the IRF case-mix group weights.

Source: MedPAC analysis of Medicare Provider Analysis and Review data, Inpatient Rehabilitation Facility–Patient Assessment Instrument data, and cost report data from CMS.

Examining the relationship between inpatient rehabilitation facilities' mix of cases, patient characteristics, and financial performance (cont.)

in the IRF and in the preceding acute care hospital stay by patients' type of condition, as coded by the IRF at IRF admission. IRFs assign each patient to an impairment group that indicates the primary reason for inpatient rehabilitation. These impairment groups can be collapsed into 21 rehabilitation impairment categories (e.g., stroke, traumatic brain injury, and neurological condition). We looked at IRF patient characteristics both by impairment group and by the collapsed rehabilitation impairment categories.

Our approach allowed us to compare patient characteristics as coded in the acute care hospital with those coded in the IRF. Ideally, we would evaluate IRFs' patient characteristics by comparing IRF patient assessment data with complete patient assessment information recorded for the beneficiary during the preceding acute care hospital stay. However, because acute care hospitals do not submit patient assessment data to CMS, no such data exist. Nevertheless, though acute care hospital claims data do not provide information about a patient's motor function and provide only limited information about a patient's cognition, they can tell us about patients' diagnoses, severity of illness, and relative resource requirements during the hospital stay preceding admission to the IRF. For each impairment group, we examined patients' average case-mix index in the acute care hospital (a measure of resource intensity in the hospital), as well as the average severity of illness using the all-patient refined diagnosis-related groups. We also looked at the average length of stay in the hospital, the average length of stay in an intensive care or coronary care unit, and whether patients had been high-cost outliers in the hospital. Data from IRF–Patient Assessment Instrument (IRF–PAI)

provided information about patients at admission to the IRF, as assessed and coded by the IRF. We examined patients' average age and the average length of stay in the IRF. We also examined patients' average case-mix index in the IRF and average level of motor and cognitive function, using the motor and cognitive scores as measured at IRF admission. The IRF–PAI uses the Functional Independence Measure™ (FIM™) scale to assess the level of disability in motor and cognitive functioning, measured as the burden of care for a patient's caregivers. Scores for each of the 18 FIM items can be summed to calculate a motor score (based on 13 FIM items) and a cognitive score (based on 5 FIM items). The motor score is on a 91-point scale, while the cognitive score is on a 35-point scale, with higher scores indicating more functional independence. Admission FIM scores are collected during the first three days of a patient's IRF stay and should reflect a patient's lowest measure of disability (if differences in function occur in different environments or at different times of the day).

We aggregated patient data for each IRF and sorted IRFs into five equal-sized groups, or quintiles, based on their margins. We found that the providers in our margin groups had very different characteristics. In 2013, IRFs in the highest margin quintile had a mean margin of 31.1 percent, while IRFs in the lowest margin quintile had a mean margin of –36.6 percent (Table 9-14). Those margins were driven in large part by differences in cost: The median standardized cost per discharge for the lowest margin quintile was almost twice that for the highest margin quintile (\$19,560 vs. \$10,812, respectively). The aggregate average IRF case-mix index (based on the case-mix group assigned in the IRF) was higher in higher margin IRFs. (All else being equal,

(continued next page)

hospital stays), we found that the mix of case types in IRFs was associated with provider profitability. In addition, we found that patients cared for by high-margin IRFs, compared with those in low-margin IRFs, were less severely ill in the acute care hospital but were assessed and coded as more functionally disabled upon admission to the IRF.

High-margin IRFs have a different mix of cases

As shown in Figure 9-3 (p. 261), the mix of case types in IRFs was associated with financial performance. The share of stroke cases appeared to be inversely correlated with the Medicare margin. In 2013, 27 percent of the lowest margin IRFs' cases were admitted for stroke, compared with 16

Examining the relationship between inpatient rehabilitation facilities' mix of cases, patient characteristics, and financial performance (cont.)

a higher case-mix index results in a higher payment.) Hospital-based IRFs made up 97 percent of the providers in the lowest margin quintile and 36 percent of the providers in the highest margin quintile. Fewer than 30 percent of the providers in the four lowest margin quintiles were for profit, compared with 68 percent in the highest margin quintile. Facility size was strongly correlated with margin. Three-quarters of the IRFs in the lowest margin quintile had fewer than 25 beds, compared with 24 percent of the IRFs in the highest margin quintile.

We also compared quality of care across providers by looking at average performance on selected risk-adjusted quality measures for each of the margin quintiles. On rates of potentially avoidable

readmissions (during the IRF stay and within 30 days after discharge from the IRF), lower margin IRFs performed better than the highest margin IRFs (Table 9-15). The average rate of risk-adjusted potentially avoidable readmissions during the IRF stay was 2.4 percent for the lowest margin IRFs, compared with 2.8 percent for the highest margin IRFs. (Lower rates are better.) The average rate of risk-adjusted potentially avoidable readmissions within 30 days after IRF discharge was 4.2 percent for the lowest margin IRFs, compared with 4.9 percent for the highest margin IRFs. On rates of discharge to skilled nursing facilities, higher margin IRFs performed better than lower margin IRFs. There was little difference across the margin quintiles in rates of discharge to the community. ■

**TABLE
9-15**

Performance on selected risk-adjusted quality measures, by margin quintile, 2013

Risk-adjusted measure	Margin quintile group				
	1 (Lowest margin)	2	3	4	5 (Highest margin)
Potentially avoidable rehospitalizations during IRF stay	2.4%	2.5%	2.3%	2.4%	2.8%
Discharged to a SNF	6.9	7.3	7.3	6.6	6.0
Discharged to the community	76.3	75.7	75.7	75.9	75.6
Potentially avoidable rehospitalizations during 30 days after discharge from IRF	4.2	4.2	4.4	4.7	4.9

Note: IRF (inpatient rehabilitation facility), SNF (skilled nursing facility). IRFs were ranked by their 2013 Medicare margins and then sorted into five equal-sized groups (quintiles). High rates of discharge to the community indicate better quality. High rates of rehospitalization and discharge to a SNF indicate worse quality. Rates are the average of facility rates in each quintile.

Source: MedPAC analysis of Medicare Provider Analysis and Review data, Inpatient Rehabilitation Facility–Patient Assessment Instrument data, and cost report data from CMS.

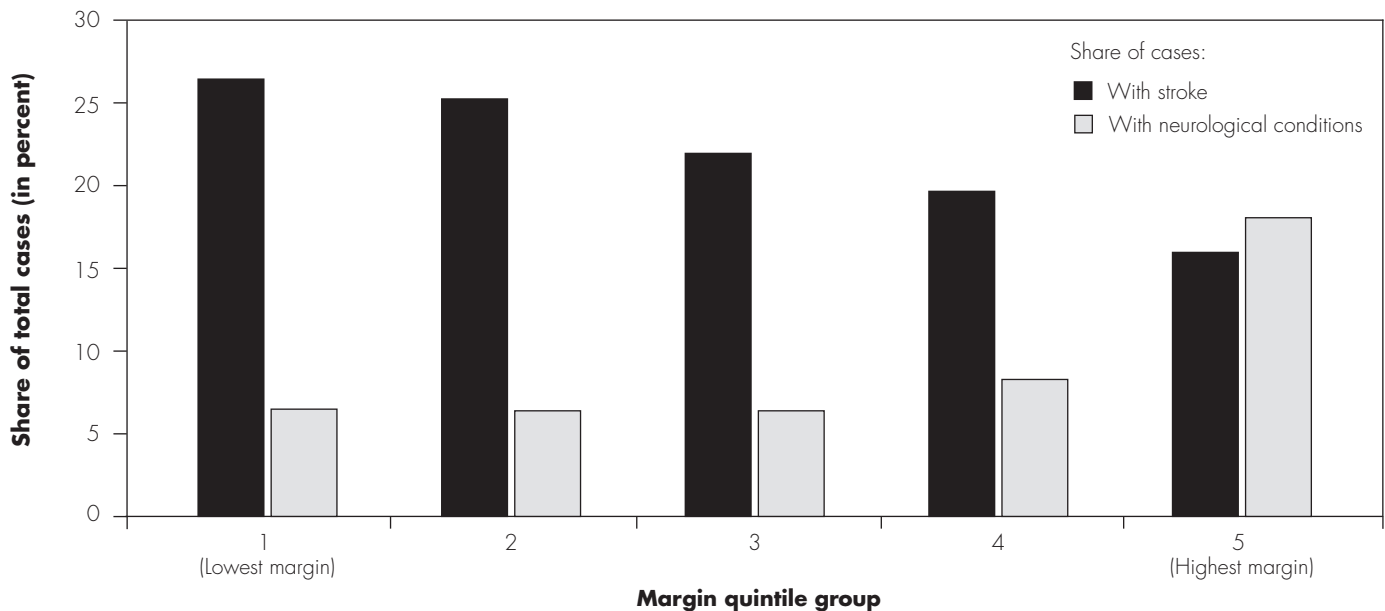
percent of the highest margin IRFs' cases. At the same time, IRFs with the highest margins had a much higher share of cases with neurological conditions. About 18 percent of the highest margin IRFs' cases were admitted with neurological conditions, compared with about 7 percent of the cases in other IRFs.¹⁵ There was little difference across the margin groups in the shares of cases

with lower extremity fractures, debility, and hip and knee replacement.

We also noted marked differences in the types of stroke cases and neurological conditions admitted to high-margin and low-margin IRFs. In the highest margin IRFs, stroke cases with no paralysis were far more common than in other IRFs (Figure 9-4, p. 262). Such cases made up 22

**FIGURE
9-3**

IRFs with the highest margins had more cases with neurological conditions, fewer cases with stroke, 2013



Note: IRF (inpatient rehabilitation facility). IRFs were ranked by their 2013 Medicare margins and then sorted into five equal-sized groups (quintiles). Neurological conditions include multiple sclerosis, Parkinson's disease, neuromuscular disorders, and polyneuropathy. Cases that did not have an acute care hospital discharge within 30 days of admission to the IRF were excluded from this analysis.

Source: MedPAC analysis of Medicare Provider Analysis and Review data, Inpatient Rehabilitation Facility–Patient Assessment Instrument data, and cost report data from CMS.

percent of all stroke cases in the highest margin IRFs, compared with 8 percent for IRFs in the lowest margin quintile.

Likewise, the highest margin IRFs admitted many more neurological cases with neuromuscular disorders than did other IRFs (Figure 9-5, p. 262). Seventy-two percent of the neurological cases admitted to IRFs in the highest margin quintile were patients with neuromuscular disorders, compared with 25 percent in the lowest margin IRFs.¹⁶ Indeed, patients with neuromuscular disorders accounted for 13 percent of all cases in the highest margin IRFs but less than 3 percent of all cases, on average, in other IRFs.

Coding practices may contribute to IRF profitability

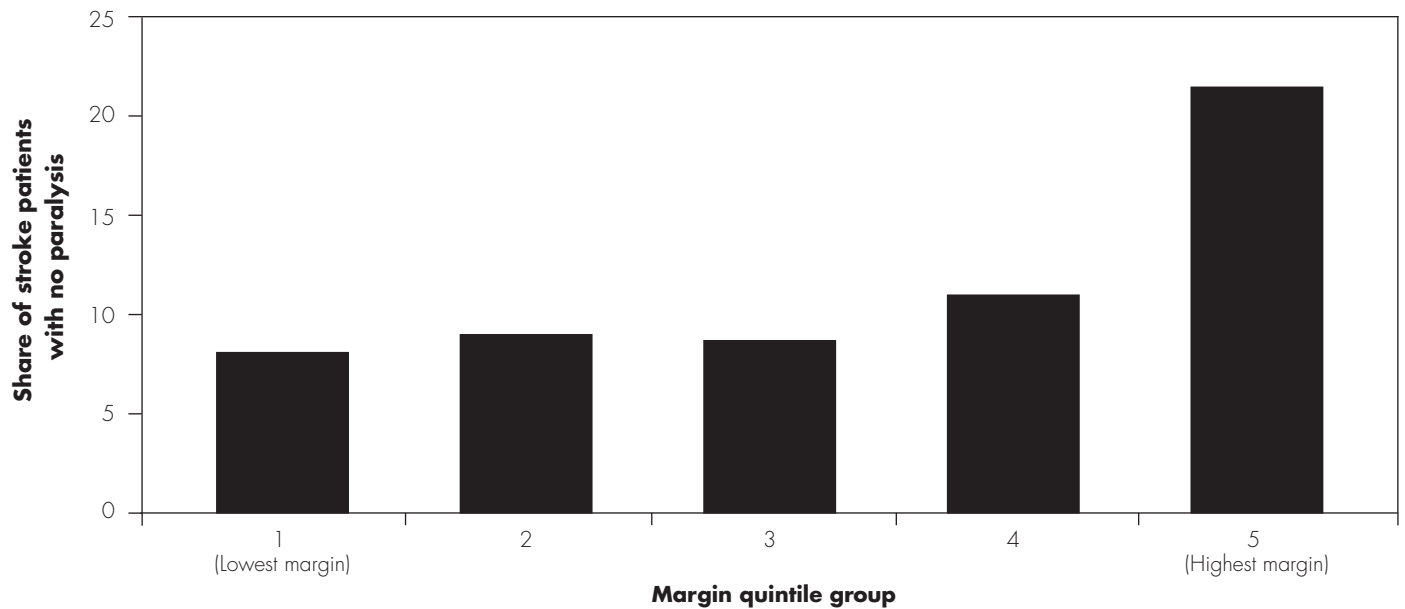
We also compared the characteristics of IRF patients across the margin groups. Overall, when we compared patients in high-margin and low-margin IRFs, we found that patients in high-margin IRFs were less severely ill and resource-intensive during the acute care hospitalization that preceded the IRF stay. Once patients were admitted to and assessed by the IRF, however, the average patient

profile changed, with patients treated in high-margin IRFs appearing to be more functionally disabled than those treated in low-margin IRFs.

To control for differences in the mix of case types across IRFs, we examined patient characteristics in the IRF and in the preceding acute care hospital stay by the impairment group indicating the reason for inpatient rehabilitation, as coded in the IRF.¹⁷ When we examined the characteristics of stroke cases, we found that patients in high-margin IRFs were less severely ill during their preceding acute care hospital stay than patients in low-margin IRFs (Table 9-16, p. 263). Stroke patients in high-margin IRFs were slightly less likely to have been of high severity (all-patient refined–diagnosis related group (APR–DRG) level 3 or 4) in the acute care hospital. Fewer stroke patients in high-margin IRFs had spent time in an acute care hospital intensive care unit (ICU) or coronary care unit (CCU), and those who did had shorter ICU or CCU stays. Stroke cases in high-margin IRFs also had a lower average acute care hospital case mix and were somewhat less likely to have been high-cost outlier cases in the hospital.

**FIGURE
9-4**

Stroke cases in the highest margin IRFs were more likely to have no paralysis, 2013

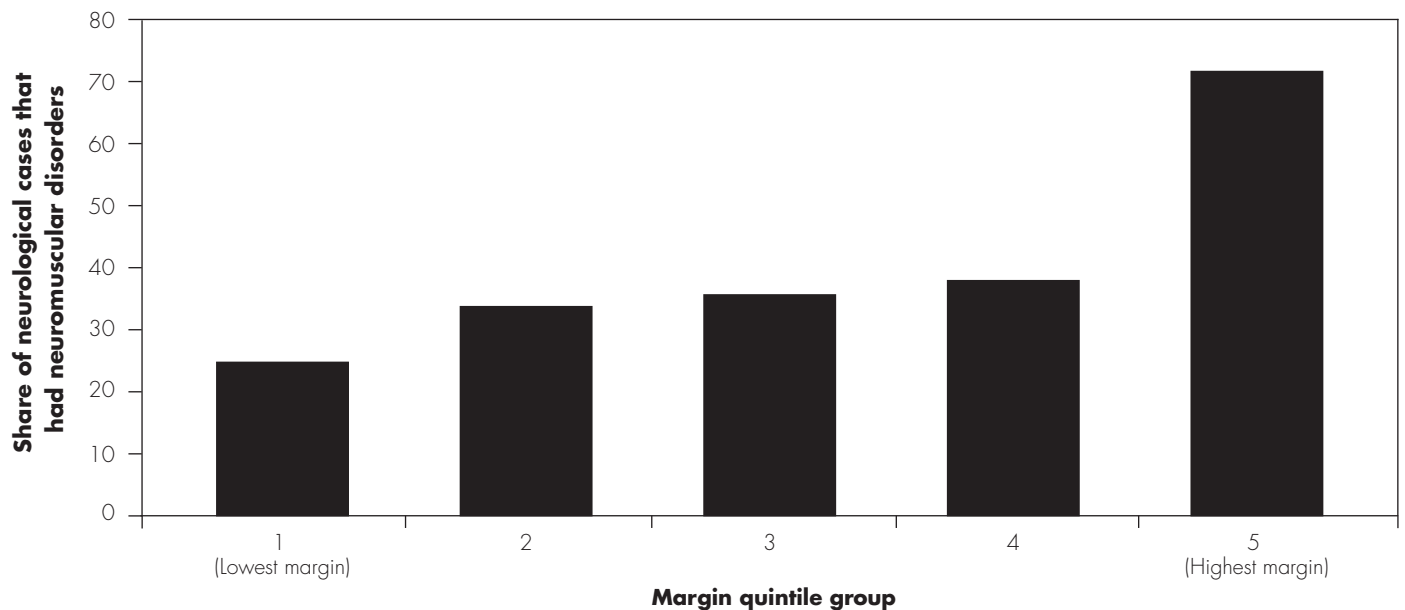


Note: IRF (inpatient rehabilitation facility). IRFs were ranked by their 2013 Medicare margins and then sorted into five equal-sized groups (quintiles). Cases that did not have an acute care hospital discharge within 30 days of admission to the IRF were excluded from this analysis.

Source: MedPAC analysis of Medicare Provider Analysis and Review data, Inpatient Rehabilitation Facility–Patient Assessment Instrument data, and cost report data from CMS.

**FIGURE
9-5**

Neurological cases in the highest margin IRFs were more likely to have neuromuscular disorders, 2013



Note: IRF (inpatient rehabilitation facility). IRFs were ranked by their 2013 Medicare margins and then sorted into five equal-sized groups (quintiles). Neurological conditions include multiple sclerosis, Parkinson's disease, neuromuscular disorders, and polyneuropathy. Neuromuscular disorders include amyotrophic lateral sclerosis and muscular dystrophy. Cases that did not have an acute care hospital discharge within 30 days of admission to the IRF were excluded from this analysis.

Source: MedPAC analysis of Medicare Provider Analysis and Review data, Inpatient Rehabilitation Facility–Patient Assessment Instrument data, and cost report data from CMS.

**TABLE
9-16****Stroke cases in high-margin IRFs were less severely ill during acute care hospital stay, but appeared more disabled once admitted to the IRF, 2013**

Characteristics of stroke cases	Margin quintile group				
	1 (Lowest margin)	2	3	4	5 (Highest margin)
Average age	75.4	75.3	75.5	75.6	75.0
During the preceding ACH stay:					
ALOS (in days)	6.0	6.0	5.9	6.1	5.9
Share of cases that were severity level 3 or 4	51%	49%	49%	50%	47%
Share of cases with ICU/CCU ALOS >4 days	36%	34%	33%	36%	22%
Share of cases that were high-cost outliers	6%	4%	4%	4%	3%
Average CMI	1.85	1.85	1.81	1.77	1.67
During the IRF stay					
ALOS (in days)	15.5	15.2	15.0	15.4	15.4
Average FIM™ motor score at admission	29.9	29.6	29.7	27.7	25.6
FIM™ cognition score at admission	19.4	19.3	19.4	18.8	17.6
Average CMI	1.50	1.51	1.51	1.58	1.67

Note: IRF (inpatient rehabilitation facility), ACH (acute care hospital), ALOS (average length of stay), ICU/CCU (intensive care unit/coronary care unit), CMI (case-mix index), FIM™ (Functional Independence Measure™). Average CMI during the preceding acute care hospital stay was calculated using the diagnosis-related group weights used in the acute care hospital payment system. Average CMI during the IRF stay was calculated using the case-mix group weights used in the IRF payment system. The motor FIM measures the level of disability in motor functioning at IRF admission on a 91-point scale. The cognitive FIM measures the level of cognitive impairment at IRF admission on a 35-point scale. Higher FIM scores indicate higher levels of function. IRFs were ranked by their 2013 Medicare margins and then sorted into five equal-sized groups (quintiles). Stroke cases included all those assigned to stroke case-mix groups in the IRF. Stroke cases that did not have an acute care hospital discharge within 30 days of admission to the IRF were excluded from this analysis.

Source: MedPAC analysis of Medicare Provider Analysis and Review data, Inpatient Rehabilitation Facility–Patient Assessment Instrument data, and cost report data from CMS.

Once stroke cases were admitted to and assessed in the IRF, however, those treated in high-margin IRFs appeared to be more disabled than stroke cases treated in low-margin IRFs, though they had, on average, similar IRF lengths of stay (Table 9-16). The average motor FIM score at admission for stroke patients was 25.6 for IRFs in the highest margin quintile compared with 29.9 for stroke patients in the lowest margin quintile. (Lower scores indicate worse motor function). Because Medicare's payments to IRFs for stroke cases are based predominantly on patients' motor scores, the difference in the average motor FIM score between the highest margin and lowest margin IRFs represents a substantial difference in payment.¹⁸ All else being equal, Medicare pays 15 percent more for a stroke patient with a motor score of 25.6 than for a stroke patient with a motor score of 29.9.¹⁹

When we controlled for the type of stroke, we continued to see a pattern of significantly lower average motor scores

(indicating greater disability) in high-margin IRFs despite lower levels of severity in the acute care hospital. The difference in average motor FIM scores between high-margin and low-margin IRFs was particularly wide for stroke cases with no paralysis: Cases in the highest margin IRFs had a motor FIM score that was 18 percent lower, on average, than cases in the lowest margin IRFs. Indeed, nonparalyzed stroke patients in the highest margin IRFs had an average motor FIM score (29.0) that was almost the same as the average motor score of paralyzed stroke patients in the lowest margin IRFs (29.2) (Table 9-17, p. 264). This finding is surprising because stroke patients with paralysis typically have worse motor function than stroke patients without paralysis. All else being equal, Medicare's payment for these two types of stroke patients with a motor FIM score of 29.0 would be the same—even though stroke patients with no paralysis have an IRF length of stay that is, on average, more than two days shorter than that of stroke patients with paralysis.

**TABLE
9-17**

Nonparalyzed stroke patients in the highest margin IRFs had the same average motor FIM™ score as stroke patients with paralysis in the lowest margin IRFs, 2013

Type of stroke case	Motor FIM score, by margin quintile group	
	1 (Lowest margin)	5 (Highest margin)
With paralysis	29.2	24.6
Without paralysis	35.3	29.0

Note: IRF (inpatient rehabilitation facility), FIM™ (Functional Independence Measure™). Average motor impairment scores were calculated using the motor FIM coded by the IRF. The motor FIM measures the level of disability in motor functioning at IRF admission on a 91-point scale. Higher FIM scores indicate higher levels of function. Results for Quintiles 2, 3, and 4 are not shown. IRFs were ranked by their 2013 Medicare margins and then sorted into five equal-sized groups (quintiles). Stroke cases with paralysis include patients with left body involvement, right body involvement, and bilateral involvement. Stroke cases without paralysis included all those assigned to impairment group code 1.4. Cases that did not have an acute care hospital discharge within 30 days of admission to the IRF were excluded from this analysis.

Source: MedPAC analysis of Medicare Provider Analysis and Review data, Inpatient Rehabilitation Facility–Patient Assessment Instrument data, and cost report data from CMS.

The pattern was evident across the case types we examined. For example, patients with neuromuscular disorders in high-margin IRFs were less severely ill and resource intensive during the acute care hospitalization that preceded the IRF stay compared with patients with neuromuscular disorders in low-margin IRFs (Table 9-18). In high-margin IRFs, the share of neuromuscular disorder cases that were APR–DRG severity of illness level 3 or 4 in the acute care hospital was lower, as was the share that spent four or more days in an acute care hospital ICU or CCU. Neuromuscular disorder cases in the highest margin IRFs were about half as likely as those in the lowest margin IRFs to have been high-cost outliers in the acute care hospital. Their average acute care hospital case-mix index was 33 percent lower. But, as with other types of cases, once neuromuscular disorder cases were admitted to and assessed by the IRF, those treated in high-margin IRFs appeared to be more disabled than those treated in low-margin IRFs, with lower motor and cognitive FIM scores.

Some of the difference in motor function of neuromuscular disorder cases in high-margin versus low-margin IRFs could have been due to differences in the age of patients.

Neuromuscular disorder cases in the lowest margin IRFs were, on average, more than four years younger than those in the highest margin IRFs. At the same time, neuromuscular disorder cases in the lowest margin IRFs had much longer acute care hospital lengths of stay (13.3 days vs. 9.7 days, respectively), so they could have been further along in their recovery when they were admitted to the IRF, compared with cases in the highest margin IRFs. If that were the case, however, one might expect that neuromuscular disorder patients in the lowest margin IRFs would have shorter IRF stays, on average, than their counterparts in the highest margin IRFs. However, we found that neuromuscular disorder cases in the lowest margin IRFs had stays that were almost one day longer, on average, than those in the highest margin IRFs.

We also looked separately at the characteristics of IRF patients with debility, hip fracture, and hip and knee replacement. As with stroke and neuromuscular disorder cases, patients with debility who were cared for by high-margin IRFs were less severely ill during the acute care hospitalization that preceded the IRF stay but, once admitted to the IRF, appeared to be more disabled than those treated in low-margin IRFs. By contrast, across the margin quintiles, IRF patients with hip fracture and those with hip and knee replacement were more similar in the acute care hospital. There were few differences in the share of joint cases that were high-severity, the share that spent time in an acute care hospital ICU or CCU, and the share that were acute care hospital cost outliers. The average acute care hospital case mix for these cases was slightly lower for high-margin IRFs. Nevertheless, once admitted to the IRF, joint cases in high-margin IRFs had lower average motor and cognitive FIM scores, indicating greater disability. The average motor FIM score for hip fracture cases was 18 percent lower in the highest margin IRFs than in the lowest margin IRFs.

Ensuring the reliability of IRF patient assessment and coding

The consistent finding that high-margin IRFs have patients who are, on average, less severely ill in the acute care hospital but more functionally disabled upon admission to the IRF suggests the possibility that coding practices contribute to greater profitability in some IRFs, especially given the comparatively low level of costs and cost growth in high-margin facilities. Providers may differ in their assessment of patients' motor and cognitive function, resulting in payments for some IRFs that are too high relative to the costs incurred in treating their patients.

**TABLE
9-18****Neuromuscular disorder cases in high-margin IRFs were less severely ill during acute care hospital stay, but appeared more disabled once admitted to the IRF, 2013**

Characteristics of neuromuscular disorder cases	Margin quintile group				
	1 (Lowest margin)	2	3	4	5 (Highest margin)
Average age	71.7	73.5	72.9	75.7	76.1
During the preceding ACH stay:					
ALOS (in days)	13.3	12.2	13.1	10.8	9.7
Share of cases that were severity level 3 or 4	79%	82%	80%	77%	72%
Share of cases with ICU/CCU ALOS > 4 days	56%	56%	55%	50%	44%
Share of cases that were high-cost outliers	25%	21%	23%	15%	11%
Average CMI	3.62	3.08	3.52	2.61	2.43
During the IRF stay:					
ALOS (in days)	13.3	12.1	12.9	12.6	12.4
Average FIM™ motor score at admission	29.3	30.5	29.0	28.9	27.1
FIM™ cognition score at admission	24.4	24.4	23.8	23.1	21.6
Average CMI	1.36	1.32	1.37	1.34	1.39

Note: IRF (inpatient rehabilitation facility), ACH (acute care hospital), ALOS (average length of stay), ICU/CCU (intensive care unit/coronary care unit), CMI (case-mix index), FIM™ (Functional Independence Measure™). Average CMI during the preceding acute care hospital stay was calculated using the diagnosis-related group weights used in the acute care hospital payment system. Average CMI during the IRF stay was calculated using the case-mix group weights used in the IRF payment system. The motor FIM measures the level of disability in motor functioning at IRF admission on a 91-point scale. The cognitive FIM measures the level of cognitive impairment at IRF admission on a 35-point scale. Higher FIM scores indicate higher levels of function. IRFs were ranked by their 2013 Medicare margins and then sorted into five equal-sized groups (quintiles). Neuromuscular disorder cases that did not have an acute care hospital discharge within 30 days of admission to the IRF were excluded from this analysis.

Source: MedPAC analysis of Medicare Provider Analysis and Review data, Inpatient Rehabilitation Facility–Patient Assessment Instrument data, and cost report data from CMS.

(Likewise, payments for some IRFs may be too low.) This phenomenon also would make some providers appear to be more cost-efficient than they actually are (since their costs would be lower than expected given their reported case mix).

To ensure payment accuracy, CMS must ensure that assessment and coding across providers accurately reflect patients' resource needs. Historically, concerns about coding have focused on unwarranted changes over time (that is, increases in coding over time that do not reflect real change in case mix). CMS has addressed such concerns in the past by making across-the-board adjustments to payments. CMS reduced the IRF standard payment conversion factor by 1.9 percent in 2006 and by 2.6 percent in 2007 to adjust for changes in IRF coding practices over time that CMS determined did not reflect real changes in IRF patients' acuity. However, the Commission's cross-sectional analyses suggest there may be coding differences across IRFs that do not reflect real differences

in patient acuity. Making an across-the-board adjustment would reduce payments for all IRFs, whether they are overestimating or underestimating the resource needs of their patients. Instead, analyses of coding accuracy and reassessment of the inter-rater reliability of the IRF patient assessment instrument are necessary. Such analyses should start with focused medical record review and comparison of patients across providers, with particular focus on those that exhibit unusual patterns of case mix and coding. Such focused medical review can help identify necessary reforms to the IRF payment system.

RECOMMENDATION 9-2

The Secretary should conduct focused medical record review of inpatient rehabilitation facilities that have unusual patterns of case mix and coding.

RATIONALE 9-2

The Commission's finding that high-margin IRFs have patients who are, on average, less severely ill in the acute

care hospital but appear more functionally disabled in the IRF suggests the possibility that coding practices contribute to greater profitability in some IRFs. Providers may differ in their assessment of patients' motor and cognitive function, resulting in payments for some IRFs that are too high relative to the costs incurred in treating their patients. To improve the accuracy of payments and protect program integrity, CMS should review medical records merged with IRF patient assessment data, reassess inter-rater reliability across IRFs, and conduct other research as necessary. Because medical record review is resource intensive, CMS should begin by focusing on providers that have an atypical mix of cases, such as a high concentration of neuromuscular disorders and stroke cases without paralysis, and on providers that have anomalous patterns of coding, such as wide discrepancies in their patients' levels of severity as coded in the acute care hospital compared with that coded in the IRF. However, system-wide assessment of payment accuracy is also needed.

IMPLICATIONS 9-2

Spending

- Implementing this recommendation could result in changes to the payment system that would be budget neutral but could also reduce Medicare's spending on IRF services if CMS were to make payment adjustments to account for assessment and coding differences across providers or for coding changes that do not reflect real case-mix change. CMS would incur some administrative expenses to conduct these activities.

Beneficiary and provider

- We do not expect this recommendation to have adverse effects on Medicare beneficiaries with respect to access to care or out-of-pocket spending or on providers' willingness and ability to care for Medicare beneficiaries.

Redistributing payments within the IRF PPS

The high aggregate margin for IRFs in 2014 (12.5 percent) indicates that Medicare payments substantially exceed the costs of caring for beneficiaries. When payments have substantially exceeded costs in other settings, the Commission has recommended that the Secretary rebase Medicare payment rates to a level that supports the efficient provider (Medicare Payment Advisory Commission 2012, Medicare Payment Advisory Commission 2011). However, rebasing payments would not address concerns about patient selection and coding

accuracy. Payments could remain too high for cases in some IRFs and too low for cases in others.

The Commission has found that more costly cases, such as strokes, are disproportionately admitted by lower margin IRFs. Though the variation in margins across IRFs may be due in some part to differences in cost control, we cannot rule out the possibility that high-cost cases may be less profitable. In the short term, CMS should effect changes to reduce potential misalignments between IRF payments and costs by redistributing payments within the IRF PPS through the high-cost outlier pool.

High-cost outlier payments are intended to offer providers some financial protection against exceptionally high-cost cases. Outlier payments can also help ensure continued access for patients who are predictably more likely than others to be exceptionally costly compared with the usual payment for the case type. Under the IRF payment system, Medicare provides extra payments, in addition to the usual PPS payment, for a case if its costs exceed a cost threshold. The outlier payment for a case is equal to 80 percent of costs above this threshold. The cost threshold is equal to the sum of the IRF's usual payment for the case-mix group (CMG) plus a fixed loss amount. CMS sets the fixed loss amount each year at a level that it estimates will result in aggregate outlier payments exhausting the funds available in the target outlier pool, which is currently set at 3 percent of total IRF payments. (For fiscal year 2016, the fixed loss amount is \$8,658, adjusted for the applicable wage index and other facility-specific characteristics.) The outlier pool is funded by an offset to the national base payment amount, which reduces all CMG payment rates by the same percentage.

In 2014, about 8 percent of IRF cases received high-cost outlier payments, although this share varied by case type. For example, almost 13 percent of cases with spinal cord injury and more than 10 percent of stroke cases were high-cost outliers. By contrast, less than 5 percent of cases with neurological conditions were outliers. Outlier cases were also distributed unevenly among IRFs. About 12 percent of cases in hospital-based IRFs were high-cost outliers compared with less than 3 percent of cases in freestanding IRFs, although this difference is driven at least in part by overall higher costs in hospital-based IRFs. The prevalence of outliers in IRFs was strongly correlated with margin. In our analyses of IRF margin quintile groups, we found that 30 percent of cases in the lowest margin IRFs were high-cost outliers, compared with just 1 percent of cases in the highest margin IRFs.

The Commission's finding that some IRFs may be systematically selecting certain types of cases and that providers may differ in their assessment of patients' motor and cognitive function suggests that the IRF CMGs may not be adequately capturing differences in patient acuity and costs across cases and providers. The potential for financial loss may therefore be greater for some providers than for others. Expanding the outlier pool would increase outlier payments for the most costly cases, thereby ameliorating the financial burden for IRFs that have a relatively high share of these cases. To fund the expanded outlier pool while maintaining budget neutrality, the base payment amount for all IRF cases would need to be reduced.

The Commission estimates that expanding the outlier pool from 3 percent to 5 percent would increase total payments for cases with spinal cord injury by 1.8 percent and for cases with stroke by about 0.3 percent. Total payments for neurological cases would fall by 0.7 percent. We estimate that total payments to hospital-based IRFs would increase by 1.1 percent, while payments to freestanding IRFs would fall by 1.3 percent. Total payments to nonprofit IRFs would increase by 0.6 percent, while payments to for-profit IRFs would decline by 1.1 percent. Rural IRFs would also see a small increase in total payments. We estimate that total payments for IRFs in the lowest margin quintile would increase by 5.2 percent, while those for IRFs in the highest margin quintile would decrease by 1.6 percent. Expanding the outlier pool by a larger amount would increase the effect on cases and providers, but would require congressional action.

We recognize that, by increasing payments for the most costly cases, Medicare may increase payments for providers who are less efficient as well as for providers who care for patients whose acuity is not well captured by the case-mix system. While this outcome is not desirable, the Commission's concern about the accuracy of Medicare's payments for resource-intensive cases warrants this approach in the near term. Over the longer term, however, CMS must ensure the accuracy of Medicare's payments by determining that IRFs' assessment and coding correctly reflects the rehabilitation needs of patients. At the same time, the variation in the mix of case types by IRF profitability warrants further attention. Some providers may select certain types of patients because their conditions are more profitable than others. Research is needed to assess variation in costs within the IRF CMGs and differences in relative profitability across CMGs. Identifying and reducing variation within CMGs and

properly calibrating payments with costs for each group is necessary to avoid overpayments and to reduce incentives for providers to admit certain types of cases and avoid others.

In the future, CMS may enact payment system reforms that warrant reassessment of IRF outlier payments and adjustments to the outlier policy, including a return to a smaller outlier pool. In addition, rebasing IRF payments may be necessary to prevent overpayments, which is critical in all of Medicare's payments systems to protect the long-run sustainability of the Medicare program.

RECOMMENDATION 9-3

The Secretary should expand the inpatient rehabilitation facility outlier pool to redistribute payments more equitably across cases and providers.

RATIONALE 9-3

The Commission's finding that high-margin IRFs may be selecting certain types of cases suggests that some CMGs may be more profitable than others. At the same time, our finding that IRFs may differ in their assessments of patients' motor and cognitive function suggests that the IRF CMGs may not be adequately capturing differences in patient acuity and costs across cases and providers. The potential for financial loss may therefore be greater for some providers than for others. Expanding the outlier pool would increase outlier payments for the most costly cases, easing the financial burden for IRFs that have a relatively high share of these cases.

IMPLICATIONS 9-3

Spending

- This recommendation would be implemented in a budget-neutral manner and should not have an overall impact on spending.

Beneficiary and provider

- We do not expect this recommendation to have adverse effects on Medicare beneficiaries with respect to access to care or out-of-pocket spending. This recommendation may relieve the financial pressure on some providers and may improve equity among providers by diminishing the effects of inaccurate coding. ■

Endnotes

- 1 More frequently, Medicare beneficiaries receive inpatient rehabilitation services in skilled nursing facilities (SNFs), in part because nationwide there are many more SNFs than IRFs.
- 2 More information about the prospective payment system for IRFs is available at <http://medpac.gov/documents/payment-basics/inpatient-rehabilitation-facilities-payment-system-15.pdf?sfvrsn=0>.
- 3 Patients with a length of stay of fewer than four days are assigned to a single CMG, regardless of diagnosis, age, level of motor and cognitive function, or presence of comorbidities.
- 4 The 13 conditions are stroke; spinal cord injury; congenital deformity; amputation; major multiple trauma; hip fracture; brain injury; certain neurological conditions (multiple sclerosis, Parkinson's disease, cerebral palsy, and neuromuscular disorders); burns; three arthritis conditions for which appropriate, aggressive, and sustained outpatient therapy has failed; and hip or knee replacement when it is bilateral, the patient's body mass index is greater than or equal to 50, or the patient is age 85 or older.
- 5 An impairment group code is not an International Classification of Diseases, Tenth Revision, Clinical Modification diagnosis code but part of a separate unique set of codes specifically developed for the IRF PPS for assigning the primary reason for admission to an IRF.
- 6 CMS's major revisions to the compliance threshold policy in 2004 were (1) increasing the number of conditions that count toward the threshold from 10 to 13 (by redefining the arthritis conditions that counted) and (2) revising the qualifying condition of major joint replacement—a condition that was commonly treated in IRFs—such that only a specific subset of patients with that condition would count toward the compliance threshold.
- 7 Cases with noncompliant conditions may count toward the compliance threshold if they have specified comorbidities.
- 8 These potentially avoidable readmissions are identified by the primary diagnosis for the hospital readmission at the time of hospital discharge. The potentially avoidable readmissions we measure are respiratory-related illness (pneumonia, influenza, bronchitis, chronic obstructive pulmonary disease, and asthma); sepsis; congestive heart failure; fractures or fall with a major injury; urinary tract or kidney infection; blood pressure management; electrolyte imbalance; anticoagulant therapy complications; diabetes-related complication; cellulitis or wound infection; pressure ulcer; medication error or adverse drug reaction; and delirium.
- 9 Our measure of community discharge does not give IRFs credit for discharging a Medicare beneficiary to the community if the beneficiary is subsequently readmitted to an acute care hospital within 30 days of the IRF discharge.
- 10 Medicare spending for IRF services was also affected when CMS reduced the IRF standard payment conversion factor by 1.9 percent in 2006 and by 2.6 percent in 2007 to adjust for changes in IRF coding practices that CMS determined did not reflect real changes in IRF patients' acuity.
- 11 Standardized costs per discharge reported in the Commission's 2014 March report were not adjusted for high-cost outliers and therefore are not comparable with the standardized costs reported here.
- 12 Because of the structure of the Medicare cost report, all-payer overall margins for hospital-based IRFs reflect a margin for the entire hospital rather than for the IRF unit alone. Therefore, we present an all-payer overall margin only for freestanding IRFs.
- 13 The market basket forecast was made in the fourth quarter of 2015. When setting the update, CMS will use the most recent forecast available at the time, which may differ from the number we report here.
- 14 Since 2010, hospital-based IRFs have kept cost growth to about 2 percent per year, on average.
- 15 Neurological conditions include multiple sclerosis, Parkinson's disease, neuromuscular disorders, and polyneuropathy.
- 16 Neuromuscular disorders include late effects of polio, motor neuron disease such as amyotrophic lateral sclerosis, and muscular dystrophy.
- 17 IRFs assign each patient to an impairment group that indicates the primary reason for inpatient rehabilitation. These impairment groups can be collapsed into 21 rehabilitation impairment categories (e.g., stroke, traumatic brain injury, and neurological condition).
- 18 Medicare's payment to IRFs for stroke cases can also vary depending on the patient's age, cognitive score, and comorbidities.
- 19 This comparison assumes both patients are under age 85.

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CHAPTER

10

Long-term care hospital services

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

- 10** The Secretary should eliminate the update to the payment rates for long-term care hospitals for fiscal year 2017.

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

Long-term care hospital services

Chapter summary

Long-term care hospitals (LTCHs) provide care to beneficiaries who need hospital-level care for relatively extended periods. To qualify as an LTCH for Medicare payment, a facility must meet Medicare's conditions of participation for acute care hospitals and its Medicare patients must have an average length of stay greater than 25 days. In 2014, Medicare spent \$5.4 billion on care provided in LTCHs nationwide. About 118,000 fee-for-service (FFS) beneficiaries had roughly 134,000 LTCH stays. On average, Medicare accounts for about two-thirds of LTCHs' discharges.

Assessment of payment adequacy

Beneficiaries' access to care—We have no direct measures of beneficiaries' access to needed LTCH services. Instead, we consider the capacity and supply of LTCH providers and changes over time in the volume of services they furnish. Trends suggest that access to care has been maintained.

- **Capacity and supply of providers**—Growth in the number of LTCHs filing Medicare cost reports slowed considerably in recent years because of two moratoriums. The first, imposed by the Medicare, Medicaid, and SCHIP Extension Act of 2007 and subsequent legislation, was in effect through December 28, 2012. The second moratorium was established in the Pathway to SGR Reform Act of 2013 and amended by the Protecting Access to Medicare Act of 2014. This moratorium is in effect from April 1,

In this chapter

- Are Medicare payments adequate in 2016?
- How should Medicare payments change in 2017?

2014, through September 30, 2017. We estimate that the number of LTCHs and LTCH beds decreased by about 2.3 percent in 2014.

- ***Volume of services***—From 2013 to 2014, the number of LTCH cases decreased by 2.8 percent. Controlling for the number of FFS beneficiaries, we found that the number of LTCH cases per beneficiary declined during this period by 2.6 percent. This decrease in per capita admissions is consistent with the decrease seen in other inpatient settings.

Quality of care—LTCHs began submitting quality of care data to CMS in 2012. LTCH quality data are not yet available for analysis; however, CMS will report quality data publicly for four measures beginning in the fall of 2016. Using claims data for 2014, we found stable or declining non-risk-adjusted rates of readmission, death in the LTCH, and death within 30 days of discharge for almost all of the top 25 LTCH diagnoses.

Providers' access to capital—For the past few years, the availability of capital to LTCHs has not reflected current Medicare payment rates but, rather, uncertainty regarding possible changes to Medicare's regulations and legislation governing LTCHs. The criteria to receive the higher LTCH payment rate specified in the Pathway for SGR Reform Act of 2013, beginning with cost reporting periods starting in fiscal year 2016, provide more long-term regulatory certainty for the industry compared with recent years. However, payment reductions implemented by CMS and a congressional moratorium on new LTCH beds and facilities through September 2017 continue to limit future opportunities for growth and reduce the industry's need for capital.

Medicare payments and providers' costs—From 2007 until 2012, LTCHs have held cost growth below the rate of increase in the market basket index, a measure of inflation in the prices of goods and services LTCHs buy to provide care. Between 2012 and 2013, Medicare payments continued to increase, albeit more slowly than provider costs. A similar trend between 2013 and 2014 resulted in an aggregate 2014 Medicare margin of 4.9 percent compared with 6.8 percent in 2013. Financial performance in 2014 varied across LTCHs, reflecting differences in cost control and responses to payment incentives. This year we added a new measure of payment adequacy, marginal profit, an indicator of whether LTCHs with excess capacity have an incentive to admit more Medicare patients. The resulting 2014 LTCH marginal profit equaled 20 percent.

We expect, but are uncertain of what, changes in admission patterns and cost structure will occur resulting from the patient-specific criteria implemented beginning in fiscal year 2016. This year, therefore, we provide a projected

margin range for qualifying cases that meet the specified criteria as part of this year's annual analyses. We project that LTCHs' aggregate Medicare margin for these qualifying cases will be between 3.3 percent and 5.9 percent in 2016. This estimate reflects current policy, including budget sequestration. On the basis of these indicators, the Commission concludes that LTCHs can continue to provide Medicare beneficiaries with access to safe and effective care and accommodate changes in their costs with no update to LTCH payment rates in fiscal year 2017. This update recommendation applies to the Medicare LTCH prospective payment system base payment rate. That is, it applies to payments for discharges that meet the criteria specified in the Pathway for SGR Reform Act of 2013 and to the portion of the blended payment that reflects the LTCH payment rate for discharges that do not meet the specified criteria. ■

Background

Patients with chronic critical illness—those who exhibit metabolic, endocrine, physiologic, and immunologic abnormalities that result in profound debilitation and often ongoing respiratory failure—frequently need hospital-level care for extended periods. These facilities can be freestanding or colocated with other hospitals, as hospitals-within-hospitals (HWHs) or satellites. To qualify as a long-term care hospital (LTCH) for Medicare payment, a facility must meet Medicare’s conditions of participation for acute care hospitals (ACHs), and its Medicare patients must have an average length of stay greater than 25 days.¹ By comparison, the average Medicare length of stay in ACHs is about five days. In 2014, Medicare spent \$5.4 billion on care provided in LTCHs nationwide. About 118,000 beneficiaries had roughly 134,000 LTCH stays. On average, Medicare fee-for-service (FFS) beneficiaries account for about two-thirds of LTCHs’ discharges.

Since October 2002, Medicare has paid LTCHs prospective per discharge rates based primarily on the patient’s diagnosis and the facility’s wage index.² Under this prospective payment system (PPS), LTCH payment rates are based on the Medicare severity long-term care diagnosis related group (MS–LTC–DRG) patient classification system, which groups patients primarily according to diagnoses and procedures. MS–LTC–DRGs include the same groupings used in ACHs paid under the inpatient PPS (IPPS) but have relative weights specific to LTCH patients, reflecting the average relative costliness of cases in the group compared with that of the average LTCH case. The LTCH PPS has outlier payments for patients who are extraordinarily costly.³ The LTCH PPS pays differently for short-stay outlier cases (patients with shorter than average lengths of stay), reflecting CMS’s contention that Medicare should adjust payment rates for patients with relatively short stays to reflect the reduced costs of caring for them (text box, pp. 278–279). In addition, although currently only partly implemented, CMS uses the so-called “25-percent rule”—which prohibits an LTCH from having any more than 25 percent of its patients at any one time admitted from a single referring hospital—to discourage LTCHs from functioning as units of ACHs.

Beginning in fiscal year 2016, Medicare began phasing in a payment change for LTCH cases that do not meet certain criteria specified in the Pathway for SGR Reform Act of 2013 (text box, p. 281). Under the new dual payment

structure, qualifying Medicare cases will be paid under the LTCH PPS if the patient had an immediately preceding ACH stay during which the patient spent 3 or more days in an intensive care unit (ICU) or coronary care unit (CCU) or if the patient received mechanical ventilation services for at least 96 hours in the LTCH. LTCH cases not meeting the specified criteria receive a “site-neutral” rate, based on the lesser of an IPPS-comparable amount or 100 percent of cost for the case. The Commission recommended in March 2014 that LTCH rates be paid only for cases that received eight or more days of care in an ICU or received prolonged mechanical ventilation services during the previous ACH stay (see text box, pp. 282–283).

LTCHs’ cost reporting start dates are not the same, so the dual payment structure will begin for LTCHs throughout fiscal year 2016. Forty-three percent of LTCHs, representing about half of all LTCH cases, have cost reporting periods that start between July 1 and the end of September. Thus, these facilities will be paid differently for nonqualifying cases for less than one quarter of fiscal year 2016.⁴

In addition to a rolling facility-level phase-in, the payment changes associated with the LTCH criteria policy will be phased in over three years. Cases not meeting the specified criteria will receive payment equal to 50 percent of the LTCH PPS rate and 50 percent of the site-neutral rate for the first two full years of implementation. Following the start of a facility’s cost reporting in fiscal year 2018, all cases will be subject to the full effect of the policy. Because of the rolling phase-in by cost reporting period, fiscal year 2019 will be the first year the policy will be fully in effect for all LTCH facilities.

Are Medicare payments adequate in 2016?

To address whether payments for 2016 are adequate to cover the costs that providers incur in providing services to Medicare beneficiaries and how much providers’ costs are expected to change in the coming year (2017), we examine several indicators of payment adequacy. Specifically, we assess beneficiaries’ access to care (by examining the capacity and supply of LTCH providers and changes over time in the volume of services furnished), quality of care, providers’ access to capital, and the relationship between Medicare payments and providers’ costs.

Payment for short-stay outliers in long-term care hospitals

In the long-term care hospital (LTCH) payment system, Medicare can adjust payments for cases with short stays. CMS defines a short-stay outlier (SSO) case as having a length of stay less than or equal to five-sixths of the geometric average length of stay for the case type. The SSO policy reflects CMS's contention that patients with lengths of stay similar to those in acute care hospitals (ACHs) should be paid at rates comparable with those under the ACH inpatient prospective payment system (IPPS). About 26.7 percent of LTCH discharges received SSO payment adjustments in fiscal year 2014, but this share varied across types of LTCHs. For example, in fiscal year 2014, 25.9 percent of for-profit LTCHs' cases were SSOs compared with 31.5 percent of nonprofit LTCHs' cases.

The amount Medicare pays to LTCHs for an SSO case is the lowest of:

- 100 percent of the cost of the case,
- 120 percent of the per diem amount for the Medicare severity long-term care diagnosis related group (MS–LTC–DRG) multiplied by the patient's length of stay,
- the full MS–LTC–DRG payment, or

- a blend of the IPPS amount for the same type of case and 120 percent of the MS–LTC–DRG per diem amount. The LTCH per diem payment amount makes up more of the total amount as the patient's length of stay increases.

CMS applies a different standard to cases with the shortest lengths of stay—those with stays less than or equal to the IPPS average stay for the same type of case plus one standard deviation. These cases are also paid the lowest of the four payment amounts: the first three listed previously or an amount comparable with the IPPS payment rate rather than a blended amount. In fiscal year 2014, about 12.5 percent of LTCH discharges were very short-stay outliers (VSSOs); 47 percent of VSSOs received payment equal to 100 percent of costs, and another 41 percent received an amount equal to the IPPS per diem payment. As with SSOs, the share of VSSOs varied across type of LTCH. For example, in fiscal year 2014, 12.3 percent of for-profit LTCHs' cases were VSSOs compared with 14.2 percent of nonprofit LTCH cases.

If we consider only the cases that would have met the criteria to receive the LTCH prospective payment system (PPS) standard federal rate in 2014, the Commission estimates that in fiscal year 2016, 31.1 percent of cases would be SSO. Fifty-eight percent of these SSO cases—or 18 percent of all LTCH cases

(continued next page)

Beneficiaries' access to care: Growth over time in supply and volume suggests continued access to care

We have no direct measures of beneficiaries' access to needed LTCH services. The absence of LTCHs in many areas of the country does not necessarily equate an inadequacy of supply since beneficiaries in areas without LTCHs have access to similar services in other settings (including ACHs and SNFs). Instead, we consider the overall capacity and supply of LTCH providers and changes over time in the volume of services they furnish.

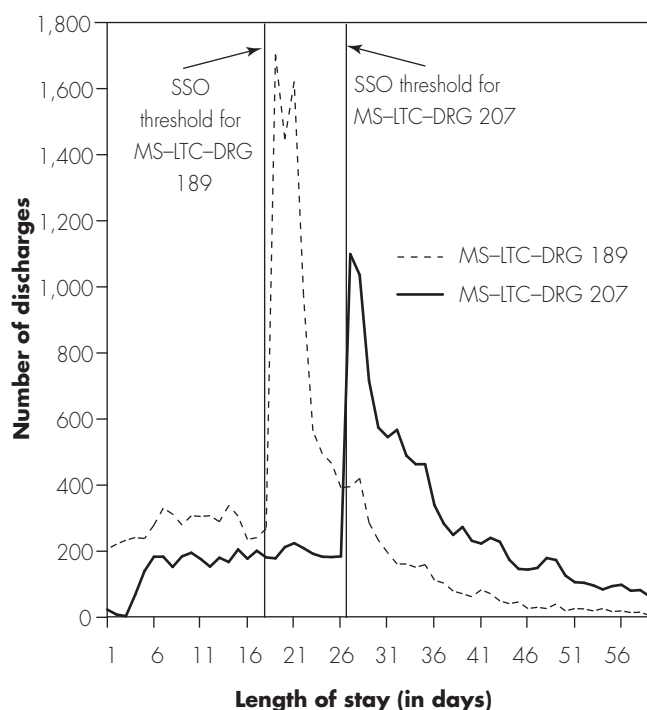
Capacity and supply of providers: Supply stabilized during the congressionally mandated moratorium

The Medicare, Medicaid, and SCHIP Extension Act of 2007 (MMSEA) and subsequent legislation imposed a limited moratorium on new LTCHs and new beds in existing LTCHs from December 29, 2007, through December 28, 2012. During this time, new LTCHs were able to enter the Medicare program only if they met specific exceptions to the moratorium.⁵ The Pathway for SGR Reform Act of 2013 and subsequent legislation implemented a new moratorium from April 1, 2014, through September 30, 2017.⁶ That moratorium provides

Payment for short-stay outliers in long-term care hospitals (cont.)

FIGURE 10-1

Many LTCH cases in fiscal year 2014 were discharged in the period immediately following the short-stay outlier threshold



Note: LTCH (long-term care hospital), SSO (short-stay outlier), MS-LTC-DRG (Medicare severity long-term care diagnosis related group). Cases in MS-LTC-DRG 189 are those with pulmonary edema and respiratory failure. Cases in MS-LTC-DRG 207 are those with a respiratory system diagnosis that received prolonged mechanical ventilation.

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

that qualify to receive the LTCH PPS standard federal payment rate—would be VSSOs.

VSSO cases were more likely to be of an extreme severity level and to require prolonged mechanical ventilation compared with non-SSO and non-VSSO cases. Many LTCH SSO and VSSO cases were short because the beneficiary was readmitted to an ACH or died. In 2014, 26 percent of VSSO cases were readmitted to an ACH, while 13 percent of SSOs and only 4 percent of longer stay cases were readmitted.

Similarly, 41 percent of VSSO cases died in the LTCH compared with 21 percent of SSO cases and 6 percent of longer stays. The remaining VSSO cases included beneficiaries discharged from the LTCH, typically to another post-acute care setting. Of these cases, only 25 percent were still living one year after discharge compared with about half of SSO and more than half of non-SSO cases.

Generally, for the same case type, the IPPS payment is substantially less than the LTCH payment under the LTCH PPS. For example, for a case assigned to MS-LTC-DRG 207 (respiratory system diagnosis with prolonged mechanical ventilation), the standard IPPS payment in 2016 is \$31,585, while the standard LTCH payment is \$77,541. LTCHs therefore have a strong financial incentive to keep patients until their lengths of stay exceed the SSO threshold for the relevant case type, and they appear to respond to that incentive (Figure 10-1). Analysis of lengths of stay by MS-LTC-DRG for 2014 shows that the number of discharges rose sharply immediately after the SSO threshold. This pattern held true across MS-LTC-DRGs and for every category of LTCH. The data strongly suggest that LTCHs' discharge decisions are influenced by financial incentives in addition to clinical indicators.

CMS could substantially reduce these financial incentives by lowering the payment penalty for discharging patients before the SSO threshold. For example, short-stay cases could be defined as cases with a covered length of stay that is more than one day shorter than the geometric average length of stay for the case type. As with the transfer policy for short-stay cases in the IPPS, payment for the first day of a short-stay LTCH case could be two times the per diem payment rate for the case type; payment for each additional day would then be set at the per diem rate, up to the maximum of the full standard per discharge payment (which would be reached one day before the average length of stay for the case type). This formula would reduce the substantial cliff in payments that exists under current policy and better match incremental payments for short-stay cases to the provider's incremental costs. ■

**TABLE
10-1****The number of LTCHs has decreased since 2012**

Type of LTCH	Congressionally imposed moratorium							Congressionally imposed moratorium	Average annual change		
	2004	2005	2009	2010	2011	2012	2013*	2014*	2004–2005	2005–2009	2009–2012
All	315	366	411	416	421	426	411	391	16.2%	2.9%	1.2%
Urban	299	342	388	390	396	400	384	365	14.4	3.2	1.0
Rural	16	24	23	26	25	26	27	26	50.0	–1.1	4.2
Nonprofit	67	78	79	82	77	79	78	75	16.4	0.3	0.0
For profit	229	265	313	314	326	329	315	300	15.7	4.2	1.7
Government	19	23	19	20	18	18	18	16	21.1	–4.7	–1.8

Note: LTCH (long-term care hospital). The Medicare, Medicaid, and SCHIP Extension Act of 2008 and subsequent legislation imposed a moratorium on new LTCHs and new LTCH beds in existing facilities from December 29, 2007, through December 29, 2012. The Pathway for SGR Reform Act of 2013 and subsequent legislation implemented a new moratorium from April 1, 2014, through September 30, 2017.

*2013 and 2014 data should not be compared with prior years, given an anomalous number of facilities that underwent an acquisition and change in cost reporting period. Using the Provider of Services file, the Commission estimates that the number of facilities decreased from 437 in 2012 to 432 in 2013, and to 422 in 2014, about 2.3 percent (not shown).

Source: MedPAC analysis of cost report data from CMS.

exceptions to the establishment of new LTCHs and LTCH satellite facilities only; there are currently no exceptions for increases in the number of certified beds in existing facilities.

It is difficult to determine the precise number of LTCHs because of discrepancies in Medicare's data sources on these facilities. The Commission has found inaccuracies in the ownership data in Medicare's Provider of Services file, so we examined Medicare cost report data from 2004 to 2014 to assess the number of LTCH beds and facilities. We consistently found that growth in the number of LTCHs filing Medicare cost reports slowed considerably in the later years of the moratorium (Table 10-1). However, between 2012 and 2013 and again between 2013 and 2014, a larger than usual number of facilities underwent midyear changes to their cost reporting period. Cost report data indicate 391 LTCHs filed valid cost reports in 2014, 20 fewer than 2013, on net. More than 20 facilities were excluded from this year's analysis because of their submission of partial year cost reports—most of which were from one major for-profit LTCH chain. These data also show that the number of LTCH beds nationwide decreased about 6 percent in 2014. The anomalous cost reporting trends during this period make it difficult to

accurately compare changes in the number of LTCH facilities and LTCH beds using cost report data. Using data from Medicare's Provider of Services file, the Commission estimates that between 2013 and 2014, the number of LTCHs and number of beds decreased by about 2.3 percent.⁷ The Commission found that a majority of the new LTCHs filing cost reports in 2014 were for-profit facilities. Consistent with historical trends, the Commission estimates that in 2014, more than 75 percent of LTCHs were for profit and 93 percent were located in urban areas.

Volume of services: Number of LTCH users decreased

Beneficiaries' use of LTCH services suggests that access is adequate. Growth in the number of LTCH cases was high in the first years of the LTCH PPS, but it declined from 2005 to 2007 (Table 10-2, p. 283). Much of this decrease is consistent with the decline in beneficiaries' enrollment in FFS Medicare and their increased enrollment in Medicare Advantage plans. CMS regulations that reduced payments for LTCH services also likely slowed growth in LTCH admissions during that period and beyond. From 2007 to 2013, the number of LTCH cases increased by an annual average rate of 1.1 percent. However, between

LTCH legislation

The Pathway for SGR Reform Act of 2013 included several provisions related to long-term care hospitals (LTCHs), including changes to payment rates for some cases, changes to the 25-percent rule, and a moratorium on new LTCHs.

“Site-neutral” payments

The Pathway for SGR Reform Act of 2013 established “site-neutral” payments for specified cases in LTCHs, beginning in fiscal year 2016. Under the law, the LTCH payment rate will apply only to qualifying LTCH discharges that had an acute care hospital (ACH) stay immediately preceding LTCH admission and for which:

- the ACH stay included at least 3 days in an intensive care unit or
- the discharge is assigned to the Medicare severity long-term care diagnosis related group (MS–LTC–DRG) based on the receipt of mechanical ventilation services for at least 96 hours.

All other LTCH discharges—including any discharges assigned to psychiatric or rehabilitation MS–LTC–DRGs, regardless of intensive care unit use—will be paid an amount based on Medicare’s ACH payment rates under the inpatient prospective payment system or 100 percent of the costs of the case, whichever is lower. These site-neutral payments will be phased in over a two-year period. Beginning with cost reporting periods starting in fiscal years 2016 and 2017, cases that do not meet the specified criteria will receive a blended rate of one-half the standard LTCH payment and one-half the site-neutral payment. These cases will receive 100 percent of the site-neutral payment rate beginning with cost reporting periods starting on or after October 1, 2017. Given LTCHs’ varying cost reporting periods, the Commission expects fiscal year 2019 to be the first full year in which this policy is completely phased in.

New criteria to receive the LTCH payment rate

Currently, to qualify as an LTCH for Medicare payment, a facility must meet Medicare’s hospital conditions of participation and its Medicare patients must have an average length of stay greater than 25 days. Under the Pathway for SGR Reform Act of 2013,

beginning in fiscal year 2016, the LTCH average length of stay will be calculated only for Medicare fee-for-service cases that are not paid the site-neutral rate. In addition, for cost reporting periods starting on or after October 1, 2019, an LTCH must have no more than 50 percent of its cases paid at the site-neutral rate to continue to receive the LTCH payment rate for eligible cases.

The “25-percent rule”

The Pathway for SGR Reform Act of 2013 continues to delay the full phase-in of the so-called 25-percent rule for most LTCH hospitals-within-hospitals (HWHs) and LTCH satellites until October 1, 2016. In fiscal year 2005, CMS established the 25-percent rule in an attempt to prevent LTCHs from functioning as units of ACHs; decisions about admission, treatment, and discharge in both ACHs and LTCHs were to be made for clinical rather than financial reasons. The 25-percent rule uses payment adjustments to create disincentives for LTCHs to admit a large share of their patients from a single ACH.

The 25-percent rule initially applied only to LTCH HWHs and LTCH satellites. In July 2007, CMS extended the 25-percent rule to apply to freestanding LTCHs also. The Congress has delayed full implementation of the 25-percent rule so that most HWHs and satellites will be paid standard LTCH rates for eligible patients admitted from their host hospitals as long as the share of Medicare admissions from the host hospital does not exceed 50 percent (instead of the more restrictive 25 percent threshold). In addition, the Secretary is prohibited from applying the 25-percent rule to freestanding LTCHs before cost reporting periods that begin on or after July 1, 2016.

Moratorium on new LTCHs

The Protecting Access to Medicare Act of 2014 amended the Pathway for SGR Reform Act of 2013 by imposing a moratorium on new facilities and new beds in existing facilities beginning April 1, 2014. The moratorium allows certain exceptions for new LTCHs but not for increases in the number of certified beds in existing LTCHs or satellite facilities. The moratorium expires on September 30, 2017.⁸ ■

Commission recommendations for long-term care hospitals

The Commission has maintained that long-term care hospitals (LTCHs) should serve only the most medically complex patients—the chronically critically ill (CCI)—and has determined that the best available proxy for intensive resource needs in LTCH patients is intensive care unit (ICU) length of stay during an immediately preceding acute care hospital (ACH) stay. The Commission has also long held that payments to providers should be properly aligned with patients’ resource needs. Further, subject to risk differentials, payment for the same services should be comparable regardless of where the services are provided. In March 2014, the Commission recommended that the LTCH payment system be reformed to better align payments for both CCI and non-CCI cases across LTCH and ACH settings.

The research supporting this recommendation consistently describes CCI patients as having long ACH stays with heavy use of intensive care services (Carson et al. 2008, Donahoe 2012, MacIntyre 2012, Nelson et al. 2010, Wiencek and Winkelman 2010, Zilberberg et al. 2012, Zilberberg et al. 2008). Further, in site visits and technical expert panel discussions conducted by Kennell and Associates Inc. and RTI under contract with CMS, LTCH representatives and ACH critical care physicians agreed that medically stable post-ICU patients are appropriate candidates for LTCH care (Centers for Medicare & Medicaid Services 2013, Dalton et al. 2012). In CMS’s Post-Acute Care Payment Reform Demonstration, length of stay in the ICU was significantly associated with post-acute care case complexity, and long ICU stays were a distinguishing characteristic of LTCH patients (Gage et al. 2011).

The Commission recommended that the Congress limit standard LTCH payments to cases that spent eight or more days in an ICU during an immediately preceding ACH stay. The Commission’s analysis of inpatient prospective payment system (IPPS) claims data found that cases with eight or more days in an ICU accounted for about 6 percent of all Medicare discharges and had a geometric mean cost per discharge that was four times that of IPPS cases with seven or fewer ICU days. Further, these cases were concentrated in a

small number of Medicare severity–diagnosis related groups that correspond with the “ideal” LTCH patients described by LTCH representatives and critical care clinicians (Dalton et al. 2012). Previous studies have found such severely ill patients more likely to benefit from LTCH care (Kennell and Associates Inc. 2010, Medicare Payment Advisory Commission 2004).

Setting the ICU length of stay threshold for CCI cases at eight days captures a large share of LTCH cases requiring prolonged mechanical ventilation—a service specialty of many LTCHs. However, the Commission is concerned that LTCH care may be appropriate for some patients requiring mechanical ventilation, even if they did not spend eight or more days in an ICU during an immediately preceding ACH stay. The Commission’s analysis of 2012 LTCH claims found that about 22,000 cases (15.8 percent of all LTCH discharges) received prolonged mechanical ventilation services during the LTCH stay. Of these cases, 69.7 percent had an immediately preceding ACH stay that included eight or more days in an ICU, while 15.6 percent had an ACH stay with fewer than eight days in an ICU. (An additional 14.7 percent did not have an ACH stay within three days of admission to the LTCH.)

For LTCH cases that did not spend eight or more days in an ICU during an immediately preceding ACH stay, the Commission recommended that the Secretary of Health and Human Services set the payment rates equal to those of ACHs. The Commission recommended that savings from this policy be used to create additional inpatient outlier payments for CCI cases in IPPS hospitals.

The Commission’s analysis of IPPS claims for patients who were discharged alive from ACHs in 2012 found that about 103,000 cases received prolonged mechanical ventilation services during their ACH stay. Of these cases, 79 percent would have met the CCI criterion because they spent eight or more days in an ACH ICU. The exception to the 8-day ICU threshold for cases that received prolonged mechanical ventilation in the ACH would thus have increased the

(continued next page)

Commission recommendations for long-term care hospitals (cont.)

potential pool of CCI-eligible cases in LTCHs in 2012 by 21,000 nationwide.

The Pathway for SGR Reform Act of 2013 mandated changes to the LTCH prospective payment system (PPS), including limiting standard LTCH payments to cases that spent at least three days in an ICU during an immediately preceding ACH stay or to discharges that received an LTCH principal diagnosis indicating prolonged mechanical ventilation. Our analysis of IPPS claims data from 2012 found that 22.8 percent of IPPS discharges spent three or more days in an ICU.

The Commission is concerned that a threshold of fewer than eight days is too low to distinguish truly CCI patients and thus will allow Medicare to continue to pay too much for many cases that could be cared for appropriately in other settings at a lower cost to the program. The Commission remains concerned that the savings from the changes to the LTCH PPS included in the Pathway to SGR Reform Act of 2013 were not redistributed to ACHs to treat CCI cases; instead, CCI cases in ACHs continue to receive ACH rates, thus perpetuating the wide payment differential for similar CCI cases across hospital settings. ■

2013 and 2014, the number of LTCH cases decreased by 2.8 percent. On a per capita basis (per 10,000 FFS beneficiaries), the decline was 2.6 percent, in part because the number of FFS beneficiaries slightly decreased between 2013 and 2014. This decrease in per capita admissions is consistent with the decreases observed in other inpatient settings.

Compared with all Medicare beneficiaries, those admitted to LTCHs are disproportionately disabled (under age 65), over age 85, or diagnosed with end-stage renal disease. They are also more likely to be African American. The higher rate of LTCH use by African American beneficiaries may be due to the concentration of LTCHs in areas of the country with larger African American

**TABLE
10-2**

The number of Medicare LTCH cases and users decreased between 2013 and 2014

	2004	2005	2007	2012	2013	2014	Average annual change			
							2004-2005	2005-2007	2007-2013	2013-2014
Cases	121,955	134,003	129,202	140,463	137,827	133,984	9.9%	-1.8%	1.1%	-2.8%
Cases per 10,000 FFS beneficiaries	33.4	36.4	36.3	37.7	36.6	35.7	9.0	-0.1	0.1	-2.6
Spending (in billions)	\$3.7	\$4.5	\$4.5	\$5.5	\$5.5	\$5.4	21.6	0.0	3.5	-2.9
Spending per FFS beneficiary	\$101.3	\$122.2	\$126.5	\$148.8	\$146.7	\$142.7	20.7	1.7	2.5	-2.8
Payment per case	\$30,059	\$33,658	\$34,769	\$39,493	\$40,070	\$40,015	12.0	1.6	2.4	-0.1
Average length of stay (in days)	28.5	28.2	26.9	26.2	26.5	26.3	-1.1	-2.3	-0.3	-0.7
Users	108,814	119,282	114,299	123,652	121,532	118,288	9.6	-2.1	1.0	-2.7

Note: LTCH (long-term care hospital), FFS (fee-for-service).

Source: MedPAC analysis of Medicare Provider Analysis and Review data from CMS and the annual report of the Boards of Trustees of the Medicare trust funds.

**TABLE
10-3****The top 25 MS-LTC-DRGs made up two-thirds of LTCH discharges in 2014**

MS-LTC-DRG	Description	Discharges	Percentage
189	Pulmonary edema and respiratory failure	16,017	12.0%
207	Respiratory system diagnosis with ventilator support 96+ hours	15,224	11.4
871	Septicemia without ventilator support 96+ hours with MCC	8,809	6.6
177	Respiratory infections and inflammations with MCC	3,733	2.8
592	Skin ulcers with MCC	3,663	2.7
208	Respiratory system diagnosis with ventilator support <96 hours	3,105	2.3
949	Aftercare with CC/MCC	2,864	2.1
539	Osteomyelitis with MCC	2,785	2.1
682	Renal failure with MCC	2,437	1.8
919	Complications of treatment with MCC	2,321	1.7
314	Other circulatory system diagnoses with MCC	1,981	1.5
190	Chronic obstructive pulmonary disease with MCC	1,975	1.5
870	Septicemia with ventilator support 96+ hours	1,966	1.5
862	Postoperative and post-traumatic infections with MCC	1,955	1.5
559	Aftercare, musculoskeletal system and connective tissue with MCC	1,947	1.5
166	Other respiratory system OR procedures with MCC	1,925	1.4
4	Tracheostomy with ventilator support 96+ hours or primary diagnosis except face, mouth and neck without major OR procedure	1,840	1.4
193	Simple pneumonia and pleurisy with MCC	1,809	1.3
291	Heart failure and shock with MCC	1,739	1.3
638	Diabetes with CC	1,665	1.2
570	Skin debridement with MCC	1,629	1.2
853	Infectious and parasitic diseases with OR procedure with MCC	1,600	1.2
981	Extensive OR procedure unrelated to principal diagnosis with MCC	1,568	1.2
560	Aftercare, musculoskeletal system and connective tissue with CC	1,359	1.0
602	Cellulitis with MCC	1,328	1.0
Top 25 MS-LTC-DRGs		87,244	65.1

Note: MS-LTC-DRG (Medicare severity long-term care diagnosis related group), LTCH (long-term care hospital), MCC (major complication or comorbidity), CC (complication or comorbidity), OR (operating room). MS-LTC-DRGs are the case-mix system for LTCH facilities. The sum of column components may not equal the stated total due to rounding.

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

populations (Dalton et al. 2012, Kahn et al. 2010). Another contributing factor may be a greater incidence of critical illness in this population (Mayr et al. 2010). At the same time, African American beneficiaries may be more likely to opt for LTCH care since they are less likely to choose withdrawal from mechanical ventilation in the ICU, have do-not-resuscitate orders, or elect hospice care (Barnato et al. 2009, Borum et al. 2000, Diringer et al. 2001).

LTCH patient discharges are concentrated in a relatively small number of diagnosis groups. In fiscal year 2014,

the top 25 LTCH diagnoses made up about 65 percent of all LTCH discharges (Table 10-3). The most frequently occurring diagnosis was MS-LTC-DRG 189, pulmonary edema and respiratory failure. MS-LTC-DRG 207, respiratory system diagnosis with ventilator support for 96 or more hours, was the second most frequently occurring diagnosis. Nine of the top 25 diagnoses, representing 36 percent of all LTCH cases, were respiratory conditions or involved prolonged mechanical ventilation—a statistic that has been relatively stable since the 2008 implementation of the MS-LTC-DRGs.

Quality measures for long-term care hospitals

The Patient Protection and Affordable Care Act of 2010 (PPACA) required CMS to establish a quality reporting program for long-term care hospitals (LTCHs) by fiscal year 2014 and further stipulated that LTCHs not participating in the program would have their annual payment update reduced by 2 percentage points starting in 2014. Beginning October 1, 2013, LTCHs receive a full payment update only if they successfully report on three quality measures—catheter-associated urinary tract infections (CAUTIs), central line–associated bloodstream infections (CLABSIs), and new or worsened pressure ulcers. Data on incidences of CAUTIs and CLABSIs are collected through the National Healthcare Safety Network (NHSN), an Internet-based surveillance system maintained by the Centers for Disease Control and Prevention (CDC). The data elements needed to calculate the pressure ulcer measure are collected using a data collection instrument called the LTCH Continuity Assessment Record and Evaluation (CARE) Data Set. These data are not yet available for analysis.

In 2014, CMS added two measures to the LTCH quality reporting program: the share of LTCH patients assessed for and appropriately given influenza vaccine and influenza vaccination coverage among facility health care personnel. Using the LTCH CARE Data Set, facilities collect data on the share of patients assessed for and appropriately given influenza vaccine, while the CDC’s NHSN collects data on influenza vaccination coverage among LTCH health care personnel. Payment

updates for fiscal year 2016 and after will be affected by LTCHs’ reporting on these two measures.

In 2015, LTCHs were required to begin reporting facility-acquired cases of methicillin-resistant *Staphylococcus aureus* and *Clostridium difficile* through the CDC NHSN. Reductions of LTCH payment updates for failing to report on these two measures will begin in fiscal year 2017. At that time, CMS plans to start using claims data to calculate LTCHs’ rates of all-cause unplanned readmissions to acute care hospitals.

CMS intends to add 4 more measures to the program beginning in fiscal year 2018, which will bring the total number of measures to 12. In January 2016, LTCHs must begin reporting on ventilator-associated events (such as pneumonia, sepsis, and pulmonary embolism) through the CDC NHSN. Starting in April 2016, CMS will begin collecting data on the following three measures using the LTCH CARE Data Set: share of patients experiencing one or more falls resulting in major injury, change in mobility among LTCH patients who require ventilator support, and share of LTCH patients with an admission and discharge assessment and care plan that address patient function.

CMS will begin public reporting of four LTCH quality measures in the fall of 2016, including measures for CAUTI, CLASBI, the percentage of patients with pressure ulcers that are new or worsened, and the all-cause unplanned readmissions. ■

Not unexpectedly, the MS–LTC–DRGs become increasingly concentrated when we consider only the cases that would have qualified to receive the LTCH PPS standard federal payment rate if that rate had been in effect at the time of discharge. The top 25 qualifying diagnoses would have accounted for approximately 78 percent of these cases.⁹ More than half of these cases involved diagnoses that were respiratory conditions or involved prolonged mechanical ventilation. Given the implementation of criteria for receiving the LTCH PPS standard federal payment rate, we would expect to see an increase in the concentration of diagnoses over time.

Quality of care: Meaningful measures not available, but trends for gross indicators are improving

Unlike most other health care providers covered by Medicare, LTCHs only recently began reporting to CMS on a limited set of quality measures (see text box); those data are not yet available for analysis. CMS will begin reporting quality data publicly for four measures in the fall of 2016. In the meantime, the Commission assesses aggregate trends in the quality of LTCH care by examining in-facility mortality rates, mortality within 30 days of discharge, and readmissions from LTCHs to ACHs. LTCH

cases are highly concentrated in a few MS–LTC–DRGs, and the vast majority of LTCH patients have multiple diagnoses and comorbidities.

For this report, we analyzed unadjusted readmission and mortality rates for the top LTCH diagnoses from 2010 to 2014. Although rates of readmission and death can vary from year to year, over the 5-year period, we found stable or declining rates of readmissions to ACHs and stable or declining mortality rates for these diagnoses, both in-facility and 30 days postdischarge. However, we caution that these measures are not risk adjusted and may not represent actual improvements in quality of care.

In aggregate, in 2014, 8 percent of LTCH cases were readmitted to an ACH, 12 percent died in the LTCH, and another 11 percent died within 30 days of discharge from the LTCH. Mortality rates varied markedly by diagnosis group. For example, among patients with a principal diagnosis of septicemia with prolonged ventilator support (MS–LTC–DRG 870), 33 percent died in the LTCH and 13 percent died within 30 days of discharge. By comparison, among patients with a diagnosis group—including aftercare, musculoskeletal system and connective tissue with major complication or comorbidity (MS–LTC–DRG 560)—only 1 percent died in the LTCH and an additional 2 percent died within 30 days of discharge. Among the highest volume MS–LTC–DRGs in 2014, patients with a diagnosis of complications of treatment with major complication or comorbidity (MS–LTC–DRG 919) had the highest readmission rate (14.9 percent).¹⁰

If we consider only cases that would have qualified to receive the LTCH PPS standard federal payment rate if that rate had been in effect at the time of discharge, the rates of readmission, death in the LTCH, and death within 30 days of discharge would have been higher for a vast majority of highest volume MS–LTC–DRGs compared with all cases. This difference is not unexpected given the increase in severity of illness and case mix for this group of beneficiaries. In 2014, almost 9.7 percent of qualifying LTCH cases were readmitted to an ACH, 16.7 percent died in the LTCH, and another 13.3 percent died within 30 days of discharge from the LTCH. Mortality rates for qualifying cases continued to vary markedly by diagnosis group.

Providers' access to capital: Continued short-term uncertainty slows investment

Access to capital allows LTCHs to maintain, modernize, and expand their facilities. If LTCHs were unable to access

capital, it might in part reflect problems with the adequacy of Medicare payments since Medicare accounts for about half of LTCH total revenues. However, for the past several years, the level of capital investment has reflected more about uncertainty regarding changes to regulations and legislation governing LTCHs than it has about current Medicare payment rates. The criteria to receive the higher LTCH payment rate specified in the Pathway for SGR Reform Act of 2013, beginning with cost reporting periods starting October 1, 2015, provide more long-term regulatory certainty for the industry compared with recent years. Short-run uncertainties regarding the industry's ability to comply with the new patient criteria has resulted in low levels of capital investment or improvements. Further, payment reductions implemented by CMS and congressional moratoriums on new LTCH beds and facilities from December 2007 through December 2012 and again from April 2014 through September 2017 continue to limit future opportunities for growth and reduce the industry's need for capital.

LTCHs and LTCH companies have been positioning themselves for the changing payment environment. For example, in this primarily for-profit industry, Kindred Healthcare, which owns about 20 percent of LTCHs, has continued to pursue an “integrated care market” strategy and diversify its portfolio. The company operates SNFs, inpatient rehabilitation facilities, home health agencies, outpatient rehabilitation providers, and LTCHs within a single market to position itself as an integrated provider of post-acute care (Kindred Healthcare 2013).¹¹ This strategy is intended to improve the chain's ability to control its mix of patients and costs and limit the impact of payment policy changes in any one post-acute care sector. As part of this strategy, in 2015 Kindred Healthcare acquired Gentiva Health Services, a large provider of home health and hospice care, and Centerre Healthcare Corporation, an inpatient rehabilitation hospital company (Cain Brothers 2014, Kindred Healthcare 2014).

Medicare's payments and providers' costs: Cost growth exceeded payment growth

From 2007 until 2012, LTCHs held cost growth below the rate of increase in the market basket index, a measure of inflation in the prices of goods and services LTCHs buy to provide care. Starting in 2012, Medicare payments increased more slowly than the rate of provider costs. This trend continued between 2013 and 2014, resulting in an aggregate 2014 Medicare margin of 4.9 percent compared

with 6.8 percent in 2013. Financial performance in 2014 varied across LTCHs, reflecting differences in cost control and response to payment incentives.

Reductions in the LTCH base rate slowed spending growth in 2013 and 2014

In the first three years of the LTCH PPS, Medicare spending for LTCH services grew rapidly, climbing an average of 29 percent per year. CMS's subsequent changes to LTCH payment policies slowed growth in spending between 2005 and 2008 to less than 1 percent per year. MMSEA halted or rolled back the implementation of some CMS regulations designed to address issues of excessive payments to LTCHs. As a result, between 2008 and 2010, spending jumped more than 6 percent per year.¹² Although some of the MMSEA provisions continued through fiscal year 2013, spending growth between 2010 and 2013 slowed to 2.1 percent, in part because of mandated reductions in Medicare's LTCH payment rate beginning in 2011.¹³

LTCHs continue to restrain cost growth, but less so than in recent years

LTCHs appear to be responsive to changes in payment, adjusting their costs per case when payments per case change. In the first years of the PPS, cost per case increased rapidly after a surge in payment per case (Figure 10-2). Between 2005 and 2007, growth in cost per case slowed considerably because regulatory changes to Medicare's payment policies for LTCHs slowed growth in payment per case to an average of 1.3 percent per year.

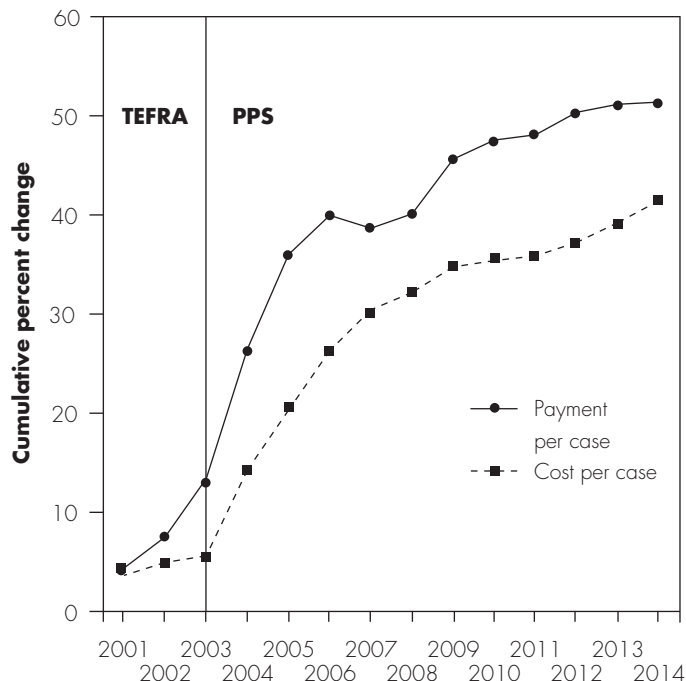
For most of the past decade, LTCHs have held cost growth below the rate of market basket increases, likely because of ongoing concerns about possible changes to Medicare's payment policies for LTCH services. The slowest growth in average cost per case occurred between 2009 and 2011, when the average cost per case increased less than 1 percent per year. Starting in 2011, the average cost per case increased more rapidly each year, equaling 2.2 percent between 2013 and 2014.

Aggregate LTCH margins decreased

After the LTCH PPS was implemented in fiscal year 2003, margins rose rapidly for all LTCH provider types, climbing to 11.9 percent in 2005 (data not shown). At that point, margins began to fall as growth in payments per case leveled off. In 2008, LTCH margins reached 3.7 percent, the lowest since the implementation of the LTCH PPS in 2003. From 2009 through 2012, LTCH

FIGURE 10-2

LTCHs' per case costs increased more than payments in 2014



Note: LTCH (long-term care hospital), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system). Percentage changes are calculated based on consistent two-year cohorts of LTCHs.

Source: MedPAC analysis of Medicare cost report data from CMS.

margins began to climb again as providers consistently held cost growth below that of payment growth. In 2013, the aggregate LTCH margin fell from 7.5 percent to 6.8 percent, primarily because of the first year of a three-year phase-in of the downward adjustment for budget neutrality and the effect of budget sequestration beginning April 1, 2013 (Table 10-4, p. 288). CMS began implementing a downward adjustment in response to unexpected changes in coding practices that increased payments to LTCHs relative to CMS's estimates in the first year of the PPS, fiscal year 2003. These adjustments in 2013, 2014, and 2015 were intended to bring payments to LTCHs more in line with what would have been spent under the previous payment method, decreasing the standard federal payment rate by about 3.75 percent in total. As anticipated, the second year of the downward adjustment for budget neutrality and the effect of a full year of sequestration resulted in the aggregate LTCH margin falling further to 4.9 percent in 2014.

**TABLE
10-4****The aggregate average LTCH Medicare margin fell in 2013 and 2014**

Type of LTCH	Share of discharges	2008	2009	2010	2011	2012	2013	2014
All	100%	3.7%	5.7%	6.8%	6.9%	7.5%	6.8%	4.9%
Urban	94	3.9	6.0	7.1	7.1	7.7	7.0	4.9
Rural	6	-3.2	-3.0	0.6	3.1	3.7	2.5	4.1
Nonprofit	13	-2.5	-0.7	-0.3	0.5	-0.2	-1.4	-2.8
For profit	85	5.3	7.4	8.4	8.5	9.3	8.7	6.9
Government	2	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: LTCH (long-term care hospital), N/A (not applicable). Margins for government-owned providers are not shown. They operate in a different context from other providers, so their margins are not necessarily comparable.

Source: MedPAC analysis of Medicare cost report data from CMS.

Differences in cost growth across the industry

Financial performance in 2014 varied across LTCHs. For-profit LTCHs had the highest margins at 6.9 percent, and those LTCHs account for more than three-quarters of all LTCHs and 85 percent of all LTCH cases. But between 2013 and 2014, the for-profit LTCH margin decreased by 1.8 percentage points, and the nonprofit LTCHs fell 1.4 percentage points.¹⁴ This decline resulted from an increase in cost and a slight decrease in payments per case. Historically, nonprofit LTCHs have experienced higher cost growth than for-profit entities, yet in 2014, for-profit LTCHs experienced a higher rate of cost growth compared with nonprofit LTCHs. However, when we look at the cumulative cost growth over the last decade, for-profit facilities exhibit cost growth levels almost one-third lower than that of nonprofit LTCHs.

The comparatively poor financial performance of nonprofit LTCHs reflects a number of differences in providers' ability to control their costs. First, though occupancy rates in 2014 for the two groups were fairly similar (64.1 percent for nonprofit LTCHs vs. 65.6 percent for for-profit LTCHs), nonprofit LTCHs were smaller and had fewer total cases than for-profit LTCHs (an average of 460 vs. 501). About 67 percent of nonprofit LTCHs had fewer than 50 beds compared with about half of for-profit LTCHs. Nonprofit LTCHs were therefore less likely than for-profit LTCHs to benefit from economies of scale. In addition, nonprofit LTCHs tend to be less able to control their input costs than for-profit LTCHs that are members of large

chains. For-profit LTCH chains that own other types of post-acute care providers within a market area likely have a distinct advantage over other LTCHs because they are better able to control their mix of patients and lengths of stay. Nonprofit LTCHs had a larger share of cases with extraordinarily high costs (21.4 percent of nonprofit LTCHs' cases qualified for high-cost outlier payments vs. 14 percent of for-profit LTCHs' cases), although it is not clear whether this difference stems from differences in efficiency, case complexity, or both. Nonprofit LTCHs had more short-stay outliers than for-profit LTCHs (31.5 percent vs. 25.9 percent). Nonprofit LTCHs had a higher share of very short-stay outliers (14.2 percent compared with 12.3 percent), which typically pay less than short-stay outliers, and thus received reduced payments for a larger share of their Medicare patients.

Differences in case mix between nonprofit and for-profit LTCHs are difficult to evaluate. By some measures, nonprofit LTCHs appear to care for a somewhat sicker patient population. For example, a higher share of cases in nonprofit LTCHs qualified for high-cost outlier payments. Similarly, nonprofit LTCHs had a higher share of cases that were high-cost outliers during their immediately preceding ACH stay (17.6 percent compared with 14.4 percent of for-profit LTCHs' cases). Another indicator suggesting a sicker patient population is length of stay: The average Medicare-covered stay in nonprofit LTCHs was two days longer than in for-profit ones (28 days vs. 26 days). However, longer stays could also result from

inefficient care. Other indicators of patient mix suggest fewer differences between the two types of facilities. The average case mix in nonprofit and for-profit LTCHs was similar. Nonprofit and for-profit LTCHs also had similar shares of cases that had ICU (or CCU) stays lasting longer than three days during an immediately preceding ACH stay.

High-margin LTCHs had lower unit costs

In 2014, higher unit costs were the primary driver of differences in financial performance between LTCHs with the lowest and highest Medicare margins (those in the bottom and top 25th percentiles of Medicare margins) (Table 10-5).¹⁵ After accounting for differences in case mix and local market input price levels, low-margin LTCHs had standardized costs per discharge that were 35 percent higher than high-margin LTCHs (\$36,952 vs. \$27,424). Low-margin LTCHs likely benefited less from economies of scale. Compared with their high-margin counterparts, low-margin LTCHs had fewer cases overall (an average of 411 compared with 516 for high-margin LTCHs) and lower occupancy rates (56 percent vs. 74 percent). Notably, high-margin LTCHs had a higher average share of Medicare discharges than did low-margin LTCHs (69 percent vs. 61 percent), which suggests that Medicare patients are financially desirable.

Outlier payments made up a larger share of total payments to low-margin LTCHs compared with high-margin LTCHs (5 percent compared with almost 14 percent). High-cost outlier payments per discharge for low-margin LTCHs averaged almost three times the amount paid to high-margin LTCHs (\$5,848 vs. \$2,041). When these outlier payments were removed from total payments, we found that the standard payment per discharge for low-margin LTCHs was 4.5 percent lower than that for high-margin LTCHs (\$36,074 vs. \$37,808). This difference was in part because the low-margin LTCHs had a lower average case mix (1.09 vs. 1.14 for high-margin LTCHs) and in part because they cared for a disproportionate share of short-stay outlier cases, which often are paid at reduced rates. Such cases made up 30 percent of low-margin LTCHs' cases compared with 25 percent in high-margin LTCHs.

Financial incentives to serve Medicare beneficiaries across LTCHs

Another consideration in evaluating the adequacy of payments is to assess whether providers have a financial incentive to expand the number of Medicare beneficiaries they serve. In considering whether to treat a patient, the

**TABLE
10-5**

LTCHs in the top quartile of Medicare margins in 2014 had lower costs

Characteristics	High-margin quartile	Low-margin quartile
Mean margin	18.9%	-15.3%
Mean total discharges per facility (all payers)	516	411
Medicare patient share	69%	61%
Average length of stay (in days)	26	27
Occupancy rate	74%	56%
Mean CMI	1.14	1.09
Mean per discharge:		
Standardized costs	\$27,424	\$36,952
Standard Medicare payment*	37,808	36,074
High-cost outlier payments	2,041	5,848
Share of:		
SSO cases	25%	30%
Medicare cases from primary-referring ACH	34	39
For-profit LTCHs	89	60

Note: LTCH (long-term care hospital), CMI (case-mix index), SSO (short-stay outlier), ACH (acute care hospital). Includes only established LTCHs—those that filed valid cost reports in both 2013 and 2014. High-margin-quartile LTCHs were in the top 25 percent of the distribution of Medicare margins. Low-margin-quartile LTCHs were in the bottom 25 percent of the distribution of Medicare margins. Standardized costs have been adjusted for differences in case mix and area wages. Case-mix indexes have been adjusted for differences in short-stay outliers across facilities. The primary-referring ACH is the acute care hospital from which the LTCH receives a plurality of its Medicare patients. Government providers were excluded. *Excludes outlier payments.

Source: MedPAC analysis of LTCH cost reports and Medicare Provider Analysis and Review data from CMS.

provider compares the revenue it will receive for treating one additional patient (i.e., the Medicare payment) with its marginal costs—that is, costs that vary with volume, in this case, to treat one additional patient. If Medicare payments are larger than the marginal costs of treating an additional beneficiary, a provider has a financial incentive to increase its volume of Medicare patients. On the other hand, if payments do not cover the marginal costs, the provider has a disincentive to admit Medicare beneficiaries. To operationalize this concept, we compare

Implementation of long-term care hospitals legislation

The Pathway for SGR Reform Act of 2013 established “site-neutral” payments for specified cases in long-term care hospitals (LTCHs), beginning in fiscal year 2016. At that point, only qualifying cases will be eligible to receive the full LTCH prospective payment system (PPS) standard payment rate. It will be some time before we see LTCHs’ full response to the legislation because this policy is being implemented based on the start of each individual LTCH’s fiscal year. Further, it is phased in at 50 percent of the LTCH PPS standard payment rate and 50 percent of the site-neutral payment rate. As of October 1, 2015, about 5 percent of facilities began receiving payment under the dual payment structure. About half of these facilities are nonprofit and have a slightly smaller share of qualifying cases. The rest of LTCHs will begin phasing in this policy throughout the federal fiscal year.

In discussing LTCH strategies to maintain profitability following implementation, the Commission has heard a variety of responses from the industry. For example, some facilities have discussed shifting their primary focus to qualifying beneficiaries only, no longer accepting beneficiaries that do not meet the specified criteria. Three of the for-profit LTCHs that started the dual payment rate in October have reported successfully accepting only qualifying cases and maintaining acceptable occupancy rates.

LTCHs have discussed other strategies, including expanding their market presence, expanding the payer mix to include more managed care, and reducing costs for nonqualifying cases through changes in staff mix. The success of these strategies will likely vary by facility and market area, and it will be another several years before the data reflect facilities’ responses to this new policy. ■

payments for Medicare services with marginal costs, approximated as:

Marginal profit = (payments for Medicare services – (total Medicare costs – fixed building and equipment costs)) / Medicare payments

This comparison is a lower bound on the marginal profit because we ignore any labor costs that are fixed. In 2014, the average LTCH marginal profit was 20 percent across all Medicare cases. This percentage suggests that LTCHs with available beds have a financial incentive to increase their occupancy rates with Medicare beneficiaries and represents a positive indicator of access.

How would current law changes for 2015, 2016, and 2017 affect LTCHs’ Medicare payments?

We project LTCH margins for 2016 based on margins in 2014 and policy changes that take place in 2015 and 2016. CMS implemented budget-neutrality adjustments in 2013,

2014, and 2015 to account for changes in coding practices that resulted in higher than expected LTCH spending in the first year of the PPS. These adjustments, intended to bring spending more in line with what would have been spent under the previous payment method, will decrease payments by about 3.75 percent over three years. The 2015 current law update for LTCHs was 2.2 percent, adjusted for the final year of the budget-neutrality adjustment, resulting in an approximate 1.1 percent payment update. In 2016, the update was 1.7 percent.

Beginning in 2016, LTCH discharges for beneficiaries who do not meet the specified patient criteria will be paid differently from the standard federal payment rate. Payment for these beneficiaries will be the lesser of an IPPS-comparable rate or 100 percent of cost. Because the payment for these cases relies on the update to the ACH IPPS rate or the individual LTCH’s growth in cost, we have excluded cases not paid under the standard LTCH payment rate from our margin projections.

The Commission continues to expect that substantial changes in provider behavior will mitigate the impact that the new payment methodology has on LTCH providers (see text box). The LTCH industry has repeatedly

demonstrated its responsiveness to payment policy changes, and the Commission has no reason to believe that the response to these most recent changes will be any different. This responsiveness, combined with the multiyear policy phase-in, results in the complexity of projecting future margins.

Based on historical update patterns, the 2017 LTCH payment update is projected to equal 1.65 percent. This figure is the result of a 2.9 percent projected LTCH market basket, a 0.5 percentage point reduction for productivity, and a 0.75 percentage point reduction mandated by PPACA. In 2017, CMS will be in the second year of phasing in the criteria to qualify for the full standard LTCH PPS payment.

Two of the largest LTCH chains, Kindred Healthcare and Select Medical, indicated that their third quarter 2015 earnings show increases in the cost of contract labor, as well as additional training for current employees regarding the new patient criteria during (Kindred Healthcare 2015, Select Medical 2015). Nonprofit facilities are also experiencing increases in contract labor and higher staff costs for similar reasons. The increased demand for highly skilled nurses could start to push wages higher, consistent with the staffing concerns in the ACH sector.

Given the recent trends in higher cost growth and the potentially increasing costs associated with treating a higher percentage of beneficiaries who qualify for the full LTCH standard payment rate, we expect cost growth to equal projected LTCH market basket levels, which are slightly higher than projected payment growth during 2015 and 2016.

How should Medicare payments change in 2017?

There is a high degree of uncertainty regarding changes in admission patterns and per case cost associated with the implementation of the new patient-specific criteria. There is also an industry-wide focus on lower cost sites of post-acute care through several initiatives, including the expansion of accountable care organizations and the ACH Value-Based Purchasing Program. It is reasonable to expect that changes in practice and referral patterns across the industry from these programs will result in lower LTCH use.

Because of the high degree of uncertainty associated with the implementation of the new patient-level criteria, we calculated a margin using only cases that would have qualified to receive the full LTCH standard payment rate. In both 2013 and 2014, these cases were more profitable than other cases. Using the most recently available claims data, combined with revenue center-specific cost-to-charge ratios for each LTCH, we calculated the 2014 margin for cases that would have qualified to receive the full LTCH standard payment rate to be 7.4 percent, 2.5 percentage points higher than the total aggregate Medicare margin.

We expect cost growth to be higher than both current law payment growth and recent LTCH cost growth for the qualifying cases while the LTCH dual payment structure is implemented. Using the projected growth in the LTCH market basket, we project that LTCHs' aggregate Medicare margin for qualifying cases paid under the LTCH PPS will be between 3.3 percent and 5.9 percent in 2016, reflecting current policy including the effect of budget sequestration. The lower bound of this range reflects a conservative approach, assuming the 2014 aggregate Medicare costs and payments projected forward for all cases. This lower bound is in contrast to a projection that includes only the cases that would have qualified to receive the full LTCH standard payment rate. LTCHs' 2016 total aggregate Medicare margin will differ from this projection to the extent that providers furnish care for beneficiaries who do not qualify to receive the full LTCH standard payment rate since we expect these cases to be less profitable under the new payment structure.

On the basis of these indicators, the Commission concludes that LTCHs can continue to provide Medicare beneficiaries with access to safe and effective care and accommodate changes in their costs with no update to LTCH payment rates in fiscal year 2017. Like we have historically, we plan to assess both our cost-growth assumptions and methodology for calculating the margin on cases that would qualify for the standard LTCH payment rate as the policy is phased in and data reflecting the new policy become available.

This update recommendation applies to the Medicare LTCH PPS base payment rate. As such, it applies to payments for qualifying discharges that meet the criteria specified in the Pathway for SGR Reform Act of 2013 and to the portion of the blended payment that reflects the LTCH payment rate for discharges that do not meet the

specified criteria (applicable during the second year of the policy's phase-in period).

RECOMMENDATION 10

The Secretary should eliminate the update to the payment rates for long-term care hospitals for fiscal year 2017.

RATIONALE 10

The supply of LTCH facilities and beds decreased slightly during 2014. The number of LTCH stays decreased both in total and per capita. On a per FFS beneficiary basis, the decline in the number of LTCH cases was consistent with the decline in the ACH and skilled nursing facility settings. These trends suggest that access to care in LTCHs has been maintained: A majority of LTCH cases come directly from ACHs, and LTCH occupancy rates are well under capacity. While the limited quality trends that we measure appear to be stable across all cases, we will continue to monitor these trends under the new dual payment system. Rather than current payment rates, the availability of capital to LTCHs reflects the implementation of a moratorium on new facilities and beds and the short-term uncertainties related to the implementation of the dual payment system. The aggregate Medicare margin for 2014

was positive, suggesting that LTCHs are able to operate under current payment rates. We continue to expect LTCHs to respond to the new payment incentives quickly and dramatically. Based on the historical trends and the increase in acuity of the beneficiaries who would now qualify for the full LTCH standard payment rate, we also expect to see increases in cost growth in 2015 and 2016 as the policy is implemented. Given the projected positive margin for qualifying cases, the 2017 LTCH base payment rate should be the same as the 2016 rate.

IMPLICATIONS 10

Spending

- Because CMS typically used the market basket as a starting point for establishing updates to LTCH payments, this recommendation would decrease federal program spending by between \$50 million and \$250 million in one year and by less than \$1 billion over five years.

Beneficiary and provider

- This recommendation is not expected to affect Medicare beneficiaries' access to care or providers' willingness or ability to furnish care. ■

Endnotes

- 1 The Medicare, Medicaid, and SCHIP Extension Act of 2007 also requires LTCHs to have a patient review process that screens patients to ensure appropriateness of admission and continued stay, physician on-site availability on a daily basis, and interdisciplinary treatment teams of health care professionals. The Pathway for SGR Reform Act of 2013 specified that beginning in fiscal year 2020, LTCHs will also be required to maintain a certain percentage of beneficiaries who qualify to receive the full LTCH standard payment rate.
- 2 More information on the prospective payment system for LTCHs is available at <http://medpac.gov/documents/payment-basics/long-term-care-hospitals-payment-system-15.pdf?sfvrsn=0>.
- 3 Medicare pays LTCHs outlier payments for patients who are extraordinarily costly. High-cost outlier cases are identified by comparing their costs with a threshold that is the MS–LTC–DRG payment for the case plus a fixed loss amount (\$16,423 in 2015). Medicare pays 80 percent of the LTCH’s costs above the threshold. In fiscal year 2014, high-cost outlier payments were made for about 15.3 percent of LTCH cases. The prevalence of high-cost outlier cases differed by LTCH ownership. About 14 percent of cases in for-profit LTCHs were high-cost outliers compared with 21.4 percent of cases in nonprofit LTCHs. Historically, some case types have been far more likely to be high-cost outliers than others. For example, almost a quarter of cases assigned to MS–LTC–DRG 4 (tracheostomy with prolonged mechanical ventilation) typically receive high-cost outlier payments each year.
- 4 Over 60 percent of LTCHs with cost report start dates during the last quarter of the fiscal year start on September 1. The new payment criteria will affect these facilities for one month of fiscal year 2016. All cases during the 11 months before implementation will be eligible to receive the full LTCH standard payment amount.
- 5 MMSEA and subsequent legislation allowed exceptions to the moratorium for (1) LTCHs that began their qualifying period (demonstrating an average Medicare length of stay greater than 25 days) on or before December 29, 2007; (2) entities that had a binding or written agreement with an unrelated party for the construction, renovation, lease, or demolition of an LTCH, with at least 10 percent of the estimated cost of the project already expended on or before December 29, 2007; (3) entities that had obtained a state certificate of need on or before December 29, 2007; (4) existing LTCHs that had obtained a certificate of need for an increase in beds, issued on or after April 1, 2005, and before December 29, 2007; and (5) LTCHs located in a state with only one other LTCH that sought to increase beds after the closure or decrease in the number of beds of the state’s other LTCH.
- 6 The Pathway for SGR Reform Act of 2013 as amended by the Protecting Access to Medicare Act of 2014 allows exceptions to the moratorium for (1) LTCHs that began their qualifying period (demonstrating an average Medicare length of stay greater than 25 days) on or before April 1, 2014; (2) entities that had a binding or written agreement with an unrelated party for the construction, renovation, lease, or demolition of an LTCH, with at least 10 percent of the estimated cost of the project already expended on or before April 1, 2014; and (3) entities that had obtained a state certificate of need on or before April 1, 2014.
- 7 Historically, the Commission has found that Medicare’s Provider of Services (POS) file includes a larger number of facilities than are found in the cost report file. The cost report file provides a more conservative estimate of total capacity because some LTCHs may not yet have filed a cost report for the applicable year when we completed our analysis, while others may have been exempt from filing cost reports because of low Medicare volume. However, POS data may overstate the total number of LTCHs because facilities that close may not be immediately removed from the file.
- 8 The Pathway for SGR Reform Act of 2013 implemented a moratorium, without any exceptions, on the establishment of new LTCHs or additional beds at existing LTCHs from January 1, 2015, through September 30, 2017. Subsequently, the Protecting Access to Medicare Act of 2014 changed the moratorium extension start date to April 1, 2014, and allowed exceptions on the establishment and classification of new LTCHs. This law still strictly prohibits increases in the number of Medicare-certified LTCH beds in existing facilities.
- 9 Across the top 25 diagnoses both for qualifying cases and all cases, 21 MS–LTC–DRGs overlap. The diagnoses that do not overlap in the top 25 represent relatively low-volume MS–LTC–DRGs in this group. Using a consistent definition of the top 25 MS–LTC–DRGs based on all cases captures 77 percent of qualifying cases.
- 10 We observed a higher readmission rate (19.6 percent) for cases with respiratory diagnoses with mechanical ventilation lasting less than 96 hours (MS–LTC–DRG 208). However, a higher rate of readmission is expected for this group because it is defined in part by the length of time a service (mechanical ventilation) is received. Any patient with a principal respiratory diagnosis with use of mechanical ventilation who is readmitted to a short-term ACH within 4 days is assigned to MS–LTC–DRG 208, while a similar patient who stays in the LTCH for a longer period likely is assigned to MS–LTC–DRG 207 (respiratory diagnosis with mechanical ventilation lasting more than 96 hours). When we combined cases assigned to MS–LTC–DRGs 207 and 208 and recalculated the

rate of readmission, we found that 11.7 percent of these cases were readmitted in 2014.

- 11 In 2014, over 75 percent of LTCHs were for profit; these for-profit facilities accounted for approximately 85 percent of LTCH cases.
- 12 Another factor was growth in the reported patient case-mix index (CMI), which measures the expected costliness of a facility's patients (Centers for Medicare & Medicaid Services 2010, Centers for Medicare & Medicaid Services 2009, Centers for Medicare & Medicaid Services 2008, Centers for Medicare & Medicaid Services 2007, Centers for Medicare & Medicaid Services 2006). Refinements to the LTCH case-mix classification system, implemented in October 2007, likely led to more complete documentation and coding of the diagnoses, procedures, services, comorbidities, and complications that are associated with payment, thus raising the average CMI, even though patients may have been no more resource intensive than they were previously (Centers for Medicare & Medicaid Services 2009, Medicare Payment Advisory Commission 2009, RAND Corporation 1990). Although some part of the increase in LTCHs' CMI between 2008 and 2009 was due to growth in the intensity and complexity of the patients admitted, CMS estimated that the case-mix increase attributable to documentation and coding improvements was 2.5 percent (Centers for Medicare & Medicaid Services 2010, Centers for Medicare & Medicaid Services 2009). Those improvements contributed to growth in payments to providers without corresponding increases in providers' costs. CMS reduced the update to the LTCH base payment rate in fiscal years 2010 and 2011 to partly offset payment increases due to documentation and coding improvements between 2007 and 2009.
- 13 PPACA specified that the annual update to the LTCH standard payment rate in 2011 be reduced by half a percentage point. That requirement, combined with a CMS offset to the 2011 update to account for past improvements in documentation and coding, resulted in a negative update to the LTCH payment rate in 2011. PPACA also mandated reductions in the LTCH standard payment rate of 1.1 percent in 2012, 0.8 percent in 2013, 0.8 percent in 2014, and 0.7 percent in 2015.
- 14 Medicare margins in nonprofit LTCHs have been negative since 2008 with the exception of 2011. The 2014 nonprofit margin is the lowest since 2000 when it equaled -2.9 percent (data not shown).
- 15 Many new LTCHs operate at a loss for a period after opening. For this analysis of high-margin and low-margin LTCHs, we examined only LTCHs that submitted valid cost reports in both 2013 and 2014. We excluded government-owned LTCHs.

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C H A P T E R

11

Hospice services

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

11 The Congress should eliminate the update to the hospice payment rates for fiscal year 2017.

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

Hospice services

Chapter summary

The Medicare hospice benefit covers palliative and support services for beneficiaries who are terminally ill with a life expectancy of six months or less if the illness runs its normal course. Beneficiaries may choose to elect the Medicare hospice benefit; in so doing, they agree to forgo Medicare coverage for conventional treatment of their terminal condition. In 2014, more than 1.3 million Medicare beneficiaries (including about 48 percent of decedents) received hospice services from over 4,000 providers, and Medicare hospice expenditures totaled about \$15.1 billion.

Assessment of payment adequacy

The indicators of payment adequacy for hospices, discussed below, are positive.

Beneficiaries' access to care—Hospice use among Medicare beneficiaries has grown substantially in recent years, suggesting greater awareness of and access to hospice services. In 2014, hospice use increased across almost all demographic and beneficiary groups examined. However, rates of hospice use remained lower for racial and ethnic minorities than for Whites.

- ***Capacity and supply of providers***—The number of hospice providers increased by over 4 percent in 2014, due almost entirely to growth in the

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- Are Medicare payments adequate in 2016?
.....
- How should Medicare payments change in 2017?
.....

number of for-profit hospices, continuing a more than decade-long trend of substantial market entry by for-profit providers.

- ***Volume of services***—In 2014, the proportion of beneficiaries using hospice services at the end of life continued to grow, while hospice length of stay among decedents changed little. Of the total Medicare beneficiary decedents in 2014, 47.8 percent used hospice, up from 47.3 percent in 2013. Average length of stay among decedents remained at about 88 days in 2014, about the same level as the prior two years. The median length of stay for hospice decedents was 17 days in 2014 and has remained stable at approximately 17 or 18 days for more than a decade.

Quality of care—At this time, we do not have data to assess the quality of hospice care provided to Medicare beneficiaries. The Patient Protection and Affordable Care Act of 2010 mandated that a hospice quality reporting program begin by fiscal year 2014. Beginning in 2013, hospices were required to report data for specified quality measures or face a 2 percentage point reduction in their annual update for the subsequent fiscal year. Beginning July 2014, CMS replaced the initial two quality measures with seven new quality measures. In 2015, CMS implemented a hospice experience-of-care survey for bereaved family members. Public reporting of hospice quality information is unlikely before 2017, according to CMS.

Providers' access to capital—Hospices are not as capital intensive as some other provider types because they do not require extensive physical infrastructure. Continued growth in the number of for-profit providers (a 7 percent increase in 2014) suggests capital is readily available to them. Less is known about access to capital for nonprofit freestanding providers, for which capital may be more limited. Hospital-based and home health–based hospices have access to capital through their parent providers.

Medicare payments and providers' costs—The aggregate 2013 Medicare margin, which is an indicator of the adequacy of Medicare payments relative to providers' costs, was 8.6 percent, down from 10.0 percent in 2012. In addition, the rate of marginal profit—that is, the rate at which Medicare's payment exceeds providers' marginal cost—was about 12 percent in 2013. The projected aggregate Medicare margin for 2016 is 7.7 percent, which includes the effect of the federal budget sequester.

Because the payment adequacy indicators for which we have data are positive, the Commission believes that hospices can continue to provide beneficiaries with appropriate access to care with no update to the base payment rate in fiscal year 2017. ■

Background

Medicare began offering a hospice benefit in 1983, pursuant to the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). The benefit covers palliative and support services for beneficiaries who are terminally ill, with a medical prognosis that the individual's life expectancy is six months or less if the illness runs its normal course. A broad set of services is included, such as nursing care; physician services; counseling and social worker services; hospice aide (also referred to as home health aide) and homemaker services; short-term hospice inpatient care (including respite care); drugs and biologics for symptom control; supplies; home medical equipment; physical, occupational, and speech therapy; bereavement services for the patient's family; and other services for palliation of the terminal condition. Most commonly, hospice care is provided in patients' homes, but hospice services are also provided in nursing facilities, assisted living facilities, hospice facilities, and hospitals. In 2014, more than 1.3 million Medicare beneficiaries received hospice services, and Medicare expenditures totaled about \$15.1 billion.

Beneficiaries receive the Medicare hospice benefit only if they elect to do so; in so doing, they agree to forgo Medicare coverage for conventional treatment of the terminal illness and related conditions. Medicare continues to cover items and services unrelated to the terminal illness. For each person admitted to a hospice program, a written plan of care must be established and maintained by an interdisciplinary group (which must include a hospice physician, registered nurse, social worker, and pastoral or other counselor) in consultation with the patient's attending physician, if any. The plan of care must identify the services to be provided (including management of discomfort and symptom relief) and describe the scope and frequency of services needed to meet the patient's and family's needs.

Beneficiaries elect hospice for defined benefit periods. The first hospice benefit period is 90 days. For a beneficiary to elect hospice initially, two physicians—a hospice physician and the beneficiary's attending physician—are generally required to certify that the beneficiary has a life expectancy of six months or less if the illness runs its normal course.¹ If the patient's terminal illness continues to engender the likelihood of death within 6 months, the hospice physician can recertify the patient for another 90 days and for an unlimited number of 60-day periods after that, as long as he or she remains eligible.² Beneficiaries

can disenroll from hospice at any time (referred to as revoking hospice) and can re-elect hospice for a subsequent period as long as the beneficiary meets the eligibility criteria.

Between 2000 and 2012, Medicare spending for hospice care increased dramatically—more than 400 percent, from \$2.9 billion to \$15.1 billion. That spending increase was driven by greater numbers of beneficiaries electing hospice and by growth in length of stay for patients with the longest stays. Occurring simultaneously since 2000 has been a substantial increase in the number of for-profit providers.³

Between 2012 and 2014, Medicare spending for hospice services has been flat at about \$15.1 billion each year. Spending has changed little despite growth in the number of beneficiaries receiving hospice care and positive increases in the base payment rates each year. The flat spending partly reflects the effect of the across-the-board budget cut known as the sequester, which reduced Medicare payments to providers by 2 percent beginning April 2013. Other factors influencing spending in this period include little change in decedents' average length of stay; a small decrease in hospice length of stay for patients not discharged deceased; and a slight shift in the mix of hospice patients served, with hospice decedents making up an increasing share of providers' caseloads.⁴ Medicare is the largest payer of hospice services, covering more than 90 percent of hospice patient days in 2013.

Medicare payment for hospice services

The Medicare program pays a daily rate to hospice providers. The hospice provider assumes all financial risk for costs and services associated with care for the patient's terminal prognosis. The hospice provider receives payment for every day a patient is enrolled, regardless of whether the hospice staff visited the patient or otherwise provided a service each day. This payment design is intended to encompass not only the cost of visits but also other costs a hospice incurs for palliation and management of the terminal condition and related conditions, such as on-call services, care planning, drugs, medical equipment, supplies, patient transportation between sites of care that are specified in the plan of care, short-term hospice inpatient care, and other, less frequently used services.

Payments are made according to a fee schedule that has four different levels of care: routine home care (RHC), general inpatient care (GIP), continuous home care (CHC), and inpatient respite care (IRC) (Table 11-1).

**TABLE
11-1****Medicare hospice payment categories and rates**

Category	Description	Base payment rate, FY 2016 ^a	Percent of hospice days, 2014
Routine home care ^b	Home care provided on a typical day: Days 1–60	\$187 per day	97.7%
	Home care provided on a typical day: Days 61+	\$147 per day	
General inpatient care	Inpatient care to treat symptoms that cannot be managed in another setting	\$720 per day	1.7
Continuous home care	Home care provided during periods of patient crisis	\$39 per hour	0.3
Inpatient respite care	Inpatient care for a short period to provide respite for primary caregiver	\$167 per day	0.3

Note: FY (fiscal year). Payment rates are rounded in the table to the nearest dollar. Payment for continuous home care (CHC) is an hourly rate (\$39.37 per hour, with a maximum payment per day equal to about \$945) for care delivered during periods of crisis if care is provided in the home for 8 or more hours within a 24-hour period beginning at midnight. In addition, a nurse must deliver more than half of the hours of this care to qualify for CHC-level payment. These rates are 2 percentage points lower for hospices that do not submit the required quality data.

^a All rates in this table became effective October 1, 2015, except for the routine home care rates. Separate routine home care base rates for days 1–60 and days 61+ became effective January 1, 2016. From October 1, 2015, through December 31, 2015, a single base rate of \$162 was in effect.

^b For patients receiving routine home care during the last seven days of life, Medicare makes additional payments for registered nurse and social worker visits (\$39 per hour, with up to four hours payable per day during this period).

Source: Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2015. "Update to hospice payment rates, hospice cap, hospice wage index, and the hospice pricer for FY 2016." Manual System Pub 100–04 Medicare Claims Processing, Transmittal 3345, August 4.

The four levels of care are distinguished by the location and intensity of the services provided. RHC is the most common level of hospice care, accounting for nearly 98 percent of all hospice days. Other levels of care—GIP, CHC, and IRC—are available to manage needs in certain situations. GIP is provided in a facility on a short-term basis to manage symptoms that cannot be managed in another setting. CHC is intended to manage a short-term symptom crisis in the home and involves eight or more hours of care per day, mostly nursing. IRC is care in a facility for up to five days to provide an informal caregiver a break. Unless a hospice provides GIP, CHC, or IRC on any given day, it is paid at the RHC rate. The level of care can vary throughout a patient's hospice stay as the patient's needs change.

CMS has implemented reforms to the hospice payment system in 2016, which represent the first changes to the payment structure since the inception of the benefit in 1983. Historically, RHC has been paid at a single, uniform daily rate. Beginning January 2016, Medicare pays two per diem rates for RHC—a higher rate for the first 60 days of a hospice episode (\$187) and a lower rate for days 61 and beyond (\$147) (Table 11-1). In addition, Medicare pays an additional \$39 per hour for registered nurse and social worker visits that occur during the last seven days of

life (up to four hours will be payable per day) for patients receiving the RHC level of care.

The new RHC payment structure is intended to better align payments with the costs of providing hospice care throughout an episode. Hospices tend to provide more services at the beginning and end of an episode and fewer in the middle. As a result, under a flat per diem, long stays are more profitable than short stays. The Commission expressed concern that this misalignment of the payment system led to a number of issues (e.g., making the payment system vulnerable to patient selection, spurring some providers to pursue revenue generation strategies such as enrolling patients likely to have long stays who may not meet the eligibility criteria, and generating wide variation in profit margins across providers based on the length of stay) (Medicare Payment Advisory Commission 2015, Medicare Payment Advisory Commission 2009). In March 2009, the Commission recommended that Medicare move away from the flat per diem to one that is higher at the beginning and end of an episode and lower in the intervening period. The new payment structure that CMS has implemented in 2016 moves in this direction and may begin to address some of the negative consequences resulting from the misalignment of the payment system.

Hospice payment rates are updated annually by the inpatient hospital market basket index. Beginning fiscal year 2013, the market basket index has been reduced by a productivity adjustment, as required by the Patient Protection and Affordable Care Act of 2010 (PPACA). An additional 0.3 percentage point reduction to the market basket update was required in fiscal years 2013 through 2016 and will possibly be required in fiscal years 2017 through 2019 if certain targets for health insurance coverage among the working-age population are met. Beginning in fiscal year 2014, hospices that do not report quality data receive a 2 percentage point reduction in their annual payment update.

Daily payment rates for hospice are adjusted to account for geographic differences in wage rates. From 1983 to 1997, Medicare adjusted hospice payments with a 1983 wage index. In 1998, CMS began using the most current hospital wage index to adjust hospice payments and applied a budget-neutrality adjustment each year to make aggregate payments equivalent to what they would have been under the 1983 wage index. This budget-neutrality adjustment increased Medicare payments to hospices by about 4 percent. The budget-neutrality adjustment has been phased out over seven years, with a 0.4 percentage point reduction in 2010 and an additional reduction of 0.6 percentage point in each subsequent year through 2016.

Beneficiary cost sharing for hospice services is minimal. Prescription drugs and inpatient respite care are the only services potentially subject to cost sharing. Hospices may charge coinsurance of 5 percent for each prescription provided outside the inpatient setting (not to exceed \$5) and for inpatient respite care (not to exceed the inpatient hospital deductible). (For a more complete description of the hospice payment system, see <http://www.medpac.gov/documents/payment-basics/hospice-services-payment-system-15.pdf?sfvrsn=0>.)

Medicare hospice payment limits (“caps”)

The Medicare hospice benefit was designed to give beneficiaries a choice in their end-of-life care, allowing them to forgo conventional treatment (often in inpatient settings) and die at home, with family, according to their personal preferences.

The inclusion of the Medicare hospice benefit in TEFRA was based in large part on the premise that the new benefit would be a less costly alternative to conventional end-of-life care (Government Accountability Office 2004, Hoyer 2007). Studies show that beneficiaries who elect hospice

incur less Medicare spending in the last one or two months of life than comparable beneficiaries who do not, but also that Medicare spending for beneficiaries is higher for hospice enrollees in the earlier months before death than it is for nonenrollees. In essence, hospice’s net reduction in Medicare spending decreases the longer the patient is enrolled, and beneficiaries with long hospice stays tend to incur higher Medicare spending than those who do not elect hospice (Medicare Payment Advisory Commission 2008).

To make cost savings more likely, the Congress included in the hospice benefit two limitations, or “caps,” on payments to hospices. The first cap limits the number of days of inpatient care a hospice may provide to 20 percent of its total Medicare patient care days. This cap is rarely exceeded; any inpatient days provided in excess of the cap are reimbursed at the routine home care payment rate.

The second, more visible cap limits the aggregate Medicare payments that an individual hospice can receive. This cap was implemented at the outset of the hospice benefit to ensure that Medicare payments did not exceed the cost of conventional care for patients at the end of life. Under the cap, if a hospice’s total Medicare payments exceed its total number of Medicare beneficiaries served multiplied by the cap amount (about \$27,383 in 2015), it must repay the excess to the program.^{5,6,7} This cap is not applied individually to the payments received for each beneficiary, but rather to the total payments across all Medicare patients served by the hospice in the cap year. The number of hospices exceeding the payment cap historically has been low, but we have found that increases in the number of hospices and increases in very long stays have resulted in more hospices exceeding the cap (with the number peaking in 2009 and oscillating in recent years). With rapid growth in Medicare hospice spending in recent years, the hospice cap is the only significant fiscal constraint on the growth of program expenditures for hospice care (Hoyer 2007).

Are Medicare payments adequate in 2016?

To address whether payments in 2016 are adequate to cover the costs of the efficient delivery of care and how much providers’ payments should change in the coming year (2017), we examine several indicators of payment adequacy. Specifically, we assess beneficiaries’ access to care by examining the capacity and supply of hospice

providers, changes over time in the volume of services provided, quality of care, providers' access to capital, and the relationship between Medicare's payments and providers' costs. Overall, the Medicare payment adequacy indicators for hospice providers are positive. Unlike our assessments of most other providers, our assessment of hospice providers could not use quality of care as a payment adequacy indicator because information on hospice quality is generally not available.

Beneficiaries' access to care: Use of hospice continues to increase

In 2014, hospice use among Medicare beneficiaries increased, continuing the trend of a growing proportion of beneficiaries using hospice services at the end of life. Of the Medicare beneficiaries who died that year, 47.8 percent used hospice, up from 47.3 percent in 2013 and 22.9 percent in 2000 (Table 11-2). Hospice use varied in 2014 by beneficiary characteristics—enrollment in traditional fee-for-service (FFS) Medicare or Medicare Advantage (MA); Medicare-only beneficiaries and beneficiaries dually eligible for Medicare and Medicaid; urban or rural residence; and age, gender, and race—but use increased across almost all of these groups.

Hospice use is somewhat higher among decedents in MA than in FFS. In 2014, about 47 percent of Medicare FFS decedents and 51 percent of MA decedents used hospice. MA plans do not provide hospice services. Once a beneficiary in an MA plan elects hospice care, the beneficiary receives hospice services through a hospice provider paid by Medicare FFS. In March 2014, the Commission urged that this policy be changed, recommending that hospice be included in the MA benefits package (Medicare Payment Advisory Commission 2014).

Hospice use varies by other beneficiary characteristics. In 2014, a smaller proportion of Medicare decedents who were dually eligible for Medicare and Medicaid used hospice compared with the rest of Medicare decedents (about 42 percent and 49 percent, respectively). Hospice use is least prevalent among beneficiaries under age 65 and most prevalent among beneficiaries age 85 and older (about 29 percent vs. 56 of these decedents used hospice, respectively). Female beneficiaries were also more likely than male beneficiaries to use hospice, which partly reflects the longer average life span for women and greater hospice use among older beneficiaries.

Hospice use also varies by racial and ethnic group (Table 11-2). As of 2014, Medicare hospice use was highest

among White decedents, followed by Hispanic, African American, North American Native, and Asian American decedents, in that order. Hospice use grew across all these groups between 2013 and 2014, with Asian Americans showing the largest increase (1.7 percentage points). Since 2000, hospice use has grown substantially for all racial and ethnic groups, but differences persist across these groups in the rates of use. The reasons for these differences are not fully understood. Researchers have cited a number of possible factors, such as cultural or religious beliefs, preferences for end-of-life care, socioeconomic factors, disparities in access to care or information about hospice, and mistrust of the medical system (Barnato et al. 2009, Cohen 2008, Crawley et al. 2000).

Hospice use is higher for urban than rural beneficiaries, although use has grown across all area categories (Table 11-2). In 2014, the share of decedents residing in urban counties who used hospice was about 49 percent; in micropolitan counties, 45 percent; in rural counties adjacent to urban counties, 43 percent; in rural nonadjacent counties, 39 percent; and in frontier counties, 32 percent. Use rates for beneficiaries residing in all these areas increased in 2014, with the exception of frontier areas, where the rate was unchanged between 2013 and 2014.

One driver of increased hospice use over the past decade has been growing use by patients with noncancer diagnoses, owing to increased recognition that hospice can care for such patients. In 2014, 71 percent of Medicare decedents who used hospice had a noncancer diagnosis, compared with 68 percent in 2012 and 48 percent in 2000. As of 2014, the most common noncancer primary diagnoses reported among hospice decedents were heart and circulatory disorders (26 percent) and neurological conditions (24 percent). Effective October 1, 2014, CMS is no longer allowing debility, adult failure to thrive, and certain neurological codes to be reported as the primary hospice diagnosis. If patients with these diagnoses have a life expectancy of six months or less, they still qualify for hospice, but the hospice must report a more specific primary diagnosis. As would be expected, the reported diagnosis mix of hospice patients changed in response to the new requirement. For example, between 2013 and 2014, the primary diagnosis of debility and adult failure to thrive dropped from 9 percent to 1 percent, while primary diagnoses for heart and circulatory conditions rose from 19 percent to 26 percent and for neurological conditions rose from 18 percent to 24 percent.

**TABLE
11-2****Use of hospice continues to increase****Percent of Medicare decedents who used hospice**

	2000	2011	2012	2013	2014	Average annual percentage point change 2000–2013	Percentage point change 2013–2014
All beneficiaries	22.9%	45.2%	46.7%	47.3%	47.8%	1.9	0.5
FFS beneficiaries	21.5	44.2	45.7	46.2	46.7	1.9	0.5
MA beneficiaries	30.9	48.9	50.4	50.6	50.8	1.5	0.2
Dual eligibles	17.5	40.3	41.6	42.1	42.4	1.9	0.3
Nondual eligibles	24.5	46.8	48.4	48.9	49.4	1.9	0.5
Age							
<65	17.0	27.8	29.2	29.2	29.4	0.9	0.2
65–74	25.4	39.3	40.6	40.7	40.7	1.2	0.0
75–84	24.2	46.3	47.8	48.2	48.9	1.8	0.7
85+	21.4	52.0	54.0	55.0	56.0	2.6	1.0
Race/ethnicity							
White	23.8	47.0	48.6	49.2	49.7	2.0	0.5
African American	17.0	35.4	36.8	37.3	37.5	1.6	0.2
Hispanic	21.1	38.3	39.4	40.2	41.3	1.5	1.1
Asian American	15.2	30.0	31.8	32.0	33.7	1.3	1.7
North American Native	13.0	32.4	34.0	34.1	34.7	1.6	0.6
Sex							
Male	22.4	41.3	42.8	43.3	43.7	1.6	0.4
Female	23.3	48.6	50.2	50.9	51.4	2.1	0.5
Beneficiary location							
Urban	24.3	46.6	48.0	48.5	48.9	1.9	0.4
Micropolitan	18.5	41.4	43.4	44.3	44.7	2.0	0.4
Rural, adjacent to urban	17.6	40.2	42.2	42.9	43.2	1.9	0.3
Rural, nonadjacent to urban	15.8	35.9	37.7	38.0	38.7	1.7	0.7
Frontier	13.2	30.7	31.9	32.3	32.3	1.5	0.0

Note: FFS (fee-for-service), MA (Medicare Advantage). Beneficiary location reflects the beneficiary's county of residence. Counties are grouped into four categories (urban, micropolitan, rural adjacent to urban, and rural nonadjacent to urban) based on an aggregation of the urban influence codes. The frontier category is defined as population density equal to or less than six people per square mile.

Source: MedPAC analysis of data from the denominator file and the Medicare Beneficiary Database from CMS.

Although hospice use has grown over time across patients with a wide range of conditions, hospice use rates continue to vary by diagnosis or cause of death. Identifying use rates by cause of death is difficult because cause of death information is not included in the Medicare claims data. However, a study by Teno and colleagues (2013) estimated hospice use rates by diagnosis based on diagnosis information that appears in Medicare claims for the last

180 days of life. That study found that, in 2009, about 42.2 percent of all Medicare decedents age 65 or older died in hospice that year, with this rate varying by diagnosis. The hospice use rate was higher than the national average rate for beneficiaries with cancer (59.5 percent) and dementia (48.3 percent) and lower than the national average for beneficiaries with chronic obstructive pulmonary disease (39.0 percent) in 2009.

**TABLE
11-3****Increase in total number of hospices driven by growth in for-profit providers**

Category	2000	2007	2012	2013	2014	Average annual percent change		Percent change 2013-2014
						2000-2007	2007-2013	
All hospices	2,255	3,250	3,727	3,925	4,092	5.4%	3.2%	4.3%
For profit	672	1,676	2,199	2,418	2,590	13.9	6.3	7.1
Nonprofit	1,324	1,337	1,320	1,309	1,302	0.1	-0.4	-0.5
Government	257	237	208	198	200	-1.2	-3.0	1.0
Freestanding	1,069	2,103	2,643	2,844	3,027	10.1	5.2	6.4
Hospital based	785	683	568	553	535	-2.0	-3.5	-3.3
Home health based	378	443	492	503	506	2.3	2.1	0.6
SNF based	22	21	23	25	24	-0.7	2.9	-4.0
Urban	1,424	2,190	2,670	2,885	3,016	6.3	4.7	4.5
Rural	788	1,012	983	992	991	3.6	-0.3	-0.1

Note: SNF (skilled nursing facility). Numbers may not sum to total because of missing data for a small number of providers.

Source: MedPAC analysis of Medicare cost reports, Medicare Provider of Services file, and the hospice claims standard analytical file from CMS.

Capacity and supply of providers: Supply of hospices continues to grow, driven by growth in for-profit providers

In 2014, 4,092 hospices provided care to Medicare beneficiaries, a 4.3 percent increase from the prior year, continuing more than 10 years of growth in the number of hospices providing care to Medicare beneficiaries (Table 11-3). For-profit hospices account almost entirely for the growth in the number of hospices. Between 2013 and 2014, the number of for-profit hospices increased by about 7 percent, while the number of nonprofit hospices declined slightly and the number of government hospices increased slightly. As of 2014, about 63 percent of hospices were for profit, 32 percent were nonprofit, and 5 percent were government.

Between 2013 and 2014, freestanding hospices accounted for most of the growth in the number of providers (Table 11-3). During this period, the number of freestanding providers increased by more than 6 percent, the number of hospital-based hospices declined about 3 percent, and the number of home health-based hospices increased slightly (less than 1 percent).⁸ The number of skilled nursing facility (SNF)-based hospices was small and decreased from 25 to 24. As of 2014, about 74 percent of hospices were freestanding, 13 percent were hospital

based, 12 percent were home health based, and less than 1 percent were SNF based.

Overall, the supply of hospices increased substantially between 2000 and 2014 both in urban and rural areas. The number of rural hospices declined modestly since its peak in 2007, but increased in 2013 and changed little in 2014 (Table 11-3). As of 2014, roughly proportionate with the share of Medicare beneficiaries residing in each area, 75 percent of hospices were located in urban areas and 25 percent were located in rural areas. The number of hospices located in rural areas is not necessarily reflective of hospice access for rural beneficiaries, as demonstrated by the increase in the share of rural decedents using hospice over this period.⁹

In 2014, rapid growth in the number of hospices was concentrated in two states, while other states generally experienced modest changes in the number of providers. Two states—California and Texas—accounted for roughly three-quarters of the increase in hospice providers. California gained 90 hospice providers and Texas gained 38 hospice providers, an increase from the prior year of 22 percent and 9 percent, respectively. That year, Arizona, Georgia, Illinois, Missouri, and Ohio experienced the next largest growth in the raw number of providers (an increase

**TABLE
11-4****Hospice expenditures and average length of stay were virtually unchanged in 2014**

Category	2000	2012	2013	2014	Average annual change, 2000–2012	Percent change, 2012–2013	Percent change, 2013–2014
Number of hospice users (in millions)	0.534	1.274	1.315	1.324	7.5%	3.2%	0.7%
Total spending (in billions)	\$2.9	\$15.1	\$15.1	\$15.1	14.7%	–0.1%	–0.2%
Average length of stay among decedents (in days)	53.5	88.0	87.8	88.2	4.2%	–0.2%	0.5%
Median length of stay among decedents (in days)	17	18	17	17	+1 day	–1 day	0 days

Note: Average length of stay is calculated for decedents who were using hospice at the time of death or before death and reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during his or her lifetime. The number of hospice users, total spending, and average length of stay displayed in the table are rounded; the percentage change is calculated using unrounded data.

Source: MedPAC analysis of the denominator file, the Medicare Beneficiary Database, and the hospice claims standard analytical file from CMS.

of six or seven providers per state), while Pennsylvania saw the largest decline (a decrease of four providers).

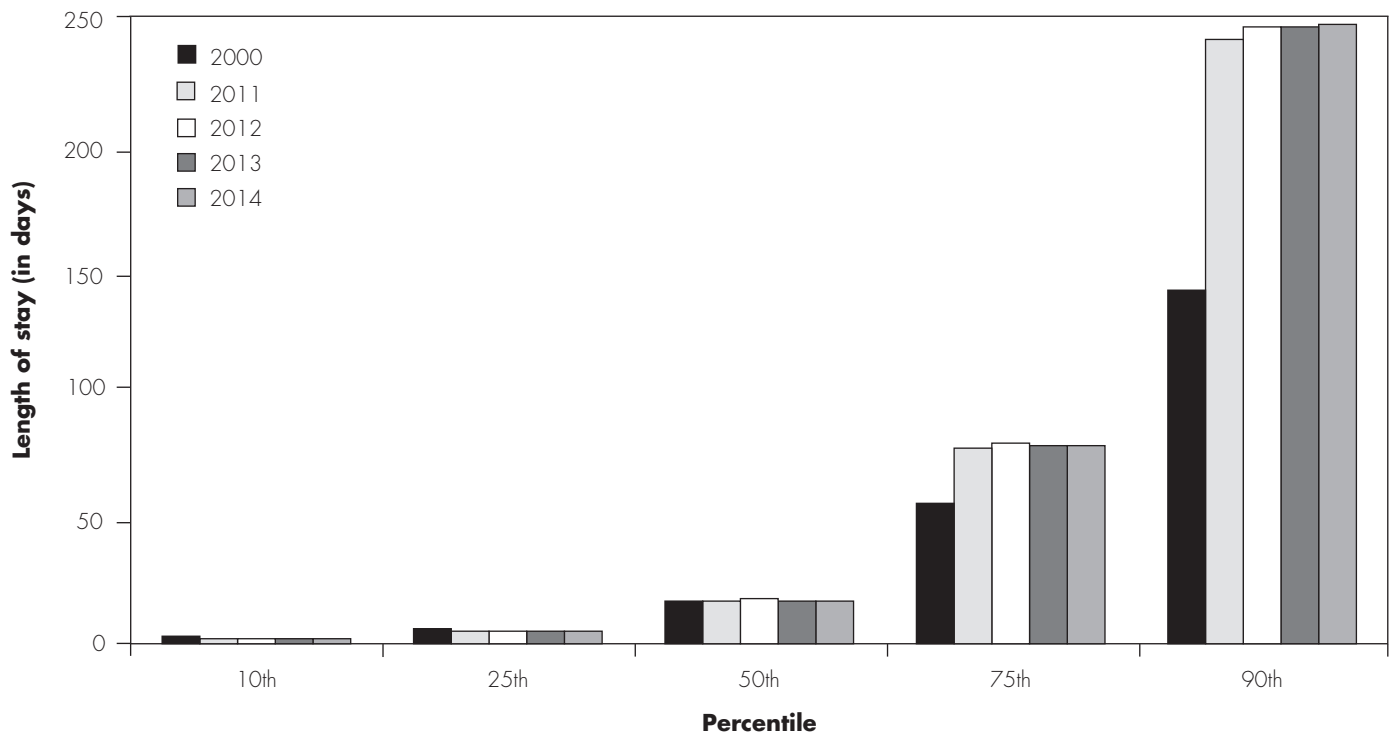
The number of hospice providers is not necessarily an indicator of beneficiary access to hospice because a hospice's service area may extend beyond the boundaries of the county where it is located. The supply of providers—as measured by the number of hospices per 10,000 Medicare decedents—varies substantially across states. In the past, we have concluded that there is no relationship between the supply of hospice providers and the rate of hospice use across states (Medicare Payment Advisory Commission 2010).

Volume of services: The number of hospice users grew and average length of stay among decedents was virtually unchanged in 2014

In 2014, the number of Medicare beneficiaries receiving hospice services continued to increase. More than 1.324 million beneficiaries used hospice services, up slightly (0.7 percent) from about 1.315 million in 2013 (Table 11-4). Underlying this aggregate growth rate are different trends among decedents and nondecedent hospice beneficiaries. Between 2013 and 2014, the number of beneficiaries receiving hospice who were discharged deceased grew by 1.6 percent, while the number of beneficiaries who received hospice but were discharged alive or remained a patient (as of the end of the year) declined 1.7 percent (data not shown).

In 2014, hospice average length of stay among decedents was 88.2 days, about the same as in the prior two years (Table 11-4). The flat average length of stay between 2012 and 2014 followed a long period of growth in average length of stay. Between 2000 and 2012, average length of stay grew from about 54 days to 88 days. The increase in average length of stay observed since 2000 in large part reflects an increase in very long hospice stays, while short stays remained virtually unchanged (Figure 11-1, p. 308). Overall, between 2000 and 2014, hospice length of stay at the 90th percentile grew substantially, increasing from 141 days to 247 days. Growth in very long stays has slowed in recent years. Between 2008 and 2011, the 90th percentile of length of stay grew six days; between 2011 and 2012, it grew five additional days; and between 2012 and 2014 it grew one day. Median length, which has held steady at 17 or 18 days since 2000, was 17 days in 2014, compared with 5 days for the 25th percentile of length of stay—unchanged from the prior year.

With growing use of hospice, the rates of patients dying in the hospital have declined, but evidence is mixed on the extent to which the decline has been accompanied by a reduction in the overall intensity of care in the last months of life. One study found that between 2000 and 2009, the share of Medicare decedents ages 65 and older dying in the hospital declined (from 32.6 percent to 24.6 percent), and the average number of hospital days in the last 30 days of life also declined (from 4.9 days to 4.6

**FIGURE
11-1****Growth in length of stay among hospice patients with the longest stays has slowed**

Note: Length of stay is calculated for decedents who were using hospice at the time of death or before death and reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during his or her lifetime.

Source: MedPAC analysis of the Medicare Beneficiary Database from CMS.

days) (Teno et al. 2013). At the same time, the study found other indicators of intensity of care in the last months of life have increased. For example, the percentage of beneficiaries receiving care in an intensive care unit during the last month of life increased (from 24.3 percent in 2000 to 29.2 percent in 2009) and the percentage of beneficiaries with 3 or more hospitalizations in the last 90 days of life increased slightly (from 10.3 percent to 11.5 percent) (Teno et al. 2013). This increase in the intensity of some aspects of end-of-life care may in part reflect referrals to hospice occurring only in the last few days of life for some beneficiaries.

The Commission has previously expressed concern about very short hospice stays. More than one-quarter of hospice decedents enroll in hospice only in the last week of life, a length of stay which is commonly thought to be of less benefit to patients than enrolling somewhat earlier. Very short hospice stays occur across a wide range of

diagnoses (Table 11-5). As discussed in our March 2009 report, a Commission-convened panel of hospice industry representatives indicated that very short stays in hospice stem largely from factors unrelated to the Medicare hospice payment system: Some physicians are reluctant to have conversations about hospice or tend to delay such discussions until death is imminent; some patients and families have difficulty accepting a terminal prognosis; and financial incentives in the FFS system encourage increased volume of clinical services (compared with palliative care) (Medicare Payment Advisory Commission 2009). In addition, some point to the requirement that beneficiaries forgo intensive conventional care to enroll in hospice as a factor that contributes to deferring hospice care, resulting in short hospice stays.

A number of initiatives seek to address concerns about potentially late hospice enrollments and the quality of end-of-life care more generally. CMS is launching a

**TABLE
11-5****Hospice length of stay among decedents by
beneficiary and hospice characteristics, 2014**

Characteristic	Average length of stay (in days)	Percentile of length of stay				
		10th	25th	50th	75th	90th
Beneficiary						
Diagnosis						
Cancer	53	3	6	18	53	130
Neurological conditions	148	3	8	33	170	447
Heart/circulatory	89	2	5	14	79	262
Debility or adult failure to thrive	102	3	6	20	99	307
COPD	121	2	5	25	129	363
Other	48	2	3	7	28	124
Main location of care						
Home	90	4	9	26	86	238
Nursing facility	110	3	6	21	103	329
Assisted living facility	154	5	12	51	187	441
Hospice						
Hospice ownership						
For profit	107	3	6	22	99	314
Nonprofit	67	2	5	13	55	179
Type of hospice						
Freestanding	91	2	5	17	78	257
Home health based	71	2	5	16	63	192
Hospital based	58	2	4	13	49	152

Note: COPD (chronic obstructive pulmonary disease). Length of stay is calculated for Medicare beneficiaries who died in 2014 and used hospice that year and reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during his or her lifetime. "Main location" is defined as the location where the beneficiary spent the largest share of his/her days while enrolled in hospice. "Diagnosis" reflects primary diagnosis on the beneficiary's last hospice claim.

Source: MedPAC analysis of the hospice claims standard analytical file, Medicare Beneficiary Database, Medicare hospice cost reports, and Provider of Services file data from CMS.

demonstration program (called the Medicare Care Choices Model) that will permit certain FFS beneficiaries who are eligible for hospice (but not enrolled in the Medicare hospice benefit) to enroll in the demonstration and receive palliative and supportive care from a hospice provider while continuing to receive "curative" care from other providers.¹⁰ Beginning in 2016, Medicare covers advance care planning conversations for beneficiaries who choose to receive these services. Medicare pays for advance care planning conversations between a beneficiary and his or her physician, advanced practice registered nurse, or physician assistant under the physician fee schedule. In

March 2014, the Commission recommended that hospice be included in the Medicare Advantage benefits package, which would give plans greater incentives to develop and test new models aimed at improving end-of-life care and care for beneficiaries with advanced illnesses (Medicare Payment Advisory Commission 2014). The Institute of Medicine also recently issued a report on end-of-life care in the United States, reviewing the challenges and making recommendations for changes. (See text box on pages 318–319 for more details on efforts to foster improvements in the quality of end-of-life care.)

**TABLE
11-6****More than half of Medicare hospice spending in 2014 was for patients with stays exceeding 180 days**

	Medicare hospice spending, 2014 (in billions)
All hospice users in 2014	\$15.1
Beneficiaries with LOS > 180 days	8.8
Days 1–180	2.8
Days 181–365	2.8
Days 366+	3.2
Beneficiaries with LOS ≤ 180 days	6.1

Note: LOS (length of stay). “LOS” indicates the beneficiary’s lifetime LOS as of the end of 2014 (or at the time of discharge in 2014 if the beneficiary was not enrolled in hospice at the end of 2014). All spending presented in the chart occurred only in 2014. Break-out groups do not sum to total because they exclude about \$0.1 billion in payments to hospices for physician visits.

Source: MedPAC analysis of the hospice claims standard analytical file and the common Medicare enrollment file from CMS.

The Commission has also expressed concern about very long hospice stays. In 2014, Medicare spent nearly \$9 billion, more than half of all hospice spending that year, on patients with stays exceeding 180 days (Table 11-6). With the flat per diem payment system, long stays have been more profitable than short stays. This misalignment of the payment system may have led some hospices to pursue revenue-generation strategies by focusing on patients with long stays, some of whom may not meet the eligibility criteria.

Hospice lengths of stay vary by observable patient characteristics, such as patient diagnosis and location, which has made it possible for providers to focus on more profitable patients (Table 11-5, p. 309). For example, Medicare decedents in 2014 with neurological conditions and chronic obstructive pulmonary disease (COPD) had substantially higher average lengths of stay (148 days and 121 days, respectively) than those with cancer (53 days) and heart or circulatory conditions (89 days). In addition, length of stay varies by the setting where care is provided. In 2014, average length of stay was higher among Medicare decedents whose main care setting was an assisted living facility (ALF) (154 days) or a nursing facility (110 days) rather than home (90 days) (Table

11-5, p. 309). In particular, hospice patients in ALFs had markedly longer stays compared with other settings, even for the same diagnosis, which warrants further monitoring and investigation in CMS’s medical review efforts.

The differences in length of stay by patient characteristics are reflected in differences in length of stay by provider ownership type (Table 11-5, p. 309). In 2014, average length of stay was substantially higher among for-profit hospices than among nonprofit hospices (107 days compared with 67 days). The higher length of stay among for-profit hospices has two components: (1) for-profit hospices have more patients with diagnoses that tend to have longer stays, and (2) for-profit hospice beneficiaries have longer stays for all diagnoses than those of nonprofit hospices. For example, among decedents with a neurological diagnosis, the average length of stay was 176 days among for-profit hospices and 117 days among nonprofits.

One pattern of unusual hospice utilization can be found among the 10.7 percent of hospices that exceed the aggregate payment cap. As shown in prior reports, above-cap hospices have substantially higher lengths of stay and rates of discharging patients alive than other hospices.¹¹ This statistic may suggest that above-cap hospices are admitting patients who do not meet the hospice eligibility criteria, which merits further investigation by the Office of Inspector General and CMS.

Between 2012 and 2013, the share of hospices exceeding the cap declined slightly from 11.0 percent to 10.7 percent (Table 11-7).¹² Among hospices that exceeded the cap, the average amount over the cap was lower in 2013 than in 2012 (\$460,000 compared with \$510,000). While above-cap hospices are required to return payments that exceed Medicare’s cap, the government’s ability to obtain repayment from hospices that close in subsequent years has been uncertain. At the extreme, at least one hospice provider in 2012 reportedly closed and reopened as a new hospice to avoid repaying cap overpayments (Waldman 2012). In its 2015 hospice final rule, CMS established a policy that will help facilitate cap overpayment collections in the future. Beginning with cap year 2014, hospices are required to perform their own cap overpayment calculation within three to five months of the cap year’s close and pay Medicare back for the calculated overpayments at that time or their payments will be suspended (Centers for Medicare & Medicaid Services 2014). Before this rule, there was typically a 16-month to 24-month lag between

**TABLE
11-7****Hospices that exceeded Medicare's annual payment cap, selected years**

	2002	2010	2011	2012	2013
Percent of hospices exceeding the cap	2.6%	10.1%	9.8%	11.0%	10.7%
Average payments over the cap per hospice exceeding it (in thousands)	\$470	\$426	\$424	\$510	\$460
Payments over the cap as percent of overall Medicare hospice spending	0.6%	1.1%	1.1%	1.4%	1.3%
Total Medicare hospice spending (in billions)	\$4.4	\$13.0	\$13.8	\$15.0	\$15.1

Note: The cap year is defined as the period beginning November 1 and ending October 31 of the following year.

Source: MedPAC analysis of the hospice claims standard analytical file, Medicare hospice cost reports, and Medicare Provider of Services file data from CMS. Data on total spending are from the CMS Office of the Actuary or MedPAC analysis.

the cap year's close and when hospices had to return any overpayments.¹³

Quality of care: Information on hospice quality is limited

We do not have sufficient data to assess the quality of hospice care provided to Medicare beneficiaries because publicly reported information on quality is generally unavailable. PPACA mandated that CMS publish quality measures by 2012. Beginning in fiscal year 2014, hospices that do not report quality data receive a 2 percentage point reduction in their annual payment update. Public reporting of quality data from these initiatives is not expected to be available until at least 2017, according to CMS.

For the first year of data reporting, CMS established two quality measures. The first measure tracked pain management and the second was a process measure designed to help develop future quality measures.¹⁴ These two measures (with small changes) were continued for the second year of the reporting program and affect the payment update for fiscal year 2015.

In July 2014, CMS replaced the two initial quality measures with seven new quality measures collected using a standardized instrument.¹⁵ The seven quality measures are process measures (i.e., measures focus on pain screening, pain assessment, dyspnea screening, dyspnea treatment, documentation of treatment preferences, addressing beliefs and values (if desired by patient), and provision of a bowel regimen for patients treated with an opioid). Hospices were required to report on these seven measures during the second half of calendar year 2014 to

receive a full payment update in fiscal year 2016. About 7 percent of hospices did not report the required quality data and face a 2 percentage point reduction in their update for fiscal year 2016. Nonreporters were generally small providers, and it is possible that some of them are no longer operating. Hospices continue to be required to report on the seven measures (with 2015 reporting affecting the 2017 payment update).

Beginning in 2015, the hospice quality reporting program has required all hospice providers (except very small providers) to participate in a Consumer Assessment of Healthcare Providers and Systems® (CAHPS®) hospice survey. Hospices are required to contract with a CMS-approved vendor to administer the survey. The survey gathers information from the patient's informal caregiver (typically a family member) after the patient's death. The survey addresses aspects of hospice care that are thought to be important to patients and for which informal caregivers are positioned to provide information. In particular, the survey collects information on how the hospice performed in the following areas: communicating, providing timely care, treating patients with respect, providing emotional support, providing help for symptom management, providing information on medication side effects, and training family or other informal caregivers in the home setting. Participation in the CAHPS hospice survey will affect payment updates for fiscal year 2017 and beyond.

For the future, CMS has expressed interest in developing a patient-reported pain outcome measure, claims-based quality measures (such as receipt of skilled visits in the last days of life, burdensome transitions of care for

**TABLE
11-8****Rates of hospice live discharge and reported reason for discharge, 2012–2014**

Category	2012	2013	2014
Live discharges as a share of all discharges	18.5%	18.4%	17.2%
Reason for live discharge			
No longer terminally ill	38	42	43
Beneficiary revocation	45	40	39
Transfer hospice providers	10	11	12
Move out of service area	5	5	5
Discharge for cause	2	2	2
Providers' rate of live discharge as a share of all discharges, by percentile			
10th percentile	9.3	9.3	8.5
25th percentile	13.0	13.2	12.3
50th percentile	19.4	19.4	18.7
75th percentile	30.8	30.2	30.1
90th percentile	50.0	47.4	50.0

Note: The information on reason for live discharge for 2012 is based on data reported for the last six months of 2012. Percentages may not sum to 100 due to rounding.

Source: MedPAC analysis of the hospice claims standard analytical file, Medicare hospice cost reports, and Medicare Provider of Services file data from CMS.

patients in and out of hospice, and rates of live discharge), measures of hospice responsiveness to patient and family needs, and measures of hospice team communication and care coordination.

As the Commission has stated previously, claims-based quality measures merit further exploration as a promising source of information on the quality of hospice care. CMS's contractor, Abt Associates, has shown that some beneficiaries do not receive skilled visits at the end of life.¹⁶ For example, in fiscal year 2014, about 12.3 percent of hospice decedents who received routine home care did not receive any skilled visits from hospice staff in the last two days of life (Plotzke et al. 2015). The Abt analysis also found that the share of routine home care patients who did not receive a skilled visit in the last two days of life varied across providers. In light of this finding, the Commission intends to explore the development of a quality measure related to end-of-life visits.

The rate at which hospice providers discharge patients alive may also be a signal of quality. It is expected that

hospice providers will have some rate of live discharges because some patients change their mind about the type of care they wish to receive and disenroll from hospice or their condition improves and they no longer meet the hospice eligibility criteria. However, analyses showing providers with substantially higher rates of live discharge than their peers signal a potential problem with quality of care or program integrity. An unusually high rate of live discharges could indicate that a hospice provider is not meeting the needs of patients and families or is admitting patients who do not meet the eligibility criteria.

Between 2013 and 2014, across all Medicare hospice patients, the average rate of live discharge (that is, live discharges as a percentage of all discharges) dropped from 18.4 percent to 17.2 percent (Table 11-8). In 2014, the most frequent reasons for live discharge reported by hospice providers were that the beneficiary was no longer terminally ill (43 percent) and the beneficiary revoked hospice election (39 percent). Other reasons for live discharge were much less common (e.g., beneficiary transferred hospice providers (12 percent), beneficiary

moved out of hospice provider’s services area (5 percent), and provider discharged beneficiary for cause (2 percent)). The rate of live discharge varied substantially across providers, with some providers having particularly high rates. In 2014, about 25 percent of providers had a live discharge rate greater than 30 percent, and 10 percent of providers had live discharge rates greater than 50 percent (Table 11-8). These data are based on hospice providers of all sizes.

Table 11-9 displays information on hospice providers whose live discharge rate exceeded double the national average in 2014.¹⁷ We focus on providers with more than 50 total discharges to avoid issues with random variation that can occur with very small populations.¹⁸ In 2014, about 13 percent of these hospice providers had live discharge rates exceeding double the national average, though this was more common in some states than others. The five states with the highest share of their providers with live discharge rates exceeding double the national average were Mississippi (36 percent), South Carolina (31 percent), Nevada (25 percent), Alabama (22 percent), and Arizona (19 percent). Providers with live discharge rates exceeding double the national average were predominantly for profit (87 percent), and many exceeded the aggregate cap (43 percent) or were newer providers who first participated in Medicare in 2010 or later (35 percent).

Providers’ access to capital: Access to capital appears to be adequate

Hospices in general are not as capital intensive as other provider types because they do not require extensive physical infrastructure (although some hospices have built their own inpatient units, which require significant capital). Overall, access to capital for hospices appears strong, given the robust entry of for-profit providers into the Medicare program.

In 2014, the number of for-profit providers grew by about 7 percent, indicating that capital is accessible to these providers. In addition, several publicly traded hospice companies reported favorable performance in their mid-2015 filings, indicating strong admissions growth and increased margins. Information from publicly traded companies and private equity analysts also suggests that the sector is viewed favorably by the investment community. CMS actions to launch the palliative care demonstration (Medicare Care Choices Model) and establish separate payment for advance care planning under the physician fee schedule are often pointed to as

TABLE
11-9

Characteristics of hospices with live discharge rates more than twice the national average among hospice providers with more than 50 discharges, 2014

Hospice characteristic	
Total number of providers	3,136
Number of providers with a live discharge rate greater than twice the national average	406
Percent of providers with a live discharge rate greater than twice the national average	13%
Percent of a state’s providers with a live discharge rate exceeding twice the national average (top 5 states)	
Mississippi	36%
South Carolina	31
Nevada	25
Alabama	22
Arizona	19
Characteristics of providers with a live discharge rate exceeding twice the national average	
For-profit ownership	87%
Exceeded aggregate cap (2013)	43
New provider entering between 2010 and 2014	35

Note: All data are for 2014, except where noted.

Source: MedPAC analysis of the hospice claims standard analytical file, Medicare hospice cost reports, and Medicare Provider of Services file data from CMS.

signs of further growth potential for the hospice industry. In addition, CMS’s changes to the hospice payment system for 2016 have been generally well received by the hospice industry.

Among nonprofit freestanding providers, less is known about access to capital, which may be more limited. Hospital-based and home health–based nonprofit hospices have access to capital through their parent providers, which currently appear to have adequate access to capital in both sectors.

Medicare payments and providers’ costs

As part of our assessment of payment adequacy, we examine the relationship between Medicare payments

**TABLE
11-10****Hospice costs per day vary
by type of provider, 2013**

	Average	Percentile		
		25th	50th	75th
All hospices	\$147	\$111	\$138	\$173
Freestanding	141	108	132	161
Home health based	161	118	148	188
Hospital based	189	132	172	219
For profit	131	104	127	155
Nonprofit	169	132	159	196
Above cap	125	99	120	148
Below cap	149	113	140	175
Urban	149	113	139	174
Rural	134	106	133	167

Note: Data reflect aggregate costs per day for all types of hospice care combined (routine home care, continuous home care, general inpatient care, and inpatient respite care). Data are not adjusted for differences in case mix or wages across hospices.

Source: MedPAC analysis of Medicare hospice cost reports and Medicare Provider of Services data from CMS.

and providers' costs by considering whether current costs approximate what providers are expected to spend on the efficient delivery of high-quality care. Medicare margins illuminate the relationship between Medicare payments and providers' costs. We examined margins through the 2013 cost reporting year, the latest period for which cost report and claims data are available. To understand the variation in margins across providers, we also examined the variation in costs per day across providers.

Hospice costs

Hospice costs per day vary substantially by type of provider (Table 11-10), which is one reason for differences in hospice margins across provider types. In 2013, hospice costs per day across all hospice providers were about \$147 on average, an increase of about 1.3 percent from the previous year.¹⁹ Freestanding hospices had lower costs per day than home health-based hospices and hospital-based hospices. For-profit, above-cap, and rural hospices also had lower costs per day than their respective counterparts.

The differences in costs per day among freestanding, home health-based, and hospital-based hospices largely

reflect differences in average length of stay and indirect costs. Our analysis of Medicare cost report data indicates that, across all hospice types, those with longer average stays have lower costs per day. Freestanding hospices have longer stays than provider-based hospices, which accounts for some, but not all, of the difference in costs per day.

Another substantial factor is the higher level of indirect costs among provider-based hospices. Indirect costs include, among others, management and administrative costs, accounting and billing, and capital costs. In 2013, indirect costs made up 32 percent of total costs for freestanding hospices, compared with 40 percent for home health-based hospices and 42 percent for hospital-based hospices. In general, hospices with a larger volume of patients have lower indirect costs as a share of total costs. However, while patient volume explains some of the difference in indirect costs across providers, freestanding hospices have lower indirect costs than provider-based hospices, even those providers with similar patient volumes.

Several factors likely drive the higher indirect costs among provider-based hospices. The structure of the cost report for provider-based hospices likely results in some overallocation of overhead costs that are not actually related to the hospices' operations or management. It is also possible that provider-based hospices have higher indirect costs for certain overhead activities. For example, provider-based hospices might have higher indirect costs than freestanding providers if administrative staff wage rates were higher for parent providers (e.g., hospitals or home health agencies) or if provider-based hospices expended more administrative resources coordinating with their parent provider.

Regardless of the source of the higher indirect costs among provider-based hospices, the Commission believes payment policy should focus on the efficient delivery of services to Medicare's beneficiaries. If freestanding hospices are able to provide high-quality care at a lower cost than provider-based hospices, then payment rates should be set accordingly, and the higher indirect costs of provider-based hospices should not be a reason for increasing Medicare payment rates.

Hospice margins

From 2007 to 2013, the aggregate hospice Medicare margin ranged from 5.5 percent to 10.0 percent (Table 11-11).²⁰ Between 2012 and 2013, the aggregate hospice Medicare margin dropped from 10.0 percent

**TABLE
11-11****Hospice Medicare margins by selected characteristics, 2007–2013**

Category	Percent of hospices 2013	2007	2008	2009	2010	2011	2012	2013
All	100%	5.8%	5.5%	7.4%	7.4%	8.8%	10.0%	8.6%
Freestanding	72	8.7	8.3	10.2	10.7	11.8	13.3	12.0
Home health based	13	2.3	3.4	5.9	3.2	6.1	5.7	2.2
Hospital based	14	-10.9	-11.3	-12.2	-16.6	-16.0	-16.8	-16.7
For profit (all)	62	10.4	10.3	11.7	12.3	14.8	15.4	14.7
Freestanding	56	11.3	11.5	12.9	13.4	15.9	16.5	15.7
Nonprofit (all)	33	1.6	0.7	3.8	3.0	2.4	3.7	1.2
Freestanding	16	5.6	3.7	6.6	7.6	6.4	7.7	5.2
Patient volume (quintile)								
Lowest	20	-7.9	-8.4	-6.5	-6.5	-4.1	-2.3	-0.3
Second	20	1.0	-0.1	2.0	2.0	2.8	5.9	6.0
Third	20	3.0	4.4	4.5	4.5	7.5	9.7	9.4
Fourth	20	5.8	7.2	6.8	6.8	9.9	11.2	11.2
Highest	20	7.0	6.1	9.0	9.0	9.6	10.6	8.3
Urban	74	6.3	5.9	7.9	7.7	9.1	10.3	8.9
Rural	26	1.4	2.1	3.7	5.2	6.0	7.3	6.1
Below cap	89.3	6.1	5.9	7.9	7.7	9.1	10.4	8.8
Above cap (excluding cap overpayments)	10.7	2.5	1.2	1.4	3.2	4.1	5.2	7.0
Above cap (including cap overpayments)	10.7	20.5	19.0	18.3	17.4	18.4	21.3	20.2

Note: Margins for all provider categories exclude overpayments to above-cap hospices, except where specifically indicated. Margins are calculated based on Medicare-allowable, reimbursable costs.

Source: MedPAC analysis of Medicare hospice cost reports, the hospice claims standard analytical file, and Medicare Provider of Services data from CMS.

to 8.6 percent, in part reflecting the effect of the budget sequester. We estimate that the sequester reduced hospice revenues in the 2013 cost report year by 1.3 percent.²¹ In that year, Medicare margins varied widely across individual hospice providers: -8.9 percent at the 25th percentile, 9.1 percent at the 50th percentile, and 23.0 percent at the 75th percentile of providers (data not shown in table). Our estimates of Medicare margins from 2007 to 2013 exclude overpayments to above-cap hospices and are calculated based on Medicare-allowable, reimbursable costs, consistent with our approach in other Medicare sectors.^{22,23}

We excluded nonreimbursable bereavement costs from our margin calculations. The statute requires that hospices offer bereavement services to family members of deceased Medicare patients. However, the statute prohibits Medicare

payment for bereavement services (Section 1814(i)(1)(A) of the Social Security Act). Hospices report the costs associated with bereavement services on the Medicare cost report in a nonreimbursable cost center. If we included these bereavement costs from the cost report in our margin estimate, it would reduce the 2013 aggregate Medicare margin by at most 1.4 percentage points. This estimate is likely an overestimate of the bereavement costs associated with Medicare hospice patients because we are not able to separately identify the bereavement costs related to hospice patients from the costs of community bereavement services provided to the family and friends of decedents not enrolled in hospice. Also, hospices may fund bereavement services through donations. Hospice revenues from donations are not included in our margin calculations.

We also excluded nonreimbursable volunteer costs from our margin calculations. As discussed in our March 2012 report, the statute requires Medicare hospice providers to use some volunteers in the provision of hospice care. Costs associated with recruiting and training volunteers are generally included in our margin calculations because they are reported in reimbursable cost centers. The only volunteer costs that would be excluded from our margins are those associated with nonreimbursable cost centers. It is unknown what costs are included in the volunteer nonreimbursable cost center. If nonreimbursable volunteer costs were included in our margin calculation, it would reduce the aggregate Medicare margin by 0.3 percentage point.

In 2013, freestanding hospices had higher margins (12.0 percent) than home health–based and hospital-based hospices (2.2 percent and –16.7 percent, respectively). As explained above, provider-based hospices have lower margins than freestanding providers partly because of their higher indirect costs. If home health–based and hospital-based hospices had indirect cost structures similar to those of freestanding hospices, we estimate that the aggregate Medicare margin would be about 10 percentage points higher for home health–based hospices and 13 percentage points higher for hospital-based hospices, and the industry-wide aggregate Medicare margin would be about 2 percentage points higher.²⁴

Hospice margins also vary by other provider characteristics, such as type of ownership, patient volume, and urban or rural location. The aggregate Medicare margin was considerably higher for for-profit hospices (14.7 percent) than for nonprofit hospices (1.2 percent). However, freestanding nonprofit hospices, which are not affected by overhead allocation issues, had a higher margin (5.2 percent) than nonprofits overall. Generally, hospices' margins vary by the provider's volume—hospices with more patients have higher margins on average. Overall, hospices in urban areas have a higher aggregate Medicare margin (8.9 percent) than those in rural areas (6.1 percent). The difference between rural and urban margins, while not large, may partly reflect differences in volume.

Hospice profitability is closely related to length of stay. Hospices with longer lengths of stay have higher margins. For example, comparing hospice providers based on the share of their patients' stays exceeding 180 days, the average margin ranged from –8.1 percent for hospices in the lowest quintile to 18.1 percent for hospices in the

second highest quintile (Table 11-12). Hospices in the highest length-of-stay quintile had a 14.2 percent average margin after the return of cap overpayments, but without the hospice aggregate cap, these providers' margins would have averaged 20.2 percent. CMS's payment reforms in 2016 are intended to reduce the variation in profitability across hospices with different lengths of stay.

Hospices with a large share of patients in nursing facilities and assisted living facilities also have higher margins than other hospices. For example, in 2013, hospices in the top quartile of share of patients residing in nursing facilities had a margin of nearly 17 percent compared with a margin of roughly 6 percent to 9 percent in the middle quartiles and a nearly 2 percent margin in the bottom quartile (Table 11-12). Margins also vary by the share of a provider's patients in assisted living facilities, with a margin ranging from roughly 2 percent in the lowest quartile to almost 14 percent in the highest quartile. Some of the difference in margins among hospices with different concentrations of nursing facility and assisted living facility patients is driven by differences in the diagnosis profile and length of stay of patients in these hospices.

However, hospices may find caring for patients in facilities more profitable than caring for patients at home for reasons in addition to length of stay. As discussed in our June 2013 report, there may be efficiencies in treating hospice patients in a centralized location in terms of mileage costs and staff travel time, as well as facilities serving as referral sources for new patients. Nursing facilities may also be a more efficient setting for hospices to provide care because of the overlap in responsibilities between the hospice and the nursing facility. Analyses in our June 2013 report suggest that a 3 percent to 5 percent reduction in the payment rate for hospice routine home care for patients in nursing facilities may be warranted because of the overlap in responsibilities between the hospice and the nursing facility (Medicare Payment Advisory Commission 2013).

Another consideration in evaluating the adequacy of payments is whether providers have a financial incentive to expand the number of Medicare beneficiaries they serve. In considering whether to treat a patient, the provider compares the marginal revenue it will receive (i.e., the Medicare payment) with its marginal costs—that is, the costs that vary with volume. If Medicare payments are larger than the marginal costs of treating an additional beneficiary, a provider has a financial incentive to increase

its volume of Medicare patients. On the other hand, if marginal payments do not cover the marginal costs, the provider may have a disincentive to treat Medicare beneficiaries. To operationalize this concept, we compare payments for Medicare services with marginal costs, which is approximated as:

$$\text{Marginal profit} = (\text{payments for Medicare services} - (\text{total Medicare costs} - \text{fixed building and equipment costs})) / \text{Medicare payments}$$

This formula gives a lower bound on the marginal profit because we ignore any potential labor costs that are fixed. For hospice providers, we find that Medicare payments exceed marginal costs by about 12 percent, suggesting that providers have an incentive to treat Medicare patients. This profit margin is a positive indicator of patient access.

Projecting margins for 2016

To project the aggregate Medicare margin for 2016, we model the policy changes that went into effect between 2013 (the year of our most recent margin estimates) and 2016. The policies include:

- a market basket update of 2.5 percent for fiscal year 2014, 2.9 percent for fiscal year 2015, and 2.4 percent for fiscal year 2016;
- a reduction to the market basket update of 0.8 percentage point in each of the three fiscal years from 2014 through 2016 (reflecting a productivity adjustment and an additional adjustment of –0.3 percentage point each year);
- 2.0 percent reduction in payments due to the sequester that began in April 2013;
- years five through seven of the seven-year phase-out of the wage index budget-neutrality adjustment factor, which reduced payments to hospices by 0.6 percentage point in each of the three fiscal years from 2014 through 2016; and
- additional wage index changes, which reduced payments by –0.1 percentage point in each fiscal year from 2014 through 2016.

We also assume a rate of cost growth in 2015 and 2016 that is higher than the historical rate in light of potentially

**TABLE
11-12**

Hospice Medicare margins by length of stay and patient residence, 2013

Hospice characteristic	Medicare margin
Average length of stay	
Lowest quintile	–8.1%
Second quintile	1.3
Third quintile	12.6
Fourth quintile	17.5
Highest quintile	14.8
Percent of stays > 180 days	
Lowest quintile	–8.1
Second quintile	1.8
Third quintile	12.8
Fourth quintile	18.1
Highest quintile	14.2
Percent of patients in nursing facilities	
Lowest quartile	1.8
Second quartile	6.6
Third quartile	9.0
Highest quartile	16.7
Percent of patients in assisted living facilities	
Lowest quartile	1.6
Second quartile	4.3
Third quartile	9.2
Highest quartile	13.9

Note: Margins for all provider categories exclude overpayments to above-cap hospices. Margins are calculated based on Medicare-allowable, reimbursable costs.

Source: MedPAC analysis of Medicare hospice cost reports, Medicare Beneficiary Database, hospice claims standard analytical file, and Medicare Provider of Services data from CMS.

higher administrative costs related to implementing several new administrative requirements (e.g., new quality reporting initiatives, a revised cost report, and additional reporting requirements related to patient diagnoses and notices of election).

Taking these factors into account, we project an aggregate Medicare margin for hospices of 7.7 percent in 2016. The 2016 margin projection includes the effect of the budget sequester. This margin projection excludes

Background on efforts to foster improvements in hospice and end-of-life care

The share of Medicare beneficiaries receiving hospice at the end of life has increased dramatically since 2000. The Commission views this trend as a positive sign that beneficiaries are increasingly aware of hospice as an option for end-of-life care and are making choices based on their preferences. Despite this important development, a number of concerns about care for patients with advanced illnesses remain. More than one-quarter of hospice decedents enroll in hospice only in the last week of life, resulting in a length of stay that is commonly thought to be of suboptimal benefit to patients.

Beyond hospice, concerns also exist about the care patients with advanced illnesses or multiple chronic conditions receive more broadly, throughout the health care system. Care for these patients can often be fragmented and may not be consistent with patients' preferences. Recent efforts to address these issues include a new CMS demonstration program, the establishment of payment for advance care planning services under Medicare's physician fee schedule, the Commission's March 2014 recommendation to include hospice in the Medicare Advantage benefits package, and a recent Institute of Medicine report on end-of-life care.

Medicare Care Choices Model demonstration program

CMS has developed a demonstration to test concurrent palliative and conventional care. Under the Medicare Care Choices Model (MCCM) demonstration, beneficiaries who are hospice eligible but not enrolled in hospice will be permitted to enroll in the demonstration and receive palliative and supportive care from a hospice provider while continuing to receive "curative" care from other providers. The demonstration is intended to test whether beneficiaries would be willing to elect supportive palliative care from hospice providers and what the effect is on quality of care, cost of care, and whether beneficiaries will subsequently choose to enroll in the Medicare hospice benefit.

Unlike the hospice benefit, under the MCCM, care will be directed by the nonhospice curative provider who referred the beneficiary to the demonstration, and the hospice provider will play a supportive role. Hospices providing services under the MCCM "are expected to engage in shared decision making, care coordination and case management of the patient, family, and his/her providers; ensure that the patient's pain and symptoms are managed; offer appropriate levels of counseling; and address other care needs based on a comprehensive assessment and plan of care" (Centers for Medicare & Medicaid Services 2014). In-home nursing, aide services, and respite care are also offered under the MCCM. Hospices will be paid \$400 per month (or \$200 per half-month) for each enrollee in the MCCM, and beneficiaries will face no cost sharing for MCCM services.

To be eligible for participation in the demonstration, a fee-for-service (FFS) beneficiary must have had 2 inpatient hospitalizations in the previous 12 months, have certain diagnoses (advanced cancers, chronic obstructive pulmonary disease, congestive heart failure, or HIV/AIDS), live at home (not an assisted living facility or nursing facility), and meet the hospice eligibility criteria (a life expectancy of 6 months or less if the disease runs its normal course). The beneficiary must also be referred to the demonstration by a provider with whom the beneficiary had at least 3 office visits in the preceding 12 months for the diagnosis that qualifies the beneficiary for the demonstration. The referring provider must certify that the beneficiary meets the demonstration eligibility criteria.

The demonstration will span five years, from January 1, 2016, to December 31, 2020. CMS selected about 140 hospice providers to participate and anticipates that up to 150,000 beneficiaries may be able to participate. The demonstration will be implemented in two phases. Half of hospice providers selected for the demonstration will begin participating in January 2016 and the other half will begin in January 2018.

Advance care planning services

Advance care planning can make it easier for interested beneficiaries to create advance directives and physician

(continued next page)

Background on efforts to foster improvements in hospice and end-of-life care (cont.)

or medical orders for life-sustaining treatment and can help facilitate care that is consistent with individual patients' preferences. Beginning in 2016, Medicare will cover advance care planning conversations for beneficiaries who wish to receive these services. Medicare pays for advance care planning conversations between a beneficiary and his or her physician, advanced practice registered nurse, or physician assistant under the physician fee schedule.

The Commission's recommendation to include hospice in the Medicare Advantage benefits package

Currently, hospice is not included in the Medicare Advantage (MA) benefits package. When an MA enrollee elects hospice, the beneficiary typically remains in the MA plan, but hospice services are paid for by FFS Medicare. This carve-out of hospice from MA fragments financial responsibility and accountability for care for MA enrollees who elect hospice.

In March 2014, the Commission recommended that hospice be included in the MA benefits package. This step would give plans responsibility for the full continuum of care and promote integrated, coordinated care, consistent with the goals of the MA program. With the inclusion of hospice in the MA benefits package, plans would have an incentive to use the flexibility inherent in the MA program to develop and test innovative programs aimed at improving end-of-life care and care for patients with advanced illnesses more broadly (e.g., concurrent care or other approaches to provide flexibility in the hospice eligibility criteria, palliative care, and shared decision making).

Institute of Medicine recommendations

The Institute of Medicine (IOM) recently issued a report making recommendations on how to improve end-of-life care in the United States (Institute of Medicine 2014). Several recommendations were in the area of policies and payment systems, including:

- integrating financing of medical and social services;
- instituting public reporting on quality measures, outcomes, and costs of care near the end of life for Medicare and other federally funded health care programs;
- creating financial incentives for medical and social services that reduce emergency department use and acute care services, coordination of care across providers and settings, and improved shared decision making and advance care planning;
- requiring use of interoperable electronic health care records that contain specific information on advance care planning; and
- encouraging states to adopt the Physician Orders for Life-Sustaining Treatment paradigm.

Other IOM recommendations included coverage by government insurers and other payers for comprehensive care for patients with advanced illnesses nearing the end of life, development and adoption of quality measures for clinician–patient conversations and advance care planning, steps to improve palliative care knowledge and skills among medical professionals, and public education and engagement efforts to provide factual information about care options and to encourage advance care planning and informed choices based on individual needs and preferences. ■

nonreimbursable costs associated with bereavement services and volunteers (which, if included, would reduce margins by at most 1.4 percentage points and 0.3 percentage point, respectively). The margin projection also does not include any adjustment to remove the effect of the

higher indirect costs observed among hospital-based and home health–based hospices (which, if such an adjustment were made, would increase the overall aggregate Medicare margin by up to 2 percentage points).

How should Medicare payments change in 2017?

Update recommendation

RECOMMENDATION 11

The Congress should eliminate the update to the hospice payment rates for fiscal year 2017.

RATIONALE 11

Our indicators of hospice payment adequacy are generally positive. The number of hospices increased more than 4 percent in 2014 because of continued entry of for-profit providers. The number of beneficiaries enrolled in hospice increased modestly, and average length of stay held steady. Access to capital appears adequate. The projected 2016 aggregate Medicare margin is 7.7 percent. Based on our assessment of the payment adequacy indicators, hospices should be able to accommodate cost changes in 2017 without an update to the 2016 base payment rate.

Spending

- Under current law, hospices would receive an update in fiscal year 2017 equal to the hospital market basket index (currently estimated at 3.0 percent), less an adjustment for productivity (currently estimated at 0.5 percent). Hospices may also face an additional 0.3 percentage point reduction in the fiscal year 2016 update, depending on whether certain targets for health insurance coverage among the working-age population are met. As a result, hospices would receive a net update of 2.2 percent or 2.5 percent (based on current estimates). Our recommendation to eliminate the payment update in fiscal year 2017 would decrease federal program spending relative to the statutory update by between \$250 million and \$750 million over one year and between \$1 billion and \$5 billion over five years.

Beneficiary and provider

- We do not expect this recommendation to have adverse effects on beneficiaries' access to care. This recommendation is not expected to affect providers' willingness and ability to care for Medicare beneficiaries. ■

Endnotes

- 1 If a beneficiary does not have an attending physician, the beneficiary can initially elect hospice based on the certification of the hospice physician alone.
- 2 When first established under TEFRA, the Medicare hospice benefit limited coverage to 210 days of hospice care. The Medicare Catastrophic Coverage Repeal Act of 1989 and the Balanced Budget Act of 1997 eased this limit.
- 3 In 2000, 30 percent of hospice providers were for profit, 59 percent were nonprofit, and 11 percent were government. As of 2014, about 63 percent of hospices were for profit, 32 percent were nonprofit, and 5 percent were government.
- 4 Hospice decedents in 2014 (i.e., beneficiaries who received hospice care in 2014 and died in 2014) had substantially fewer days of hospice care than hospice nondecedents (i.e., beneficiaries who received hospice care in 2014 but did not die in 2014).
- 5 The cap year spans November 1 through October 31 (i.e., cap year 2012 spanned November 1, 2011, to October 31, 2012). Medicare payments for the cap year reflect the sum of payments to a provider for services furnished in the cap year. The calculation of the beneficiary count for the cap year is more complex, involving two alternative methodologies. For a detailed description of the two methodologies and when they are applicable, see our March 2012 report (Medicare Payment Advisory Commission 2012).
- 6 This 2015 cap threshold was equivalent to an average length of stay of 172 days of routine home care for a hospice with a wage index of 1.
- 7 Action by the Congress and CMS will result in some changes to the cap calculation in future years. First, the Improving Medicare Post-Acute Care Transformation Act of 2014 (IMPACT) changed the annual update factor applied to the hospice aggregate cap for accounting years that end after September 30, 2016. Currently, the aggregate cap is updated annually based on the percentage increase in the medical care expenditure category of the consumer price index for all urban consumers. As a result of IMPACT, the aggregate cap will be updated annually by the same factor as the hospice payment rates (market basket net of productivity and other adjustments). Second, CMS in its 2016 hospice rulemaking finalized a policy to align the cap year with the federal fiscal year beginning cap year 2018.
- 8 Type of hospice reflects the type of cost report filed (i.e., a hospice files a freestanding hospice cost report or is included in the cost report of a hospital, home health agency, or skilled nursing facility). The type of cost report does not necessarily reflect the location where patients receive care. For example, all hospice types may serve some nursing facility patients.
- 9 The number of rural hospices is not necessarily reflective of hospice access for rural beneficiaries for several reasons. A count of the number of rural hospices does not capture the size of those hospice providers, their capacity to serve patients, or the size of their service area. Furthermore, a count of hospices located in rural areas does not take into account hospices with offices in urban areas that also provide services in rural areas.
- 10 The terms *curative care* and *conventional care* are often used interchangeably to describe treatments intended to be disease modifying.
- 11 Above-cap hospices are more likely to be for-profit, freestanding providers and to have smaller patient counts than below-cap hospices.
- 12 The estimates of hospices over the cap are based on the Commission's analysis. While the estimates are intended to approximate those of the CMS claims processing contractors, differences in available data and methodology have the potential to lead to different estimates. An additional difference between our estimates and those of the CMS contractors relates to the alternative cap methodology that CMS established in the hospice final rule for 2012 (Centers for Medicare & Medicaid Services 2011). Based on that regulation, for cap years before 2012, hospices that challenged the cap methodology in court or made an administrative appeal had their cap payments calculated from the challenged year going forward using a new, alternative methodology. For cap years from 2012 onward, all hospices will have their cap liability calculated using the alternative methodology unless they elected to remain with the original method. For estimation purposes, we assume that the CMS contractors used the alternative methodology for cap year 2012. Estimates for cap years 2011 and earlier assumed that the original cap methodology was used.
- 13 This policy—which requires a hospice to estimate its cap liability within three to five months of the cap year's close and remit the calculated overpayments to CMS at that time or face suspension of their payments—should create greater awareness of cap overpayment liabilities by providers and make it more likely that Medicare will collect at least a portion of the overpayments from all above-cap hospices. Because of how the aggregate cap calculation is structured, the amount a hospice owes when the calculation is performed three to five months after the cap year's close will be less

- than the full amount the hospice owes when the Medicare contractor reconciles the calculation at a later date with more complete claims data. Thus, this policy should ensure that hospices pay a portion of their cap overpayments up front and be liable for the remainder of the overpayments at a later date.
- 14 The initial two quality measures were (1) the share of patients who reported being uncomfortable because of pain at admission whose pain was brought to a comfortable level within 48 hours and (2) whether the hospice tracked at least 3 quality measures focused on patient care (and what those measures were).
 - 15 CMS discontinued collection of the pain outcome measure it adopted in the first year of the reporting program because a high rate of patient exclusion made the measure unstable and because the measure was inconsistently administered across providers.
 - 16 Abt Associates defined skilled visits as visits by a nurse, therapist, social worker, or hospice physician. Their measure does not include visits by a hospice aide, spiritual counselor, or volunteer.
 - 17 Our analysis uses the broadest measure of live discharges—live discharges that are initiated by the hospice and live discharges that are initiated by the beneficiary. Some stakeholders argue that certain live discharges initiated by the beneficiary—those in which the beneficiary revokes his or her hospice enrollment—should not be included in a live-discharge measure because they reflect beneficiary preferences and are not in the control of the hospice. Because there are a wide range of reasons a beneficiary may choose to revoke hospice, some of which could be linked to the hospice provider’s business practices or quality of care, we have included those live discharges in our measure. Since our analysis focuses on hospices with unusual live-discharge patterns, the inclusion of revocations in our measure would affect the results only to the extent that a hospice provider has an unusual amount of revocations compared with its peers. Analysis of claims data indicates that there are some providers with unusually high live-discharge rates, in which most (and in some cases almost all) of the live discharges are revocations. Providers with this pattern of live discharges would be missed if revocations were excluded from the live-discharge measure.
 - 18 While it may be difficult to interpret high live-discharge rates for individual providers with small patient populations, the aggregate live-discharge rate (based on combined data for similarly sized hospices) is higher for small hospice providers than large providers. In 2014, the aggregate live-discharge rate for providers with 50 or fewer discharges annually was about 34 percent compared with 17 percent for larger providers.
 - 19 The cost per day calculation reflects aggregate costs for all types of hospice care (routine home, continuous home, general inpatient, and inpatient respite care). *Days* reflects the total number of days the hospice is responsible for care for its patients, regardless of whether the patient received a visit on a particular day. The cost per day estimates are not adjusted for differences in case mix or wages across hospices and are based on data for all patients, regardless of payer.
 - 20 The aggregate Medicare margin is calculated as follows: $((\text{sum of total payments to all providers}) - (\text{sum of total costs to all providers}) / (\text{sum of total payments to all providers}))$. Estimates of total Medicare costs come from providers’ cost reports. Estimates of Medicare payments and cap overpayments are based on Medicare claims data. We present margins for 2013 for several reasons. Cost reporting year 2013 is the most recent period for which we have a complete set of claims data. For some hospices, cost reporting year 2013 includes part of calendar year 2014. Our margin estimates also exclude cap overpayments to providers. To calculate this exclusion accurately, we need the next year’s claims data (e.g., the 2013 cap overpayment calculation requires 2014 claims data).
 - 21 Across all providers, about two-thirds of hospice revenues during cost reporting year 2013 occurred while the sequester was in effect.
 - 22 Hospices that exceed the Medicare aggregate cap are required to repay the excess to Medicare. We do not consider the overpayments to be part of hospice revenues in our margin calculation.
 - 23 Our margin estimates also do not take into account revenues or costs from fundraising and donations.
 - 24 These estimates are adjusted to account for differences in patient volume across freestanding and provider-based hospices.

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CHAPTER

12

The Medicare Advantage program: Status report

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

- 12-1** The Congress should eliminate the cap on benchmark amounts and the doubling of the quality increases in specified counties.

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

-
- 12-2** The Congress should direct the Secretary to:

- develop a risk adjustment model that uses two years of fee-for-service (FFS) and Medicare Advantage (MA) diagnostic data and does not include diagnoses from health risk assessments from either FFS or MA, and
- then apply a coding adjustment that fully accounts for the remaining differences in coding between FFS Medicare and Medicare Advantage plans.

COMMISSIONER VOTES: YES 16 • NO 1 • NOT VOTING 0 • ABSENT 0

.....

(Additionally, the Commission reiterates its March 2014 recommendations on improving the bidding rules in the MA program and integrating hospice care into the MA benefit package and its March 2004 recommendation on allowing beneficiaries with end-stage renal disease to enroll in private plans. See text box, pp. 361–363.)

The Medicare Advantage program: Status report

Chapter summary

Each year, the Commission provides a status report on the Medicare Advantage (MA) program. In 2015, the MA program included 3,500 plan options, enrolled more than 16.7 million beneficiaries (30 percent of all beneficiaries), and paid MA plans about \$170 billion to cover Part A and Part B services. To monitor program performance, we examine MA enrollment trends, plan availability for the coming year, and payments for MA plan enrollees relative to spending for fee-for-service (FFS) Medicare beneficiaries. We also provide updates on risk adjustment, risk coding practices, and current quality indicators in MA. As a result of these analyses, we make recommendations to adjust benchmarks and risk coding.

The MA program gives Medicare beneficiaries the option of receiving benefits from private plans rather than from the traditional FFS Medicare program. The Commission strongly supports the inclusion of private plans in the Medicare program; beneficiaries should be able to choose between the traditional FFS Medicare program and alternative delivery systems that private plans can provide. Because Medicare pays private plans a per person predetermined rate rather than a per service rate, plans have greater incentives than FFS providers to innovate and use care-management techniques.

The Commission has emphasized the importance of imposing fiscal pressure on all providers of care to improve efficiency and contain Medicare program

In this chapter

- Trends in enrollment, plan availability, and payments
- MA risk adjustment and coding intensity adjustment
- Quality in the Medicare Advantage program

costs. For MA, the Commission previously recommended that payments be brought down from previous levels, which were generally higher than FFS, and be set so that the Medicare payment system is neutral and does not favor either MA or the traditional FFS program. Legislation has reduced the inequity in Medicare spending between MA and FFS. As a result, over the past few years, plan bids and payments have come down in relation to FFS spending while enrollment in MA continues to grow. The pressure of competitive bidding and lower benchmarks has led to improved efficiencies that enable MA plans to continue to increase MA enrollment by offering benefits that beneficiaries find attractive.

Previously, the Commission recommended a quality bonus program for MA; the Congress legislated such a program in the Patient Protection and Affordable Care Act of 2010, with bonuses available beginning in 2012. The data on quality indicate that plans are responding to the legislation by paying closer attention to the subset of quality measures that are the basis of bonus payments. In 2016, more plans have achieved quality ratings that would permit bonuses under the statutory provisions.

Enrollment—Between 2014 and 2015, enrollment in MA plans grew by about 6 percent (900,000 enrollees) to 16.7 million enrollees. About 30 percent of all Medicare beneficiaries (beneficiaries enrolled in Part A or Part B) were enrolled in MA plans in 2015, about the same rate as in 2014, but up from 28 percent in 2013. Among plan types, HMOs continued to enroll the most beneficiaries (11 million), with 20 percent of all Medicare beneficiaries in HMOs in 2015. Between 2014 and 2015, enrollment in local preferred provider organizations (PPOs) increased by about 9 percent and decreased in regional PPOs by about 1 percent. As expected because of legislation effective in 2010, enrollment in private fee-for-service (PFFS) plans continued to decrease from a high of 2.4 million enrollees in 2009 to about 300,000 enrollees in 2015.

Plan availability—Access to MA plans remains high in 2016, with most Medicare beneficiaries having access to a large number of plans. Almost all beneficiaries have had access to some type of MA plan since 2006, and HMOs and local PPOs have become more widely available in the past few years. Ninety-six percent of Medicare beneficiaries have an HMO or local PPO plan operating in their county of residence, up from 95 percent in 2015. Regional PPOs are available to 73 percent of beneficiaries, up from 70 percent in 2015. Forty-seven percent of beneficiaries have access to PFFS plans. Overall, 99 percent of all Medicare beneficiaries have access to an MA plan.

An analysis of the market structure of the MA program shows that, compared with 2007, MA enrollment is more heavily concentrated in 2015. The top 10 MA

organizations (ranked by enrollment) had 69 percent of total enrollment in 2015, compared with 61 percent in 2007. Despite this concentration, on average an increasing number of MA organizations are participating by county; between 2007 and 2015, the per county average number of MA organizations offering coordinated care plans (HMOs or PPOs) rose from 2.6 to 3.2. However, at the county level, enrollment is often concentrated in the top 10 organizations.

Plan payments—For 2016, the base county benchmarks (in nominal dollars and before any quality bonuses are applied) average approximately 3 percent higher than the benchmarks for 2015. (The benchmark that is compared to a specific plan bid is a plan-specific average, weighted by the plan’s enrollment from each county in its service area.) Also, for 2016, 70 percent of MA enrollees, up from a projected 59 percent in 2015, are projected to be in plans that will receive add-ons to their benchmarks through the quality bonus provisions. These quality bonus add-ons are either 5 percent or 10 percent. On average, the quality bonuses in 2016 will add 4 percent to the average plan’s (averaging both bonus and nonbonus plans) base benchmark, up from 3 percent added in 2015, and will add 3 percent to plan payments. We estimate that 2016 MA benchmarks (including the average 4 percent for quality bonuses), bids, and payments will average 107 percent, 94 percent, and 102 percent of FFS spending, respectively.

Removing quality bonuses from the benchmarks, we expect the base benchmarks to average 102 percent of FFS in 2017 and thus approach rough equity with FFS. Nonetheless, there are equity issues surrounding the distribution of benchmarks and payments. Currently, CMS’s calculation of FFS spending, on which MA benchmarks are based, needs refinement to be more representative of FFS spending for the beneficiaries who can enroll in MA plans (i.e., those who are enrolled in both Part A and Part B); benchmark caps can unduly penalize plans that exceed the cap, often through reduced quality bonuses; and legislation providing double quality bonuses to qualified counties inequitably raises these bonuses for some counties without commensurate quality improvements. Therefore, we recommend eliminating the benchmark caps and double quality bonuses to improve intercounty benchmark equity.

Risk adjustment and coding intensity—Medicare payments to plans for an enrollee are based on the plan’s payment rate and the enrollee’s health risk score. Analyses have shown that MA plan enrollees have higher risk scores than similar FFS beneficiaries because of plans’ more intensive coding efforts. As mandated by the Deficit Reduction Act of 2005, CMS makes an across-the-board adjustment to the risk scores to make them more consistent with FFS coding. We find that CMS would need to increase the coding adjustment (i.e., lower enrollees’ risk scores)

and/or change the way diagnoses are collected for use in the risk adjustment process to ensure the coding levels in aggregate are roughly equal between the FFS and MA programs. Specifically, we consider an alternative approach to adjust for coding differences that would (1) remove health risk assessments as a source of diagnoses from risk adjustment calculations, (2) use two years of FFS and MA diagnostic data in the risk adjustment model, and (3) apply an across-the-board adjustment of appropriate size such that the combined effect eliminates the impact of differences in MA and FFS coding intensity.

Quality measures—A comparison of the most current results for MA quality indicators relative to last year shows that performance improved in several measures, declined for one measure among HMOs, and slightly declined in patient experience measures. In general, quality indicators remained stable, but a number of measures had specification changes that did not allow us to determine year-over-year changes in the measure results.

MA plans are able to receive bonus payments if they achieve an overall rating of 4 stars or higher on CMS’s 5-star rating system. Although the distribution of plans at different star levels changed between the 2015 star ratings and the 2016 star ratings, there was little change in the enrollment-weighted average star ratings for the 331 plans that had a star rating for both rating periods. However, across all plans, the share of enrollees in bonus-level plans increased. Among 363 plans with an overall 2016 star rating, 173 (48 percent) have a star rating of 4 stars or higher; as of October 2015, these bonus-eligible plans include 70 percent of MA enrollment. In the preceding year, among 389 plans with an overall 2015 star rating, 153 MA plans (39 percent) had a star rating of 4 or higher, representing 59 percent of the 2014 enrollment. The smaller number of plans with ratings and the greater share of enrollees in bonus-eligible plans is partly due to contract consolidations whereby an organization combines multiple plans under one surviving plan. For 2016, 16 contracts with lower than 4-star ratings have had their enrollees incorporated into 4-star or 4.5-star contracts.

The Commission and CMS have examined the question of whether the star rating system should take into account population differences when analyses indicate that there are systematic differences in measure results—specifically for low-income beneficiaries and beneficiaries with disabilities. Both the Commission and CMS have found systematic differences among these populations in certain measures, but the effects across plans are relatively small. CMS is considering making adjustments to the star rating system to address the potential bias in star ratings. ■

Background

The Medicare Advantage (MA) program allows Medicare beneficiaries to receive benefits from private plans rather than from the traditional fee-for-service (FFS) program. In 2015, the MA program included 3,500 plan options and enrolled more than 16.7 million beneficiaries (30 percent of all beneficiaries). Medicare paid MA plans about \$170 billion to cover Part A and Part B services. The Commission supports including private plans in the Medicare program because they allow beneficiaries to choose between FFS Medicare and alternative delivery systems that private plans can provide. Plans often have flexibility in payment methods, including the ability to negotiate with individual providers, care-management techniques that fill potential gaps in care delivery (e.g., programs focused on preventing avoidable hospital readmissions), and robust information systems that provide timely feedback to providers. Plans also can reward beneficiaries for seeking care from more efficient providers and give beneficiaries more predictable cost sharing; one trade-off is that plans often restrict the choice of providers.

By contrast, traditional FFS Medicare has lower administrative costs and offers beneficiaries an unconstrained choice of health care providers among those who accept Medicare payment, but it lacks incentives to coordinate care and is limited in its ability to modify care delivery. Because private plans and traditional FFS Medicare have structural aspects that appeal to different segments of the Medicare population, we favor providing a financially neutral choice between private MA plans and traditional FFS Medicare. Medicare's payment systems should not unduly favor one component of the program over the other.

Efficient MA plans may be able to capitalize on their administrative flexibility to provide better value to beneficiaries who enroll in their plans. However, some of the extra benefits that MA plans provide to their enrollees result from payments that would have been lower under FFS Medicare for similar beneficiaries. Thus, those benefits are financed by higher government spending and higher beneficiary Part B premiums (including for those who are in traditional FFS Medicare) at a time when Medicare and its beneficiaries are under increasing financial stress. To encourage efficiency and innovation, MA plans need to face some degree of financial pressure, just as the Commission recommends for providers in

the traditional FFS program. One method of achieving financial neutrality is to link private plans' payments more closely to FFS Medicare costs within the same market. Alternatively, neutrality can be achieved by establishing a government contribution that is equally available for enrollment in either FFS Medicare or an MA plan. The Commission will continue to monitor the effect of changes mandated by the Patient Protection and Affordable Care Act of 2010 (PPACA) on plan payments and performance and track progress toward financial neutrality.

Each year, the Commission provides a status report on the MA program. To monitor program performance, we examine MA enrollment trends, plan availability for the coming year, and payments for MA plan enrollees relative to spending for FFS Medicare beneficiaries. We also provide updates on risk adjustment, risk coding practices, and current quality indicators in MA. As a result of these analyses, we make recommendations to adjust benchmarks and risk coding.

Trends in enrollment, plan availability, and payments

In contrast to traditional FFS Medicare, MA enrolls beneficiaries in several types of private health plans. Medicare pays plans a fixed rate per enrollee rather than a fixed rate per service.

Types of MA plans

Our analysis of the MA program uses the most recent data available and reports results by plan type. The plan types are:

- ***HMOs and local preferred provider organizations (PPOs)***—These plans have provider networks and can use tools such as selective contracting and utilization management to coordinate and manage care and control service use.¹ They can choose individual counties to serve and can vary their premiums and benefits across counties. These two plan types are classified as coordinated care plans (CCPs).
- ***Regional PPOs***—These plans are required to offer a uniform benefit package and premium across designated regions made up of one or more states. Regional PPOs have more flexible network requirements than local PPOs. Regional PPOs are also classified as CCPs.

- **Private FFS (PFFS) plans**—PFFS plans are not classified as CCPs. Before 2011, PFFS plans typically did not have provider networks, making them less able than other plan types to coordinate care. They usually paid providers Medicare’s FFS payment rates (instead of negotiated rates) and had fewer quality reporting requirements. Because PFFS plans generally lacked care coordination, had lower quality measures than CCPs on the measures they reported, paid Medicare FFS rates, and had higher administrative costs than traditional FFS Medicare, they were viewed as providing little value. In response, the Medicare Improvements for Patients and Providers Act of 2008 mandated that, in areas with two or more CCP plans, PFFS plans can be offered only if they have provider networks. PFFS plans are also now required to participate in quality reporting. Existing PFFS plans had to either locate in areas with fewer than two network plans or develop provider networks themselves, which in effect would change them into PPOs or HMOs, or they would operate as network-based PFFS plans.

Two additional plan classifications cut across plan types. Special needs plans (SNPs) are one of these classifications; they offer benefit packages tailored to specific populations (those beneficiaries who are dually eligible for Medicare and Medicaid, are institutionalized, or have certain chronic conditions). SNPs must be CCPs. The second classification is employer group plans, which are available only to Medicare beneficiaries who are members of employer or union groups that contract with those plans. Employer group plans cannot be PFFS plans. Both SNPs and employer group plans are included in our plan data, with the exception of plan availability figures because these plans are not available to all beneficiaries. (See the Commission’s March 2013 report to the Congress for more detailed information on SNPs.)

How Medicare pays MA plans

Plan payment rates are determined by the MA plan bid, which represents the dollar amount the plan estimates will cover the Part A and Part B benefit package for a beneficiary of average health status, and the payment area’s benchmark, which is the maximum amount of Medicare payment set by law for an MA plan to provide Part A and Part B benefits. (Medicare also pays plans for providing the Part D drug benefit, but the Medicare payments for Part D are determined through the Part

D bidding process, and not all plans include the Part D benefit.) Plans with higher quality ratings are rewarded with a higher benchmark. (The benchmark that is compared to a specific plan bid is a plan-specific average, weighted by the plan’s enrollment from each county in its service area.) If a plan’s bid is above the benchmark, its MA payment rate is equal to the benchmark and enrollees have to pay a premium (in addition to the usual Part B premium) equal to the difference. If a plan’s bid is below the benchmark, its payment rate is its bid plus a percentage (between 50 percent and 70 percent depending on a plan’s quality ratings) of the difference between the plan’s bid and the benchmark; the beneficiary pays no premium to the plan for the Part A and Part B benefits (but continues to be responsible for payment of the Medicare Part B premium and may pay premiums to the plan for additional benefits). The payment amount above the bid is referred to as the rebate. The rebate must be used by the plan to provide additional benefits to enrollees in the form of lower cost sharing, lower premiums, or supplemental benefits. (The valuation of the rebate can be fully loaded, meaning that the plan can devote some of the rebate to administration costs and margins.) Plans may also choose to include additional supplemental benefits in their packages and charge premiums to cover those additional benefits. (A more detailed description of the MA program payment system can be found at <http://medpac.gov/documents/payment-basics/medicare-advantage-program-payment-system-15.pdf?sfvrsn=0>).

Because benchmarks have historically been set well above what it costs Medicare to provide benefits to similar beneficiaries in the FFS program, MA payment rates usually exceed FFS spending. In past reports, we examined why benchmarks are above FFS spending and what the ramifications are for the Medicare program. In 2015, Part A and Part B payments to MA plans totaled approximately \$170 billion.

MA plan enrollment continued to grow faster than total Medicare beneficiary growth in 2015

Between November 2014 and November 2015, enrollment in MA plans grew by about 6 percent—or 0.9 million enrollees—to 16.7 million enrollees (compared with growth of about 3 percent in the same period for the total Medicare population). About 30 percent of all Medicare beneficiaries were enrolled in MA plans in 2015, about the same as in 2014 (Table 12-1).

**TABLE
12-1****Medicare Advantage plan enrollment continued to grow faster than total Medicare beneficiary growth in 2015**

	MA enrollment (in millions)		Percent change in enrollment	2015 MA enrollment as a share of total Medicare
	November 2014	November 2015		
Total	15.8	16.7	6%	30%
Plan type				
CCP	15.5	16.4	6	30
HMO	10.4	11.0	6	20
Local PPO	3.8	4.2	9	8
Regional PPO	1.3	1.3	-1	2
PFFS	0.3	0.3	-15	0
Restricted availability plans included in totals above				
SNPs*	2.1	2.1	3	4
Employer group*	3.0	3.2	5	6
Urban/rural				Share of Medicare population in MA
Urban	13.9	14.5	4	33
Rural	1.9	2.2	15	21

Note: MA (Medicare Advantage), CCP (coordinated care plan), PPO (preferred provider organization), PFFS (private fee-for-service), SNP (special needs plan). CCPs include HMO, local PPO, and regional PPO plans. The sum of column components may not equal the stated total due to rounding.

* SNPs and employer group plans have restricted availability. Their enrollment is included in the statistics by plan type and location. We present them separately to provide a more complete picture of the MA program.

Source: MedPAC analysis of CMS enrollment files.

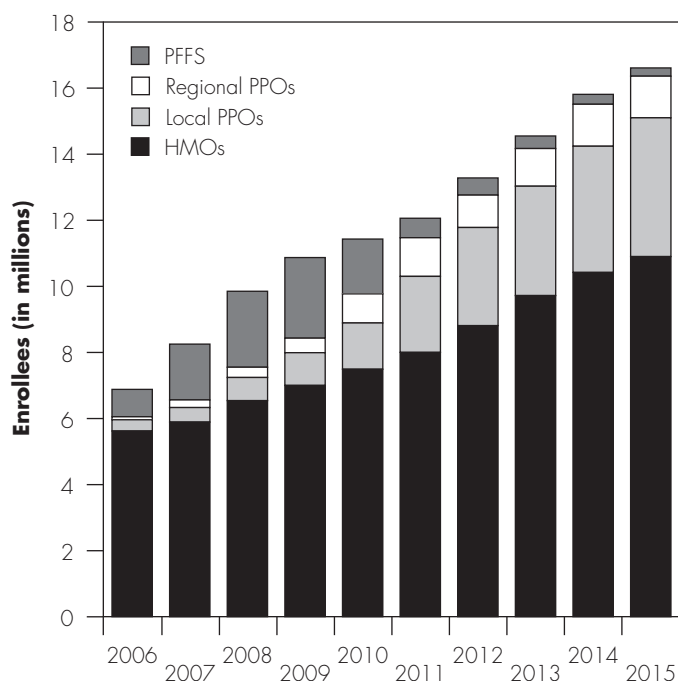
Previous work we did suggests that many beneficiaries enroll in MA immediately upon becoming eligible, but that more initially enroll in FFS Medicare and then subsequently move to MA. For more on enrollment patterns, see our March 2015 report (Medicare Payment Advisory Commission 2015).

Among plan types, HMOs continued to enroll the most beneficiaries (11 million), with 20 percent of all Medicare beneficiaries in HMOs in 2015. Between 2014 and 2015, enrollment in local PPOs continued to grow, by about 9 percent. Regional PPO enrollment decreased by about 1 percent. As expected because of legislation effective in 2010, PFFS enrollment continued to decrease from a high of 2.4 million enrollees in 2009 to about 300,000 enrollees in 2015 (Table 12-1). In 2015, SNP enrollment grew by 3 percent and employer group enrollment grew by 5 percent.

Enrollment patterns differ in urban and rural areas. A larger share of urban beneficiaries are enrolled in MA (about 33 percent) compared with beneficiaries residing in rural counties (about 21 percent). About one-third of rural MA enrollees were in HMO plans (not shown in Table 12-1) compared with over 70 percent of urban enrollees. By contrast, 6 percent of rural enrollees were in PFFS plans compared with 1 percent of urban enrollees.

The percentage of Medicare beneficiaries enrolled in MA plans in 2015 varied widely by geography. In some metropolitan areas, less than 1 percent of Medicare beneficiaries were enrolled in MA plans (Anchorage, AK), whereas in other areas, enrollment was 60 percent or more (Miami, FL; Pittsburgh, PA; Rochester, NY; and several areas in Puerto Rico).

Growth in MA enrollment in 2015 continued a trend begun in 2003. Since 2003, enrollment has more than

**FIGURE
12-1****Medicare Advantage
enrollment, 2006–2015**

Note: PFFS (private fee-for-service), PPO (preferred provider organization).

Source: MedPAC analysis of CMS enrollment files.

tripled (Figure 12-1 shows 2006 through 2015). Trends vary by plan type. HMOs have grown steadily each year since 2003, but growth in other plan types has been more variable.

Plan availability for 2016

Every year, we assess plan availability and projected enrollment for the coming year based on the bid data that plans submit to CMS. We find that access to MA plans remains high in 2016, with most Medicare beneficiaries having access to a large number of plans. Some measures of availability have improved for 2016. While almost all beneficiaries have had access to some type of MA plan since 2006, local CCPs have become more widely available in the past few years (Table 12-2). In 2016, 96 percent of Medicare beneficiaries have an HMO or local PPO plan operating in their county of residence, up from 95 percent in 2015 and up from 91 percent in 2010. Regional PPOs are available to 73 percent of beneficiaries, up from 70 percent in 2015.

Access to PFFS plans in 2016 is unchanged at 47 percent of beneficiaries. Overall, 99 percent of Medicare beneficiaries have access to an MA plan, and 99 percent have access to a CCP (not shown in Table 12-2), an increase from 98 percent in 2015.

The availability of SNPs has changed slightly and varies by the type of special needs population served. In 2016, 83 percent of beneficiaries reside in areas where SNPs serve beneficiaries who are dually eligible for Medicare and Medicaid (up from 82 percent in 2015), 50 percent live where SNPs serve institutionalized beneficiaries (up from 47 percent in 2015), and 54 percent live where SNPs serve beneficiaries with chronic conditions (down from 55 percent in 2015). Overall, 86 percent of beneficiaries reside in counties served by at least one type of SNP.

In 2016, 81 percent of Medicare beneficiaries have access to at least one MA plan that includes Part D drug coverage and charges no premium (beyond the Medicare Part B premium), compared with 78 percent in 2015. Twenty-seven percent of beneficiaries have access to plans that offer some reduction in the Part B premium (not shown in Table 12-2). Table 12-2 shows the average rebates for nonemployer, non-SNP plans. For 2016, rebates (which can include allocations to plan administration and profit margin) for nonemployer, non-SNP plans average \$81 per enrollee per month. The rebates are higher than in 2014 and 2015, but lower than in the peak year of 2012.

In most counties, a large number of MA plans are available to beneficiaries. For example, beneficiaries in Cleveland, OH; New York City; and Orange County, CA, can choose from at least 40 plans in 2016. At the other end of the spectrum, over 200 counties, representing 1 percent of beneficiaries, have no MA plans available; however, many of these beneficiaries have the option of joining cost plans (another managed care option under Medicare).² On average, nine plans are offered in each county in 2016, the same as in 2015. The plans offered include an average of nine CCPs in 2016, up from an average of eight in 2015 (Table 12-2 does not break out the number of CCPs, and there are non-CCPs offered in 2016, but not enough to make a difference when rounding). Plan availability can also be calculated, weighted by the number of beneficiaries living in the county, to give a sense of the number of plan choices available to the average beneficiary. According to that calculation, the average beneficiary has 18 plans, including 17 CCPs, available in 2016, up from 17 plans, including 16 CCPs, in 2015.

**TABLE
12-2****Access to Medicare Advantage plans remains high****Share of Medicare beneficiaries with access to MA plans by type**

Type of plan	2010	2011	2012	2013	2014	2015	2016
Any MA plan	100%	100%	100%	100%	100%	99%	99%
Local CCP	91	92	93	95	95	95	96
Regional PPO	86	86	76	71	71	70	73
PFFS	100	63	60	59	53	47	47
Special needs plans							
Dual eligible	79	76	78	82	82	82	83
Chronic disease	63	46	45	55	51	55	54
Institutional	49	47	41	46	47	47	50
Zero-premium plan with drug coverage	85	90	88	86	84	78	81
Average number of choices							
County weighted	21	12	12	12	10	9	9
Beneficiary weighted	30	26	19	19	18	17	18
Average rebate for nonemployer, non-SNP plans	\$74	\$83	\$85	\$81	\$75	\$76	\$81

Note: MA (Medicare Advantage), CCP (coordinated care plan), PPO (preferred provider organization), PFFS (private fee-for-service), SNP (special needs plan). CCPs include HMO, local PPO, and regional PPO plans. These figures exclude employer-only plans. Special needs plans are included in the three special needs plan rows but excluded from all other rows. A zero-premium plan with drugs includes Part D coverage and has no premium beyond the Part B premium.

Source: MedPAC analysis of CMS bid data and population reports.

Market structure of the Medicare Advantage program

In past reports and in this year's report, the Commission has written about the market structure of the Medicare Part D drug program. In this section, we provide a similar analysis of the market structure of the MA program and changes over time.

In 2015, 185 parent organizations offered MA plans or participated in the Medicare–Medicaid demonstration project for dually eligible Medicare beneficiaries (in which the plans operate as MA plans). For the 2016 contract year, 9 new organizations are offering MA plans, and 1 organization has discontinued its MA participation, resulting in 193 parent organizations offering plans in 2016. The types of organizations sponsoring MA plans range from multistate insurers to more local plans that can be sponsored by providers to highly specialized plans such as the chronic care special needs plans offered to beneficiaries with HIV/AIDS.

In 2015, 54 percent of MA enrollment was in the four largest parent organizations (Table 12-3, p. 336). The top 10 organizations (ranked by enrollment) had 69 percent of enrollment. There were 75 parent organizations with fewer than 10,000 enrollees each, accounting for about 1.5 percent of total MA enrollment. By contrast, in 2007, when total MA enrollment was about half the current level, the MA market was less concentrated in that the four largest organizations had 45 percent of total enrollment; the top 10 organizations had 61 percent of the total enrollment; and 99 organizations with under 10,000 enrollees had a little over 3 percent of total MA enrollment.

Looking at particular segments of the MA market, the top 10 organizations dominate the MA employer group market (which represents about one-fifth of MA enrollment). In 2015, 80 percent of MA employer group enrollment was in the top 10 parent organizations. Only 1 of the top 10 organizations (WellCare) had no employer group enrollment. For the top 10 organizations other than WellCare, the share of MA enrollment in employer

**TABLE
12-3****Parent organizations with the highest shares of MA enrollment, 2007 and 2015**

2007		2015	
Parent organization	Enrollment as a percent of total	Parent organization	Enrollment as a percent of total
UHC–Pacificare (UnitedHealth)	17%	UnitedHealth Group Inc.	20%
Humana Inc.	14	Humana Inc.	19
Kaiser Permanente	10	Aetna Inc.	7
Wellpoint Inc.	4	Kaiser Foundation Health Plan Inc.	7
Subtotals, top 4 organizations	45	Subtotals, top 4 organizations	54
Highmark Inc.	3	Anthem Inc. (formerly Wellpoint Inc.)	4
Coventry Health Care Inc.	3	Cigna	3
Health Net Inc.	3	Blue Cross Blue Shield of Michigan	2
Universal American Financial Corporation	3	WellCare Health Plans Inc.	2
Aetna Inc.	2	Highmark Health	2
Blue Cross Blue Shield of Michigan	2	Health Net Inc.	2
Totals, top 10 organizations	61	Totals, top 10 organizations	69

Note: MA (Medicare Advantage). Figures may not sum to stated totals due to rounding.

Source: MedPAC analysis of Medicare Advantage monthly contract reports and plan directories.

group plans ranged from 1 percent (Cigna) to 72 percent (Blue Cross Blue Shield of Michigan). One reason for the concentration of employer group enrollment in larger companies is that some of those companies have a national presence, and employers are able to contract with a single organization to serve retirees who move to different parts of the country when they retire. For this reason, also, many companies use MA PPO options for employer group enrollees: 62 percent of employer group MA enrollees are in local PPOs, compared with 15 percent among other MA enrollees.

SNPs are another market segment in MA. The level of concentration among the top 10 MA organizations listed in Table 12-3 varies by SNP type. In 2015, the top 10 organizations had:

- 53 percent of the enrollment of SNPs for Medicare–Medicaid dually eligible beneficiaries;
- 73 percent of chronic disease SNP enrollment; and
- 84 percent of the enrollment in SNPs for institutionalized beneficiaries (with 1 organization, UnitedHealth Group, the sponsor of Evercare,

accounting for 76 percent of all institutional special needs plans' (I–SNPs') enrollment).

While MA concentration has increased when measured by market shares of the largest companies, on average, the number of organizations competing in each geographic area is increasing. Between 2007 and 2015, the per county average number of available MA organizations offering CCPs (that is, HMOs or PPOs, in which plans are required to form provider networks) increased from 2.6 to 3.2 per county. In the 10 counties with the largest Medicare populations (representing 10 percent of the total Medicare population and 14 percent of MA enrollment), the average number of organizations per county rose from 11 to 16 (with only 1 large county, Miami-Dade, seeing a reduction in the number of MA organizations, from 16 to 14). There was a reduction in the number of organizations offering CCPs in 586 counties (where 14 percent of the Medicare population resided, with 16 percent of MA enrollment in October 2015), but 3 or more organizations remained available for 116 of the 586 counties. The 116 counties had the larger population share among the 586 counties. The 470 counties with fewer than 3 organizations remaining had 5 percent of the Medicare population and 2 percent of MA enrollment in October 2015. At the county level,

**TABLE
12-4****Projected payments are at or above FFS spending for all plan types in 2016**

Plan type	Percent of FFS spending in 2016		
	Benchmarks*	Bids	Payments
All MA plans	107%	94%	102%
HMO	106	90	101
Local PPO	109	105	108
Regional PPO	103	98	101
PFFS	111	108	110
Restricted availability plans included in totals above			
SNP**	105	94	101
Employer group**	108	103	106

Note: FFS (fee-for-service), MA (Medicare Advantage), PPO (preferred provider organization), PFFS (private fee-for-service), SNP (special needs plan). Benchmarks are the maximum Medicare program payments for MA plans and incorporate plan quality bonuses. We estimate FFS spending by county using the 2016 MA rate book. We removed spending related to the remaining double payment for indirect medical education payments made to teaching hospitals.

* Benchmarks include quality bonuses.

** SNPs and employer group plans have restricted availability, and their enrollment is included in the statistics by plan type. We have broken them out separately to provide a more complete picture of the MA program.

Source: MedPAC analysis of data from CMS on plan bids, enrollment, benchmarks, and fee-for-service expenditures.

enrollment is often concentrated among the organizations listed in Table 12-3. For example, as of October 2015, 79 percent of MA enrollees in non-SNP, non-employer-group plans reside in counties in which the top 10 organizations have over 50 percent of the MA enrollment, and 54 percent of such enrollees reside in counties in which the top 10 organizations have 70 percent or more of the MA enrollment. Looking at the top four organizations, 53 percent of non-SNP, non-employer-group-plan enrollees reside in a county in which the top four organizations have 50 percent or more of the MA enrollment; 28 percent of such enrollees are in counties where the top four organizations have 70 percent or more of the MA enrollment.

Currently, a number of mergers of health insurers are planned, including those among 4 of the top 10 organizations—the merger of Aetna and Humana and that of Anthem and Cigna. If these mergers are approved, we can expect to see concentration increase in the MA marketplace.

2016 benchmarks, bids, and payments relative to FFS spending

Using plans' bid projections, we compare the Medicare program's projected MA spending with projected FFS spending on a like set of FFS beneficiaries. We calculate

and present three sets of percentages: the benchmarks relative to projected FFS spending, the bids relative to projected FFS spending, and the resulting payments to MA plans relative to projected FFS spending. Benchmarks are set each April for the following year. Plans submit their bids in June and incorporate the recently released benchmarks. Benchmarks reflect FFS spending estimates for 2016 made by CMS actuaries at the time the benchmarks were published in April 2015. We estimate that 2016 MA benchmarks (including quality bonuses), bids, and payments will average 107 percent, 94 percent, and 102 percent of FFS spending, respectively (Table 12-4), the same as last year.

MA benchmarks

Under PPACA, county benchmarks in 2016 are transitioning to a system in which each county's benchmark in 2017, excluding quality bonuses, will be a certain percentage (ranging from 95 percent to 115 percent, subject to caps) of the average per capita FFS Medicare spending for the county's residents. Each county's benchmark in 2017, excluding quality bonuses, is determined by organizing the counties into quartiles based on their FFS spending. Counties (excluding the territories) are ranked by average FFS spending; the highest spending quartile of counties have benchmarks set at 95 percent of local FFS spending. The next highest

spending quartile of county benchmarks is set at 100 percent of FFS spending, followed by the third highest quartile set at 107.5 percent of FFS spending. The lowest spending quartile has benchmarks set at 115 percent of local FFS spending. Each quartile contains 786 or 787 counties, except the lowest spending quartile, which also contains the U.S. territories. Low-FFS-spending counties will have benchmarks higher than FFS to help attract plans, and high-FFS-spending counties will have benchmarks lower than FFS to generate Medicare savings. Plans awarded quality bonuses will have benchmarks 5 percent higher than the standard county benchmarks, and in certain counties (where plans receive the double bonus), the benchmarks for plans awarded quality bonuses will be 10 percent higher than the standard benchmarks.

The transition from old benchmarks will be complete by 2017. (See the Commission's March 2011 report to the Congress for more details on PPACA benchmark changes.) In 2016, four-fifths of all counties have base benchmarks (not including quality payments in the base) that have fully transitioned to the final PPACA levels. These counties include 70 percent of all Medicare beneficiaries and 68 percent of MA enrollees. Overall, about 90 percent of the dollar changes in the base benchmarks transition has occurred:

- In 2011, plan base benchmarks averaged 113 percent of FFS spending.
- In 2016, plan base benchmarks average 103 percent of FFS spending.
- In 2017, fully transitioned base benchmarks are expected to average about 102 percent of FFS spending.

For 2016, the base county benchmarks (in nominal dollars and before any quality bonuses are applied) average approximately 3 percent more than the benchmarks for 2015. Also, for 2016, 70 percent of MA enrollees, up from a projected 59 percent in 2015, are projected to be in plans that will receive add-ons to their benchmarks through the PPACA quality bonus provisions. These quality bonus add-ons are either 5 percent or 10 percent of FFS spending. On average, the quality bonuses add 4 percent to the benchmarks in 2016, while the bonuses added 3 percent to the benchmarks on average in 2015.³

MA bids and payments for different plan types

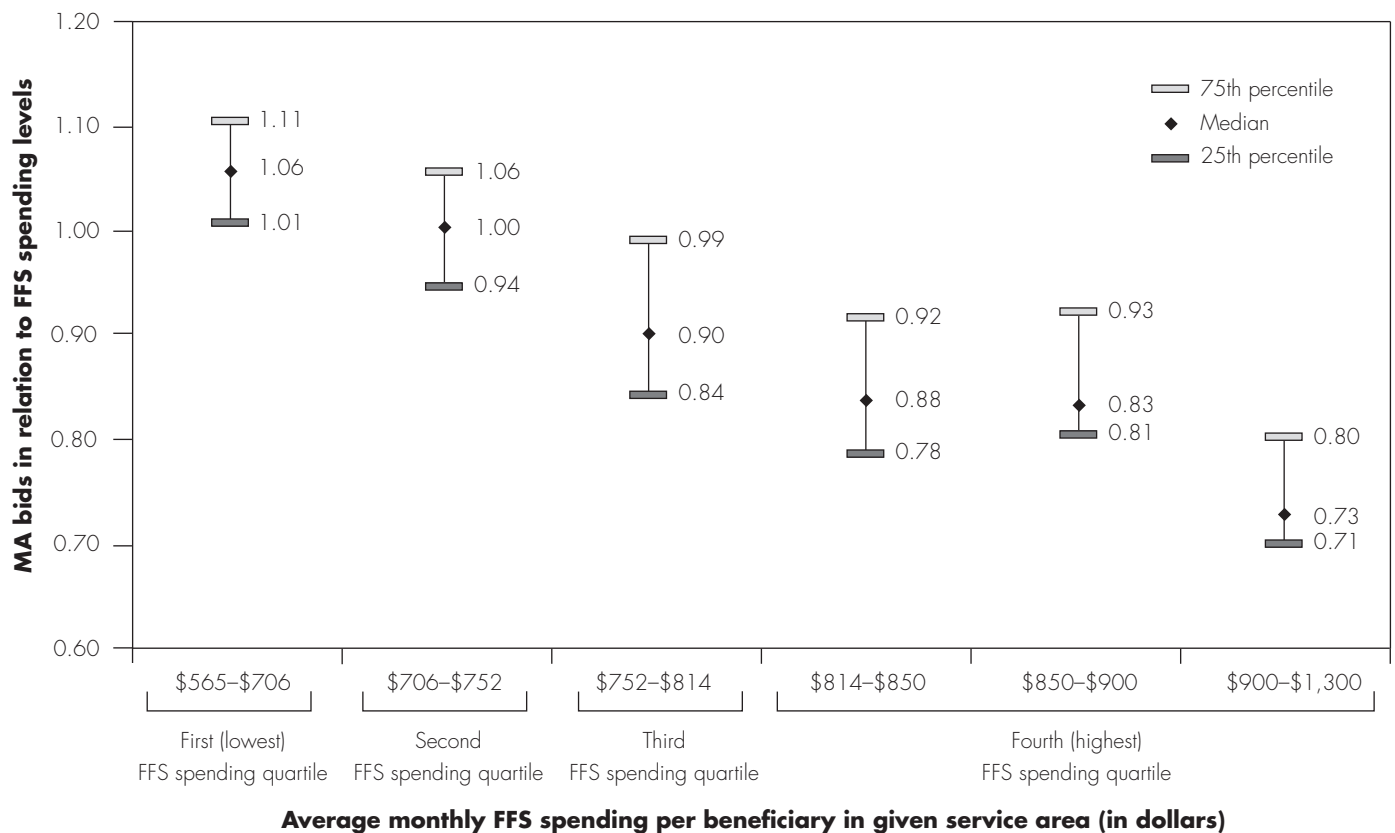
The modest growth in benchmarks over the past few years may have exerted fiscal pressure on MA plans and encouraged them to better control costs and restrain

growth in their bids. The average bid for 2016 is 94 percent of the projected FFS spending for beneficiaries with similar geographic and risk profiles, unchanged from 2015. About 63 percent of nonemployer plans bid to provide Part A and Part B benefits for less than what the FFS Medicare program would spend to provide these benefits in 2016. These plans are projected to enroll 68 percent of nonemployer MA enrollees in 2016. About 1 million beneficiaries, excluding those enrolled in employer group MA plans, are projected to enroll in plans that bid lower than 73 percent of FFS spending, while a similar number of beneficiaries are projected to enroll in plans that bid at least 112 percent of FFS spending.

Figure 12-2, illustrating over 2,000 plan bids (excluding roughly 1,500 employer plans, SNPs, and plans in the territories), shows how plans bid relative to FFS for service areas with different ranges of FFS spending. The first three FFS spending ranges roughly correspond to the FFS ranges in the first three payment rate quartiles in the PPACA payment rules for 2016. We broke the fourth quartile into three FFS spending ranges because a substantial share of Medicare beneficiaries—about 35 percent—live in counties in the highest spending quartile. Each of the 6 FFS ranges covers the bids of at least 110 plans and 1.2 million projected enrollees.

Plans bid low (relative to FFS) in areas with relatively high FFS spending. When plans bid for service areas that average less than \$706 in monthly FFS spending, they are likely to bid more than FFS (Figure 12-2). However, when plan service areas average more than \$706 per month in FFS spending, plans are likely to bid below (sometimes far below) the FFS level. This finding suggests that, geographically, plan costs do not vary as much as FFS spending. Ninety-eight percent of beneficiaries live in a county served by at least one plan that bid below the average FFS spending of its service area. However, that does not mean that plans can bid lower than FFS in every county because plans with large service areas and a geographically dispersed membership are probably not considering exactly how their costs will vary in each county they serve.⁴ While the bidding and payment patterns are reported here as averages, clearly there is much variation within these averages (Table 12-4, p. 337; Figure 12-2).

Although plan bids average less than FFS spending, payments for enrollees in these plans usually exceed such spending because the benchmarks (including the quality bonuses) are high relative to FFS spending. Overall, plan

**FIGURE
12-2****Medicare Advantage bids in relation to FFS spending levels, 2016**

Note: FFS (fee-for-service), MA (Medicare Advantage). Excludes employer group plans, special needs plans, and plans in the territories.

Source: MedPAC analysis of MA bid and FFS expenditure data from CMS.

bids average 94 percent of expected FFS spending for beneficiaries with similar geographic and risk profiles in 2016, but because the benchmarks average 107 percent of FFS spending, Medicare pays an average of 102 percent of FFS for beneficiaries enrolled in MA. (Excluding quality bonuses, Medicare benchmarks average 103 percent of FFS, and Medicare payments average 99 percent of FFS for MA enrollees.)

The ratio of MA plan payments to FFS spending varies by plan type, but the ratios for all plan types are at or higher than 100 percent of FFS. For example, HMOs as a group bid an average of 90 percent of FFS spending, yet 2016 payments for HMO enrollees are estimated to average 101 percent of FFS spending because the benchmarks average 106 percent of FFS spending. Local PPOs and PFFS plans have average bids above FFS spending. As

a result, payments for local PPO and PFFS enrollees are estimated to be 108 percent and 110 percent, respectively, of FFS spending. Payments for beneficiaries enrolled in regional PPOs averaged 101 percent of FFS because of the relatively low benchmarks for the regional PPOs.

We also analyzed bids and payments to SNPs and employer plans separately because the plans are available only to subpopulations of Medicare beneficiaries and bidding behavior may differ from that of other plan types. In the past, payments to SNPs and their bids tended to be slightly higher relative to FFS spending than payments to the other MA plans. This year in aggregate, however, SNP bids and payments look much like the average plan.

Employer group plans consistently bid higher than plans that are open to all Medicare beneficiaries. Employer

groups bid an average of 103 percent of FFS compared with 92 percent of FFS for nonemployer plans (not shown in Table 12-4, p. 337). Medicare pays 106 percent of FFS for employer plan enrollees.

In the past, we have recommended that CMS pay employer plans differently because the employer bids are not usually submitted for a competitive purpose, while the bids for nonemployer plans are submitted to compete for enrollment. (For more details on employer plans and our recommendation, see our March 2014 report to the Congress, available at <http://www.medpac.gov>.) We have reprinted this recommendation, as well as two other previous recommendations that seek to make MA a choice for the complete Medicare benefit by including the FFS hospice benefit in the MA benefit package and by removing the exclusion of most end-stage renal disease (ESRD) beneficiaries from MA eligibility.⁵

MA plan margins

In last year's March report, we provided information about MA plan margins based on 2012 historical data that plans provided as part of their 2014 bid submissions (Medicare Payment Advisory Commission 2015). We found the industry-wide margin for Part C (that is, MA revenue and expenditures excluding Part D) to be 4.9 percent. However, we commented that we expected margins in subsequent years to be lower because of the sequestration that went into effect as of April 2013 and because plans were preparing to meet a medical loss ratio requirement as of 2014.

Using 2013 historical data from the 2015 bids, we find that the aggregate Part C margin for MA plans in 2013 was 3.7 percent, with administrative costs (as identified in plan bids) at 9.3 percent (with the benefit ratio therefore at 87 percent). When Part D revenue and cost data are included, the industry-wide combined Part C and Part D margin for MA plans with Part D coverage was 4.2 percent in 2013. The industry-wide margin for plans that did not include drug coverage—representing 11 percent of all revenue in Part C—was 4.9 percent in 2013.

Below are 2013 margin levels by selected MA categories for plans that include drug coverage (excluding Medicare's reinsurance payments in Part D):

- HMOs: 4.1 percent
- local PPOs: 4.0 percent
- for-profit plans: 5.9 percent (before taxes)

- nonprofit plans: 0.4 percent
- SNPs: 8.0 percent
- plans other than SNPs: 3.3 percent

For plans with drug coverage where we have Part C and Part D data at the level of the parent organization, in 2013:

- 40 organizations, representing 20 percent of all revenue for this group of plans, had negative margins; and
- 76 organizations, with 80 percent of total revenue, were at break-even margins (4 organizations) or had positive margins (72 organizations).

Perspective on MA plans and payments

Enrollment in MA has reached 16.7 million enrollees (30 percent of all Medicare beneficiaries) and continues to grow faster than Medicare FFS enrollment. Plans are available to 99 percent of Medicare beneficiaries, and some measures of availability have improved over the last year. Extra benefits provided by rebate dollars have improved over the past year. Also, the benchmarks, bids, and payments have declined relative to FFS spending since 2011. In 2016, excluding quality bonuses and assuming no coding intensity differences, MA benchmarks average 103 percent of FFS, and MA payments average 99 percent of FFS.

Overall, the payment indicators are mostly positive. As a result, we conclude that the MA program is more efficient than in the past. However, there are some remaining payment issues related to intercounty payment equity, coding intensity, and quality measures.

MA benchmarks and equity issues

The use of benchmarks and plan bids to determine payments to MA plans began in 2006. The original MA benchmarks were based on the county-level payment rates used to pay MA plans before 2006. Those payment rates were at least as high as per capita FFS Medicare spending in each county and often substantially higher because the Congress set floors to raise the lowest rates to stimulate plan growth in areas where plans historically had not found it profitable to enter. For the most part, county benchmarks increased from 2006 to 2010 by the greater of national FFS growth or county-level FFS growth. By 2010, the median county benchmark was 114 percent of FFS. However, because of the previously determined floor rates and growth anomalies in individual

counties, benchmarks ranged from 100 percent of FFS to 182 percent of FFS. Under PPACA, county benchmarks are transitioning to generally lower levels, ranging from 95 percent of county FFS spending to 115 percent of county FFS spending (based on the quartile of the county's FFS spending), although plan quality bonuses can increase the benchmarks. While we expect the fully transitioned benchmarks to average 102 percent of FFS and thus approach rough equity with FFS, equity issues surrounding the distribution of benchmarks and payments will remain.

Calculating FFS spending used to set the benchmarks

One issue involves the CMS calculation of FFS spending that helps set the MA benchmarks. Currently, CMS measures average FFS spending for all FFS beneficiaries in a county who have *either* Part A or Part B of Medicare. (Average Part A spending is calculated using all beneficiaries enrolled in Part A, and average Part B spending is calculated for all beneficiaries enrolled in Part B. Those two averages are added to get the relevant FFS total.) However, to be eligible to join an MA plan, a beneficiary must be enrolled in *both* Part A and Part B.

We examined the Part A FFS spending for beneficiaries who were enrolled in Part A and in Medicare FFS for all of 2012. We found that 9 percent of those beneficiaries were not enrolled in Part B for at least some of the year. (In contrast, 0.5 percent of beneficiaries were enrolled in Part B but not Part A.) Part A spending for beneficiaries in Part A *and* Part B all year averaged 8 percent more than the average for all those in Part A, regardless of whether they were also in Part B. Beneficiaries in Part A who choose not to buy Part B are likely healthier than those who buy Part B; therefore, the risk-adjusted difference in Part A spending between these two groups of beneficiaries is likely less than 8 percent.

While the overall increase in average FFS spending used in benchmark calculations is likely to be small if FFS spending is calculated using only beneficiaries enrolled in both Part A and Part B, the effect will vary by county. Counties with 15 percent to 20 percent of their FFS beneficiaries enrolled in Part A but not Part B would likely see their benchmarks rise. Alternatively, counties with significantly lower than average (9 percent) Part A-only enrollment would be likely to see lower benchmarks if this change were made.

CMS has made a special adjustment to the FFS calculation for Puerto Rico because the majority of its FFS population does not buy Part B. Hawaiian plans have recently sought accommodation because almost 20 percent of the Hawaiian FFS population does not buy Part B. But while Hawaii is near the top in the share of FFS beneficiaries without Part B, other areas such as Pittsburgh, PA, and Portland, OR, have similar shares of FFS beneficiaries without Part B. These areas all have MA penetration rates over 50 percent, and the estimated effects of using only beneficiaries with both Part A and Part B on FFS spending could have a large effect and result in higher benchmarks for these areas. That is, high MA penetration leaves fewer, and perhaps less representative, beneficiaries on which to calculate FFS spending. As MA penetration continues to grow, we expect these calculation problems to grow. Therefore, the FFS calculation should be corrected to ensure that the population that is used to calculate the FFS spending is representative of the expected spending for MA beneficiaries.

CMS is the agency best positioned to calculate the FFS spending estimates based on beneficiaries enrolled in both Part A and Part B. We encourage CMS to investigate recalculating FFS spending, especially in counties where the calculation would make a substantial difference in MA benchmarks. At the same time, we will continue work on this issue.

PPACA benchmark caps

A second equity issue is that the PPACA payment formulations include an administratively determined cap on each county's benchmark. The law included a provision that caps any county's benchmark at the higher of its pre-PPACA level, projected into the future with a legislatively modified national growth factor and 100 percent of its estimated FFS spending in the current year.

The caps are based on the 2010 payment rates that varied considerably relative to county FFS spending, but there is no reason to think that the distribution of relative payments in 2010 should be perpetuated forever, especially because the 2010 payment patterns had many non-policy-based anomalies.

For 2016, benchmark caps will apply if a county's 2016 benchmark is projected to be more than the national growth factor allows (approximately 6.4 percent in 2016) above its 2010 benchmark and if the benchmark is above 100 percent of the estimated 2016 FFS spending in the

**TABLE
12-5****Benchmark caps, 2016****Payment quartile based on FFS spending**

	All	115 percent	107.5 percent	100 percent	95 percent
Share of bonus-capped counties	45%	60%	65%	50%	6%
Share of MA enrollees	19%	31%	38%	19%	1%
Share of base-capped counties	24%	35%	40%	20%	0%
Share of MA enrollees	6%	15%	12%	3%	0%
Average 2016 benchmark cap reduction (dollars per enrollee per month)	\$40	\$42	\$46	\$33	\$18

Note: FFS (fee-for-service), MA (Medicare Advantage). Bonus-capped counties are counties in which benchmarks are limited for plans with 4 or more stars in the county. Base-capped counties are counties in which benchmarks are limited for all plans in the county. The 115 percent quartile is the lowest spending quartile, and the 95 percent quartile is the highest spending quartile.

Source: CMS MA rate calculation data, April 2015; CMS plan enrollment data, February 2015.

county. The caps apply for the benchmarks that include the 5 percent quality bonus (or the 10 percent quality bonus for “double-quality-bonus” counties), even though the 2010 benchmarks did not include any quality bonuses. The benchmark caps thus have the potential to limit or eliminate quality bonuses for plans in certain counties, referred to as “bonus-capped” counties.

Nineteen percent of MA enrollment (and 45 percent of counties) is affected by caps on the high quality benchmarks (Table 12-5). Those beneficiaries are enrolled in high-quality MA plans in bonus-capped counties, and the plans they are in are losing some or all of their quality bonuses. Six percent of MA enrollment is in a subset of the bonus-capped counties, known as base-capped counties (24 percent of counties), where the benchmarks are capped below the base rate (the rate for plans that do not qualify for quality bonuses). All of the MA enrollment in these counties is affected by the benchmark caps.

The benchmarks are unlikely to be capped for counties in the highest FFS spending quartile. The law will not cap benchmarks below 100 percent of FFS, and the benchmarks in the highest spending quartile counties are already set below 100 percent of FFS (at 95 percent). The average benchmark reduction caused by the cap is \$40 per member per month, but reductions for some counties exceed \$100 per member per month. The lower spending counties see larger reductions than the higher spending counties. The impact of the caps on plans is a decrease of about 0.5 percent of MA payments.

Double-bonus counties

PPACA also designated certain counties as “qualified” for double quality bonuses. Double-bonus-qualified counties are described in statute as counties that:

- received urban floor payment rates in 2004 (counties in metropolitan areas with a population of at least 250,000 were paid a special floor rate if their FFS spending was below a certain level),
- had a private plan penetration rate of at least 25 percent in 2009 (including cost plan enrollment), and
- have projected FFS spending lower than the national average FFS spending (\$800.21 in 2016).

For 2016, if an MA enrollee both lives in a double-bonus county and is enrolled in a plan with 4 or more stars, that plan receives a 10 percentage point benchmark bonus for that enrollee. In 2016, 19 percent of MA enrollees not only live in one of the 236 double-bonus counties but also are enrolled in an MA plan with 4 or more stars (enrolled in 2015) (Table 12-6). The table shows only those enrollees in plans benefiting from the double bonus. Because the national average FFS spending level (\$800.21 per month) is lower than the FFS spending in all counties in the 95 percent of FFS quartile, there are no double-bonus counties in the 95 percent quartile. Also, there are fewer double-bonus counties in the 100 percent of FFS quartile than in the two lower spending quartiles

**TABLE
12-6****Double-bonus counties, 2016****Payment quartile based on FFS spending**

	All	115 percent	107.5 percent	100 percent	95 percent
Number of double-bonus counties	236	92	80	64	0
MA enrollees in high-quality plans and double-bonus counties	19%	37%	29%	25%	0%
Average additional bonus (dollars per enrollee per month)	\$28	\$26	\$26	\$33	\$0

Note: FFS (fee-for-service), MA (Medicare Advantage). A double-bonus county is a county for which the benchmark increase for plans with 4 or more stars (high-quality plans) is 10 percent of FFS spending. For other counties, the benchmark increase is 5 percent of FFS. The 115 percent quartile is the lowest spending quartile, and the 95 percent quartile is the highest spending quartile.

Source: CMS MA rate calculation data, April 2015; CMS plan enrollment data, February 2015.

(115 percent and 107.5 percent of FFS). Assuming the county benchmarks are not capped, the double bonuses will add an additional 5 percent of FFS spending to the county high quality benchmarks. The maximum double bonus would add \$40 to the county benchmark for high-quality plans in 2016, and the average increase is \$28 per member per month for those high-quality plans enrolling beneficiaries in double-bonus counties. We estimate that the 2016 payments average about 0.6 percent higher than they would have been without the double bonuses. Plans in double-bonus counties get paid twice the quality bonus that plans in other counties get for exactly the same quality performance. Others have found that the double bonuses did not lead to higher quality in plans serving those counties but did lead to an increase in the number of plans serving those counties (Layton and Ryan 2015).

Addressing the inequities of benchmark caps and double bonuses simultaneously

The law includes a benchmark cap that inequitably lowers benchmarks in some counties, especially for plans qualified for quality bonuses, and at the same time provides a double quality bonus that inequitably raises quality bonuses for some counties. One option to address the inequities would be to eliminate both the benchmark caps and the double bonuses.

This option would rationalize the MA payment system while improving equity across counties. There is substantial overlap among double-bonus and capped counties. For 2016, 52 counties with over 900,000 current

MA enrollees are both double bonus and capped. This overlap means that even though high-quality plans in 236 counties would qualify for double bonuses, the benchmark caps limit or eliminate the bonuses for 52 of those counties. For the most part, the benchmark cap reductions and the benchmarks for double-quality-bonus increases are distributed similarly across the quartiles.

Through eliminating two sources of inequity across counties—the reduction in benchmarks due to the benchmark caps and the increase in benchmarks due the double quality bonuses—the MA payment system could be made more rational, aggregate payments could be kept roughly constant, and the distribution of payments across quartiles would not change a great deal (Table 12-7, p. 344).

The effects of eliminating the caps and double quality bonuses could affect the actions of plans and beneficiaries. However, if these policy changes had been made for 2016 and the plan bids were held constant, the resulting impacts would be relatively small (Table 12-8, p. 345). The overall effect is that Medicare payments to plans would decrease by 0.1 percent. Of the 182 parent organizations that submitted bids for 2016, 115 (63 percent) would have seen a change in payments of less than 0.5 percent. These 115 parent organizations enroll 83 percent of all projected MA enrollment for 2016. The largest reduction in Medicare payments to any organization would have been under 3 percent. The largest increase in payments would have been 3.9 percent.

**TABLE
12-7****Effects of eliminating both benchmark caps and double quality bonuses**

	Payment quartile based on FFS spending				
	All	115 percent	107.5 percent	100 percent	95 percent
Benchmark increases from eliminating caps (in millions)	\$821	\$315	\$394	\$110	\$2
Benchmark decreases from eliminating double quality bonuses (in millions)	-\$1,018	-\$349	-\$321	-\$347	\$0
Net change in benchmarks (in millions)	-\$197	-\$34	\$73	-\$237	\$2

Note: FFS (fee-for-service). The changes in this table relate to benchmarks, not payments. Payments are determined both by benchmarks and bids. The 115 percent quartile is the lowest spending quartile, and the 95 percent quartile is the highest spending quartile.

Source: CMS Medicare Advantage rate calculation data, April 2015; CMS plan enrollment data, February 2015.

RECOMMENDATION 12-1

The Congress should eliminate the cap on benchmark amounts and the doubling of the quality increases in specified counties.

RATIONALE 12-1

Current law contains two special adjustments to the county benchmarks that make the benchmarks inequitable across counties. These adjustments are based on older, inequitable, administratively set payments. Both of these adjustments affect benchmarks primarily for high-quality plans and often offset one another. Eliminating both the cap on benchmarks and the doubling of quality increases would make the benchmark-setting process simpler and more equitable, while leaving overall payments at roughly the same level. There would be a reduction of roughly 0.1 percent of MA program spending.

IMPLICATIONS 12-1**Spending**

- Our recommendation—to eliminate the Section 1853(n)(4) cap on benchmark amounts that limits benchmarks and to eliminate the doubling of the quality increases in specified counties that increases benchmarks—would decrease federal program spending relative to current law by between \$50 million and \$250 million over one year and between \$1 billion and \$5 billion over five years.

Beneficiary and provider

- We expect some redistribution of plan payments; some plans, depending on the mix of counties they serve, would see increased payments and some would see

decreased payments. As a result, plans may find some markets more or less attractive than they are under current law. Also, plans may have a new incentive to improve quality in previously capped counties. Beneficiary access to plans thus may increase or decrease based on plan reactions to the new benchmarks.

The effects are expected to be small for most plans; plans subject to larger impacts are expected to account for a small share of enrollment. To the extent that the Congress finds it necessary, implementation of these benchmark changes could be transitioned over two years.

MA risk adjustment and coding intensity adjustment

Medicare calculates its payment to plans separately for each beneficiary, multiplying the plan's payment rate by the beneficiary's risk score. The risk scores are based on diagnoses that providers coded during the year before the payment year. The diagnoses are reported to Medicare through claims for Medicare FFS beneficiaries or by the plans for MA enrollees. To receive the maximum payment, plans have an incentive to ensure that the providers serving the beneficiary record all diagnoses completely.

Recent research has found that risk scores for MA plan members have been growing more rapidly than risk scores for FFS beneficiaries (Kronick and Welch 2014). Thus, as mandated by the Deficit Reduction Act of 2005, CMS has been making across-the-board adjustments to

**TABLE
12-8****Effect of eliminating caps and double bonuses on organizations and enrollees, 2016**

	Number of organizations	Number of enrollees (in millions)
All organizations	182	17.288
Payments decreased by:		
2.0% or more	9	0.304
1.5% to 2.0%	13	0.706
1.0% to 1.5%	10	0.564
0.5% to 1.0%	8	0.383
Payment change less than 0.5%	115	14.375
Payments increased by:		
0.5% to 1.0%	14	0.697
1.0% to 1.5%	4	0.038
1.5% to 2.0%	4	0.101
2.0% or more	5	0.120

Source: MedPAC analysis of 2016 Medicare Advantage bid data and benchmark data from CMS.

the risk scores. Taking into account multiple years of coding differences, CMS reduced risk scores by 3.41 percent in each year from 2010 through 2013. PPACA specifies minimum reductions for 2014 and all future years, although CMS has discretion to make larger reductions. The Government Accountability Office found that CMS should make larger reductions to fully account for the coding differences (Government Accountability Office 2013). The American Taxpayer Relief Act of 2013 increased the minimum reductions that CMS must make in the scores. By law, the mandated reductions will end once CMS begins risk modeling based on MA diagnoses and expenditures rather than on the FFS diagnoses and expenditures supporting the current model. For 2016, CMS has chosen to reduce risk scores by 5.41 percent, the minimum reduction under current law. The law specifies that the minimum reduction rises by 0.25 percentage point each year until 2018, when it would reach 5.9 percent. The minimum reduction would remain 5.9 percent for 2019 and each subsequent year.

Last year, the Commission began its own analysis of coding differences between beneficiaries in FFS Medicare and those enrolled in MA plans. To test whether beneficiary risk scores grew faster in MA than in FFS, we used beneficiary risk scores and enrollment data from 2006 through 2013. We built cohorts of beneficiaries whose first full calendar year was spent in FFS and whose

second and all subsequent full calendar years (through 2013) were spent entirely in either FFS or MA. For example, one cohort consisted of those beneficiaries whose first full year in Medicare was 2006, who were in FFS for all of 2006, and who either remained exclusively in FFS through 2013 or switched into MA in January 2007 and remained in MA through 2013. We examined the 2006 cohort and all the cohorts whose first full years in Medicare were in FFS in 2007 through 2011. Thus, all beneficiaries had an initial risk score that reflected their year in the FFS program, and the differences in the growth of their risk scores can be attributed primarily to the program in which they were coded. In this analysis, we found:

- Beneficiaries who spent their first calendar year in FFS and then switched to MA had entry risk scores that were 84 percent to 87 percent of those who remained in FFS, for each MA entry year from 2007 to 2012. In other words, beneficiaries enrolling in MA start out with lower risk scores than the average risk scores of beneficiaries remaining in FFS Medicare.
- The ratio of the average MA risk score to the average FFS Medicare risk score grew for every additional year of enrollment in MA.
- The ratio of the average MA risk score to the average FFS Medicare risk score during the first year of enrollment in MA increased by at least 6 percent.

- After the first year, the ratio of the average MA risk score to the average FFS Medicare risk score tended to increase by about 2 percent for each year the beneficiaries remained in MA.

While this analysis showed compelling evidence that a coding difference exists between beneficiaries in FFS Medicare and MA and that the difference grows over time, it did not tell us the level of the overall difference, which we would need to evaluate in order to determine whether the statutory coding adjustment seems adequate. To address the issue this year, we built cohorts of 2014 MA enrollees based on how long they had been continuously enrolled. We then compared the MA enrollees with FFS Medicare beneficiaries who had spent the same amount of continuous time in FFS. In this analysis, we found:

- The cohorts who had remained in MA longer had more growth in risk scores than their contemporaries who had remained in FFS.
- The MA enrollees who had been enrolled exclusively in MA in 2012, 2013, and 2014 had risk-score growth about 4 percent higher than beneficiaries who exclusively had FFS Medicare coverage for those three years, while the difference for those enrolled continuously during the eight years from 2006 to 2014 was about 16 percent.
- When weighted by the number of people in each continuous enrollment cohort, risk scores among the 2014 MA population had grown about 9 percent more than among the FFS population. Last year, this same analysis found that risk scores grew about 8 percent more among the 2013 MA population than among the FFS population.

Together, these analyses show that, because of coding practices, beneficiaries in MA plans will have higher risk scores than they would have had if they had remained in FFS. Further, those differences in coding are larger than the current (2016) 5.41 percent coding adjustment mandated by law. One possible source of coding differences is from the use of health risk assessments (HRAs) and the incorporation of diagnoses documented on HRAs in risk adjustment. We discuss this issue and present some analysis in the following section.

CMS has taken a step to help control the increased coding in MA. Beginning in 2014, CMS phased in a new CMS–hierarchical condition category (CMS–HCC) model. This new model reduces risk scores for some diagnoses and

increases scores for others, relative to the old model. CMS acknowledges that scores are lower for diagnoses that are suspected of being more aggressively coded in MA plans. Our analysis, and analysis from other researchers, suggests that the impact of fully implementing this new CMS–HCC model would reduce MA risk scores by about 2 percent to 3 percent compared with the old model. Taking this analysis into account, we continue to find that the coding difference has been growing over time and will undoubtedly be greater by the time policy adjustments can be made.

Medicare Advantage risk adjustment

Medicare payments to MA organizations are adjusted to account for differences in beneficiary medical costs through the CMS–HCC model. The model uses demographic information and certain diagnoses grouped into HCCs to calculate a risk score for each enrollee, such that higher risk scores generate higher payments for beneficiaries with higher expected expenditures. CMS designed this risk adjustment model to maximize its ability to predict annual medical expenditures for Medicare beneficiaries. Therefore, in developing the model, CMS used statistical analyses to select certain HCCs for inclusion in the model based on each HCC’s ability to predict annual Medicare expenditures, ensuring that diagnostic categories included were clinically meaningful and were specific enough to minimize inappropriate manipulation or discretionary coding (Pope et al. 2004).⁶ As a result, CMS determined that only diagnoses resulting from a hospital inpatient stay, hospital outpatient visit, or a face-to-face visit with a physician or other health care professional were acceptable for determining payment through the risk adjustment model, though there are a few exceptions. Other possible sources of diagnoses, such as home health, nursing facility, ambulatory surgery, durable medical equipment, and hospice services, are not used to determine payment through the risk adjustment model due to concerns about the reliability of the diagnoses and concerns that adding diagnoses from these sources did not improve the model’s ability to predict medical expenditures.

Diagnostic data in the CMS–HCC model are used prospectively, meaning that diagnoses collected during one calendar year are used to predict Medicare costs for the following calendar year. A particular diagnosis code needs to be submitted only once during the data collection year for the related HCC to be included in an enrollee’s risk score in the following payment year. Multiple submissions of the same diagnosis code and submissions of different

diagnosis codes that are grouped in the same HCC do not have an effect on an enrollee's risk score.

Each demographic and HCC factor used to determine MA payment has a coefficient that represents the expected medical expenditures associated with that component. These coefficients are estimated based on Medicare FFS data. Medicare payment for a particular enrollee is equal to the sum of the dollar-value coefficients for all components identified for that enrollee. For example, annual Medicare payment to an MA organization in 2013 for an 84-year-old male (\$4,808) with congestive heart failure (\$3,116) would have been \$7,924, which is the sum of the two relevant model components. Identifying an additional HCC for an enrollee can significantly increase the Medicare payment. If the same 84-year-old male with known congestive heart failure is also found to have polyneuropathy (\$2,890), the Medicare payment to the MA organization would increase from \$7,924 to \$10,814. This \$2,890 increase represents 32 percent of the annual Medicare reimbursement for an enrollee with average expenditures, which in 2013 was \$9,005. The annual increase in 2013 payments to MA organizations for most HCCs when newly identified for an MA enrollee was between \$1,000 and \$5,000, and was \$10,000 or more for some HCCs.

Health risk assessments in Medicare Advantage

HRAs are a preventive care tool used to identify health risks and evaluate patients for the presence of disease or disability. PPACA requires that an HRA be administered as part of Medicare's annual wellness visit (AWV), during which it is paired with patient counseling about relevant health risks and referrals for follow-up care. HRAs focus on patient behaviors, medical history, and current physical health and disease status. Information about exercise habits, diet, living condition, and chronic disease is collected through a patient interview or questionnaire, medical history review, physical examination, or biometric testing or screening. This information can be helpful in identifying gaps in care, and when administered in conjunction with appropriate feedback and with connection to available resources, HRAs play an integral role in engaging patients in their own health management and decision making. For MA plans, HRAs are often the basis for developing a plan of care for a particular enrollee.

In Medicare FFS, HRAs are covered only through an AWV, which can be initiated by a beneficiary or his or her primary care provider. In MA, HRAs are covered

through an AWV; however, many plans take a more active approach to patient care and have reached out to initiate care planning by offering an HRA to enrollees. One implication of this approach is that in MA, HRAs are frequently initiated by MA organizations, through either a third-party vendor or through an MA organization's own program. Most HRAs are administered during a visit to an enrollee's home, which typically lasts about an hour and is often conducted by a nurse practitioner. A home visit may include reviewing a patient's self-reported medical history, measuring vital signs, conducting blood or urine tests, reviewing medications, and assessing the risks present in a patient's home. Although HRAs have been administered to Medicare beneficiaries for several years, MA organizations and third-party vendors have been providing an increasing number in recent years. Our analysis of MA encounter data shows that the number of HRAs administered increased from 2.3 million in 2012 to 3.4 million in 2013, an increase of nearly 50 percent.⁷

The Commission strongly supports the use of HRAs in any setting for care planning and coordination. Ideally, all health conditions identified through HRAs would be addressed in a plan of care and needed education or advice would be provided to support a beneficiary's engagement in his or her health management.

Impact of health risk assessments on Medicare Advantage risk adjustment

In current payment policy, diagnoses generated from HRA documentation are used in risk-adjusted payment, regardless of whether follow-up care is provided for those conditions. If conditions are documented without services being provided to treat the condition, current policy may result in increased payments to MA organizations by an amount that is greater than the benefit provided to Medicare beneficiaries. The Commission is concerned that this policy may incentivize inappropriate use of HRAs and has considered whether payment for conditions newly identified through an HRA should be made when treatment or other care is not provided for those conditions. Consequently, the Commission has questioned whether HRAs alone should be used to determine the prevalence of a diagnosis for payment increases through the HCC risk adjustment system. Given that the cost of providing an HRA is significantly less than the potential increase in Medicare payment if an additional HCC is discovered, there is a strong incentive for plans to conduct HRAs. Instead of current policy, the Commission considered requiring some documentation of the condition

**TABLE
12-9****HRA-only HCC frequency, 2012, and payment increase, 2013**

HCC number and name		HRA-only HCC frequency	Increase in 2013 payment per HCC	Total increase in 2013 payment
71	Polyneuropathy	105,315	\$2,890	\$304,412,233
105	Vascular disease ^a	86,995	2,719	236,574,577
16	Diabetes with neurologic or other specified manifestation ^{a,b}	73,453	3,341	245,386,284
55	Major depressive, bipolar, and paranoid disorders ^a	63,870	3,242	207,045,718
83	Angina pectoris/Old myocardial infarction ^{a,b}	56,522	1,531	86,523,341
108	Chronic obstructive pulmonary disease ^{a,b}	52,502	3,062	160,739,126
15	Diabetes with renal or peripheral circulatory manifestation ^b	50,759	3,341	169,571,868
80	Congestive heart failure ^b	42,146	3,116	131,310,453
131	Renal failure ^{a,b}	29,533	2,674	78,982,496
18	Diabetes with ophthalmologic or unspecified manifestation ^{a,b}	24,473	3,341	81,757,567
19	Diabetes without complication ^{a,b}	23,667	1,144	27,065,358
38	Rheumatoid arthritis and inflammatory connective tissue disease	15,219	3,251	49,472,078
92	Specified heart arrhythmias	14,064	2,602	36,599,364
100	Hemiplegia/hemiparesis ^{a,b}	9,676	4,808	46,526,882
52	Drug/alcohol dependence ^a	9,592	3,359	32,216,981

Note: HRA (health risk assessment), HCC (hierarchical condition category). "HRA-only HCCs" are HCCs documented on an HRA that are not documented on any other encounter used for risk adjustment.

^a These HCCs are part of a hierarchy such that the actual frequencies and payments when hierarchies are imposed may be lower than those identified in this table.

^b These HCCs are also included in the model as part of one or more two- or three-way interaction terms with disability status or other HCCs. Any increase in payments to Medicare Advantage plans resulting from interaction terms indicated as a result of HRA or home evaluation and management visits is not included in this table.

Source: MedPAC analysis of Medicare Advantage encounter data, 2012; CMS Advance Notice for 2013 Medicare Advantage payment.

being treated through a physician or other health care professional or through an inpatient or outpatient encounter (i.e., an encounter used for MA payment) in addition to HRA documentation.

Using MA encounter data for 2012, we found that about 1.8 million HCCs were documented on an HRA, which is a little more than 1 HCC per person who received an HRA. Sixty-three percent of those HCCs were documented on another encounter during 2012 that was used to determine MA payment, but 37 percent were not documented during any other physician or other health care professional, inpatient, or outpatient encounter used to determine MA payment. Put differently, the majority of the time (63 percent), plans seem to be identifying conditions through an HRA and providing care to treat the condition. The Commission supports this use of assessments because related care was provided to enrollees. However, 37 percent of the time, conditions were documented on an HRA but had no other documentation showing that physician or other health professional, inpatient, or outpatient care was

provided.⁸ These "HRA-only" HCCs, documented during 2012, were associated with about \$2.3 billion in Medicare payments to MA organizations in 2013. The number of HRA-only HCCs documented during 2013 increased by 10 percent or 17 percent over 2012, depending on which HCC model is used as the basis for the analysis.⁹

Our analysis found that HRA-only HCCs were more common for particular conditions. Fifteen HCCs accounted for 87 percent of all HRA-only HCCs. For each of these HCCs, Table 12-9 shows the HRA-only frequency in 2012 (that is, the number of enrollees for whom the HCC was documented on an HRA but not documented by another encounter used to determine MA payment), the increase in payment each time the HCC was newly identified, and the total 2013 Medicare payment associated with HRA-only documentations.

Some Commissioners raised concern about instances in which HRA-only HCCs were treated with services not covered by Medicare, which may not be captured in MA

encounter data. Such services may include various forms of telehealth, medication management by a pharmacist, or certain nutritional services. It is permissible for plans to provide services not covered by Medicare, but plans are not required to report such services through the CMS encounter data reporting system. In these cases, the concern is that, if HCCs originating only from HRAs are not considered when determining payment through the HCC risk adjustment system, then plans are being denied the revenue they need to provide these services. However, the key issue is that non-Medicare-covered services must be financed either by rebates paid by the Medicare program (for plans bidding below their benchmarks for Medicare Part A and Part B services) or through an additional premium, beyond the Part B premium, that plans are permitted to charge to beneficiaries. The HCC risk adjustment system determines the amount of revenue plans will receive for providing Medicare-covered services. Thus, removing HRA-only diagnoses from the HCC risk adjustment system would not deny plans the appropriate level of revenue for care provided using non-Medicare-covered services because plans must cover the cost of providing those services through their rebate and premium revenue. It is common for plans to provide a variety of non-Medicare-covered services, some of which are provided for the purpose of reducing the plans' expected cost of providing Medicare Part A and Part B services (e.g., preventive care that is not covered by Medicare but that may reduce utilization of other, Medicare-covered, services). As the overall cost of Medicare-covered services is reduced, MA plans may reduce their bid for Medicare-covered services and receive a larger rebate in the following year. With additional rebate funding, MA plans can provide additional services that may be designed to attract new enrollees.

The Commission supports MA service innovations that provide health care more efficiently than in Medicare FFS. However, the Commission is concerned that HRA-only HCCs are not properly addressed when no related encounters with a physician or other health care professional or in an inpatient or outpatient setting are provided. When such treatment (i.e., using only non-Medicare-covered services) is appropriate, the payment rate determined by HCCs may not be appropriate because it represents the amount required to cover treatment for the condition using Medicare-covered services.

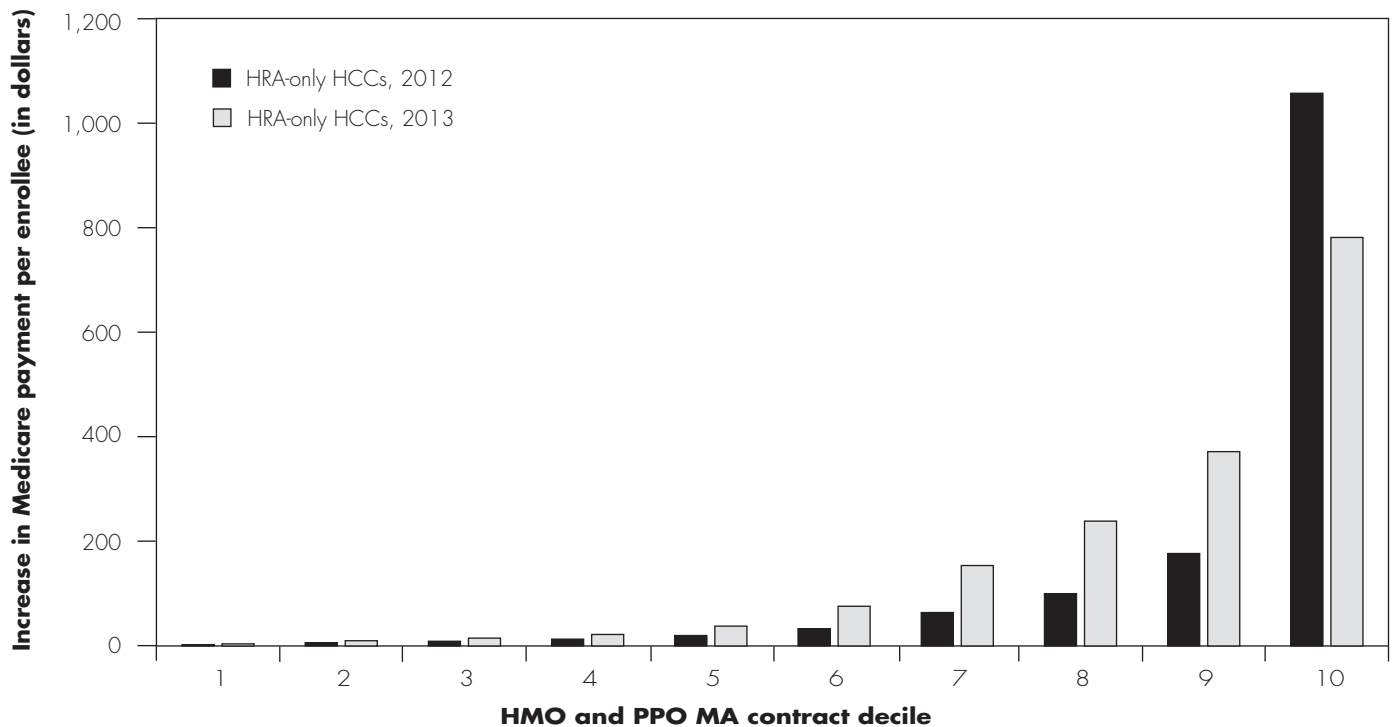
The Commission has also considered whether HRAs may identify diagnoses for which follow-up care would not

be expected. Such diagnoses include those identified by International Classification of Diseases, Ninth Revision (ICD-9) V codes, which describe factors influencing health status or contact with health services other than disease or injury, and ICD-9 E codes, for self-inflicted poisoning or injury. Seven HCCs can be identified with ICD-9 V codes (asymptomatic HIV, long-term insulin use, tracheostomy or respirator status, dialysis testing or catheter status, major organ transplant status, artificial opening for feeding or elimination, or amputated limb status), and one HCC can be identified by ICD-9 E codes.¹⁰ Seven of these eight HCCs were indicated by a V or E code in 0.1 percent or less of MA and FFS AWVs. The V code for long-term insulin use was used to identify the diabetes without complication HCC on 1.4 percent of AWVs in MA, but it was almost never used to identify that HCC during AWVs in FFS. Given the small number of HCCs that can be identified by V or E codes and their minimal prevalence in AWVs, we do not believe such codes are a major factor in identifying HCCs through HRAs.

Finally, the number of HCCs identified through HRAs alone varies significantly across MA plans, as shown by our analysis of MA encounter data. For the HMO and PPO contracts with at least one HRA in 2012 or 2013, Figure 12-3 (p. 350) shows the average increase in annual Medicare payment per enrollee from HRA-only HCCs when these contracts are ranked into decile groups. Not all MA contracts received a significant source of revenue from HRA-only HCCs, though several contracts increased their revenue from HRA-only HCCs from 2012 to 2013, shown most prominently by increases in the sixth through ninth deciles when reading left to right. A small proportion of contracts generated substantial Medicare payments from HRA-only HCCs, shown in the highest decile. This decile included a few outlier contracts with very high HRA-only HCC revenue from 2012. Those contracts generally remained in the highest decile for 2013, but showed a reduction in revenue per enrollee from HRA-only HCCs to a level that was more in line with other contracts in that decile. To the extent that diagnoses are identified through HRAs more frequently by MA organizations than in Medicare FFS, these efforts contribute to overall differences in diagnostic coding between MA and Medicare FFS.

Concerns about health risk assessment diagnoses

The accuracy of the CMS-HCC risk adjustment model is ensured by the principles that diagnostic categories included in the model: (1) predict medical expenditures

**FIGURE
12-3****Per enrollee increase in Medicare payment
from HRA-only HCCs for MA contracts, by decile**

Note: HRA (health risk assessment), HCC (hierarchical condition category), MA (Medicare Advantage), PPO (preferred provider organization). "HRA-only HCCs" are HCCs documented on an HRA that are not documented on any other encounter used for risk adjustment. The denominator in this analysis is total enrollment in each contract, not only those beneficiaries who received an HRA.

Source: MedPAC analysis of Medicare Advantage 2012 and 2013 encounter data.

and (2) are clinically meaningful and specific enough to minimize inappropriate manipulation or discretionary coding. However, these principles may be weakened by including diagnoses identified only through HRAs because the diagnoses are often based on enrollee self-reporting or cannot be accurately identified with equipment brought into an enrollee's home. That said, to the extent that diagnoses are accurate and follow-up care is not provided for what may be a significant chronic illness, the Commission is concerned that some plans may be acting unethically or diminishing the quality of care provided to MA enrollees. Finally, the financial incentives provided by identifying diagnoses through HRAs generate some concern about tactics used to recruit enrollees for in-home HRA visits. Anecdotal evidence from our focus groups (see text box on reactions to in-home health risk assessments) found that at least some MA enrollees experienced in-home visit recruitment to be uncomfortably aggressive. An additional anecdote from the Harvard

Health Blog notes the financial incentives for plans to administer HRAs and some discomfort with the in-home visit offer, which, in the instance cited, included a gift card incentive for accepting (Merz 2015).¹¹

CMS has also stated concern about the potential for HRAs to be used solely as a diagnosis-collection vehicle (Centers for Medicare & Medicaid Services 2014b, Centers for Medicare & Medicaid Services 2013a), and two whistleblower lawsuits add questions about the accuracy of diagnoses and related documentation collected during in-home HRA visits conducted by independent home visit vendors.

Despite those concerns, the Commission recognizes the value that HRAs provide when administered as part of a care plan that includes providing information to a beneficiary's primary care clinician and ensures that Medicare beneficiaries are provided necessary treatment

Medicare Advantage enrollees' reaction to in-home health risk assessments

This year, we conducted focus groups with Medicare beneficiaries in three cities across the country. Although the sample of Medicare Advantage (MA) enrollees was small, nearly all had received a phone call offering an in-home visit. Roughly half of those enrollees accepted the offer and found the experience pleasant, stating that it was nice to have an hour-long discussion with a nurse about their health. The other half said they received numerous calls offering an in-home visit and found the persistence aggravating or annoying. Some enrollees who declined the home visit offer said they were uncomfortable with the idea of a nurse visiting their home. Several enrollees said they were offered gift cards for \$25 or \$50 as an incentive to receive the home visit.

We also conducted focus groups with primary care physicians, who stated that they had received reports including results from these home visits for some of their patients but generally found them unhelpful because they often contained several pages of information that was already known or lacked context for their patient's care. Some primary care physicians noted that they would have appreciated information that was apparently not included in the reports they received—for example, information about their patient's living environment, including an assessment of fall risk, amount of food in the kitchen, and general cleanliness. One primary care physician, echoed by others, stated that he spent time ruling out diagnoses that were made incorrectly during a home visit and addressing the patient's concern and confusion caused by the misinformation. ■

or connection to resources. The Commission believes that many of the concerns described here would be alleviated if Medicare's payment policy required that follow-up treatment was provided for conditions that are newly identified through an HRA. If such a policy were implemented, the Commission would hope that the proper use of HRAs would grow for Medicare beneficiaries who may benefit.

Policies to address diagnostic coding differences

CMS's adjustment for coding differences does not account for the full impact of these differences, and as a result, Medicare payments to MA organizations on behalf of a particular enrollee are larger than Medicare would have made to providers had that same beneficiary been in Medicare FFS. Foremost, CMS should increase its adjustment for coding differences to fully account for the impact. Our analysis suggests that, in 2014, the total difference in risk scores due to prior coding differences was at least 6 percent. Assuming a moderate growth rate in coding difference that is supported by our analysis, the difference in 2017 could be 9 percent or higher, though we need more experience under the CMS-HCC model introduced in 2014 to more accurately estimate the impact of coding differences. In addition to accounting for the

full impact of coding differences, CMS could use other policies that offer a more equitable adjustment across MA contracts than the across-the-board adjustment.

Exclude HRA-only diagnoses from risk adjustment One policy to address differences in MA and FFS coding intensity would be to remove HRAs as a source of diagnoses for risk adjustment, both from Medicare FFS diagnostic data when calibrating the model and from MA diagnostic data when calculating risk scores for payment. Our analysis shows that HRA-only HCCs are more common in MA than in Medicare FFS and vary in frequency across MA contracts. Therefore, a policy that excludes diagnoses found solely in HRAs from the risk score calculation would address some coding differences between MA and FFS; it would also be more equitable across MA contracts because contracts with more HRA-only HCCs would receive a larger effective adjustment, and vice versa. For example, we note that nearly all dual-eligible special needs plan (D-SNP) contracts made up of 50 percent or more dually eligible beneficiaries have a relatively low number of HRA-only HCCs, so that a policy removing HRA-only HCCs from risk adjustment would be beneficial to these contracts compared with an across-the-board coding adjustment with equivalent aggregate impact. CMS has twice proposed removing diagnoses from HRAs from risk adjustment but received

generally negative comments from the industry and has not implemented such a proposal (Centers for Medicare & Medicaid Services 2014c, Centers for Medicare & Medicaid Services 2013b). For 2016 payment, CMS provided guidance on best practices for providing in-home HRAs and stated that it would continue tracking care provided subsequent to a home visit (Centers for Medicare & Medicaid Services 2015a). Our analysis suggests that excluding diagnoses from HRAs for risk adjustment in 2017 would effectively reduce MA risk scores by roughly 2 percent to 3 percent relative to Medicare FFS and, thus, would reduce the need for an across-the-board coding intensity adjustment.

Use two years of diagnostic data for risk adjustment A second part of this policy addressing differences in MA and FFS coding intensity is based on our analysis presented in the June 2012 report to the Congress on improving the MA risk adjustment model (Medicare Payment Advisory Commission 2012). This analysis shows that using two years of FFS diagnostic data to estimate CMS–HCC model coefficients and using two years of MA diagnostic data to calculate MA risk scores would also decrease differences in MA and FFS coding intensity. Given that HCCs generally identify chronic conditions, conditions that are coded in one year and not the next often occur as a result of incomplete coding rather than a change in condition status. In addition to addressing some difference in coding intensity, using two years of data improves the completeness of chronic condition coding for both MA and Medicare FFS enrollees and slightly improves the predictive power of the risk adjustment model for enrollees with several chronic conditions. Our analysis of using two years of diagnostic data to estimate and calculate risk scores suggests that 2017 MA risk scores would effectively be reduced by 1 percent to 2 percent relative to Medicare FFS and, thus, would reduce the need for an across-the-board coding adjustment.

Apply across-the-board adjustment for remaining coding impact Both of these changes to the risk adjustment system would provide a more equitable adjustment for coding differences across MA contracts and could be implemented simultaneously. However, our analysis suggests that applying these two changes together would not fully account for the impact of coding differences on MA risk scores. Therefore, CMS would need to estimate the effect of coding differences after implementing these two changes and then apply an across-the-board adjustment factor of appropriate size such that the combined effect would eliminate the impact of differences in coding intensity between FFS and MA. If the across-

the-board adjustment factor used in this approach were less than the minimum adjustment factor required by law, CMS might need to seek authority to implement this set of policies.

RECOMMENDATION 12-2

The Congress should direct the Secretary to:

- **develop a risk adjustment model that uses two years of fee-for-service (FFS) and Medicare Advantage (MA) diagnostic data and does not include diagnoses from health risk assessments from either FFS or MA, and**
- **then apply a coding adjustment that fully accounts for the remaining differences in coding between FFS Medicare and Medicare Advantage plans.**

RATIONALE 12-2

By law, the Congress requires the Secretary to adjust for the difference in coding between MA and Medicare FFS. The Secretary has the discretion to apply a larger coding intensity adjustment, up to the full impact of coding differences, but has chosen not to do so in recent years. Our policy recommendation would have the Secretary make coding adjustments in a more equitable manner. First, the recommendation seeks to eliminate HRAs as a source of diagnoses for risk adjustment. We contend that a small number of plans are using HRAs to increase Medicare payment without providing follow-up care. Second, the recommendation would base the CMS–HCC model on two years of diagnostic data. This approach gives MA plans a greater ability to document enrollees’ chronic conditions and reduces year-to-year variation in Medicare FFS documentation. Finally, the recommendation proposes that the Secretary apply an across-the-board adjustment to account for the remaining impact of coding differences. We believe that implementing the two changes to the CMS–HCC model will reduce the across-the-board adjustment applied to all plans relative to current law.

IMPLICATIONS 12-2

Spending

- Our recommendation to use two years of diagnostic data, exclude diagnoses identified through health risk assessments, and apply a coding adjustment that fully accounts for the remaining differences in coding would decrease federal program spending relative to current law by between \$750 million and \$2 billion in one year and between \$1 billion and \$5 billion over

five years. This estimate assumes that the Secretary would otherwise apply the minimum coding intensity adjustment required by current law, which does not account for the full impact of coding differences. We believe the decrease in program spending resulting from the recommendation would come from reduced payments to MA plans with the highest levels of coding intensity, whereas plans with the lower levels of coding intensity would see little difference or possibly a decrease in the coding intensity adjustment relative to current law.

Beneficiary and provider

- We do not expect the recommendation to have any impact on either beneficiaries’ access to care or the quality of care they receive. However, to the extent that plans currently use aggressive recruitment techniques and focus on generating assessment-based conditions without follow-up care, beneficiaries may experience some relief.

We do not expect the aggregate impact of the recommendation to significantly influence plans’ willingness to participate in the MA program, but it will have a differential impact across plans. Plans that generate few HRA-only HCCs may receive a lower across-the-board adjustment for coding intensity relative to current law, whereas plans with more HRA-only HCCs may receive a higher effective adjustment. This policy would place no restriction on providing HRAs to Medicare beneficiaries, and all plans could continue to use HRAs for care planning and management.

Quality in the Medicare Advantage program

The indicators that we track to evaluate quality in MA come from various sources described more fully in an online appendix to the March 2010 report to the Congress (available at http://medpac.gov/documents/reports/mar10_ch06_appendix.pdf?sfvrsn=0), in last year’s March report, and in technical notes from CMS. To determine whether there has been meaningful improvement in quality measures on a year-over-year basis, we compare results for plans that reported on a measure in both reporting years (a “same-store” approach).

Over the two most recent reporting periods, a number of measures improved, a small number declined, and the

large majority were unchanged. Fewer measures could be tracked over the last year compared with the preceding period because some of the measure specifications changed to such an extent as to be not comparable between the two years (for example, the MA hospital readmission measure).

Among the Healthcare Effectiveness Data and Information Set® (HEDIS®) measures we track, the National Committee for Quality Assurance (NCQA) changed the specifications for six HEDIS Medicare measures (including one intermediate outcome measure and the readmission measure) such that the results cannot be compared with results for the preceding year. NCQA advises caution in interpreting results for six additional measures. Among the remaining 32 HEDIS measures we can compare on a same-store basis, three measures saw statistically significant improvement for both HMOs and local PPOs: recording of body mass index levels and two measures of the level of high-risk medications among the elderly. HMOs also improved on the measure of colorectal cancer screening. One HEDIS measure had a statistically significant decline among HMOs, the survey-based measure of whether physicians advised beneficiaries to engage in physical activity. Each of these measures, or a similar measure in the case of the use of high-risk medications, is included in the CMS star rating system we discuss below.

For patient experience measures collected through the Consumer Assessment of Healthcare Providers and Systems® for MA (CAHPS®–MA) and reported through CMS’s star rating system, there was not a meaningful change in plan performance on six measures of beneficiaries’ perceptions of their access to care, rating of their health plan and providers, and beneficiaries’ perception of their ability to get care when it was needed (with a change of about 1 percent on these measures).

The Health Outcomes Survey (HOS) is the source of two outcome measures in the CMS star system that track whether a plan’s enrollees report improvement or decline in physical health status or mental health status. Both of these measures remained stable among MA plans between the most recent reporting period and the prior reporting period. CMS also uses the HOS to determine whether health status changes in a given plan are markedly different from the average across all plans. As in past years, for the most recent two-year period of tracking changes in health status (2012 to 2014), only a small number of plans (fewer than 8 percent) had changes

in their enrollees' mental or physical health status that differed significantly from the average across all plans (<http://www.hosonline.org/en/survey-results>).

Part D quality measures apply to Medicare Advantage Prescription Drug plans (MA-PDs). Part D measures include three medication adherence measures (medications for diabetes, hypertension, and cholesterol). HMO plans improved their scores on two of these measures (adherence to blood pressure medication and adherence to cholesterol medication), with PPOs also improving on the blood pressure medication.

The star system of the quality bonus program described below can provide some indication of changes in plan quality over time. However, we continue to examine results for individual measures for two reasons. One reason is that some measures are not included in the star system—for example, the mental health measures that had been declining according to our analysis in last year's March report (but remain stable this year). The other reason is that if we are interested in evaluating improvement over time across multiple plans, star rating results that show the relative performance among plans would not provide information about whether there was improvement in MA quality, particularly now that most measures do not have predetermined bonus thresholds (for example, there could be system-wide declines in quality but no effect on the relative distribution of plan results).

With regard to changes in quality measures, we would note that HEDIS is beginning to include overuse measures. There are several measures of this nature in use for the commercial and Medicaid populations. One overuse measure has been added to the measures that Medicare plans report as of 2015, which is the measure of the percentage of men age 70 or older who were screened unnecessarily for prostate cancer using prostate-specific antigen–based screening. In its announcement of possible changes to the star rating system, CMS did not indicate that this new measure will be used for 2017 star ratings (Centers for Medicare & Medicaid Services 2015d). As measures of overuse continue to be developed, it would be useful to include them in the star rating system.

The star system and the quality bonus program

Since 2012, the MA program has included a pay-for-performance system that gives bonuses to higher performing plans. Plans are evaluated on a subset of the quality measures just described and, to a lesser extent, on

contract performance measures (such as the timeliness and accuracy of appeals). The bonuses take the form of an increase in plan benchmarks; higher rated plans are able to use a higher percentage of the difference between bids and benchmarks for rebates, which finance extra benefits. Bonuses are based on a plan's overall star rating, with a maximum of five stars. Part D measures are included for plans that have Part D coverage (most MA plans). Performance on SNP-specific measures is a component of the star rating for SNP sponsors. Each element of the star rating is assigned a weight of 1.0 for process measures, 1.5 for patient experience and access measures, and 3.0 for outcome measures. An improvement measure that CMS calculates for MA and Part D has a weight of 5.0.

Plans that receive 5-star ratings can enroll beneficiaries outside of the annual election period. In the 2016 star ratings, 10 MA-PD plans and 2 MA-only contracts received 5-star ratings. Their status as high-rated plans is displayed at Medicare.gov. The lowest rated plans are also flagged, and beneficiaries are cautioned about choosing to enroll in a low-rated plan. Three contracts flagged as low-rated plans could be terminated at the end of 2016 if CMS exercises its authority to terminate the contracts of plans that have three consecutive years of performance at or below the 2.5-star level in either Part C or Part D (Centers for Medicare & Medicaid Services 2015b, Centers for Medicare & Medicaid Services 2015e).

Star ratings and changes in the ratings

For the 2016 star rating methodology, CMS moved away from having some measures for which there was a predetermined 4-star threshold, instead determining the 4-star threshold for such measures based on the relative distribution of rates among plans in each year. This approach is not the approach the Commission favors. The Commission has favored using performance benchmarks that are fixed in advance of the performance period. Fixed benchmarks provide a clear signal to plans about the level of performance necessary to achieve a given ranking, and they help plans target performance improvement efforts. CMS opted for relative benchmarks based on its finding that plan performance improved more among the star rating measures that did not have predetermined thresholds when compared with those with such thresholds.

In 2015, 27 of the 46 star measures had predetermined thresholds. For the 2015 ratings, for example, 15 of the 17 HEDIS clinical measures had a predetermined performance level for achieving 4 stars. The change to using the relative distribution resulted in some large

**TABLE
12-10****Changes in plan star ratings among HMOs, 2014 to 2015 and 2015 to 2016**

Changes between 2014 and 2015					Changes between 2015 and 2016				
2014 overall star rating	Number of HMO contracts, 2014	2015 overall star ratings			2015 overall star rating	Number of HMO contracts, 2015	2016 overall star ratings		
		Lower	Same	Better			Lower	Same	Better
5.0	10	30%	70%	N/A	5.0	9	33%	67%	N/A
4.5	39	21	74	5%	4.5	41	34	56	10%
4.0	56	29	59	13	4.0	58	24	55	21
3.5	78	22	62	17	3.5	66	14	55	32
3.0	60	8	58	33	3.0	48	6	46	48
2.5	9	0	33	67	2.5	15	0	27	73
2.0	0	N/A	N/A	N/A	2.0	1	0	100	0

Note: N/A (not applicable).

Source: MedPAC analysis of Medicare Advantage star ratings data.

changes for a few measures in the 2016 ratings. Overall, 10 of the 15 HEDIS clinical measures had an increase or decrease in the 4-star threshold of 5 percent or greater—with 6 measures having a 4-star threshold that was at least 5 percent higher than the previous pre-set threshold, and 4 of the 10 with the threshold reduced by at least 5 percent.

The largest threshold increase was for colorectal cancer screening, where the threshold for 4-star performance increased by 22 percent. In the 2015 ratings, among 263 HMO contracts present in the 2016 ratings, 199 contracts had colorectal screening rates of 58 percent or higher—at or exceeding the pre-set 4-star threshold—but only 100 of the 263 contracts have a 4-star rating on this measure in 2016, when the 4-star threshold is 71 percent (a 13 percentage point difference, or 22 percent higher than the 2015 threshold). The pre-set 4-star threshold of 58 percent for colorectal cancer screening had been in place for five consecutive star rating years, since the inception of pre-set thresholds in the star rating system (the 2011 star ratings developed in 2010). If the threshold had remained at 58 percent for the 2016 ratings, 220 HMO contracts would have met the threshold (compared with 199 in 2015, among HMOs reporting in both years). If the 2015 threshold had been set at 71 percent, 76 HMO contracts would have met the threshold in the 2015 ratings (compared with 100 meeting it in the 2016 ratings). As we noted, for this particular measure, plan performance did improve (with the mean rate rising from 65.4 percent to 67.4 percent among HMOs reporting in both years), but

the revision to the thresholds resulted in a reduced number of plans in bonus status.

Other measures had a lower 4-star threshold in 2016, such as the measure for monitoring physical activity. Among 233 HMOs reporting a result for this measure both in 2015 and 2016, 69 achieved a 4-star rating in 2016 compared with only 8 in 2015. For this measure, the number of HMOs at or above the 2015 threshold of 60 percent (among those reporting in both years) increased from 12 to 14. Using a threshold of 55 percent (the new 4-star threshold), 51 HMOs were at that level in 2015 compared with 69 in 2016.

A contract is eligible for bonus payments if the weighted average of each of the individual measure stars is at or above 3.75 (rounded to 4). As we have explained, the change in methodology for determining 2016 star ratings at the individual measure level had both positive and negative effects on individual star measures for plans in relation to their 2015 star levels. Although there might have been a concern that the movement away from predetermined thresholds could have had the effect of generally reducing plans' star ratings, that was not the case. Looking at year-over-year changes, the change in methodology for 2016 did not have a substantially different effect on the overall star ratings of plans when compared with past changes in overall star ratings.

Table 12-10 shows the changes in overall star ratings in the most recent period (with the methodological change)

**TABLE
12-11****Distribution of enrollment by
plan star ratings, 2015–2016**

Star rating	Percent of total enrollment	
	2015	2016
5.0	9%	10%
4.5	20	26
4.0	36	35
Subtotal, bonus-status plans (4 stars or higher)	65	70
3.5	23	20
3.0	10	9
2.5	2	1
2.0	<1	0

Note: Enrollment is for October 2015. Data include plans with a star rating in either 2015 or 2016. Data exclude cost-reimbursed HMO plans, which are not eligible for bonuses. Figures may not sum to stated totals due to rounding.

Source: MedPAC analysis of CMS star ratings and enrollment data.

compared with the preceding year for HMOs with star ratings in both years compared. The only category of star ratings that saw an increase in the share of plans with lower overall ratings in the subsequent year were HMO contracts at the 5-star and 4.5-star level. Between 2014 and 2015, 30 percent of HMO plans that had been at 5 stars dropped to a lower star rating; similarly, between 2015 and 2016, 33 percent of the plans that had been at 5 stars dropped to a lower star level—a slightly higher share than from 2014 to 2015. Among plans at the 4.5-star level, between 2014 and 2015, 21 percent of HMOs dropped to a lower star level; a higher proportion—34 percent—dropped to a lower star level between 2015 and 2016. For each of the remaining star levels, fewer plans dropped to a lower star rating in the 2015 to 2016 period as compared with the 2014 to 2015 period (for example, 29 percent of 4-star plans dropped to a lower star level in the first period, as compared with 24 percent in the second period, which was the period of the change in methodology).

Although the distribution of plans at different star levels changed between the 2015 star ratings and the 2016 star ratings, the net effect of the methodological changes was minimal under a “same-store” comparison. For the 331 plans rated in both 2015 and 2016, there was virtually no difference between the 2015 enrollment-weighted average

overall star ratings (3.99) and the 2016 weighted ratings (4.03). Between 2014 and 2015, the comparable change in the weighted average star ratings was similar (3.88 vs. 3.91, respectively, using year 2014 enrollment; data not in table). However, across all plans, the share of enrollees in bonus-level plans increased. Among 363 plans with an overall 2016 star rating, 173 (48 percent) have a star rating of 4 stars or higher, but these bonus-eligible plans include 70 percent of MA enrollment. In the preceding year, among 389 plans with an overall 2015 star rating, 153 MA plans (39 percent) had a star rating of 4 or higher, representing 59 percent of enrollment. The smaller number of plans with ratings and the greater share of enrollees in bonus-eligible plans is partly due to contract consolidations whereby an organization combines multiple plans under one surviving plan. For 2016, 16 contracts under 4 stars have had their enrollees incorporated into 4-star or 4.5-star contracts—reducing the number of contracts with a 2016 rating and reducing the number of enrollees included when determining the enrollment-weighted average 2016 star rating based on October 2015 enrollment. For 2016, about 900,000 enrollees (about 5 percent of MA enrollment in plans with a 2015 star rating) are being folded into a bonus-eligible contract from a contract that was not in bonus status in the 2015 ratings.

Among all plans with any star rating in 2016 (excluding certain plan types not in the quality bonus program), 70 percent of enrollees are in plans with a star rating of 4 or higher based on the 2016 ratings, compared with 65 percent for the same set of enrollees if the 2015 star ratings had been used (Table 12-11). About one-fourth (26 percent) of enrollees are in plans with a 4.5 star rating, compared with 20 percent using the 2015 star ratings for the same plans; the share of enrollees in 3.5-star plans declined (from 23 percent to 20 percent).

Some plans were able to move to bonus status (rated 4 stars or higher) because of their performance on the two CMS-computed measures that gauge whether a plan has improved in Part C (one measure) and/or Part D (a separate improvement measure). Each improvement measure is weighted 5; thus, the two improvement measures make up about 12 percent of the total weight for determining the overall star rating. Of 369 MA contracts with a star rating for 2016, 15 are in bonus status because of their improvement scores. Of those 15, 3 are majority D–SNP contracts, including 2 contracts in Puerto Rico, where plans historically have had low overall star ratings—with no plans in bonus status until the 2016 ratings.

**TABLE
12-12****Overall star ratings by plan type and weighted average ratings, 2016**

Plan type	Number of contracts by overall star level						Average stars (enrollment weighted)
	2.5	3.0	3.5	4.0	4.5	5.0	
HMO	12	49	80	68	45	10	4.07
Local PPO	0	11	25	27	20	0	4.16
Regional PPO	0	5	4	1	0	0	3.33
Private fee-for-service	0	1	3	2	0	0	3.80
Cost-reimbursed HMO	0	0	0	4	0	2	4.32

Note: PPO (preferred provider organization). Cost-reimbursed plans are not Medicare Advantage plans and are not eligible for bonuses.

Source: MedPAC analysis of CMS 2016 star data and October 2015 enrollment data.

Another change in CMS's methodology allowed contracts with enrollment between 500 and 999 enrollees to be included in HEDIS measurement. As a result, smaller organizations have an overall star rating, including, for example, two contracts (sponsored by the same company) that are exclusively chronic condition special needs plan (C-SNP) contracts serving beneficiaries with HIV/AIDS, which have star ratings of 4.0 and 4.5.

Moving enrollees to bonus plans

CMS publicizes plan star ratings to coincide with the October to December MA open enrollment period so that beneficiaries can consider star ratings when choosing among plans. The 2016 star ratings, for enrollments effective in 2016, were released in October 2015.

However, for bonus payment purposes, a plan's bonus status has to be known earlier so that, when plans bid in June for the following year, the benchmarks include any bonus add-ons. Bids applicable to the 2016 contract year were therefore based on the 2015 star ratings released in October of 2014.

CMS has permitted plans to consolidate contracting by moving enrollees to a different contract ("cross-walking" the enrollees), but this consolidation can result in enrollees being moved from a contract for which the organization would not have received bonus payments for their enrollees to a contract that is in bonus status. At the end of 2013, 11 contracts were terminated and their 156,000 enrollees cross-walked to a new contract. Of that number, 122,000 enrollees in 8 contracts (all with the same parent organization) were moved from a contract with a rating

below 4 stars to one with 4 or more stars, resulting in additional program expenditures through bonus payments to plans for these 122,000 enrollees. Cross-walking also occurred at the end of 2014, involving 3 companies and 387,000 beneficiaries. At the end of 2015, nearly 900,000 enrollees—about 5 percent of total MA enrollment, involving 5 companies—were moved from plans with a 2015 rating below 4 stars to bonus-eligible plans with a 2015 rating of 4 stars or higher (the 2015 ratings being the ratings that determine whether bonuses are received during the 2016 contract year). As a result of this movement of plan members, the share of MA enrollees in bonus status in 2016 (based on October 2015 enrollment levels and 2015 stars), rose from 65 percent to about 70 percent.

Variation in star ratings by plan type

As has been true in past years and as CMS notes in its 2016 star ratings fact sheet, plans with the highest star ratings have certain characteristics (available at <https://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovGenIn/PerformanceData.html>). Higher rated plans have been in the MA program longer and are more likely to be nonprofit. Our analysis also shows that plans with a high proportion of enrollees who are in an employer-sponsored plan have higher average star ratings. Overall star ratings for plans also vary by plan type, with HMOs (at 4.07 in 2016) and local PPOs (at 4.16 in 2016) having higher enrollment-weighted star ratings than PFFS plans (3.80) and regional PPOs (3.33) (Table 12-12). The only plans rated at 2.5 stars overall are HMO plans, while the only 5-star plans are HMO plans. No

**TABLE
12-13****2016 star ratings for majority D-SNP plans**

Type of contract	Number with:			
	Star rating	Star rating in bonus status	Star rating in bonus status due to improvement	Star rating not in bonus status
All*	62	14	3	48
100 percent D-SNP				
With 65 and older enrollment at 100%	8	7	0	1
Majority D-SNP				
With under-65 enrollment over 30%	42	3	1	39
With under-65 enrollment at or below 30%**	12	4	2	8

Note: D-SNP (dual-eligible special needs plan). Contracts with star ratings of 4 stars or higher are in bonus status.

*Excludes four contracts, all in nonbonus status, for which we do not have data on the under-65 enrollment.

**Includes one contract that has been sanctioned, resulting in a star rating of 2.5 (rated 4 in the preceding year).

Source: MedPAC analysis of CMS star ratings and enrollment data.

PFFS or regional PPO plans are rated higher than 4 stars. Among cost-reimbursed HMO contracts, for the six that have an overall star rating, two have a rating of 5 stars and four have a rating of 4 stars.

Contracts with a majority of enrollment (50 percent or more) consisting of beneficiaries who are dually eligible for Medicare and Medicaid tend to have low star ratings. Across all plans, 70 percent of enrollees in plans with a 2016 star rating are in plans that have bonus-level star ratings (4 stars or above; Table 12-11, p. 356); however, the corresponding figure is 37 percent among contracts in which the majority of enrollment consists of dually eligible beneficiaries (for contracts with 50 percent or more D-SNP enrollment). Excluding these majority D-SNP contracts, 74 percent of enrollees are in bonus-level plans. In the 2015 star ratings examined in last year's report, 14 percent of enrollees in majority D-SNP plans were in plans rated 4 stars or higher. The larger percentage for 2016 is in part due to the effect of the improvement measures in raising overall stars (Table 12-13).

Sixty-six contracts that are majority D-SNP contracts have a 2016 star rating (Table 12-13). Fourteen are bonus-status contracts, with a star rating of 4 (11 contracts) or 4.5 (3 contracts). Three of the contracts with 4 stars are in bonus status only because of the improvement measures, including one contract with over 30 percent of

its enrollment consisting of beneficiaries under the age of 65 (36 percent of whom are entitled to Medicare on the basis of disability). Otherwise, there are two other D-SNP contracts with high under-65 enrollment (at 36 percent and 58 percent) that have 4-star ratings in the 2016 stars.

In last year's report, we provided information showing that contracts with a high proportion of enrollees under the age of 65 had lower overall star ratings in the context of determining why some D-SNPs were able to achieve high overall star ratings while others were not (Medicare Payment Advisory Commission 2015). D-SNP plans with high star ratings were almost exclusively plans that did not enroll beneficiaries under the age of 65. Subsequently, the Commission undertook an analysis of beneficiary-level data to determine whether certain HEDIS measures showed systematic differences in results based on age, disability status, and dual-eligibility status. CMS and its contractors undertook a similar analysis and evaluated information received from plans and other interested parties. Both the Commission and CMS found that there are systematic differences, and those differences can be seen not only within a contract but also across contracts. As a result, CMS is considering ways to adjust star ratings to compensate for the systematic performance differences among population categories. Our work and that of CMS and its contractors is summarized in the text box on MA plan star ratings.

Variation in Medicare Advantage plan star ratings reflecting population differences

Since 2012 Medicare Advantage (MA) plans have been eligible for quality bonus payments if they achieve a star rating of 4 or higher in the 5-star rating system established by CMS. Plans that enroll a disproportionate share of low-income beneficiaries believe that they are at a disadvantage in the star rating system because their enrollees' sociodemographic status complicates the plans' ability to provide optimal care. Data at the contract level (the level used for determining star ratings) do indicate that plans with high shares of low-income beneficiaries tend to have lower star ratings, which is also the case for plans with high shares of enrollees under the age of 65. Because MA rules allow plans to limit their enrollment to certain categories of beneficiaries, the impact of the differences in star ratings falls most heavily on plans that specialize in serving Medicare–Medicaid dually eligible beneficiaries, nearly half of whom are under the age of 65.

In response to the concerns raised, CMS and its contractors examined whether there was a systematic bias in the star rating system affecting low-income enrollees. The agency found such a bias for a number of the quality measures. The agency continues to evaluate how to address the bias while maintaining the integrity of the star rating system but allowing adjustments that can result in bonus payments for plans that would otherwise not be eligible, absent such adjustments. As required by the Improving Medicare Post-Acute Care Transformation Act of 2014, the Department of Health and Human Services is also examining the question of the extent to which socioeconomic factors should be taken into account in quality measurement.

The Commission undertook an analysis similar to that of CMS as a follow-up to our analysis of star ratings and the contract-level composition of enrollment of plans (Medicare Payment Advisory Commission 2015).

Our research, and that of CMS and its contractors, found that for a subset of measures in the star system, rates for low-income individuals and beneficiaries with disabilities were systematically lower than for

other populations, but that for a few measures, rates were better among low-income populations or those with disabilities (Centers for Medicare & Medicaid Services 2015e). Our analysis was limited to a subset of Healthcare Effectiveness Data and Information Set® (HEDIS®) measures for which we had beneficiary-level data that could be combined with demographic data and health status information. None of the measures we examined are case-mix adjusted for star rating purposes, and when CMS did its analysis, it specifically excluded measures (such as Consumer Assessment of Healthcare Providers and Systems® measures) that are case-mix adjusted.

Each analysis found that for a limited number of measures, there were meaningful differences between results for the two populations examined (the under-65 and low-income beneficiaries) and other plan enrollees. Specifically, CMS and its contractor (RAND) found that for the low-income population (beneficiaries entitled to low-income subsidies under Part D), 8 of 16 measures examined had a median difference of over 2 percent (ranging from 2 percent to 8 percent) compared with rates for non-low-income individuals within the same contract. In the star rating system, those measures constitute about 15 percent of the total weight of all measures. For disabled individuals, there were 10 such measures (with a median difference ranging from 3 percent to 9 percent), making up about 22 percent of the total weight of star measures. A set of factors that CMS examined was a set of factors not included in our analysis—census block measures of socioeconomic status (SES), including education and income/poverty levels. These SES factors were found not to have a meaningful effect when low-income status and disability status were taken into account (Centers for Medicare & Medicaid Services 2015e).

CMS's intent is to make adjustments when there are systematic within-contract differences in results for the populations in question. That is, to the extent that differences arise because there are differences between contracts that reflect the poorer performance of the contractor, an adjustment is not appropriate.

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Variation in Medicare Advantage plan star ratings reflecting population differences (cont.)

As of this writing, CMS is considering the manner in which star ratings can be adjusted. The agency has proposed using either: (1) a method by which there is essentially a contract-level case-mix adjustment, with a star rating adjustment applied to deciles of plans grouped by their share of the relevant populations, or (2) indirect standardization of measure results. Under indirect standardization, a plan's performance for each relevant subpopulation (the observed rate) is measured against an all-plan uniform standard for each subpopulation (the expected rate). The plan's overall performance is the weighted average of its observed-to-expected results by subpopulations. CMS has requested comments on these approaches or others (Centers for Medicare & Medicaid Services 2015d).

The Commission has a precedent for dealing with disparities in plan quality indicators and their effect on plan payments. In the case of the hospital readmission penalty, there is an association between a hospital's share of low-income patients and its rate of readmissions. Hospitals with higher shares of low-income patients are more likely to incur penalties because of their higher overall readmission rates. The Commission has suggested using an approach whereby hospitals are grouped into categories (e.g., deciles) by their share of low-income patients. A target

performance will be determined for each category of hospitals, with penalties applied when a hospital does not meet the target for its category of hospitals (e.g., a grouping consisting of hospitals with over 50 percent of patients being low income). The calculated readmission rate will not be adjusted (it will remain high for many hospitals with high low-income volume, and disparities would not be masked), but the penalty structure will be different.

In material presented after the agency's request for comments on its proposal (Centers for Medicare & Medicaid Services 2015c), CMS stated that, for public reporting purposes, the Medicare.gov website (Plan Finder) would display an unadjusted result at the level of the individual measure (e.g., breast cancer screening rates) and at the level of the domain (breast cancer screening is in the "Staying Healthy: Screenings, Tests and Vaccines" domain). However, the Part C and Part D summary star ratings would have adjusted results displayed. This approach is somewhat different from the approach the Commission favors in the case of hospital readmission rates, for which only unadjusted rates would be publicly reported. In CMS's proposed approach to the display of star ratings, a user of Plan Finder would have to look specifically at the measure and domain levels to determine unadjusted rates. ■

Summary of MA quality data and issues with star ratings

To summarize our analysis of MA quality, we found that most quality indicators remained relatively stable or unchanged, with improvement seen in measures of drug adherence and the avoidance of high-risk drugs for the elderly. One measure declined among HMOs, and some patient experience measures had slight declines for HMOs and PPOs. A number of measures had specification changes that did not allow us to determine year-over-year changes in the measure results.

For the 2016 star rating period, more MA enrollees will be in plans eligible for bonus payments, though there was little change in the enrollment-weighted average plan star ratings between 2015 and 2016 despite certain

changes in the methodology for determining overall star ratings. We continue to see that certain plan types perform better than other plan types in the star ratings, and there is evidence that there are systematic differences in plan performance with respect to certain populations—the under-65 population (entitled to Medicare on the basis of disability) and the often overlapping category of low-income beneficiaries. CMS is considering ways to address these systematic differences. CMS and the Department of Health Human Services are continuing to study the issue.

We have called attention to the large number of beneficiaries that plans have been able to move from nonbonus status to bonus status through an end-of-the-year "cross-walking" from one contract to another. This practice results in additional program expenditures that

The Commission reiterates its March 2014 and March 2004 recommendations on Medicare Advantage

The Commission reiterates recommendations it has recently made to improve the bidding rules in the Medicare Advantage (MA) program and to integrate hospice care into the MA benefit package. The effects on spending were estimated at the time the Commission made these recommendations (and we believe the magnitude and the direction of these effects have not substantially changed in the last two years). We also reiterate our recommendation from 2004, calling for the Congress to allow all beneficiaries with end-stage renal disease to enroll in private (MA) plans.

Recommendation 13-1, March 2014 report

The Congress should direct the Secretary to determine payments for employer group Medicare Advantage plans in a manner more consistent with the determination of payments for comparable nonemployer plans.

The implementation of this recommendation could use the national average bid-to-benchmark ratio for nonemployer plans and apply that ratio to employer group plans. However, alternatives to this approach are also possible.

Implications 13-1

Spending

- We would expect Medicare program spending to decrease. Under the specific option we discussed, spending would decrease between \$250 million and \$750 million over one year and between \$1 billion and \$5 billion over five years.

Plans

- Most employer group plans would be paid less by Medicare because of the lowering of Medicare subsidies. In response, plans could charge employers more, offer fewer supplemental benefits, make lower profits, or lower their costs.

Beneficiaries

- Some employer group plan enrollees might choose plans in the nonemployer market or move to fee-for-service (FFS) Medicare if employers dropped plans or increased charges to plan enrollees.

Recommendation 13-2, March 2014 report

The Congress should include the Medicare hospice benefit in the Medicare Advantage benefits package beginning in 2016.

The carve-out of hospice from MA fragments financial responsibility and accountability for care for MA enrollees who elect hospice. Including hospice in the MA benefits package would give plans responsibility for the full continuum of care, which would promote integrated, coordinated care, consistent with the goals of the MA program. With the inclusion of hospice in the MA benefits package, plans would have greater incentive to use the flexibility inherent in the MA program to develop and test innovative programs aimed at improving end-of-life care and improving care for patients with advanced illnesses more broadly. In addition, giving MA plans responsibility for hospice would be a step toward synchronizing accountability for hospice across Medicare platforms (MA, accountable care organizations (ACOs), and

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would not otherwise have been incurred, and the practice also hampers our ability to analyze changes in quality results over the years in the manner we usually employ. We generally look at year-over-year changes by contract for contracts reporting in each year. We do so on the assumption that it is the best way to evaluate whether there has been improvement in the quality indicators for the MA sector (as opposed to comparing all-contract averages for

each year, for example). However, when the enrollment in one contract doubles from what it had previously been—as in the case of one of the cross-walked contracts absorbed by another contract in a different, noncontiguous state—then we are dealing with a contract where quality results cannot be compared with the preceding year's results if the objective is to be able to gauge whether the contract shows improvement in its quality measures. ■

The Commission reiterates its March 2014 and March 2004 recommendations on Medicare Advantage (cont.)

FFS). Because the Commission believes it is important to include hospice in the MA benefits package as soon as possible, we have recommended this change be made by 2016. We recognize that implementing this change, if it were enacted by the Congress, would require actions by CMS (to recalculate capitation rates and risk scores) and by plans and providers (to negotiate contracts), but we believe this change could be accomplished by 2016 under a tight time line.

Implications 13-2

Spending

- The effect on Medicare program spending is expected to be negligible, with the policy potentially resulting in a small cost or small savings. The estimated one-year and five-year effects on Medicare program spending fall into our smallest budget categories: cost or savings of less than \$50 million over one year and less than \$1 billion over five years.

Beneficiaries and providers

- MA enrollees could benefit from a more integrated, coordinated MA benefits package. Some plans may choose to provide concurrent hospice and

conventional care or offer other supplemental benefits aimed at improving care for patients with advanced illnesses, which could expand options available to beneficiaries. We would not expect an adverse impact on beneficiaries' access to hospice care. As with other types of Medicare services, beneficiaries might be required to obtain services from a network provider, so they might have fewer hospice providers to choose from than they do under FFS Medicare. MA plans would have the option to charge nominal beneficiary cost sharing for hospice services, whereas under FFS Medicare, there is no cost sharing (with minor exceptions). If the experience with home health is any guide, MA plans may be unlikely to charge hospice cost sharing. Few MA plans require cost sharing for home health services from network providers.

MA plans would be better positioned to manage and coordinate care for patients with advanced illnesses. If including hospice in MA led some plans to experiment with concurrent care or other approaches that seek to improve care for patients with advanced illnesses, hospice providers could

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The Commission reiterates its March 2014 and March 2004 recommendations on Medicare Advantage (cont.)

have opportunities to participate in new models of care.

Plans and hospices currently engage in private contracting for commercially insured individuals and incur administrative costs associated with that contracting. If hospice were included in MA, the breadth of those contracting activities would increase and plans and hospice providers would incur additional administrative costs associated with them.

Quality

- Including hospice in MA would reduce fragmentation of coverage, which would promote integrated, coordinated care. Furthermore, broadening MA plans' bundle of services to include the full continuum of end-of-life care could incentivize plans to focus more on efforts to improve quality and satisfaction with this care.

Delivery system reform

- Hospice is an area in which Medicare policy differs across delivery systems. Including hospice in MA would be a step toward synchronizing policies across the Medicare system (MA, ACOs, and FFS).

Recommendation 4B, March 2004 report

The Congress should allow all beneficiaries with end-stage renal disease to enroll in private plans.

All beneficiaries should be allowed the voluntary choice of plans so long as payment is accurate. In 2005, CMS will replace the current payment system for end-stage renal disease (ESRD) enrollees with a version of the new risk adjustment system that should perform much better than the current demographic system, and payments to plans will more accurately reflect the costs of treating them. A study evaluating a Medicare ESRD demonstration showed that the quality of care and outcomes of most plan participants were equal to or better than those for ESRD patients enrolled in traditional Medicare.

Implications 4B

Spending

- This recommendation should not affect Medicare benefit spending.

Beneficiary and plan

- ESRD beneficiaries will have the choice of private plans.
- There should be no significant impact on plans. ■

Endnotes

- 1 While all HMOs and PPOs have provider networks, PPOs cover out-of-network care and HMOs typically do not. There are also HMOs that offer a point-of-service option that covers some out-of-network care.
- 2 Cost plans are technically not MA plans. They do not submit bids but are paid their reasonable costs under provisions of Section 1876 of the Social Security Act.
- 3 Benchmarks for regional plans are based on a weighted average of benchmarks for counties in the region and bids submitted by the regional PPOs. For 2016, regional plans submitted bids in 18 of the 26 MA regions. In 12 of the 18 regions, the average bids were below the region's average benchmark, and so benchmarks for those regions were reduced. As a result, the average regional PPO benchmark (weighted by projected enrollment) was 103 percent of FFS spending, compared with the overall average of 107 percent of FFS spending.
- 4 If plans were required to bid their costs for each county separately, then in many instances, bids for distinct counties would be different from those we observe in the data.
- 5 CMS allows ESRD beneficiaries with a functioning kidney transplant to enroll in Medicare Advantage plans.
- 6 CMS also analyzed two-way and three-way interactions of HCCs and included certain relevant interactions in the model based on the same criteria as individual HCCs.
- 7 We identified HRAs as encounters either with a Healthcare Common Procedure Coding System (HCPCS) code of G0438, G0439, 99420 or with a HCPCS code for an evaluation and management visit and with place of service as home, given that a large portion of HRAs are known to be provided in a patient's home. Our initial analysis of only the three HRA HCPCS codes did not include certain MA contracts known to have a home visit program in place in 2012. We believe this analysis reasonably identifies HRAs administered in MA, though it may include some home visits during which medical care was provided and an HRA was not, and it may have missed other HRA administration encounters. CMS began tracking HRAs provided in the home in 2014.
- 8 The vast majority of this 37 percent of HCCs had no other provider encounter at all. Only a small portion of these HCCs (6 percent of the total) were identified on another encounter that does not affect MA payment (e.g., home health, nursing facility, hospice).
- 9 Medicare payment in 2014 used a blend of risk scores based 75 percent on the new CMS–HCC model mentioned earlier and 25 percent on the CMS–HCC model used in 2013 payments. The incorporation of the new CMS–HCC model reduced the impact of HRA-only HCCs on Medicare payments in 2014.
- 10 The version of the CMS–HCC risk adjustment model introduced in 2014 includes the same V and E codes for the same 8 HCCs, but also includes V codes indicating a body mass index of 44.0 or greater, which are associated with the morbid obesity HCC. Since changing to ICD–10 diagnostic codes, these diagnoses generally continue to be used in the HCC risk adjustment model.
- 11 According to a CMS memo dated December 4, 2014, an MA organization may create programs that provide rewards and incentives to enrollees in connection with their participation in activities that focus on promoting improved health, preventing injuries and illness, and promoting efficient use of health care resources. Rewards and/or incentives may not be offered in the form of cash or monetary rebates, including reduced cost sharing or premiums. Otherwise, MA organizations have considerable flexibility with regard to what may be offered as a reward or incentive. Gift cards are a permissible form of reward or incentive as long as they are not redeemable for cash and comply with CMS guidelines. MA organizations are encouraged to offer enrollees a choice of gift cards from which to choose to account for differences in enrollees' preferences and accessibility of retailers.

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CHAPTER

13

Status report on Part D

Status report on Part D

Chapter summary

Each year, the Commission provides a status report on the Medicare prescription drug benefit established under Part D that describes beneficiaries' access to prescription drugs: enrollment levels, plan benefit designs, and the quality of Part D services. The report also analyzes changes in plan bids, premiums, and program costs.

In 2014, Medicare spent \$78 billion for the Part D benefit, accounting for nearly 13 percent of total Medicare outlays. In 2015, about 39 million Medicare beneficiaries were enrolled in Part D: 61 percent were in stand-alone prescription drug plans (PDPs) and the rest were in Medicare Advantage—Prescription Drug plans (MA-PDs). Part D experienced significant growth in 2014 and 2015 program spending, much of which was attributable to new treatments for hepatitis C.

Medicare beneficiaries' drug coverage in 2015 and benefit offerings for 2016—In 2015, 70 percent of Medicare beneficiaries were enrolled in Part D plans. Among those 39 million individuals, nearly 12 million received the low-income subsidy (LIS), which provides extra help with premiums and cost sharing. An additional 4 percent received drug coverage through employer-sponsored plans that receive Medicare's retiree drug subsidy. As of 2013, 12 percent of beneficiaries had either no drug coverage or coverage

In this chapter

- Enrollment and plan choices in 2015 and benefit offerings for 2016
- Market structure and strategies of plan sponsors for controlling growth in premiums
- Drug pricing
- Program spending
- Beneficiaries' access to prescription drugs
- Quality in Part D
- Looking ahead

less generous than Part D. Our previous analysis showed that beneficiaries with no creditable coverage tended to be healthier, on average.

In 2016, plan sponsors are offering 886 PDPs and 1,682 MA-PDs, an 11 percent decrease from 2015 in the number of PDPs offered and a 5 percent increase in MA-PDs. PDP reductions appear to reflect a trend in which sponsors are consolidating their plan offerings into fewer, but more widely differentiated, products. Even with these consolidations, beneficiaries have between 19 and 29 PDPs to choose from, depending on where they live, as well as typically 9 or more Medicare Advantage options. MA-PDs continue to be more likely than PDPs to offer enhanced benefits, but a smaller share is offering gap coverage (beyond what is required by the Patient Protection and Affordable Care Act of 2010) compared with previous years. For 2016, 218 premium-free PDPs are available to enrollees who receive the LIS, a 23 percent decline from 2015. Most regions of the country continue to have at least 3 and as many as 10 PDPs available at no premium to LIS enrollees.

In 2015, about 80 percent of enrollees were in plans with two cost-sharing tiers for generic drugs: a preferred one with lower cost sharing and another generic tier that, in some cases, came with substantially higher cost sharing. In 2015, nearly 90 percent of PDPs used tiered pharmacy networks that included preferred pharmacies offering lower cost sharing. Both of these strategies provide financial incentives for enrollees to use lower cost drugs or providers, potentially reducing program costs. However, because cost sharing for LIS enrollees is set by law, they are less likely to be influenced by plan benefit designs that use cost sharing to encourage the use of lower cost medications and pharmacies. This situation, in turn, may lead to higher growth in spending for Medicare's low-income cost-sharing subsidy compared with cost-sharing amounts paid by non-LIS enrollees.

Part D program spending and bids—Between 2007 and 2014, Part D spending on an incurred basis increased from \$46 billion to \$73 billion (an average annual growth rate of about 6.8 percent). (The incurred amount of \$73 billion for 2014 differs from the \$78 billion mentioned earlier because the larger amount includes reconciliation payments between Medicare and plan sponsors for benefits delivered in previous years.) In 2014, Part D program payments increased by nearly 15 percent from the year before, much of that due to spending for new hepatitis C drugs. Also in 2014, Medicare's reinsurance payments to plans surpassed LIS payments to become the single largest component of Part D spending. Reinsurance also remained the fastest growing component, at an average annual rate of 19 percent between 2007 and 2014. Program spending for Part D reflects two underlying trends. First, an unusually large number of patent expirations on widely used brand-name drugs has led to a dramatic shift toward use of generics in Part D.

Generic drugs' share of all Part D prescriptions filled rose from 61 percent in 2007 to 84 percent in 2013. However, between 2012 and 2013, the share of enrollees who incurred spending high enough to reach the catastrophic phase of Part D's benefit grew by nearly 10 percent. Spending for these high-cost individuals grew by 8.4 percent per enrollee, driven primarily by increases in the average price per prescription filled. The pharmaceutical pipeline is shifting toward greater numbers of biologic products and specialty drugs, many of which have high prices and few therapeutic substitutes. The use of high-priced drugs by Part D enrollees will likely grow and put significant upward pressure on Medicare spending for individual reinsurance and the LIS.

Access to prescription drug coverage—In general, Part D has improved Medicare beneficiaries' access to prescription drugs, with plans available to all individuals. The amounts enrollees pay in cost sharing can also affect access. Generally, between 2007 and 2013, average out-of-pocket costs remained stable or even decreased somewhat, in part because of the phased closure of Part D's coverage gap. For individuals whose prescription medications are not covered by their plans or are covered but have relatively high cost sharing, a well-functioning exceptions and appeals process is crucial. Plan-level data show low rates of claim rejections and appeals. At the same time, CMS has conducted audits that have found some compliance issues with formulary administration, claims adjudication, and appeals.

Quality in Part D—In 2016, the average star rating among Part D plans decreased somewhat for PDPs but increased slightly for MA-PDs. PDP scores changed significantly because of changes to the mix of measures, making it difficult to use star ratings to evaluate changes in quality of services over time. Part D plans are required to implement medication therapy management (MTM) programs to improve quality. Although the Commission supports the goal of improving medication management, we have been concerned with the effectiveness of plans' MTM programs. Beginning in 2017, Medicare will test enhanced MTM programs by providing incentives for stand-alone PDPs to conduct medication reviews and tailor drug benefit designs to encourage adherence to appropriate drug therapies. ■

**TABLE
13-1****Parameters of the defined standard benefit increase over time**

	2006	2015	2016	Average annual growth rate 2006–2016
Deductible	\$250.00	\$320.00	\$360.00	3.7%
Initial coverage limit	2,250.00	2,960.00	3,310.00	3.9
Annual out-of-pocket spending threshold	3,600.00	4,700.00	4,850.00	3.0
Estimated total covered drug spending at annual out-of-pocket threshold	5,100.00	7,061.76*	7,515.22*	4.0
Minimum cost sharing above annual out-of-pocket threshold:				
Copayment for generic/preferred multisource drugs	2.00	2.65	2.95	4.0
Copayment for other prescription drugs	5.00	6.60	7.40	4.0

Note: *Total covered drug spending at annual out-of-pocket threshold depends on each enrollee's mix of brand-name and generic drugs filled during the coverage gap. The amounts for 2015 and 2016 are for an individual who is not receiving Part D's low-income subsidy and has no other supplemental coverage. Part D benefit parameters for 2016 reflect an increase of nearly 12 percent over 2015 due to a more than 6 percent increase in average spending and a revision to prior-year adjustments of over 5 percent (Centers for Medicare & Medicaid Services 2015g).

Source: CMS, Office of the Actuary.

Background

In 2014, Medicare spent \$78 billion on the Part D program, accounting for nearly 13 percent of Medicare outlays (Boards of Trustees 2015).¹ In 2015, more than 39 million Medicare beneficiaries were enrolled in Part D plans. Each year, the Commission provides a status report on Part D and makes recommendations as necessary. We examine several performance indicators: enrollment patterns, plan benefit offerings, market structure, drug pricing, program costs, beneficiaries' access to medications, and quality.

Part D's approach

Medicare's payment system for Part D is very different from payment systems under Part A and Part B. For Part D, Medicare pays competing private plans to deliver drug benefits to enrollees. Instead of setting prices administratively, Medicare's payments are based on bids submitted by plan sponsors. Part D pays for drug benefits whether beneficiaries enroll in a stand-alone prescription drug plan (PDP) or in a Medicare Advantage—Prescription Drug plan (MA–PD).

The design of the program is intended to give plan sponsors incentives to offer beneficiaries attractive prescription drug coverage while controlling growth

in drug spending. Policymakers envisioned that plans would compete for enrollees based on premiums, benefit structure (e.g., deductible amount), formularies, quality of services, and networks of pharmacies.

The drug benefit

Medicare defines a standard Part D benefit with parameters that change at the same rate as the annual change in beneficiaries' average drug expenses (Table 13-1).² For 2016, the defined standard benefit includes a \$360 deductible and 25 percent coinsurance until the enrollee reaches \$3,310 in total covered drug spending. Enrollees whose spending exceeds that amount face a coverage gap up to a threshold of \$4,850 in out-of-pocket (OOP) spending, excluding cost sharing paid by most sources of supplemental coverage such as employer-sponsored policies. Above the OOP threshold, enrollees pay the greater of either 5 percent coinsurance or \$2.95 to \$7.40 per prescription.

Before 2011, enrollees exceeding the initial coverage limit were responsible for paying the full price of covered drugs (usually without reflecting manufacturers' rebates) up to the annual OOP threshold. Because of changes made by the Patient Protection and Affordable Care Act of 2010 (PPACA), since 2011, beneficiaries without a low-income subsidy (LIS) face reduced cost sharing for both brand-name and generic drugs filled during the coverage gap

**TABLE
13-2****Nearly three-quarters of Medicare enrollees received drug coverage through Part D, 2015**

	Beneficiaries	
	In millions	Percent of Medicare enrollment
Medicare enrollment	55.8	100%
Part D enrollment		
In Part D plans	39.2	70.3
In plans receiving RDS*	<u>2.2</u>	<u>3.9</u>
Total Part D	41.4	74.2**

Note: RDS (retiree drug subsidy). Part D plan enrollment figures based on enrollment as of April 1, 2015.

*Excludes federal government and military retirees covered by either the Federal Employees Health Benefits Program or the TRICARE for Life program.

**The remaining 25.8 percent of beneficiaries not enrolled in Part D receive drug coverage through other sources (such as the Federal Employees Health Benefits Program, TRICARE for Life, and the Department of Veterans Affairs), had no drug coverage, or had coverage less generous than Part D.

Source: MedPAC based on Table IV.B7 and Table V.B4 of the Medicare Board of Trustees' report for 2015 and monthly Part D enrollment data as of April 1, 2015.

(Medicare Payment Advisory Commission 2015b). In 2016, cost sharing for prescriptions filled during the gap phase is 45 percent for brand-name drugs and 58 percent for generic drugs.³ An individual with no other source of drug coverage is estimated to reach the \$4,850 limit at \$7,515.22 in total drug expenses.

Plan sponsors can and do offer alternative benefit designs. For example, a plan can offer a deductible lower than \$360 or can use tiered copayments rather than coinsurance—provided the alternative benefit meets requirements for actuarial equivalence. Once a plan sponsor offers a plan with basic benefits in a region, it can also offer plans with additional drug coverage, called enhanced plans, that supplement the standard benefit.

Part D includes a LIS that provides assistance with premiums and cost sharing for individuals with low incomes and assets. Individuals who qualify for this subsidy pay no or nominal cost sharing set by statute. In 2016, most individuals receiving the LIS pay up to \$2.95 for generic drugs and up to \$7.40 for brand-name drugs.

Two avenues of competition in Part D

Plan sponsors concentrate much of their attention on premium competition to attract enrollees because premiums are seen by most consumers as the most salient feature (particularly by those without the LIS) to compare plan options. Part D plan sponsors submit bids to CMS that represent their revenue requirements (including administrative costs and profit) for delivering the standard benefit to an enrollee of average health. Part D is different from Part C (i.e., Medicare Advantage) in that Medicare's payments do not involve any comparison with an administratively set benchmark amount. Instead, CMS calculates a nationwide enrollment-weighted average among all the bid submissions.

Enrollees pay a base beneficiary premium (\$34.10 in 2016) plus (or minus) any difference between their plan's bid and the nationwide average bid (Medicare Payment Advisory Commission 2015b). If enrollees choose a plan that is costlier than average, they pay a premium that is higher by the difference between the plan's bid and the nationwide average. If they select a plan that has a lower than average bid, their premium is lower by that difference. If enrollees pick a plan that includes supplemental coverage, they must pay the full price for the additional coverage (i.e., Medicare does not subsidize it). This approach is designed to give sponsors the incentive to control enrollees' spending so that sponsors can bid low and keep premiums attractive. At the same time, sponsors must balance this incentive with beneficiaries' desire to have access to medications. A plan with a very limited number of covered drugs might not attract enrollees.

A second avenue of competition involves keeping plan premiums at or below regional LIS benchmarks. Part D's bidding process determines the maximum premium amount Medicare will pay on behalf of LIS enrollees. This amount varies across the country's 34 Part D regions. It is based on an average of premiums for plans (both stand-alone PDPs and MA-PDs) with basic benefits, weighted by each plan's LIS enrollment in the previous year. The formula also ensures that at least one stand-alone PDP is available to LIS enrollees at no premium.

This approach to subsidizing LIS enrollees also provides incentives for plan sponsors to control drug spending and bid low. If sponsors do so, they can win or maintain market share without having to incur marketing expenses for LIS enrollees. Each year, there is turnover in benchmark plans—those that qualify as premium free. If LIS enrollees are in a plan with a premium above the

benchmark and do not choose a plan themselves, CMS reassigns these enrollees randomly to a new benchmark PDP. Instead of accepting the new assignment, LIS enrollees may choose a plan themselves. However, if their selected plan has a premium higher than the benchmark, they must pay the difference between the plan's premium and the benchmark amount. Once LIS enrollees select a plan themselves, CMS no longer reassigns them to a new plan. Instead, the agency sends letters about premium-free plan options in the enrollee's region.

Enrollment and plan choices in 2015 and benefit offerings for 2016

In 2015, about three-quarters of Medicare beneficiaries were enrolled in Part D or actuarially equivalent employer drug plans for retirees. Enrollment has shifted from retiree drug plans to Part D plans. Only 1 percent of Part D enrollees were in defined standard benefit plans; the rest were in plans that had the same or higher average benefit values but different cost-sharing structures. In 2016, plan sponsors are offering fewer PDPs, but beneficiaries continue to have broad choice among plans. The number of MA-PDs has grown slightly.

In 2015, about three-quarters of Medicare beneficiaries were in Part D plans or employer plans that got Medicare's retiree drug subsidy

In 2015, over 39 million individuals—about 70 percent of nearly 56 million total Medicare beneficiaries—were enrolled in Part D plans (Table 13-2). Additionally, nearly 4 percent of other beneficiaries got drug coverage through employer-sponsored plans that received Medicare's retiree drug subsidy (RDS) for being the primary provider.⁴ The remaining nearly 26 percent of Medicare beneficiaries received drug coverage from other sources, had no coverage, or had coverage less generous than Part D.⁵

An estimate from the 2013 Medicare Current Beneficiary Survey (MCBS) suggests that about 12 percent of beneficiaries (a subset of the 26 percent described above) had no "creditable" drug coverage (either no coverage at all or less generous coverage than Part D)—a bit higher than the 10 percent reported by CMS during the first few years of Part D. About half of the 12 percent reported having some drug coverage through public or private insurance. Consistent with previous findings, our analysis

of the 2013 MCBS data suggests that beneficiaries who do not enroll in Part D tend to be healthier (Medicare Payment Advisory Commission 2013).

In recent years, enrollment has shifted noticeably into Part D plans from employer plans that had previously received the RDS (Figure 13-1, p. 376). This shift reflects changes made by PPACA that over time increased the generosity of Part D by eliminating the coverage gap and by altering the tax treatment of drug expenses covered by the RDS. Between 2010 (the year PPACA was enacted) and 2015, the number of beneficiaries whose employers received the RDS fell from 6.8 million to 2.2 million. Over the same period, enrollment in Part D plans that were operated for employers and their retirees (employer group waiver plans, or EGWPs) grew from 2.4 million to 6.6 million.

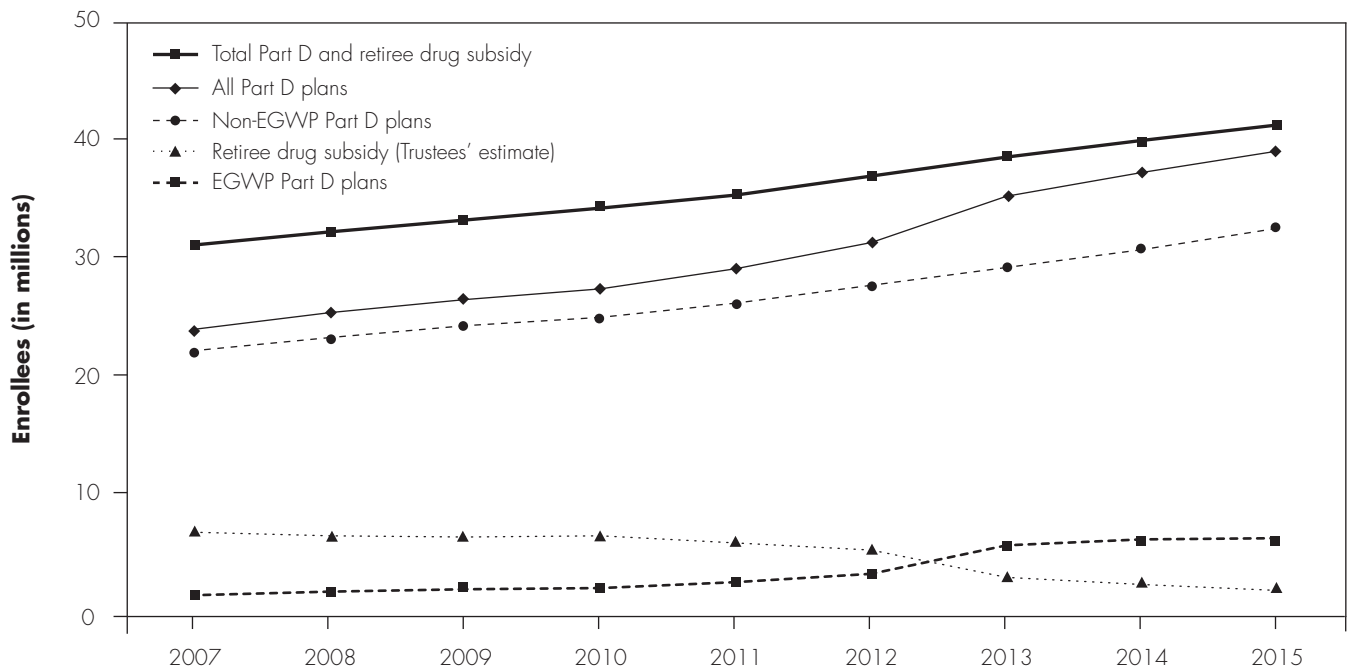
The percentage of Medicare beneficiaries covered under Part D has grown over time, as has the share of enrollees in plans that combine prescription coverage with medical benefits (MA-PDs). Between 2007 and 2015, the share of Medicare beneficiaries enrolled in Part D plans grew from about 54 percent to 70 percent, or an average 6 percent annually (Table 13-3, p. 376). Enrollment in MA-PDs grew more rapidly (10 percent annually) than in PDPs (4 percent annually). In 2015, 39 percent of Part D enrollees were in MA-PDs compared with 30 percent in 2007.

In 2015, about 12 million beneficiaries (30 percent of Part D plan enrollees) received the LIS (Table 13-3). Of these individuals, more than 7 million were dually eligible for Medicare and Medicaid. Another 4.6 million qualified for the LIS either because they received benefits through the Medicare Savings Programs or the Supplemental Security Income program or because they were eligible after they applied directly to the Social Security Administration (data not shown). Part D enrollees who receive the LIS are more likely to be female, more than twice as likely to be African American, Hispanic, or Asian, and nearly five times more likely to be under age 65 (Medicare Payment Advisory Commission 2015a).

Between 2007 and 2015, enrollment growth for Part D enrollees who received the LIS was slower (3 percent per year) than for non-LIS enrollees (8 percent per year) (Table 13-3). Non-LIS enrollees' faster enrollment growth is partly attributable to the recent growth in EGWPs that shifted beneficiaries to Part D plans from employer plans that had previously received the RDS. Consequently, the share that received the LIS fell from 39 percent to 30 percent.

**FIGURE
13-1**

Enrollment in Part D plans has increased over time, with fewer employers receiving Medicare's retiree drug subsidy



Note: EGWP (employer group waiver plan).

Source: MedPAC based on monthly Part D enrollment data and Table IV.B7 of the 2015 annual report of the Boards of Trustees of the Medicare trust funds.

**TABLE
13-3****Part D plan enrollment trends, 2007-2015**

	2007	2009	2011	2013	2015	Average annual growth rate 2007-2015
Total Part D enrollment (in millions)	24.2	26.7	29.3	35.4	39.2	6%
Percent of Medicare beneficiaries	54%	57%	60%	67%	70%	
Enrollment by type (in millions)						
PDP	16.9	17.4	18.6	22.5	24.0	4
MA-PD	7.2	9.3	10.7	12.9	15.3	10
Percent in MA-PD	30%	35%	37%	36%	39%	
Enrollment by LIS status (in millions)						
LIS	9.4	9.7	10.5	11.2	11.7	3
Non-LIS	14.8	17.1	18.8	24.2	27.5	8
Percent receiving the LIS	39%	36%	36%	32%	30%	

Note: PDP (prescription drug plan), MA-PD (Medicare Advantage-Prescription Drug [plan]), LIS (low-income subsidy). Figures are based on enrollment as of April 1 of each year with the exception of 2007 (enrollment as of July 1, 2007) and 2008 (enrollment as of May 1, 2008). Components may not sum to stated totals due to rounding.

Source: MedPAC based on monthly Part D enrollment data.

**TABLE
13-4****MA-PD enrollees more likely to be in enhanced plans with reduced or no deductible, 2015**

	PDP		MA-PD	
	Number (in millions)	Percent	Number (in millions)	Percent
Total	19.2	100%	10.6	100%
Type of benefit				
Defined standard	0.0	0	0.1	1
Actuarially equivalent*	10.6	55	2.9	27
Enhanced	8.6	45	7.6	72
Type of deductible				
Zero	9.3	49	6.0	57
Reduced	1.4	7	3.4	32
Defined standard**	8.5	44	1.2	11

Note: MA-PD (Medicare Advantage-Prescription Drug [plan]), PDP (prescription drug plan). The MA-PD enrollment described here excludes employer-only plans, plans offered in U.S. territories, 1876 cost plans, special needs plans, demonstrations, and Part B-only plans. Components may not sum to stated totals due to rounding.

*Includes "actuarially equivalent standard" and "basic alternative" benefits.

**\$320 in 2015.

Source: MedPAC analysis of CMS landscape, plan report, and enrollment data.

About 70 percent (8 million) of LIS enrollees were in PDPs; the rest were in MA-PDs (data not shown). Most individuals receiving the LIS are enrolled in traditional Medicare rather than Medicare Advantage. Thus, if these individuals have not chosen a Part D plan themselves, CMS randomly and automatically assigns them to benchmark plans, which are all PDPs. However, LIS enrollment in MA-PDs has grown as some individuals have selected these plans or joined them through the Medicare-Medicaid financial alignment initiative.⁶

Beneficiaries' enrollment decisions in 2015

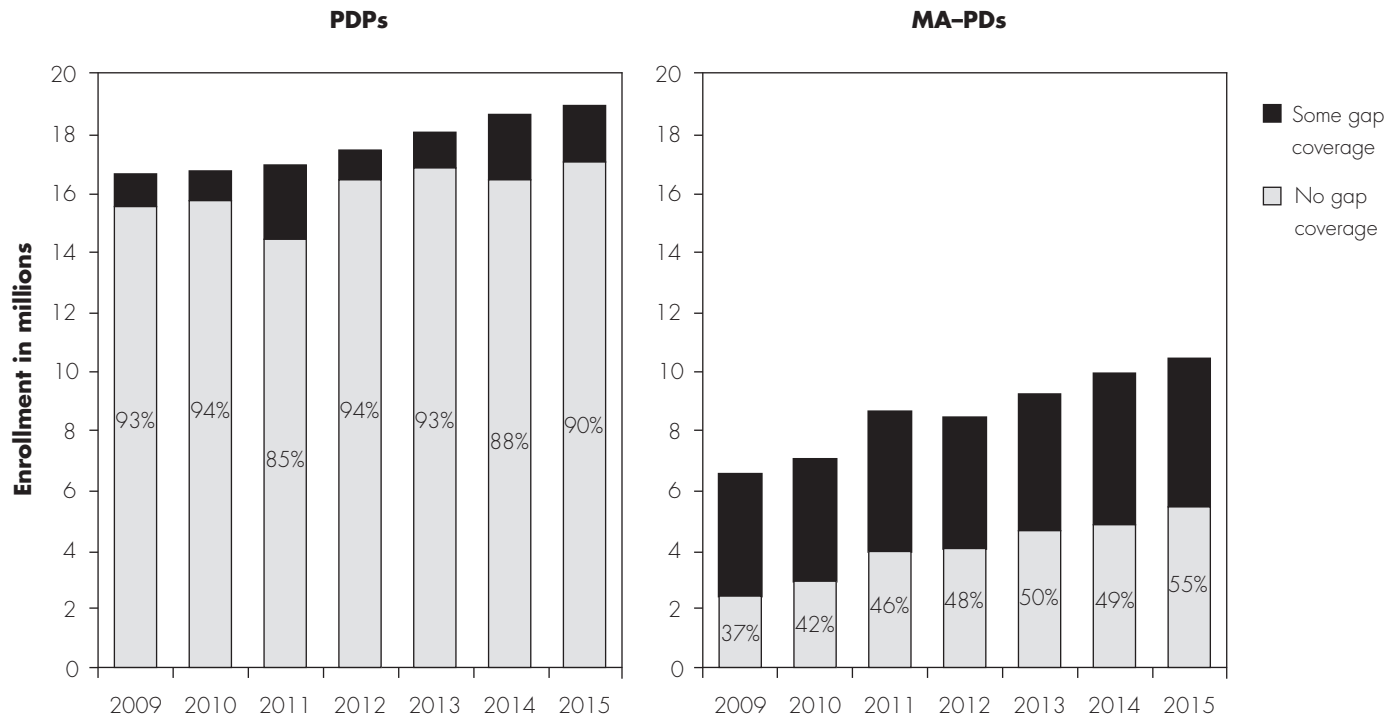
Most Part D enrollees are in plans that differ from Part D's defined standard benefit; these plans are actuarially equivalent to the standard benefit or are enhanced in some way. Actuarially equivalent plans have the same average benefit value as defined standard plans, but a different benefit structure. For example, a plan may use tiered copayments (e.g., charging \$5 per generic drug and \$50 for a brand-name drug) that can be higher or lower for a given drug compared with the 25 percent coinsurance under the defined standard benefit. Alternatively, instead of having a deductible, a plan may use a cost-sharing rate higher than 25 percent. Once a PDP sponsor offers at least one plan with basic benefits in a region, it can also offer

a plan with enhanced benefits by including, for example, lower cost sharing, coverage for drugs filled during the gap (beyond what is required by PPACA), or an expanded drug formulary that includes non-Part D drugs.

Enrollment by benefit design

In 2015, 55 percent of PDP enrollees had basic coverage that was actuarially equivalent to the defined standard benefit, most with tiered copayments (Table 13-4). Another 45 percent of PDP enrollees had enhanced benefits—the typical enhancement being a lower deductible rather than benefits in the coverage gap. No PDP enrollees were in defined standard benefit plans. MA-PD enrollees were predominantly in enhanced plans with no deductible or a deductible smaller than the \$360 in Part D's defined standard benefit. Enrollees in PDPs were more likely to have a deductible in their plans' benefit design than enrollees in MA-PDs.

Under the Medicare Advantage payment system, MA-PDs may use a portion of their Part C payments to supplement their Part D drug benefits or to lower Part D premiums.⁷ Many MA-PDs also use some of their Part C rebate dollars to provide additional Part D benefits in the coverage gap (Figure 13-2, p. 378). In 2015, 45 percent of MA-PD enrollees (nearly 5 million beneficiaries) were in

**FIGURE
13-2****PDP enrollees are less likely to have plans that offer additional benefits in the coverage gap**

Note: PDP (prescription drug plan), MA-PD (Medicare Advantage-Prescription Drug [plan]). Figures exclude employer-only plans, plans offered in U.S. territories, 1876 cost plans, special needs plans, demonstrations, and Part B-only plans. Extra coverage in the gap (beyond what is required by the Patient Protection and Affordable Care Act of 2010) is typically restricted to a subset of formulary drugs. In 2015, one-third of PDP enrollees received the low-income subsidy, which effectively eliminates any coverage gap.

Source: MedPAC analysis of CMS landscape, plan report, and enrollment data.

plans offering some gap coverage. By comparison, only 10 percent of PDP enrollees (about 2 million beneficiaries) were in plans that offered benefits in the coverage gap beyond what is required by PPACA. However, 33 percent of PDP enrollees (8 million of 24 million) received the LIS, which effectively eliminates their coverage gap (data not shown).

Average enrollee premiums

On average, Part D premiums have remained flat over the past several years, despite growth in program spending for Part D's catastrophic benefits. In 2015, monthly beneficiary premiums averaged about \$30 across all plans (Table 13-5). Underlying that average is wide variation, ranging from \$0 for a number of MA-PDs to \$172 for a PDP offering enhanced coverage (data not shown).⁸ On average, premiums were lower for beneficiaries enrolled

in MA-PDs compared with those enrolled in PDPs, in part reflecting plan sponsors' use of Part C rebate dollars to lower enrollee premiums. Among PDP enrollees, individuals in plans that offered enhanced coverage paid, on average, \$20 more per month than those in plans that offered only basic coverage (\$48 vs. \$28, respectively). In contrast, beneficiaries enrolled in MA-PDs, on average, paid lower premiums for enhanced coverage than for basic coverage alone (\$16 vs. \$21, respectively).

While the overall average Part D premium (including basic and enhanced coverage) has been stable in recent years, averages specific to PDPs and to MA-PDs have shown more fluctuation (Table 13-5). For example, average monthly premiums for enrollees in PDPs that offered enhanced coverage experienced large year-to-year changes between 2011 (\$63) and 2013 (\$49).

**TABLE
13-5****Changes in average Part D premiums, 2007–2015**

	Average monthly premium weighted by enrollment (in dollars)						Average annual growth rate 2007–2015
	2007	2011	2012	2013	2014	2015	
All plans (any coverage)	\$23	\$30	\$30	\$30	\$29	\$30	3.1%
PDPs							
Basic coverage	24	33	33	32	30	28	2.1
Enhanced coverage	40	63	58	49	49	48	2.2
Any coverage	27	38	38	39	38	37	3.9
MA–PDs, including SNPs*							
Basic coverage	17	27	27	29	25	21	2.8
Enhanced coverage	9	13	12	13	13	16	8.3
Any coverage	10	14	14	15	16	18	7.2

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), SNP (special needs plan). Figures exclude employer-only plans, plans offered in U.S. territories, 1876 cost plans, demonstrations, and Part B–only plans.

*Reflects the portion of Medicare Advantage plans' total monthly premium attributable to Part D benefits for plans that offer Part D coverage. MA–PD premiums reflect Part C rebate dollars that were used to offset Part D premium costs.

Source: MedPAC analysis of CMS landscape, plan report, and enrollment data.

Two other factors affect the premium amount paid by a given enrollee. First, higher income beneficiaries pay a larger share of their Part D benefits; that is, they have a lower federal subsidy. In 2015, an estimated 2.1 million beneficiaries (about 5 percent of Part D enrollees) were subject to the income-related premium.⁹ As with the income-related premium for Part B, the higher Part D premiums apply to individuals with an annual adjusted gross income greater than \$85,000 and to couples with an adjusted gross income greater than \$170,000. A beneficiary whose income exceeds these levels pays an income-related monthly adjustment amount in addition to the Part D premium paid to a plan. In 2015, the adjustment amount ranged from \$12 to \$71 per month, depending on income.

Second, individuals enrolling in Part D outside of their initial enrollment period must have proof that they had drug coverage as generous as the standard benefit under Part D (i.e., creditable coverage) to avoid the late enrollment penalty (LEP). The LEP amount depends on the length of time an individual went without creditable coverage and is calculated by multiplying 1 percent of the base beneficiary premium times the number of full,

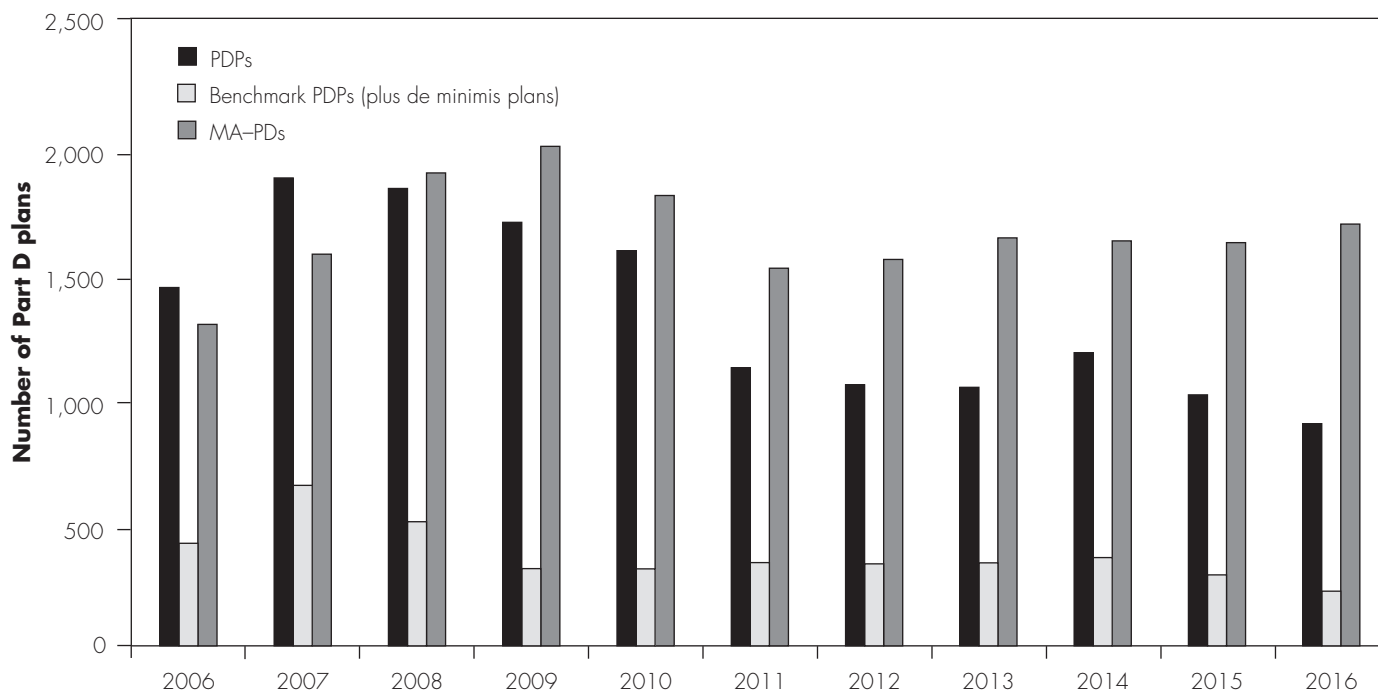
uncovered months an individual was eligible but was not enrolled in a Part D plan and went without other creditable coverage.

Benefit offerings for 2016

Beneficiaries are encouraged to reexamine their plan options from time to time. In addition to changes in plan availability and premiums, most plans make some changes to their benefit offerings—such as deductible amounts and plan formularies—that can directly affect access to and affordability of medications. We outline notable trends for the 2016 benefit year, including changes in numbers of plans, coverage, premiums, and cost sharing.

Number of PDPs has declined, but broad choice still available

For 2016, plan sponsors are offering 11 percent fewer PDPs than in 2015, while the number of MA–PDs increased by 5 percent (Figure 13-3, p. 380). The decline in PDPs is due largely to plan responses to CMS's policy intended to differentiate more clearly between basic and enhanced benefit plans and a policy discouraging plans with low enrollment. In addition, some sponsors may have

**FIGURE
13-3****A wide variety of plans available in 2016, but fewer benchmark PDPs**

Note: PDP (prescription drug plan), MA-PD (Medicare Advantage–Prescription Drug [plan]). “Benchmark PDPs” are plans for which low-income subsidy (LIS) enrollees pay no premium because the plans’ premiums are at or below a regional premium threshold. “De minimis plans” are plans that CMS permitted to retain their LIS enrollees because the plan premium was within a certain variance of the regional LIS premium threshold. The figures exclude employer-only plans, plans offered in U.S. territories, 1876 cost plans, special needs plans, demonstrations, and Part B-only plans.

Source: CMS landscape and plan report files, 2006–2016.

chosen to reduce their offerings out of concern for rules that were proposed by CMS—but ultimately were not finalized—that would have limited sponsors to offering no more than two PDPs per region (Centers for Medicare & Medicaid Services 2014d).¹⁰

Even with fewer PDPs, beneficiaries continue to have a wide variety of choice among plans, ranging from 19 PDP options in Alaska to 29 PDPs in the Pennsylvania–West Virginia region, along with MA–PD options in most areas of the country. The number of Medicare Advantage (MA) plans available to a beneficiary varies by the county of residence, with an average county having 9 MA plans to choose from (18 plans when weighted by the Medicare population). A handful of counties have no MA plans available.

In 2016, PDPs available to LIS enrollees with no premium (benchmark plans) declined 23 percent from 2015 levels to 218 plans (Figure 13-3). Most regions of the country

continue to have a number of premium-free PDPs available in 2016, ranging from 3 PDPs in Florida to 10 in Arizona and in the Washington, DC–Delaware–Maryland region. Hawaii has two PDPs that qualify as premium free.

For 2016, an estimated 1.9 million of about 12 million LIS enrollees were affected by the turnover in plans whose premiums no longer fell at or below benchmarks—potentially subject to reassignment to a new benchmark plan by Medicare (Hoadley et al. 2015a). However, over the years, a sizable share of LIS enrollees (by 2010, 43 percent of LIS enrollees in PDPs) had selected plans that differed from their randomly assigned plans and were therefore no longer eligible for reassignment (Hoadley et al. 2015c). In 2015, an estimated 1.2 million LIS enrollees in PDPs (15 percent) remained in a nonbenchmark plan and paid a portion of their premium (Hoadley et al. 2015b). Another 0.4 million LIS enrollees in MA–PDs paid a portion of their premium. CMS estimated that

for 2016, it would need to randomly reassign about 0.5 million LIS enrollees to new benchmark plans (Lyons 2015).

Most MA–PDs offer more generous drug coverage than PDPs, but some MA–PDs have less generous coverage compared with last year

The number of MA–PDs grew by 5 percent between 2015 and 2016, and most MA–PD enrollees continue to have more generous coverage than what is offered typically in PDPs—for example, some enhanced coverage beyond basic Part D benefits. For 2016, the share of MA–PDs offering enhanced benefits increased to 87 percent compared with 81 percent the year before. However, between 2015 and 2016, the share of MA–PDs that charge no deductible dropped from 63 percent to 55 percent. In 2015 and 2016, the percentage of MA–PDs that offer additional coverage in the coverage gap beyond that already called for under PPACA remained steady at 44 percent.

The reasons certain MA–PDs are offering less generous coverage are not fully clear. Our analysis of Part C plan bids suggests that, on average, MA–PDs dedicated about the same percentage of Part C rebate dollars for Part D benefits in 2016 as in 2015 (35 percent, or nearly \$29 per enrollee per month, split fairly evenly between basic and enhanced benefits). One possibility for the less generous coverage is that some plans are using the Part C rebates in other ways rather than reducing deductibles or providing gap coverage. For example, the cost of providing Part D benefits may have risen for MA–PDs, and some plan sponsors chose to scale back coverage to a greater extent than they chose to increase their bids. Another possibility is that MA–PD sponsors do not need to include as much coverage in plan designs because Part D’s benefit is becoming more generous (as the coverage gap phases out) and because MA–PDs are enrolling larger numbers of individuals who receive help with premiums and cost sharing through the LIS.

Greater differentiation among PDP offerings

With the reduction in numbers of PDPs, plan sponsors appear to be consolidating offerings into fewer, but more widely differentiated, products. Many sponsors appear to be moving closer toward offering one basic plan and one enhanced plan per region. For 2016, sponsors continue to use alternatives to Part D’s defined standard benefit; the market includes no PDPs with the standard benefit design, which was also true in 2015. In those two years, the percentage of PDPs that charged the defined standard

benefit’s deductible amount (\$360 in 2016) rose from 44 percent to 53 percent, while the percentage of plans that charged no deductible fell from 42 percent to 33 percent. The share of plans that used a deductible less than \$360 remains at 14 percent. A smaller share of PDPs offers additional coverage in the gap: 22 percent in 2016 compared with 26 percent a year earlier. The reduction in the number of PDPs offering gap coverage may, in part, be associated with changes made by PPACA to gradually phase out the coverage gap.¹¹

Sizable premium increases for several PDPs with the most enrollment

Although average premiums for Part D remained flat through 2015, monthly premiums for many of the most popular stand-alone PDPs increased (Table 13-6, p. 382). In 2016, average premiums for the eight plans with the highest enrollment ranged from about \$18 per month for Humana Walmart to more than \$66 per month for Humana Enhanced. Among these eight PDPs, only one has a slightly lower premium in 2016. The remaining seven plans have higher premiums for 2016, ranging from about \$1 higher (3 percent) to more than \$13 higher (25 percent).

Mixed changes in cost-sharing requirements

Cost-sharing requirements in Part D plans have generally risen over the years, and some plan sponsors have moved from charging fixed-dollar copayments to coinsurance. By charging enrollees a percentage of the price of their prescriptions rather than a flat copayment, plan sponsors put more of the risk of price increases for those drugs on beneficiaries.

The top eight PDPs (ranked by enrollment) have some noticeable features in common for 2016. All now use a five-tiered formulary structure (CVS Health added a second generic tier to its SilverScript Choice plan), with differential copayments between preferred and other generic medications (Table 13-7, p. 383). All of the top eight PDPs also use a specialty tier for high-cost drugs.

In other ways, the largest PDPs differ in changes to their cost sharing. Two of the top PDPs offered by UnitedHealth under the AARP name moved to charging coinsurance for nonpreferred brand-name drugs rather than copayments. The most popular plan, AARP MedicareRx Preferred, raised copayments for preferred generics from \$2 to \$3 and, for other generics, from \$5 to \$10, but lowered copayments for preferred brands from \$40 to \$35. In creating two generic tiers for 2016, the second most

**TABLE
13-6****Change in premiums for PDPs with the highest 2015 enrollment**

Plan name	Enrollment, 2015 (in millions)	Weighted average monthly premium*		Dollar change	Percentage change
		2015	2016		
AARP MedicareRx Preferred	3.5	\$50.19	\$60.79	\$10.60	21%
SilverScript Choice	3.3	23.13	22.56	-0.57	-2
Humana Preferred	1.7	26.45	28.39	1.94	7
Humana Walmart	1.5	15.67	18.40	2.73	17
AARP MedicareRx Saver Plus	1.4	28.13	35.23	7.10	25
Humana Enhanced	1.1	52.86	66.25	13.39	25
Cigna-HealthSpring Rx Secure	0.9	30.84	36.39	5.55	18
WellCare Classic	0.9	31.05	32.06	1.01	3

Note: PDP (prescription drug plan).

*These figures reflect the average of all PDPs offered under the same plan name in each region of the country, weighted by 2015 enrollment.

Source: Hoadley et al. 2015a.

popular PDP, SilverScript Choice, lowered copayments for preferred generics to \$3, but raised copayments for other generics to \$13. It also raised copayments for preferred brands from \$35 to \$45 and increased the coinsurance rate for nonpreferred brands slightly, from 45 percent to 46 percent. Humana plans made no changes in cost sharing. Other top PDPs had a mixture of cost-sharing increases and decreases.

Market structure and strategies of plan sponsors for controlling growth in premiums

Today, numerous organizations participate in Part D as plan sponsors—private entities that act both as insurers and administrators of Medicare prescription drug benefits. The role of plan sponsors is largely the same as in previous years, but the industry's structure has changed substantially since Part D began.

The role of private plan sponsors

Many of the largest sponsors, such as UnitedHealth and Humana, offer both MA-PDs and PDPs. Other sponsors offer just one type of product. For example, integrated delivery system Kaiser Permanente offers only MA-PDs, while CVS Health, a leading pharmacy benefit manager

(PBM) that also operates one of the largest chains of retail drug stores, participates as a Part D sponsor, but offers only PDPs. All sponsors must hold valid insurance licenses in the states in which they operate, and they must carry out basic functions such as administering marketing, enrollment, customer support, claims processing, coverage determinations, and the appeals and grievances process.

Sponsors must also carry out the specialized functions of PBMs, using either corporate-owned organizations or a commercial PBM under contract. These functions include:

- developing and maintaining formularies—lists of drugs the plan covers and the terms under which it covers them;
- negotiating rebates—payments from drug manufacturers for placing their products on a plan's formulary or preferred cost-sharing tier or for successfully encouraging enrollees to use the manufacturer's drugs; and
- setting up pharmacy networks and negotiating contracts on prices the sponsor will pay pharmacies for prescriptions filled, dispensing fees, and any discount agreements.

Rebates from pharmaceutical manufacturers and price discounts from pharmacies are key factors affecting the net

**TABLE
13-7****2016 cost-sharing amounts for stand-alone PDPs with highest 2015 enrollment, by tiers**

Stand-alone PDPs with the highest 2015 enrollment	Preferred generics		Other generics		Preferred brands		Nonpreferred brands		Specialty	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
AARP MedicareRx Preferred	\$2	\$3	\$5	\$10	\$40	\$35	\$85	40%	33%	33%
SilverScript Choice*	\$8	\$3	N/A	\$13	\$35	\$45	45%	46%	33%	33%
Humana Preferred Rx Plan	\$1	\$1	\$2	\$2	20%	20%	35%	35%	25%	25%
Humana Walmart Rx Plan	\$1	\$1	\$4	\$4	20%	20%	35%	35%	25%	25%
AARP MedicareRx Saver Plus	\$1	\$1	\$2	\$2	\$20	\$20	\$40	30%	25%	25%
Humana Enhanced	\$3	\$3	\$7	\$7	\$42	\$42	44%	44%	33%	33%
Cigna-HealthSpring Rx Secure	\$1	\$2	\$4	\$6	20%	16%	35%	47%	25%	25%
WellCare Classic	\$0	\$0	\$9	\$10	\$39	\$47	\$89	50%	25%	25%

Note: PDP (prescription drug plan), N/A (not applicable). Enrollment rankings are based on information from October 2015 and exclude employer plans and plans offered in U.S. territories. In cases where plans vary cost-sharing amounts across regions, we report unweighted medians.

*Indicates just one generic tier in 2015.

Source: NORC/Social & Scientific Systems analysis for MedPAC of formularies submitted to CMS.

prices that plan sponsors pay for enrollees' prescriptions. By law, the Medicare program is prohibited from becoming involved in negotiations among plan sponsors, drug manufacturers, and pharmacies. Sponsors tend to use rebates to offset plans' benefit spending (reducing plan premiums) rather than lower the price of prescriptions at the pharmacy counter.

Concentrated enrollment

A relatively small number of large insurers offer stand-alone PDPs in each of the 34 Part D regions across the country, and many of those same insurers also offer MA-PDs in selected parts of the country. In 2015, the top 9 insurers (those with 900,000 or more Part D enrollees each) sponsored plans that accounted for 77 percent of total enrollment (Figure 13-4, p. 384). Proposed mergers between some of the largest insurers would concentrate Part D enrollment further. By comparison, in 2007, those insurers (some of which were not among the plan sponsors with the highest market shares at the time) had a combined 60 percent of enrollment.

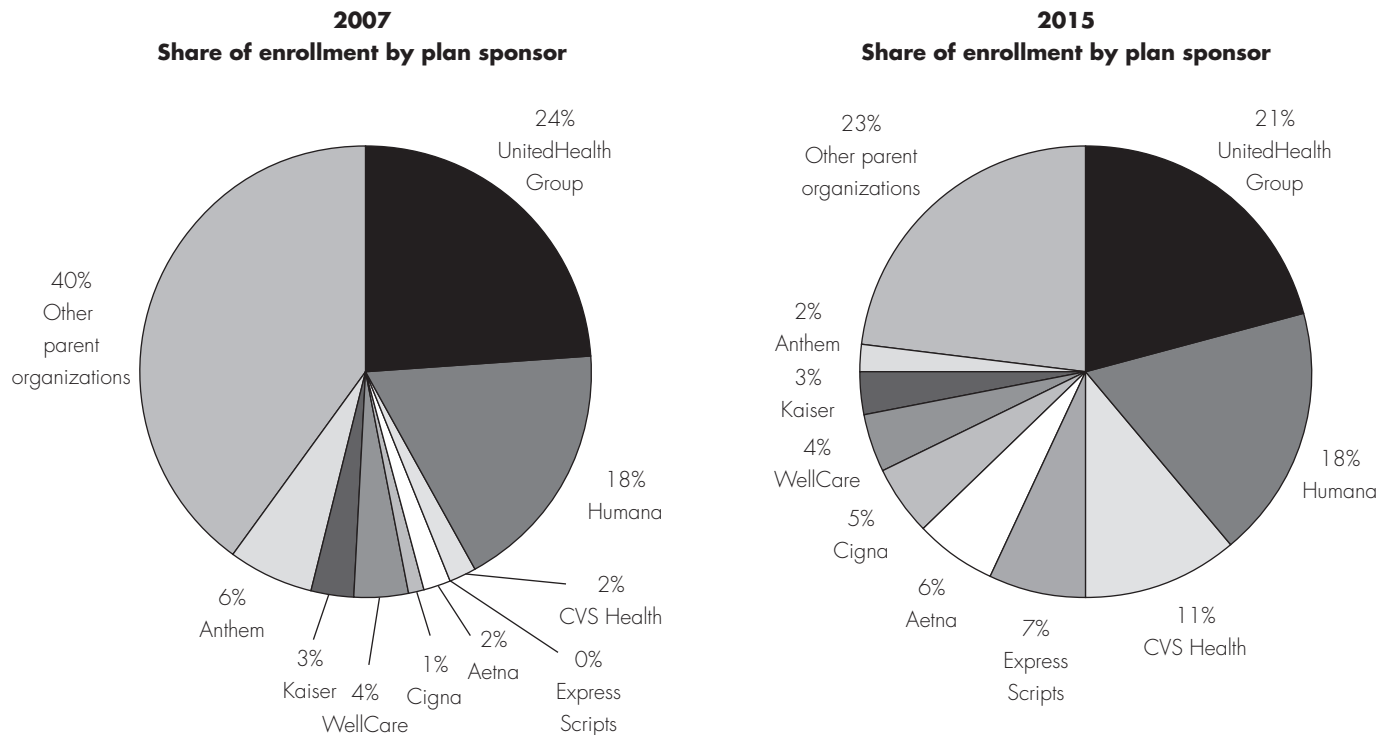
In 2015, combining stand-alone PDP and MA-PD enrollment, two major companies accounted for nearly 40 percent of the Part D market. UnitedHealth Group, offering plans under the AARP name, had 8.3 million

enrollees in its plans (about 1 in 5 Part D enrollees), and Humana had combined enrollment of 7 million beneficiaries, or 18 percent.

Over time, Aetna has increased its market presence. The insurer had just 2 percent of the Part D market in 2006, but expanded by acquiring Coventry Health Care in 2013. In 2015, Aetna struck a \$37 billion deal to acquire Humana (Bray and Abelson 2015). If the proposed deal moves forward without divestiture of any Medicare plans, the combined entity would account for 24 percent of Part D enrollment.

Other insurers that initially held smaller shares of the Part D market have had a growing presence over time, often through mergers and acquisitions (Hoadley et al. 2014b). The most notable example is CVS Health, which in 2015 had 11 percent of Part D enrollees in its plans. The company itself is a product of the acquisition of the PBM Caremark by CVS in 2007. CVS Health dramatically increased its Part D market share through a series of mergers and acquisitions, including Long's Drug Stores' RxAmerica plans, Universal American's Community CCRx and Pennsylvania Life product lines, and Health Net Orange PDPs.

Similarly, Cigna has increased its market presence, helped by acquiring HealthSpring in 2012 (which had itself

**FIGURE
13-4****Plan sponsors have consolidated their enrollment over time**

Note: Market shares are based on Part D enrollment, including both stand-alone prescription drug plans and Medicare Advantage prescription drug plans. Employer group waiver plans are included. Note that in 2015, Aetna proposed acquiring Humana. Similarly, in 2015, Anthem proposed acquiring Cigna.

Source: MedPAC based on enrollment data from CMS.

previously acquired Bravo's Part D plans). As a result, Cigna's market share rose from just 1 percent in 2006 to 5 percent by 2015. In 2015, Anthem proposed to buy Cigna for \$54 billion (Herman 2015). If the deal is approved without divestitures, the combined company would account for 7 percent of Part D enrollment.

As the share of enrollment made up by employer groups has grown in Part D, some sponsors have focused on this niche. For example, Express Scripts is perhaps best known as a PBM under contract to commercial health plans and employers. The company participated in Part D as a sponsor in most years of the program, and when it merged with the PBM Medco in 2012, the two companies consolidated their market shares. Since 2010, Express Scripts has significantly ramped up its presence in Part D through EGWP offerings.

Competition for LIS enrollees

From a plan sponsor's perspective, LIS enrollees might not be an obvious market niche to pursue. LIS enrollees tend to use more prescription drugs and their cost-sharing requirements are set in law, so plans have less ability to encourage LIS enrollees to use lower cost medicines and pharmacies. Still, there is significant competition among sponsors to bid so that some of their plans have premiums below regional benchmarks. Part D's subsidy payments on behalf of LIS enrollees are risk adjusted to compensate for their higher expected spending. To the extent that LIS enrollees are more likely to reach Part D's OOP threshold, the program pays for most of their higher benefit spending through individual reinsurance. Also, the automatic assignment of LIS enrollees to benchmark plans limits the need for sponsors to spend as much on marketing.

**TABLE
13-8****Distribution of LIS enrollment in Part D plans offered by the largest plan sponsors, 2015**

Plan sponsor	Number of LIS enrollees (in millions)	LIS share of sponsor's total enrollment (in percent)	Sponsor's share of all LIS enrollment (in percent)
CVS Health	2.2	50%	19%
UnitedHealth Group	2.1	26	18
Humana	1.8	26	16
Cigna	1.1	56	9
WellCare	0.8	60	7
Aetna	0.8	36	7
Express Scripts	0.4	14	3
Envision	0.3	86	3
Anthem	0.2	20	2
Kaiser	0.1	11	1
All LIS enrollees	11.7	30	N/A

Note: LIS (low-income subsidy), N/A (not applicable). Enrollment in stand-alone prescription drug plans and Medicare Advantage–Prescription Drug plans is included. Employer groups are included.

Source: MedPAC based on enrollment data from CMS.

For these reasons, many plan sponsors actively pursue the LIS segment of the Part D market. In 2015, CVS Health had more LIS enrollees than any other sponsor: a total of 2.2 million, or 19 percent of LIS enrollees (Table 13-8). About 50 percent of enrollees in CVS Health plans received the LIS. Cigna and WellCare are other companies among the top Part D plan sponsors for which more than half of their enrollees receive the LIS. Envision, a relatively smaller plan sponsor that was purchased by Rite Aid (a pharmacy chain being acquired by competitor Walgreens Boots Alliance) in 2015, accounted for 3 percent of LIS enrollment.

Once a sponsor has a sizable number of LIS enrollees, its bid can influence regional benchmarks because the benchmarks are calculated as a regional average premium weighted by LIS enrollment. At the same time, should the sponsor miss a regional benchmark by bidding too high, it would stand to lose potentially sizable numbers of LIS enrollees and market share.

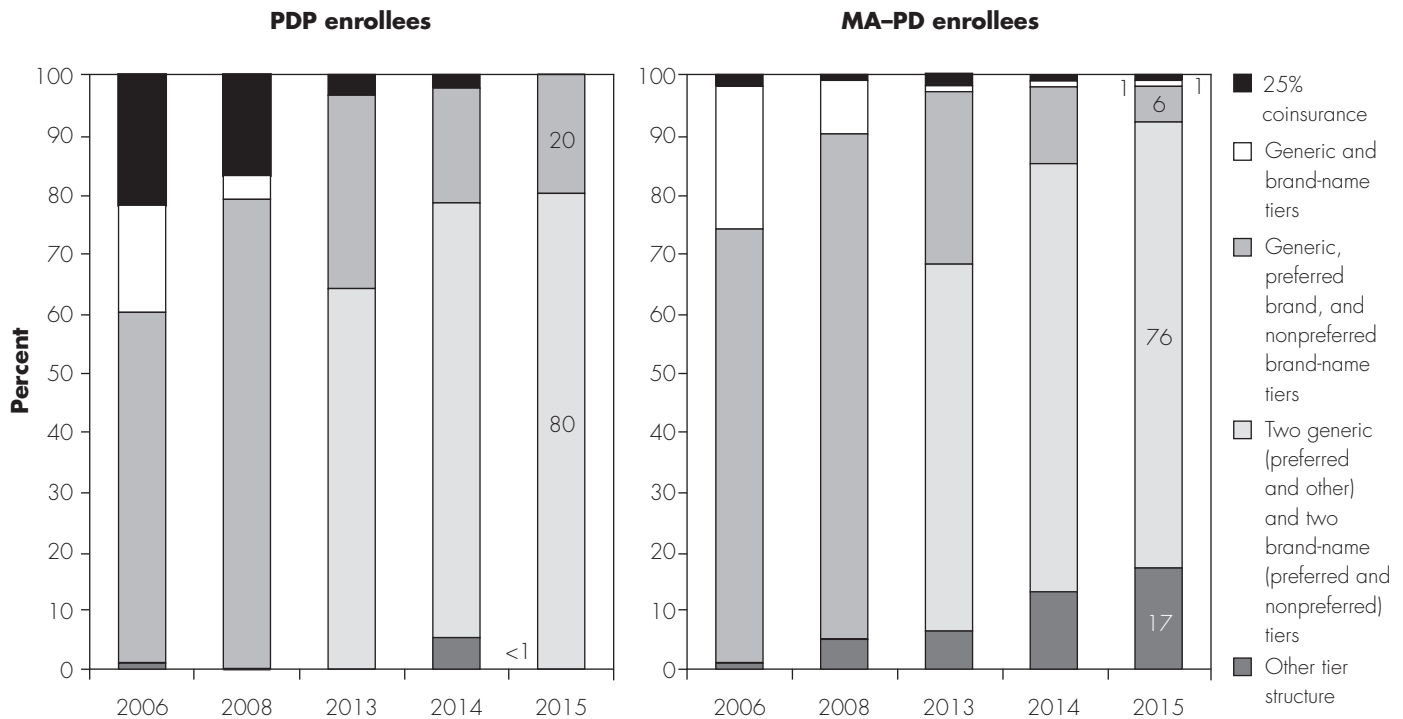
Estimated margins for Part D plans

In 2013, more than 200 parent organizations sponsored Part D plans. To get a sense of the economic returns that make sponsors willing to participate in the program, we examined reconciled, plan-level data from CMS for basic

Part D benefits delivered in 2013. These data include gross spending for covered benefits, aggregate discounts and rebates, Medicare's subsidies, enrollee premiums, and risk-corridor payments. The data do not include actual administrative costs, but rather estimates of administrative costs from information submitted by plan sponsors in their Part D bids.¹²

In 2013, revenues for basic benefits delivered by the PDPs and MA-PDs in this analysis—net of rebates from pharmaceutical manufacturers, discounts from pharmacies, and reinsurance payments from Medicare—totaled about \$27 billion. That total comprised \$10.6 billion in enrollee premiums (including premiums paid by Medicare on behalf of low-income enrollees and Part C rebate amounts applied to Part D premiums (see endnote 7) and \$17.4 billion in Medicare's direct subsidy payments, minus \$0.7 billion in risk-corridor payments to Medicare from plan sponsors.¹³ After analyzing bid data, we estimate that nonbenefit expenses such as marketing and administrative costs were about 10 percent of revenues.

We used reconciliation data to estimate margins: pre-tax profits (that is, revenues for basic benefits minus basic benefit costs and administrative expenses) as a percentage of revenues, excluding Medicare's reinsurance payments. The calculations also exclude revenues and costs

**FIGURE
13-5****The majority of Part D enrollees are in plans that use a five-tier formulary structure**

Note: PDP (prescription drug plan), MA-PD (Medicare Advantage-Prescription Drug [plan]). In addition to the tiers shown in the figure, all plans use specialty tiers for drugs and biologic products that cost \$600 or more per month. Typically, plans charge enrollees coinsurance of 25% to 33% for specialty-tier products.

Source: NORC/Social & Scientific Systems analysis for MedPAC of formularies submitted to CMS.

associated with enhanced (supplemental) benefits. Because Medicare limits the profits and losses of plan sponsors through Part D's risk corridors, we took risk-corridor payments into account when estimating revenues.¹⁴ (For more detail about Part D's risk corridors and reconciliation process, see the Commission's June 2015 report to the Congress (Medicare Payment Advisory Commission 2015c)). Our analysis showed the following:

- In 2013, the average margin for Part D plans, weighted by revenue and including risk-corridor payments between Medicare and plan sponsors, was 12.4 percent. Excluding risk corridors, the average margin was 2.3 percentage points higher.
- Across categories of plans, PDPs and MA-PDs had similar average margins: 12.6 percent and 12.2 percent, respectively.
- Overall, PDPs that qualified as premium-free for LIS enrollees had an average margin similar to that of

plans with premiums above their regional benchmarks: 12.2 percent compared with 12.9 percent, respectively.

- About 24 percent of PDPs and 16 percent of MA-PDs in this analysis had negative margins for 2013. However, sponsors typically offer more than one plan. When aggregated to the level of parent organization, 13 percent (24 of the 189 plan sponsors we examined) had a combined negative margin. Those sponsors accounted for 4 percent of total revenues and 3 percent of the total enrollee member months.
- In contrast, 87 percent of parent organizations (accounting for 97 percent of total enrollment months) had positive margins in 2013, and many saw strong returns. Fifty-three percent of sponsors had margins of 10 percent or more after risk-corridor payments to Medicare, and they accounted for 75 percent of the total revenues for basic benefits that we examined and 75 percent of total enrollment months.

Strategies for controlling growth in plan premiums

Plan sponsors decide how many drugs to list on their formulary and whether to apply utilization management, such as requiring prior authorization to fill prescriptions. Sponsors also set differential copayments to encourage enrollees to use preferred medicines or a subset of pharmacies.

In their formulary designs, plan sponsors attempt to strike a balance between providing enrollees with access to medications and controlling growth in drug spending. Part D sponsors rely on clinicians (typically, physicians and pharmacists who serve on pharmacy and therapeutics committees) when deciding which drugs to list, subject to CMS regulations. Sponsors also select the cost-sharing tier for each listed drug (if using a tiered formulary structure) and determine whether to apply utilization management tools.

Sponsors use formularies to structure competition among drug therapies and to shift utilization toward certain products, such as lower cost generics and preferred brand-name drugs. Traditionally, plan sponsors have not received rebates from manufacturers of generic drugs. However, market competition from generics can, over time, lower spending by 80 percent or more, and so promoting the use of generics can play a central part in controlling drug spending (Kesselheim 2014).

Most enrollees are in plans that use a five-tier formulary structure

Nearly all plans have used cost-sharing tiers for their formularies since the start of Part D, but over time, plans have moved toward more tiers. Most plans now use a five-tier formulary—including preferred generic and other generic tiers, preferred and nonpreferred brand-name drug tiers, and a specialty tier. Plans charge higher copayments for other generics relative to preferred generics to encourage use of less costly medicines. In 2015, 80 percent of PDP enrollees and 76 percent of MA–PD enrollees were in plans with five cost-sharing tiers (Figure 13-5).

Mixed changes to formularies and continued use of utilization management

Although imperfect measures, the number of drugs listed on a plan's formulary and utilization management strategies are metrics to gauge the generosity of plans'

coverage.¹⁵ Under contract with the Commission, researchers from Social & Scientific Systems analyzed Part D formulary data for 2016. For this analysis, drugs are defined at the level of chemical entities—a broad grouping that encompasses all of a chemical's forms, strengths, and package sizes—that combine brand and generic versions of the same specific chemical entity (Medicare Payment Advisory Commission 2008).

The number of drugs in the formulary reference file, which is used as a denominator to calculate the share of all distinct chemical entities listed on plan formularies, increased by about 2 percent between 2015 and 2016. Meanwhile, some of the largest PDPs tightened their formularies between 2015 and 2016, while others kept their formularies nearly the same (Table 13-9, p. 388). For example, two of UnitedHealth Group's plans, AARP Medicare Rx Preferred plan and AARP MedicareRx Saver Plus, had 5 percentage point and 4 percentage point reductions, respectively, in the share of drugs listed on their formularies. WellCare Classic also tightened its formulary by 4 percentage points. Meanwhile, the formularies of CVS Health's SilverScript Choice plan and other popular plans offered by Humana kept the breadth of their formularies about the same as in 2015. Cigna-HealthSpring Rx Secure widened its formulary by 2 percentage points.

The application of utilization management tools in Part D—including quantity limits, step therapy, and prior authorization—has grown over the years. Sponsors use such tools for drugs that are expensive, potentially risky, or subject to abuse, misuse, and experimental use. These tools are also intended to encourage the use of lower cost therapies.

In 2016, the average enrollee in a PDP faces some form of utilization management for 42 percent of drugs listed on a plan's formulary, up from 38 percent in 2015 (Table 13-9, p. 388). Among the top PDPs, those operated by Humana have the highest share of drugs with utilization management. UnitedHealth Group's two largest plans (AARP Medicare Rx Preferred and AARP MedicareRx Saver Plus) had the largest increases in the shares of formulary drugs to which utilization management applies: 8 percentage point and 7 percentage point increases, respectively (Table 13-9, p. 388). Other popular PDPs had more modest increases, usually on the order of 1 or 2 percentage points. The most common strategy that plan sponsors use to manage enrollees' drug use is to apply a

**TABLE
13-9****2016 formularies for stand-alone PDPs with highest 2015 enrollment**

Stand-alone PDPs with the highest 2015 enrollment	Percent of drugs on formulary		Percent of formulary drugs with any utilization management*	
	2015	2016	2015	2016
All PDPs	81%	77%	38%	42%
AARP MedicareRx Preferred	89	84	36	44
SilverScript Choice	74	74	40	40
Humana Preferred Rx Plan	81	81	45	46
Humana Walmart Rx Plan	83	83	45	46
AARP MedicareRx Saver Plus	83	79	36	43
Humana Enhanced	89	89	47	47
Cigna-HealthSpring Rx Secure	77	79	44	45
WellCare Classic	74	70	37	39

Note: PDP (prescription drug plan). Figures reflect the average of all PDPs offered under the same plan name, weighted by 2015 enrollment. Employer plans and U.S. territories are excluded. For 2015, the number of drugs in the formulary reference file, which is used as a denominator to calculate the share of all distinct chemical entities listed on plan formularies, was 1,253; for 2016, the number is 1,316.

*Utilization management includes prior authorization, quantity limits, and step therapy requirements.

Source: NORC/Social & Scientific Systems analysis for MedPAC of formularies submitted to CMS.

prior authorization requirement. In 2016, about 24 percent of formulary drugs are subject to prior authorization.

Pharmacy networks

In addition to their formulary structure, Part D plan sponsors can use pharmacy networks to obtain competitive prices by differentiating among pharmacies in two ways: (1) designating a pharmacy network, and (2) within that network, designating some pharmacies as preferred.

By law, plan sponsors must do business with all pharmacies that are willing to accept the plan sponsors' terms of contract, and all such pharmacies are considered to be in the plan's network. However, some pharmacies may choose not to contract with certain plans because they do not like the terms and conditions the plans offer. Plan sponsors are not obligated to cover prescriptions at an out-of-network pharmacy, except under certain circumstances.

Today, most sponsors use tiered pharmacy networks that encourage enrollees to fill prescriptions at certain pharmacies by offering preferred (lower) cost sharing. Plan sponsors negotiate additional price concessions, incentive payments, or both with that subset of pharmacies. Thus,

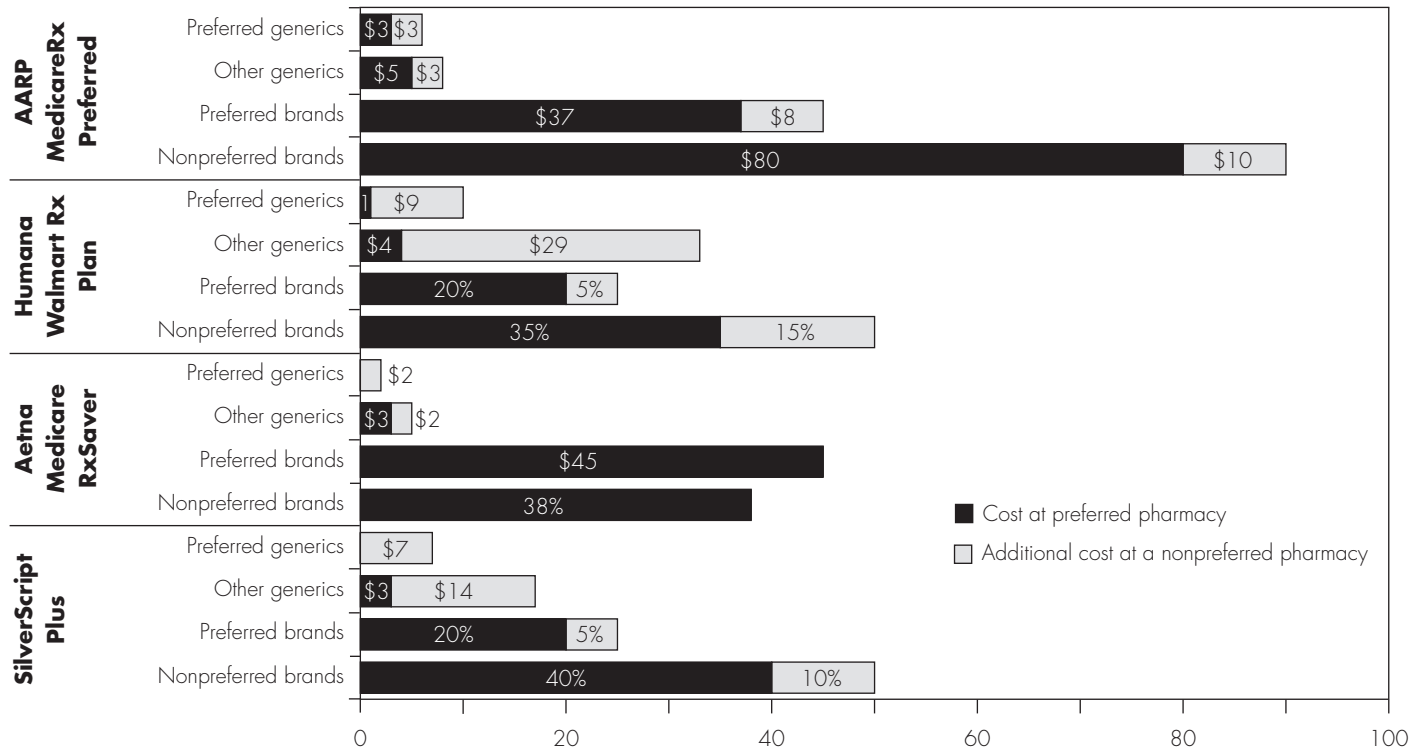
the use of tiered pharmacy networks has the potential to lower costs to the Medicare program and to enrollees.

A Commission-sponsored analysis of pharmacy networks among 2015 Part D plans highlighted two emerging strategies (NORC at the University of Chicago 2015):

- Some PDPs moved toward tighter pharmacy networks than in previous years. For example, 20 percent of PDPs listed 90 percent or fewer pharmacies in their service area(s) as being in their network. Two large national plans—First Health Part D Value Plus and Aetna Medicare Rx Saver—listed, on average, less than 70 percent of pharmacies as in-network. In previous years, the vast majority of plans included over 90 percent of pharmacies in their networks.
- Between 2014 and 2015, the percentage of PDPs designating a subset of pharmacies within their networks as preferred pharmacies increased from 70 percent to 86 percent. As of February 2015, about 81 percent of PDP enrollees were in a plan with a preferred pharmacy network, up from 74 percent in 2014.

**FIGURE
13-6**

Cost-sharing differentials at preferred versus other pharmacies for selected plans, 2015



Note: Plans with no cost-sharing amounts shown for preferred generics at preferred pharmacies offer free (preferred) generics. Some plan offerings have slight differences in cost sharing from region to region. The cost sharing displayed in this exhibit is for Region 17.

Source: NORC/Social & Scientific Systems analysis for MedPAC of formularies submitted to CMS.

Beneficiaries' access to a preferred pharmacy varies considerably across plans. In 2015, among the largest plans that used tiered networks, the percentage of pharmacies designated as preferred ranged from 10 percent among Humana plans to about 70 percent for one of the Blue Cross Blue Shield plans.¹⁶ Variation in the share of pharmacies that are designated as preferred also occurs across geographic regions. For example, in AARP Medicare Rx Preferred and AARP Medicare Rx Saver Plus plans for 2015, 18 percent of pharmacies were preferred in the Pennsylvania–West Virginia region, while 74 percent of pharmacies were preferred in the Colorado region.

Plan sponsors typically charge lower cost sharing to encourage enrollees to fill prescriptions through their plans' preferred pharmacy networks. Differences between cost sharing at preferred pharmacies and other network pharmacies can vary substantially among plans, with some

plans providing much stronger incentives to use preferred pharmacies. For example, in Region 17 of the 2015 Aetna Medicare Rx Saver plan, enrollees paid \$2 less for generic prescriptions filled at preferred pharmacies but no difference for brand-name prescriptions. In comparison, the Humana Walmart Rx plan charged \$9 less for preferred generics and \$29 less for other generics at preferred pharmacies (Figure 13-6).

The use of tiered pharmacy networks may allow plan sponsors to better manage Part D spending if it encourages enrollees to use pharmacies with lower costs (Federal Trade Commission 2014, Kaczmarek et al. 2013). However, preferred networks have been controversial because of concern that some enrollees may not have convenient access to preferred pharmacies with lower cost sharing. While the share of pharmacies on plans' preferred lists varies from one plan offering to another,

most preferred networks include less than half of the pharmacies in their networks (Medicare Payment Advisory Commission 2014d, NORC at the University of Chicago 2015).

CMS has noted concern that lower cost sharing offered to beneficiaries at preferred pharmacies could come at the expense of higher Medicare program spending. For example, some plans might encourage beneficiaries to fill prescriptions at pharmacies (including mail-order pharmacies) owned by the same parent organization at prices that are not necessarily lower, or, in some cases, lower cost sharing offered at preferred pharmacies might simply shift more benefit costs to the program. Because of these concerns, CMS conducted a study to examine the implications of the use of preferred pharmacies. The study found that costs at preferred pharmacies were, on average, lower than at other pharmacies (Centers for Medicare & Medicaid Services 2013). However, for a subset of plans, average costs were higher at preferred pharmacies. These findings led CMS to propose a rule that would allow plans to offer lower cost sharing at preferred pharmacies only when the approach does not raise Medicare payments (Centers for Medicare & Medicaid Services 2014d). That rule was not finalized due to comments CMS received from many stakeholders opposing the policy (Centers for Medicare & Medicaid Services 2015d).

A further concern is that if LIS enrollees have less opportunity to use preferred pharmacy networks or choose other pharmacies over a preferred one, Medicare will not realize the “savings” that could have resulted had this management strategy been effective (since the LIS covers most or all of these enrollees’ cost sharing).

To participate in Part D, plan sponsors must set up pharmacy networks that meet access requirements.¹⁷ Access standards apply to a plan’s entire network rather than to its preferred network. In 2014, CMS examined access to preferred networks with somewhat surprising results: On average, enrollees living in urban (rather than rural) areas were less likely to have convenient access to preferred pharmacies that offered lower cost sharing (Centers for Medicare & Medicaid Services 2014a).¹⁸ Certain plan sponsors had substantially tighter preferred networks. For the 2016 benefit year, CMS conducted close reviews of “tighter network” plans in areas where potential access appeared low and required plan sponsors to inform enrollees more clearly of their options with respect to preferred cost sharing (Centers for Medicare & Medicaid Services 2015g).

The Commission has expressed support for plan innovations that increase efficiency, and we agree with CMS that the competition created by preferred pharmacy networks should result in lower costs for the program and for Part D enrollees. However, we noted in our comment letter to CMS that a separate pharmacy access standard may be required to ensure that plan enrollees have reasonable access to preferred cost sharing (Medicare Payment Advisory Commission 2014a). In addition, the Commission is concerned that because cost sharing for LIS enrollees is set statutorily, plans may be limited in their ability to encourage individuals with the LIS to use preferred pharmacies.

To examine this issue further, we looked at patterns of pharmacy use for plans offered by the same sponsor in two regions. We found that, in both regions, non-LIS enrollees were twice as likely as LIS enrollees to fill their prescriptions at preferred pharmacies (see online Appendix 13-A, available at <http://www.medpac.gov>, for more detail). Although this finding may not be generalizable, it suggests that plan sponsors may be less successful at encouraging LIS enrollees to fill their prescriptions at a lower cost setting using financial incentives.

In its March 2012 report, the Commission recommended that the Congress give the Secretary authority to provide stronger financial incentives for LIS enrollees to use lower cost generics when available (Medicare Payment Advisory Commission 2012). At the time, a key rationale for the recommendation was that LIS enrollees made up the majority of beneficiaries who reached the catastrophic phase of the Part D benefit. Encouraging LIS enrollees to use lower cost generics could reduce the number of individuals who reach the catastrophic phase of the benefit and thereby reduce the amount Medicare pays to plans in individual reinsurance.

Since 2012, larger numbers of plans have added tiers to their formularies (e.g., put in place two generic tiers) and now most also use tiered pharmacy networks. Given these changes and the potential for other innovations in how plan sponsors manage prescription drug benefits, the Commission may modify the language of its 2012 recommendation in the future.

Specialty pharmacies

Another strategy most commercial health plans have adopted to manage the use of high-cost medicines is to require that enrollees fill prescriptions through a limited network of specialty pharmacies.¹⁹ PBMs and health

plans contend that specialty pharmacies can lead to better patient education and improved adherence. Manufacturers and payers may prefer to use specialty pharmacies to prevent diversion of expensive drugs or the distribution of counterfeits. Specialty pharmacies can reduce waste by, for example, initially dispensing a 7-day or 14-day supply and observing the patient for side effects before providing a 30-day supply. Also, these pharmacies can help prescribers navigate the clinical documentation needed to meet prior authorization requirements. The largest specialty pharmacies are owned by PBMs, and in some cases, they may be able to negotiate lower prices with drug manufacturers.

A variety of business models fall under the term “specialty pharmacy,” and the interests served by some specialty pharmacies may not be aligned with those of payers or patients.²⁰ For example, Philidor Rx Services, a specialty pharmacy affiliated with Valeant Pharmaceuticals International, “functioned almost as a direct seller for it [Valeant Pharmaceuticals International]” (Nisen 2015). Another specialty pharmacy, Linden Care, is accused of “pushing a single manufacturer’s products” and keeping sales from going to generic drugs “by offering to do paperwork, reimburse patients’ out-of-pocket costs, and fight with insurers for doctors and patients” (Nisen 2015).

Unlike the commercial sector, Medicare guidance prohibits Part D plan sponsors from limiting where beneficiaries fill their prescriptions, so long as the pharmacy selected by the enrollee is in the plan’s network.²¹ An exception is if a *manufacturer* of a specialty medication has limited the distribution of its product to certain authorized pharmacies. In this situation, the Part D enrollee would be able to fill that prescription at only one of the designated (specialty) pharmacies.

Drug pricing

Since the start of Part D, plans’ use of differential cost sharing across formulary tiers, combined with the fortuitous timing of an unusually large number of patent expirations on widely used brand-name drugs, has led to a dramatic shift toward the use of generics. Between 2010 and 2013, 30 blockbuster drugs with combined annual sales of about \$100 billion went off patent, and the market for generic drugs expanded rapidly (Galliard Capital Management 2011, Myshko 2012). As a share of total Part D prescriptions, generics rose to about 84 percent in

2013 (the latest year of claims data available), up from 81 percent in 2012. At the same time, the introduction of new generics is slowing and the drug pipeline contains larger numbers of biologic products and specialty drugs. Plan sponsors have had less success at stemming growth in prices of drugs with few or no substitutes in their therapeutic class.

Plan sponsors negotiate substantial rebates on certain brand-name drugs, particularly those that face competition from other brands or generics in the same therapeutic class. Across all types of Part D drugs, the Medicare Trustees estimated that, in 2015, plan sponsors obtained rebates amounting to 16.6 percent of total prescription drug costs, averaged across all prescription drugs (even though plans do not receive any rebates for some drugs) (Boards of Trustees 2015). This estimate is a significant increase from rebates of about 9.6 percent of total prescription drug costs for 2007, 12.9 percent in 2013, and 14.4 percent in 2014. CMS Office of the Actuary attributes the 2015 increase to “the intensified competition in the hepatitis C drug market.”

To track drug prices, the Commission contracted with Acumen LLC to construct a series of volume-weighted price indexes. The indexes do not reflect retrospective rebates or discounts from manufacturers and pharmacies, but rather the prices sponsors and beneficiaries pay to pharmacies at the point of sale (including ingredient costs and dispensing fees).

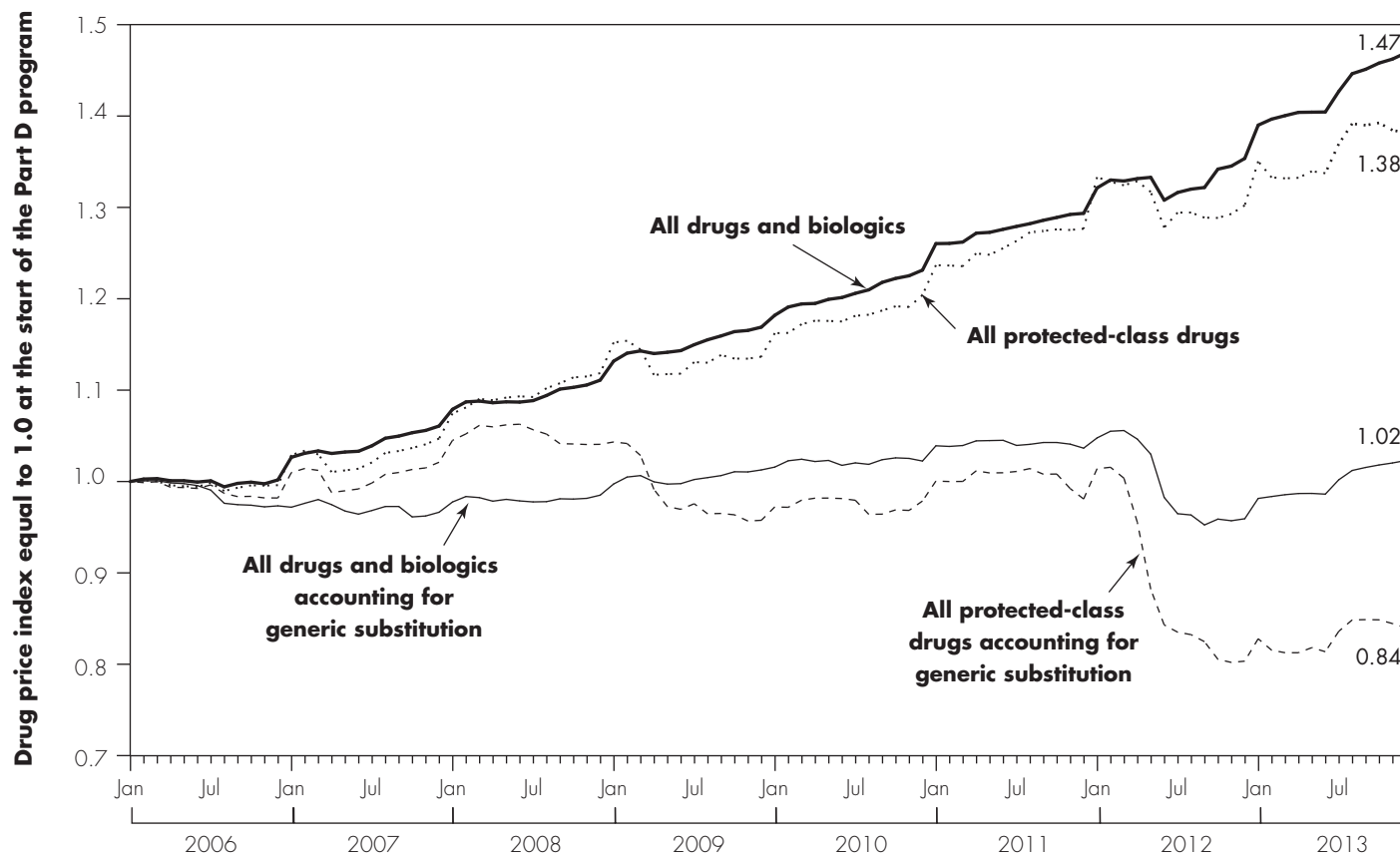
In 2013, price increases more than offset the effects of generic use

Measured by individual national drug codes (NDCs) and excluding manufacturers’ rebates, between 2006 and 2013, Part D drug prices rose by an average of 47 percent cumulatively (Figure 13-7, p. 392).²² As measured by a price index that takes the substitution of generics for brand-name drugs into account, Part D prices increased by just 2 percent cumulatively.²³

Generic substitution has played a key role in constraining growth in Part D’s average price of drug therapy. However, a closer look at the changes in the price index for 2013 reveals cause for concern. First, between December 2012 and December 2013, our index of Part D prices that accounts for generic substitution grew by 6.6 percent—the highest rate observed since the program began. Before 2012, annual growth rates ranged between –2.7 percent and 2.8 percent. In 2012, the Part D price index experienced its largest ever decline (–7.5 percent) as a

**FIGURE
13-7**

Availability of generics, rather than protected status, is key to slower price growth under Part D



Note: Chain-weighted Fisher price indexes.

Source: Acumen LLC analysis for MedPAC.

result of the so-called “patent cliff.” Second, the 2013 increase in the price index occurred even as the share of generic prescriptions rose from 81 percent in 2012 to 84 percent (see text box on the increase in generic use). The changes between 2012 and 2013 suggest a strong uptick in prices of medicines taken by Part D enrollees that more than offset the price-moderating effects of switching to generic medications.

For most therapeutic classes, CMS requires plan formularies to cover at least two drugs, unless only one drug is approved for that class. This policy is intended to protect beneficiaries who need a drug that is the only one available to treat a certain condition and allows competition in classes with multiple products. For six drug classes, CMS requires Part D plans to cover “all

or substantially all” drugs in the class. These classes are antineoplastics, antidepressants, antipsychotics, antiretrovirals, anticonvulsants, and immunosuppressants used by transplant patients.²⁴ Plans can charge higher cost sharing for drugs in these classes—for example, by placing them on tiers for nonpreferred brands—but plans may have limited ability to influence utilization of these classes of drugs.

As measured by individual NDCs, prices for drugs in the six protected classes showed a trend between 2006 and 2013 similar to that for all Part D drugs, rising by a cumulative 38 percent (Figure 13-7). When protected-class drugs were grouped to take generic substitution into account, their prices fell by a cumulative 16 percent over the eight-year period.

Generic use has risen, varies across plan types and enrollees

Increased use of generics has played a major role in moderating Part D spending growth. Between 2007 and 2013, the average generic dispensing rate (GDR)—defined as the share of Part D prescriptions dispensed that are generic drugs—increased from 61 percent to 84 percent (Table 13-10). During this period, some of the most popular brand-name drugs lost patent protection, affording more opportunities for generic substitution.

GDRs vary across categories of beneficiaries. For example, Medicare Advantage–Prescription Drug plan (MA–PD) enrollees are more likely to use generics than stand-alone prescription drug plan (PDP) enrollees. Between 2007 and 2013, average GDRs for MA–PD enrollees consistently exceeded those of PDP enrollees by 4 percentage points to 6 percentage points. Low-income subsidy (LIS) enrollees have had a consistently lower GDR than non-LIS enrollees, and that difference has remained stable at about 4 percentage points to 5 percentage points since 2008.²⁵

In both PDPs and MA–PDs, LIS enrollees are less likely to use generic drugs than non-LIS enrollees. For example, among PDP enrollees in 2013, the GDR for LIS enrollees was 2 percentage points below that of

non-LIS enrollees. Among MA–PD enrollees in the same year, the GDR for LIS enrollees was 8 percentage points lower.

Multiple factors likely contribute to the higher or lower GDRs among groups of beneficiaries. For example, differences in health status may limit the opportunity for clinically appropriate therapeutic substitutions for some beneficiaries. There can also be differences in prescribing behavior between physicians who are part of a managed care organization and those who are not. Another factor may be the difference in financial incentives faced by LIS and non-LIS enrollees. Because cost sharing for LIS enrollees is set statutorily, that factor may limit how well plan sponsors can manage drug spending for their LIS enrollees.

The Commission’s March 2012 recommendation was intended to encourage LIS enrollees to use generics when they are available (see p. 390 for the discussion of the recommendation). This strategy, in turn, would likely reduce the amount Medicare spends for the LIS. In addition, because about three-fourths of enrollees who reach the catastrophic phase of the benefit receive the LIS, greater use of generics could also reduce the amount Medicare pays in individual reinsurance. ■

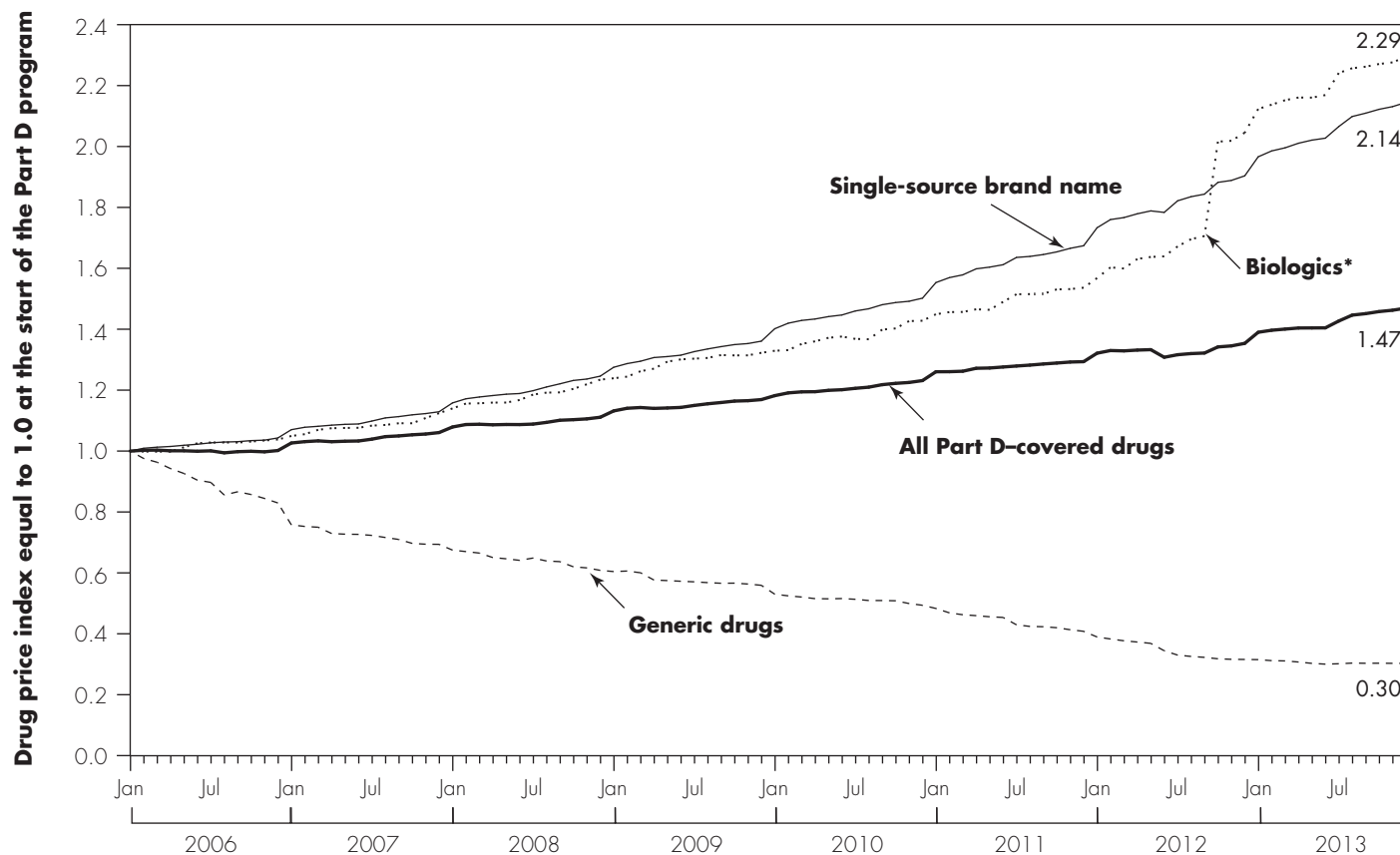
**TABLE
13-10**

Generic dispensing rate by plan type and LIS status, 2007–2013

	2007	2008	2009	2010	2011	2012	2013
All Part D	61%	67%	70%	74%	77%	81%	84%
By plan type							
PDP	60	66	69	72	75	80	82
MA–PD	66	71	74	77	80	84	86
By LIS status							
LIS	60	65	68	71	74	78	81
Non-LIS	62	69	72	76	79	83	85

Note: LIS (low-income subsidy), PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). Shares are calculated as a percentage of all prescriptions standardized to a 30-day supply. “Generic dispensing rate” is the proportion of Part D prescriptions dispensed that are generic prescriptions.

Source: MedPAC analysis of Medicare Part D prescription drug event data and Part D denominator file from CMS.

**FIGURE
13-8****Decline in generic prices and sustained aggressive price growth under Part D for single-source brand-name drugs and biologics**

Note: Chain-weighted Fisher price indexes.

*The shift in biologics price index in October of 2012 is due in part to a change in how prescription quantities were reported for Avonex, a product used to treat multiple sclerosis.

Source: Acumen LLC analysis for MedPAC.

These trends are influenced heavily by three classes of drugs: antidepressants, antipsychotics, and anticonvulsant medications, which accounted for over 90 percent of the volume of prescriptions in the six classes. With the exception of antiretroviral drugs, many drugs in the six classes now have generic versions available. In 2013, between 80 percent and 90 percent of prescriptions dispensed for protected-class drugs other than antiretrovirals were generic. This trend has translated into a modest growth in prices even when measured at individual NDCs: Between 2006 and 2013, average prices grew by 3 percent for antidepressants and decreased by 5 percent for anticonvulsants. Recent entry of generics has also slowed growth in price indexes for immunosuppressants and antipsychotics.

In the case of anticancer drugs, however, growth in prices for very expensive brand-name medications has likely driven overall growth in the category. Our price index for antineoplastics (measured at individual NDCs) grew by more than 90 percent between 2006 and 2013. This level of growth far exceeds the price index growth observed for other protected-class drugs, even antiretrovirals, which consists almost entirely of brand-name drugs.²⁶ The growth in our price index for antineoplastics is especially striking given that generic drugs accounted for 90 percent of the prescriptions dispensed for that class in 2013.

Overall, when a drug has protected status, plan sponsors have had success at moving enrollees toward generics when available. However, the extent to which increases

in the use of generics help to keep prices stable varies by drug class. In addition, the drugs' protected status may limit the amount of rebates plan sponsors are able to obtain from manufacturers for drugs in these classes. We lack rebate information to test this hypothesis.

Prices of brand-name drugs and biologics have grown aggressively

Patterns of price growth across classes of drugs suggest that prices for drugs with few or no generic substitutes have grown rapidly. Our index of prices for drugs with no generic substitutes (single-source, brand-name drugs) grew between 2006 and 2013 by a cumulative 114 percent (Figure 13-8). By comparison, our price index for generic drugs decreased to just 30 percent of the average index value observed at the beginning of 2006.

Among biologic products covered by Part D, few (if any) today have follow-on products on the market that compete with them through price. Our price index for biologic products grew between 2006 and 2013 by a cumulative 129 percent—even higher than that observed for single-source brand-name drugs (Figure 13-8). However, the rapid increase in our biologics index for 2012 bears further examination.²⁷

Several analysts have noted that certain generic medications now have high prices or have experienced sharp price increases (Alpern et al. 2014, Fein 2014, Kesselheim 2014). Overall, the Commission's generic price index decreased at a slower rate (about -4 percent between December 2012 and December 2013) compared with double-digit declines in nearly every year between 2006 and 2012. Because of growing reliance on generics, the price increases have drawn the attention of policymakers (Rosenthal 2014). The high price of some generics may be one motivation for Part D plan sponsors to move toward a five-tier formulary structure, with two generic tiers. A number of factors explain price increases for generics, including drug shortages, disruptions in the supply of drugs, and consolidations among manufacturers of generic drugs (Alpern et al. 2014). Factors associated with decreased market competition can lead to high and rising prices.

Program spending

Evidence on program spending gives a mixed picture about the success of Part D plans at containing costs. Consistent with what the Commission observed in its

June 2015 report to the Congress, spending for the competitively derived direct-subsidy payments on which sponsors bear the most insurance risk has continued to grow slowly, while benefit spending on which sponsors bear no insurance risk (low-income cost sharing) or limited risk (the catastrophic portion of the benefit, for which Medicare provides 80 percent reinsurance) has grown much faster (Medicare Payment Advisory Commission 2015c).

Program subsidies and costs

Medicare pays plan sponsors three major subsidies on behalf of each enrollee in their plans:

- **Direct subsidy**—Medicare pays plans a monthly amount set as a share of the national average bid for Part D basic benefits, adjusted for the risk of the individual enrollee.
- **Reinsurance**—Medicare reimburses plans for 80 percent of drug spending above an enrollee's annual OOP threshold.
- **LIS**—Medicare pays plans to cover expected cost sharing and premiums for enrollees eligible for the low-income subsidy.

Combined, the direct subsidy and reinsurance cover 74.5 percent of basic benefits, on average. Beneficiary premiums cover the remainder.

Between 2007 and 2014, program spending (including the retiree drug subsidy (RDS)) rose from \$46.2 billion to \$73.3 billion (Table 13-11, p. 396). In 2014, Medicare paid \$19.6 billion for direct subsidies, \$27.8 billion for individual reinsurance, \$24.3 billion for the LIS, and \$1.6 billion for the RDS (Boards of Trustees 2015). Payments to plans for the three subsidies combined with RDS payments grew by an average of 6.8 percent per year.

In 2014, for the first time since the program began, payments for individual reinsurance exceeded payments for the LIS to become the largest component of Part D spending. Medicare payments for individual reinsurance have grown faster than other components of Part D spending, increasing between 2007 and 2014 at an annual average of 19.5 percent (Table 13-11). This growth appears to have accelerated in recent years, in part due to the gradual phase out of the coverage gap that began in 2011. Since 2010, there has been a double-digit increase in the number of non-LIS enrollees who reach

**TABLE
13-11****Medicare's reimbursement amounts for Part D**

	Calendar year						Average annual growth rate 2007-2014
	2007	2009	2011	2012	2013	2014	
Reimbursement amount (in billions):							
Direct subsidy*	\$17.6	\$18.2	\$19.2	\$19.7	\$19.6	\$19.6	1.5%
Reinsurance	8.0	10.1	13.7	15.5	19.2	27.8	19.5
Low-income subsidy	16.7	19.6	22.2	22.5	23.2	24.3	5.5
Retiree drug subsidy	<u>3.9</u>	<u>3.9</u>	<u>3.6</u>	<u>3.0</u>	<u>1.8</u>	<u>1.6</u>	-12.0
Total	46.2	51.8	58.7	60.7	63.8	73.3	6.8

Note: Numbers above reflect reconciliation. Most enrollees paid premiums directly to plans, and those amounts are not included. On a cash basis, the Boards of Trustees estimate that premiums paid by enrollees were \$4.1 billion in 2007, \$5.0 billion in 2008, \$6.1 billion in 2009, \$6.7 billion in 2010, \$7.3 billion in 2011, \$7.8 billion in 2012, \$9.3 billion in 2013, and \$10.5 billion in 2014. Components may not sum to stated totals due to rounding.

*Net of risk-sharing payments using Part D's risk corridors.

Source: MedPAC based on Table IV.B10 of the 2015 annual report of the Boards of Trustees of the Medicare trust funds.

the catastrophic phase of the benefit, which, in turn, triggers Medicare's individual reinsurance (see text box on beneficiaries who reach the coverage gap or OOP threshold, pp. 398–399, and Table 13-12, p. 399). Between 2010 and 2014, payments for individual reinsurance grew by about 26 percent per year compared with 12 percent for 2007 through 2010 (data not shown).

Changes in the national average bid also reveal higher growth in individual reinsurance. Between 2007 and 2016, expected total benefit spending per member per month has grown at a modest rate of 3 percent annually, from \$103 to \$134 (Figure 13-9). During that period, the monthly amount that plans expect to receive through the direct subsidy has fallen 5.4 percent annually, from about \$50 to \$31. Over the same period, the amount per member per month that sponsors expect to receive in reinsurance has grown 11.3 percent annually, from \$26 to about \$69.

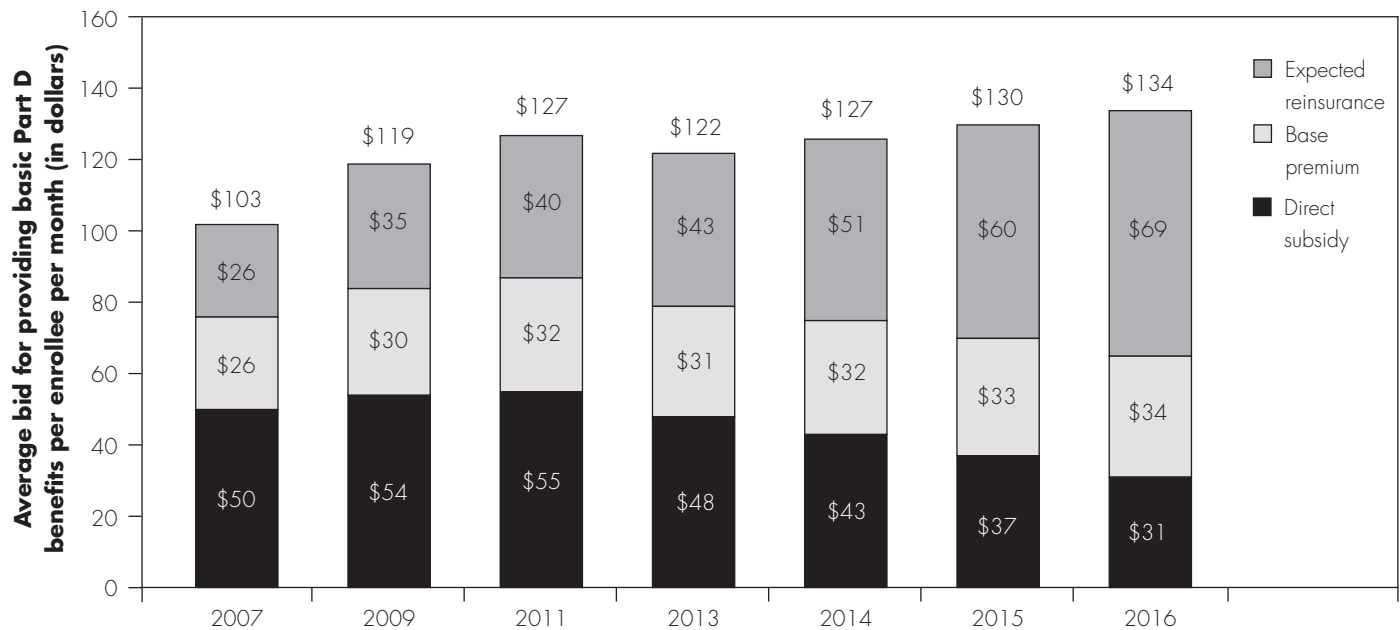
In the Commission's June 2015 report to the Congress, we observed regular patterns in Medicare's reconciliation payments with plans (Medicare Payment Advisory Commission 2015c). First, many plan sponsors have bid too low on the amount of benefit spending they expected above Part D's catastrophic threshold relative to their enrollees' actual catastrophic spending. Second, plan sponsors have bid too high on the rest of benefit spending other than catastrophic benefits. Between 2009 and 2013, about three-fourths of parent organizations returned a portion of their prospective payments to Medicare through

risk corridors. Actuaries interviewed by Commission staff suggested that there is significant uncertainty behind the assumptions they make when projecting drug spending for their bids. At the same time, we suggested Part D's risk-sharing mechanisms may provide incentives to bid too low on catastrophic spending and too high on spending for the remainder of the Part D benefit. When plan sponsors underbid on the amount of individual reinsurance they will ultimately receive, Medicare pays an overall Part D subsidy higher than the 74.5 percent specified in law. We estimate this higher subsidy has occurred in each year between 2007 and 2014.

For benefits delivered in 2014, 81 percent of plan sponsors received additional individual reinsurance payments from Medicare at reconciliation, much of which was likely due to higher than anticipated spending on new hepatitis C therapies. Ultimately, however, 62 percent of Part D plan sponsors made risk-corridor payments to Medicare for 2014 benefits. In the aggregate, those payments totaled less than \$100 million, much lower than risk-corridor payments from plan sponsors to Medicare in previous years.

A growing share of program spending is for high-cost enrollees

The share of spending accounted for by high-cost enrollees—those who reach the catastrophic phase of the benefit—has grown in recent years, from about 40 percent of the gross spending before 2011 to 44 percent in 2011,

**FIGURE
13-9****National average plan bid for basic Part D benefits**

Note: The averages shown are weighted by the previous year's plan enrollment. Amounts do not net out subsequent reconciliation amounts with CMS. Components may not sum to stated totals due to rounding.

Source: MedPAC analysis based on data from CMS.

and to about 47 percent in 2013. This growth has occurred, even as these high-cost enrollees' share of Part D enrollees has decreased (see text box, pp. 398–399).

Increase in prices per prescription drove growth in spending for high-cost enrollees

Between 2007 and 2013, per capita spending for all Part D enrollees grew an annual 2.2 percent, compared with an annual 8.4 percent for high-cost enrollees (Table 13-13, p. 400). On average, growth for all Part D enrollees was driven by an increase in the number of prescriptions filled, which grew by an average annual 2.2 percent, while the average price for each prescription remained nearly flat (an annual growth rate of less than 0.1 percent).

By comparison, the pattern is very different for high-cost enrollees. Between 2007 and 2013, prices per prescription for high-cost enrollees grew an annual 6.9 percent, while the number of prescriptions filled per enrollee per month grew an annual 1.4 percent (Table 13-13, p. 400). That is, the growth in prices explains much of the spending growth (8.4 percent) for high-cost enrollees during this period.

The higher growth in prices of drugs taken by high-cost enrollees can be explained by their tendency to use more brand-name drugs. For example, in 2013, the average generic dispensing rate (GDR) among high-cost enrollees was slightly over 70 percent, or about 13 percentage points below the overall Part D average. This lower GDR is due, in part, to the fact that most of the high-cost enrollees are individuals who receive the LIS. The cost-sharing subsidy, while helping these beneficiaries to afford medications, also minimizes or eliminates the financial incentives plans employ to encourage the use of lower cost drugs. At the same time, for certain classes of drugs, generic substitution is not available. Prices of many drugs (e.g., specialty drugs) that do not have generic substitutes are typically much higher and grow more rapidly compared with other drug products.²⁸

Use of higher cost drugs poses challenges for Part D

Drugs with very high prices pose a particular challenge for Part D. As more expensive therapies become available, larger numbers of beneficiaries will reach the catastrophic

Beneficiaries who reach the coverage gap or out-of-pocket threshold

In 2013, a quarter of Part D enrollees incurred spending high enough to reach the coverage gap (Figure 13-10). Of those, about 2.9 million, or about 8 percent of all Part D enrollees, had spending high enough to reach the catastrophic phase of the benefit, up from 2.6 million in 2012.²⁹ We refer to individuals who reach the catastrophic phase as high-cost enrollees.

Most high-cost enrollees received the LIS in 2013

In 2013, slightly over 2.1 million, or three-quarters of high-cost enrollees, received Part D's low-income

subsidy (LIS). Because LIS enrollees are more likely to be enrolled in prescription drug plans (PDPs), a larger share of high-cost enrollees was in PDPs compared with other enrollees (78 percent compared with 63 percent, respectively). High-cost enrollees were also more likely to reside in an institution, be disabled beneficiaries under age 65, and be non-White compared with other enrollees (data not shown).

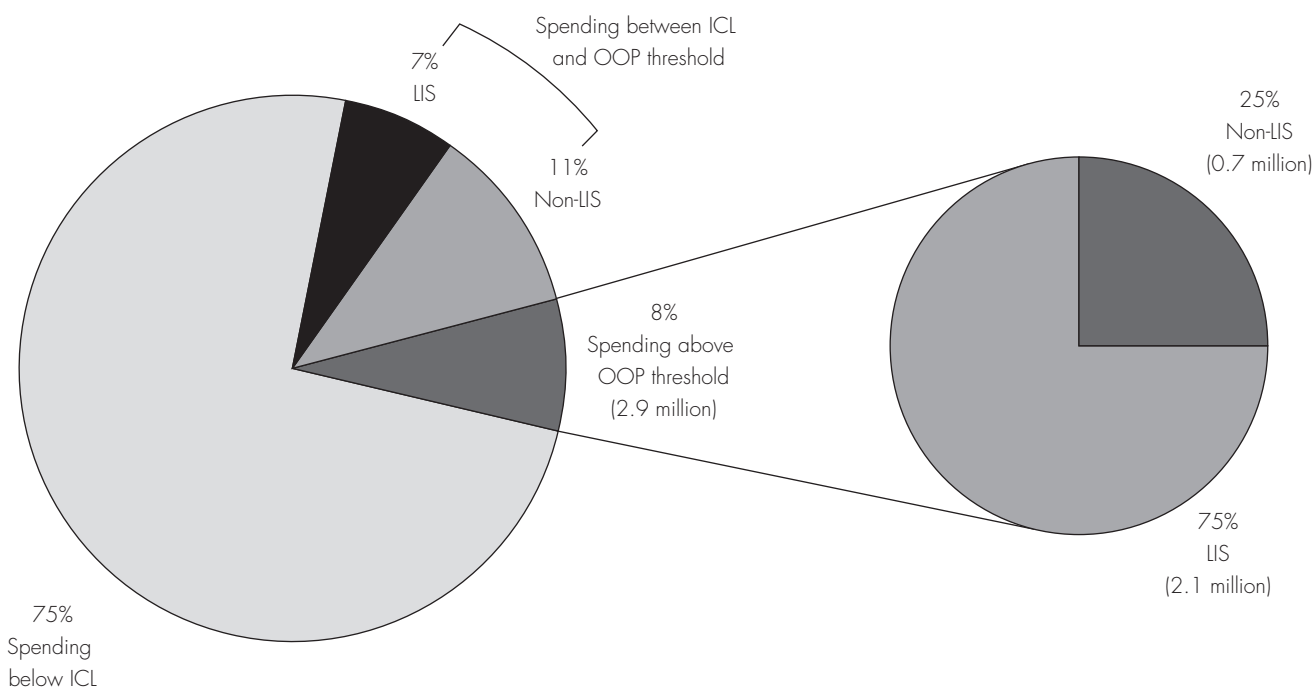
High-cost enrollees without the LIS increased faster than those with the LIS

Even though non-LIS enrollees made up just 25 percent of high-cost enrollees in 2013, their proportion has been rising. Between 2010 and 2013, the number of

(continued next page)

**FIGURE
13-10**

Part D enrollees with spending in the coverage gap and catastrophic phase, 2013



Note: ICL (initial coverage limit), LIS (low-income subsidy), OOP (out-of-pocket). Enrollees with spending in between the ICL and the OOP threshold fall within Part D's coverage gap. LIS enrollees do not face a coverage gap. In 2013, Part D enrollees reached the ICL at \$2,970 in gross drug spending. With no supplemental coverage, an enrollee reached the threshold at \$4,750 of OOP spending or qualifying drug spending made on behalf of the beneficiary, including the 50 percent discount paid for by pharmaceutical manufacturers for brand-name drugs. Some non-LIS enrollees who reached the catastrophic phase of the benefit may have had some gap coverage. Components may not sum to stated totals due to rounding.

Source: MedPAC analysis of Part D prescription drug event data and Part D denominator file from CMS.

Beneficiaries who reach the coverage gap or out-of-pocket threshold (cont.)

non-LIS enrollees who reached the catastrophic phase of the benefit increased noticeably, with a more than 27 percent increase between 2010 and 2011 and a nearly 33 percent increase between 2012 and 2013 (Table 13-12). Much of this increase is likely a result of changes made by the Patient Protection and Affordable Care Act of 2010 (PPACA). Specifically, PPACA called for a 50 percent manufacturer discount on brand-name

drugs in the coverage gap and allowed that discount to count toward the out-of-pocket spending threshold. However, the increase also reflects higher enrollment growth among non-LIS enrollees between 2007 and 2013—over 8 percent per year compared with less than 3 percent per year among LIS enrollees (data not shown). ■

**TABLE
13-12**

Part D enrollees reaching the benefit's out-of-pocket threshold, 2007-2013

	2007	2008	2009	2010	2011	2012	2013
In millions							
LIS	1.9	2.0	2.0	2.0	2.1	2.1	2.1
Non-LIS	<u>0.4</u>	<u>0.4</u>	<u>0.4</u>	<u>0.4</u>	<u>0.5</u>	<u>0.5</u>	<u>0.7</u>
All	2.3	2.4	2.4	2.4	2.6	2.6	2.9
Annual percentage change							
LIS		4.6%	-0.5%	-0.1%	9.0%	-3.4%	4.0%
Non-LIS		4.9	-6.2	-3.9	27.6	6.8	32.7
All		4.6	-1.6	-0.8	12.1	-1.4	9.9

Note: LIS (low-income subsidy). Growth rates calculated using figures before rounding was applied. Components may not sum to stated totals due to rounding.

Source: Data from 2007 and 2008 are based on published figures from CMS. Data from 2009 to 2013 are based on MedPAC analysis of Part D prescription drug event data.

phase of the benefit, when Medicare pays for 80 percent of the costs through individual reinsurance. We are already beginning to observe this trend with biologic products. Between 2009 and 2013, the share of high-cost enrollees who filled at least one prescription for a biologic product grew from 8 percent to 12 percent. During the same period, the share of spending accounted for by biologic products grew from 6 percent to 10 percent. According to data released by CMS, spending for new hepatitis C therapies has led to a large spike in Part D spending in 2014 (see text box, pp. 402-403).

Part D enrollees' use of high-cost drugs has thus far made up a limited share of total drug spending (see Medicare Payment Advisory Commission (2015d) for a more detailed discussion). One likely reason for the limited use

of high-cost drugs in Part D so far is that nearly all plans have specialty tiers, which typically carry 25 percent to 33 percent cost sharing. High cost-sharing amounts may discourage some non-LIS enrollees from initiating or completing high-cost treatment. In addition, under Part D rules, enrollees may not appeal cost-sharing amounts for specialty-tier drugs. A similar strategy would not be effective for enrollees whose cost sharing is paid by the LIS.

For the future, the high and increasing cost of specialty drugs poses a big challenge in Part D because these drugs are concentrated in drug classes that treat conditions such as rheumatoid arthritis and inflammatory diseases, multiple sclerosis, cancer, and HIV, which are more prevalent among the Medicare population (Express Scripts 2014). Major PBMs and insurers uniformly

**TABLE
13-13****Increase in prices drove growth in per capita spending for high-cost enrollees, 2007–2013**

	2007	2013	Average annual growth rate, 2007–2013
All Part D enrollees			
Average price per 30-day prescription	\$54	\$54	<0.1%
Prescriptions per enrollee per month	<u>3.9</u>	<u>4.5</u>	2.2
Gross drug spending per enrollee per month	\$212	\$242	2.2
High-cost enrollees			
Average price per 30-day prescription	\$97	\$145	6.9%
Prescriptions per enrollee per month	<u>8.9</u>	<u>9.7</u>	1.4
Gross drug spending per enrollee per month	\$868	\$1,410	8.4

Note: Spending includes all payments to pharmacies, including payments by drug plans, Medicare's low-income subsidy, and beneficiary out of pocket.

Source: MedPAC analysis of Part D prescription drug event data and denominator file from CMS.

project that growth in price and use of specialty drugs will continue to drive trends in spending.³⁰ In the drug pipeline, fewer blockbuster drugs are losing patent protection, and more than half of the FDA's approvals of new drugs in 2013 were for specialty drugs (CatamaranRx 2014). Because many of these therapies have limited therapeutic substitutes, prices for specialty drugs tend to be high, affording PBMs and insurers less ability to exert downward pressure on price.

As the use of specialty drugs increases, Part D enrollees and the Medicare program will face increasingly higher costs. Plans will likely continue to require 25 percent to 33 percent coinsurance on high-priced medicines. If larger numbers of beneficiaries begin to use specialty drugs just as the coverage gap is growing smaller, the number who reach Part D's OOP threshold could rise significantly. In turn, Medicare spending for individual reinsurance and low-income cost sharing also will rise.

Beneficiaries' access to prescription drugs

Implementation of the Part D program in 2006 increased the share of beneficiaries with drug coverage from 75 percent to nearly 90 percent.³¹ In general, Part D has

improved Medicare beneficiaries' access to prescription drugs, with plans available to all individuals. Surveys indicate that beneficiaries enrolled in Part D continue to be generally satisfied with the Part D program and their plans (Healthcare Leadership Council 2015a, Healthcare Leadership Council 2015b, KRC Research 2013).

Enrollee cost sharing

Cost-sharing requirements have generally been rising over the years. This trend is primarily the result of a provision in the law that requires a constant generosity of the Part D's benefit over time, which means that an increase in average total drug expenses requires a commensurate increase, on average, in benefit parameters.

To measure how the beneficiary's share of the drug costs has changed over time, we contracted with researchers at Acumen LLC to calculate the average cost-sharing amounts for different intervals of spending. Table 13-14 shows cost-sharing amounts for beneficiaries with annual total drug spending that falls within different phases of the benefit (e.g., below the 2013 defined-standard benefit's deductible of \$324).³² Cost-sharing amounts shown are for a hypothetical enrollee with average spending in each spending range based on actual spending in 2013. For an LIS enrollee, we also show the combination of Medicare's low-income cost-sharing subsidy and the LIS beneficiary's OOP spending.

**TABLE
13-14****Examples of cost sharing paid by Part D enrollees in 2007 and 2013**

Gross drug spending per beneficiary	Percent of enrollees in 2013	Percent of spending in 2013	Beneficiary OOP*						Medicare's low-income cost-sharing subsidy combined with LIS enrollee OOP		
			Non-LIS			LIS					
			2007	2013	Change 2007- 2013	2007	2013	Change 2007- 2013	2007	2013	Change 2007- 2013
\$0	7%	0%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$1-\$324	20	1	83	93	10	12	19	7	97	124	27
\$325-\$2,969	47	22	460	440	-20	62	68	6	527	573	46
\$2,970-\$6,954.51	17	27	1,988	1,480	-509	160	130	-29	2,419	2,429	10
\$6,954.52-\$9,999	4	11	3,863	2,932	-931	173	148	-25	4,651	4,805	154
≥\$10,000	5	39	4,357	4,388	31	88	113	25	5,043	5,619	576

Note: OOP (out-of-pocket), LIS (low-income subsidy). The dollar amounts for 2007 are adjusted by the consumer price index for all urban consumers into 2013 dollars.

*Beneficiary OOP includes all payments made by or for a beneficiary (excluding low-income cost sharing) that would be treated as OOP for the purpose of determining when he or she has reached the catastrophic phase of the benefit. Average spending per beneficiary was \$146 for enrollees with spending between \$1 and \$324, \$1,276 for enrollees with spending between \$325 and \$2,969, \$4,426 for enrollees with spending between \$2,970 and \$6,954.41, \$8,272 for enrollees with spending between \$6,954.52 and \$9,999, and \$22,073 for enrollees with spending at or greater than \$10,000.

Source: MedPAC based on Acumen LLC analysis for MedPAC.

In general, the amounts Part D enrollees paid OOP remained relatively stable or decreased between 2007 and 2013. Cost-sharing amounts for non-LIS enrollees generally decreased, with larger decreases for those who had spending high enough to reach the coverage gap or catastrophic phase of the benefit (ranges \$2,970–\$6,954.51 and \$6,954.52–\$9,999, respectively). The decrease is primarily due to the closing of the coverage gap (i.e., an increase in generosity of the Part D benefit) that began in 2011. For LIS enrollees, changes in the amounts paid out of pocket were relatively small (less than 1 percent) with the exception of those in the lowest spending category (\$1–\$324), which grew by \$7 (from \$12 to \$19).³³

In contrast, Medicare's low-income cost-sharing subsidy combined with the OOP amount paid by LIS enrollees grew across all spending ranges. This amount depends on many factors—such as the disease burden of enrollees, whether the enrollee is in a plan with a deductible, the tier placement of the enrollee's drugs, whether the enrollee chose brand-name drugs or generics, and whether the enrollee filled his or her prescriptions at a preferred pharmacy. Comparing the average amounts of LIS cost sharing to averages for non-LIS enrollees is complicated because the relative generosity of the Part D benefit has differed over time for these two groups. While LIS

enrollees generally have never faced a coverage gap, since 2011, the coverage gap for non-LIS enrollees has become smaller (i.e., coverage has become more generous). Still, the average combined low-income cost-sharing subsidies and LIS OOP amounts grew more than did average non-LIS cost sharing (Table 13-14). Some of this growth is likely due to the fact that LIS OOP amounts, set by law, make LIS enrollees less likely to be influenced by their plans' benefit designs, which use cost sharing to encourage the use of lower cost medications and pharmacies. In turn, this effect may lead to higher growth in spending for Medicare's low-income cost-sharing subsidy in the Part D program compared with cost-sharing amounts paid by non-LIS enrollees.

Exceptions and appeals process

The number of drugs listed on a formulary or the use of utilization management tools—prior authorization, quantity limits, and step therapy requirements—can provide a measure of beneficiaries' access to prescription drugs. However, for individuals whose prescription medications are not covered by their plans or are covered but have relatively high cost sharing, a well-functioning exceptions and appeals process is crucial to ensuring access to needed medications.

Part D spending for new hepatitis C medicines

Hepatitis C is a blood-borne virus that causes inflammation of the liver.³⁴ The hepatitis C virus (HCV) can remain asymptomatic for years, even decades, but can also lead to cirrhosis, liver failure, and higher risk of liver cancer. An estimated 3 million people in the United States have HCV, many without realizing it, and the virus is disproportionately concentrated among baby boomers (Centers for Disease Control and Prevention 2015). As of January 2015, about 363,000 Medicare beneficiaries (1.7 percent of the fee-for-service population) had been diagnosed with HCV (Segal 2015). Prevalence rates for low-income subsidy (LIS) enrollees in Part D are six times higher than for non-LIS enrollees: 3.7 percent versus 0.6 percent, respectively.

Olysio, Sovaldi, Harvoni, and Viekira Pak are examples of new oral therapies that offer significant promise for patients with HCV; they substantially reduce or eliminate viral load, may halt progression of disease, and are much more tolerable than older treatments. However, prices for the new drugs are very high: Sovaldi was first offered in December 2013 at \$84,000 per treatment regime, or \$1,000 per pill. More recently, the FDA approved other HCV therapies, and Gilead (Sovaldi's manufacturer) began offering rebates that

lowered the price by about 40 percent (Loftus 2014). Initial data show that new HCV drugs can substantially increase the number of patients achieving a sustained virologic response compared with previous therapies. However, a 2014 comparative clinical and cost-effectiveness analysis of Olysio and Sovaldi found that, even though newer agents may prevent more liver events such as cancer or transplantation, over a 20-year period, those fewer events would offset only three-quarters of the incremental cost of the new drugs. If a large number of patients were treated, "the clinical advantages of newer treatment regimens would come with a substantial potential impact on health care budgets" (Loftus 2014, Tice et al. 2014).

The use of new hepatitis C therapies has had a very significant impact on Part D spending. Medicare Trustees estimate that in 2014, Part D program payments increased by nearly 15 percent, and they attribute the size of the increase to the use of new hepatitis C drugs (Boards of Trustees 2015). As of January 2015, about 57,000 Medicare fee-for-service beneficiaries (only 16 percent of those identified as having HCV) had filled at least 1 prescription for an HCV drug (Segal 2015). Nevertheless in 2014, gross Part D spending for new HCV drugs before

(continued next page)

Part D's exceptions and appeals process is complex, involving multiple levels (Medicare Payment Advisory Commission 2014d). It begins either when an enrollee's prescription is denied at the pharmacy because of a plan's utilization management or cost-sharing requirements or because the drug is not listed on the plan's formulary. To initiate a request for an appeal, the enrollee, prescribing physician, or authorized representative must ask the plan for a redetermination.

In 2013, we examined Part D's appeals data that pertained to the second of five levels of the appeals process, for which plans' adverse coverage determinations were reviewed by an independent review entity. However, the data did not provide information sufficient for us to assess the effectiveness of the exceptions and appeals process in ensuring access to needed medications (Medicare

Payment Advisory Commission 2014d). Subsequently, CMS released data on the exceptions and appeals process at the plan level. Our analysis of that data showed low rates of claims rejections and appeals (Medicare Payment Advisory Commission 2015d). We were unable to determine whether those findings were cause for concern because claims can be rejected for valid reasons, such as exceeding the quantity limits based on FDA labeling. In other cases, beneficiaries may work with their physicians to find alternative medications or obtain samples. A low appeals rate could be cause for concern if it reflects a lack of transparency in the process or excessive administrative burden imposed on enrollees and prescribers that discourages them from submitting an appeal.

At the same time, CMS audits continue to find that plans have difficulties in the areas of Part D coverage

Part D spending for new hepatitis C medicines (cont.)

rebates was \$4.8 billion, and as of June 30, 2015, the comparable figure had reached \$4.6 billion (Committee on Finance 2015). Part D plan sponsors did not fully anticipate the spending effects of new HCV drugs when they submitted their plan bids for 2014, and in 2015, Medicare paid plans an additional \$11 billion in 2014 reconciliation payments.³⁵ Since all Part D enrollees with HCV must have reached the out-of-pocket threshold and many likely had assistance with cost sharing through the LIS, the Medicare program paid for the vast majority of new HCV spending.

Several factors account for why the higher spending in 2014 was not anticipated accurately. Physicians who treat HCV knew that more tolerable medicines would soon become available, and some of these physicians “warehoused” patients (delayed treatment) in anticipation of newer therapies (Committee on Finance 2015). A further reason is that once the FDA approved the first two breakthrough therapies, Part D plans were obligated to cover them; plans had little negotiating leverage over the drugs’ prices until the introduction of additional HCV therapies. The only prior authorization Part D plans could require was to clinically document that the enrollee had one of the HCV indications listed on the drug’s label. By comparison, 33 state Medicaid programs used tighter utilization management—covering

new HCV treatment only for patients with more advanced liver disease (Ward and Mermin 2015).

New HCV drugs pose difficult challenges for public payers, including Medicare. One challenge is the issue of opportunity costs: steep increases in spending for HCV drugs leave fewer resources available for other important uses. A competing issue is whether public programs may restrict care when effective treatments are available. In a November 2015 notice to state Medicaid programs, CMS cautioned that the programs should not deny access to clinically appropriate HCV treatments (Centers for Medicare & Medicaid Services 2015e). At the same time, CMS encouraged manufacturers of HCV drugs to disclose how they might use value-based pricing agreements. A further challenge is that new HCV infections have risen significantly in the United States, fueled by the use of injected drugs (Ward and Mermin 2015). Some public health analysts contend that broader treatment with new HCV drugs may reduce the rate of new infections (Van Nuys et al. 2015), while others voice concern that without measures to reduce illicit drug use, some treated HCV patients may become reinfected and the virus could potentially become drug resistant (Wilkerson 2015). ■

determinations, appeals, and grievances (Centers for Medicare & Medicaid Services 2015a). In beneficiary focus groups convened for the Commission during 2015, we continued to find limited experience with the exceptions and appeals process (Hargrave et al. 2015). Some of the beneficiaries we spoke with were aware of the appeals process, but many chose not to appeal the plans’ (negative) coverage determinations. Many reported working with their physicians to find alternative medications instead of appealing plans’ coverage decisions. In our focus groups, many providers reported that it was time consuming and frustrating to speak with insurance companies on behalf of a patient for a particular prescription.

Quality in Part D

CMS collects quality and performance data to monitor sponsors’ operations. A subset of these data is used to rate plans on a 5-star system, which is used to determine MA quality bonus payments and is made available to the public to help beneficiaries evaluate their plan options during Part D’s annual open enrollment. CMS also requires Part D plans to implement medication therapy management (MTM) programs to improve the quality of the pharmaceutical care for high-risk beneficiaries. Although the Commission supports CMS’s goal of improving medication management, we have been concerned with the effectiveness of plans’ MTM programs. In September 2015, CMS announced that it would test a new MTM

model. We plan to examine the effectiveness of the new MTM program once additional information becomes available.

Measuring plan performance

CMS collects Part D plan quality and performance data from several sources—the Consumer Assessment of Health Providers and Systems[®] survey, agency monitoring of plans, data furnished by plan sponsors, and claims information (Centers for Medicare & Medicaid Services 2015f). Selected performance measures are available on the Plan Finder at www.medicare.gov to help beneficiaries evaluate their plan options during Part D’s annual open enrollment. The lowest rated plans are flagged to caution beneficiaries about choosing those plans. The highest rated plans can enroll beneficiaries outside the annual open enrollment period. In addition, for MA–PDs, Part D performance data affect the MA program’s overall plan ratings to determine the amount of bonus payment.

For 2016, Part D plan ratings are based on up to 15 metrics that measure plan performance on intermediate outcomes, patient experience, access, and process. Four measures of intermediate outcomes receive twice as much weight as the seven metrics that reflect patient experience and access. Two new measures have been added for 2016: MTM completion rate for comprehensive medication reviews and beneficiary access and plan performance problems, a measure reflecting any CMS sanctions, civil monetary penalties, or compliance actions (Centers for Medicare & Medicaid Services 2015f). These new measures receive relatively less weight, as do other process measures. Finally, drug plan quality improvement, a measure reflecting changes in drug plans’ performance from one year to the next, is assigned the highest weight (5). Most MA–PDs are rated on up to 32 measures that assess the quality of medical services provided under Part C (i.e., the MA program), in addition to the 15 measures used to assess the quality of prescription drug (Part D) services provided. CMS aggregates individual scores for each measure (15 measures for PDPs and 47 measures for MA–PDs) on the Plan Finder under a 5-star system; 5 stars reflect excellent performance, and 1 star reflects poor performance.

The average star rating (weighted by 2015 enrollment) for 2016 is 3.40, down from 3.75 in 2015. CMS noted changes in the PDP scores because of the discontinuation of one measure and the introduction of three new measures (Centers for Medicare & Medicaid Services 2015b). For

MA–PDs, the average is 4.03, up from 3.92 in 2015 (see Chapter 12 for a discussion of stars ratings for MA plans and MA–PDs.). In general, changes in the composition of the measures CMS uses to rate plans over the years makes it difficult to use the star rating system to measure changes in quality of services provided by plans across years.

Medication therapy management programs

Part D plans are required to implement MTM programs to improve the quality of the pharmaceutical care for high-risk beneficiaries. These programs are intended to improve medication use and reduce adverse drug events for beneficiaries who have multiple chronic conditions, take multiple medications, and are likely to have annual drug spending that exceeds the annual cost threshold (\$3,507 for 2016). Our earlier review of MTM programs revealed wide variations in eligibility criteria and the kinds of interventions provided to enrollees (Medicare Payment Advisory Commission 2009).

CMS has been tightening criteria for MTM programs since 2010 and has used multiple guidances to specify MTM requirements. For example, under CMS MTM criteria, plan sponsors cannot require beneficiaries to have more than three chronic conditions or use more than eight medications to be eligible for their MTM programs. Plan sponsors are required to offer all MTM-program-eligible enrollees a comprehensive medication review (CMR) at least annually and a targeted medication review (TMR) at least quarterly for ongoing monitoring and follow-up of any medication-related issues.³⁶

Although the Commission supports CMS’s goal of improving medication management, we have been concerned with the effectiveness of Part D’s MTM programs. As CMS has noted in the past, plans are unable to contact many eligible beneficiaries, and many beneficiaries refuse the service. MTM program data released by CMS showed that, in 2010 and 2012, only 10 percent of MTM participants (about 1 percent of Part D enrollees) completed a CMR (Marrufo et al. 2013, Medicare Payment Advisory Commission 2015d). In addition, physicians may be reluctant to accept recommendations from drug plans with which they have no direct relationship. Evidence suggests that the effectiveness of the MTM services currently offered by Part D plans “fall[s] short of their potential to improve quality and reduce unnecessary medical expenditures” (Centers for Medicare & Medicaid Services 2015h, Marrufo et al. 2013).

In September of 2015, CMS announced that it would test whether providing payment incentives and greater regulatory flexibility in designing the MTM programs would “achieve better alignment of PDP sponsor and government financial interests, while also creating incentives for robust investment and innovation in better MTM targeting and interventions” (Center for Medicare & Medicaid Innovation 2015). The regulatory flexibility combined with the financial incentives provided under the model test have the potential to address some of the Commission’s concerns regarding coordination with a beneficiary’s care team and a plan’s incentive to offer MTM programs (Medicare Payment Advisory Commission 2014a) (see text box, p. 406). We plan to continue to monitor how well the current MTM program is working and report on the new enhanced MTM model as more information becomes available.

Looking ahead

Medicare does not set drug prices administratively for Part D; prices are determined through negotiations between private plan sponsors, pharmacies, and pharmaceutical manufacturers. The law that created Part D included a clause that explicitly prohibits the Secretary from “interfer[ing] with the negotiations between drug manufacturers and pharmacies and PDP sponsors.”³⁷ The law also prohibits the Secretary from requiring a particular formulary or instituting a price structure for reimbursement. This reliance on market-based prices was premised on the notion that competition among Part D plans that bear insurance risk would provide a strong incentive for plan sponsors to manage drug use and keep spending in check. Plan sponsors and their PBMs carry out this responsibility by developing and maintaining formularies, using differential cost sharing to encourage enrollees to use lower cost options, and negotiating rebates and discounts from manufacturers and pharmacies. However, for medicines with limited therapeutic substitutes or for which coverage is required, plan sponsors have less bargaining leverage to exert downward pressure on price.

This chapter describes the growing effects of high-cost enrollees (those who reach Part D’s OOP threshold) on program spending. In 2013, about three-fourths of high-cost enrollees received the LIS, and past research by the Commission has shown consistently that plan sponsors are less successful at encouraging LIS enrollees to use

generics. Encouraging LIS enrollees to use lower cost generics could reduce the number of individuals who reach the catastrophic phase of the benefit and thereby reduce the amount Medicare pays to plans in individual reinsurance. Meanwhile, the numbers of non-LIS enrollees who reach Part D’s OOP threshold are growing faster than those with the LIS. Phased closure of the coverage gap combined with the pipeline shift toward drugs with very high prices have contributed to this trend and pose a particular challenge because Medicare pays for 80 percent of catastrophic costs through individual reinsurance.

Going forward, the Commission will continue to evaluate policy options that could improve the efficiency of Part D within the context of the program’s market-based approach. For example, plan sponsors could be asked to shoulder more insurance risk for their Part D enrollees while, at the same time, plans could be allowed greater flexibility around formulary tools. Such steps could be designed to increase plans’ incentives and ability to manage benefit spending. Policy changes would need to be accompanied by well-functioning appeals and grievance procedures to ensure that enrollees maintain good access to appropriate medications.

It would also be important to consider medication use within the context of broader Medicare spending. For example, we may want to consider Medicare policies that encourage the use of medications that improve health outcomes and reduce the use of other health care services. Our previous research on this topic highlighted the difficulty of measuring the effects of medication use (adherence) on the use of other health care services among Medicare beneficiaries (Medicare Payment Advisory Commission 2014c). A related issue is that harmful effects can result from polypharmacy (use of multiple medications), especially among Medicare beneficiaries, who tend to have multiple chronic conditions (Medicare Payment Advisory Commission 2015c).³⁸ Thus, in contemplating policy interventions to encourage appropriate medication use, we need a better understanding of how the effects of medication use vary by condition and by population. We plan to revisit these issues in the future. ■

Part D Enhanced Medication Therapy Management Model test

CMS plans to implement the new program called the Part D Enhanced Medication Therapy Management Model in selected prescription drug plan (PDP) regions through the Center for Medicare and Medicaid Innovation with a proposed five-year performance period, from 2017 through 2021.³⁹ Part D's program requirements related to uniformity of benefits and cost sharing will be waived for participating PDPs, which would provide them with the ability to offer medication therapy management (MTM) interventions tailored to an individual's needs, including cost-sharing assistance to financially needy beneficiaries (Centers for Medicare & Medicaid Services 2015h).

CMS's stated goal is for the participating PDPs to explore different communication strategies to improve beneficiary, pharmacist, and medical provider coordination and engagement. To aid that effort, CMS can provide participating PDPs with their enrollees' Part A and Part B claims data and information on beneficiaries' participation in integrated care models, such as accountable care organizations.

Because stand-alone PDPs may not necessarily benefit financially from providing MTM services that could improve enrollees' health outcomes and lower costs for the Medicare program, the model test also includes financial incentives for participating PDPs:

- a plan-specific prospective payment for MTM services that is outside the annual Part D bid and would not therefore affect plan premiums, and
- a performance-based payment in the form of an increased beneficiary premium subsidy (in a future year) for plans that successfully achieve a 2 percent reduction in expected beneficiary fee-for-service expenditures (net of model prospective payments).

PDPs participating in the enhanced MTM model will be required to collect and submit MTM-related encounter data for both monitoring and evaluation purposes. The MTM encounter data will also be used to construct certain quality metrics that reflect clinical significance and outcomes (Center for Medicare & Medicaid Innovation 2015). ■

Endnotes

- 1 This amount includes reconciliation payments made during 2014 between Medicare and plan sponsors for benefits delivered in previous years.
- 2 Part D benefit parameters for 2016 reflect an increase of nearly 12 percent over 2015 due to a more than 6 percent increase in average spending and a revision to prior-year adjustments of over 5 percent (Centers for Medicare & Medicaid Services 2015g).
- 3 In 2016, the Part D benefit provides gap coverage of 5 percent for brand-name drugs, in addition to a 50 percent discount provided by drug manufacturers, reducing cost sharing in the gap to about 45 percent. Cost sharing for brand-name drugs filled depends on the dispensing fee charged since the 5 percent covered by Part D applies to both the ingredient cost and the dispensing fee, while the 50 percent manufacturer discount applies only to ingredient costs.
- 4 If an employer agrees to provide primary drug coverage to retirees with an average benefit value equal to or greater than Part D (called creditable coverage), Medicare provides a tax-free subsidy to the employer for 28 percent of each eligible retiree's drug costs that fall within a specified range of spending. Under PPACA, employers still receive the RDS tax free, but as of 2013, they can no longer deduct drug expenses for which they receive the subsidy as a cost of doing business. However, they can still deduct prescription drug expenses not covered by the subsidy.
- 5 Other sources of coverage include the Federal Employees' Health Benefits Program, TRICARE for Life, and the Department of Veterans Affairs.
- 6 CMS is conducting demonstration projects in which certain beneficiaries who are eligible for both Medicare and Medicaid receive all of their care through a single health plan, known as a Medicare–Medicaid Plan (MMP). The number of beneficiaries enrolled in MMPs rose from 17,000 in 2014 to about 320,000 in 2015. They are included in the MA–PD category.
- 7 Under the Part C payment system, a portion of the difference between the plan's benchmark payment and its bid for providing Part A and Part B services is referred to as Part C rebate dollars. The rebate dollars can be used to supplement benefits or lower premiums for services provided under Part C or Part D.
- 8 MA–PD premiums reflect Medicare Advantage plans' total monthly premium attributable to Part D benefits for plans that offer Part D coverage and are net of rebate dollars that were used to offset Part D premium costs.
- 9 These figures are based on CMS's estimate as of December 2015. Cubanski and Neuman (2015) provide a similar estimate.
- 10 CMS allows sponsors to offer multiple plans in a given service area only when the plans are substantially different from one another. To be considered "substantially different" for 2016, a beneficiary's expected monthly OOP costs between basic and enhanced PDPs must differ by at least \$18 per month. If a sponsor is offering two enhanced PDPs in the same service area, the second enhanced plan must have a higher value than the first, with a difference of at least \$30 in a beneficiary's expected monthly OOP costs between the two enhanced plan offerings.
- 11 Information on the extent of coverage plans provide in the gap phase is not available for 2015 or 2016. However, in the past, plans often provided limited coverage in the gap. For example, in 2014, about one-fourth of PDPs with some additional coverage in the gap included fewer than 10 percent of formulary drugs in that coverage (Hoadley et al. 2014a).
- 12 Plan sponsors do not submit Part D bids for EGWP plans, and so we do not have bid information about their administrative costs. For that reason, we excluded EGWP plans from this analysis. We also excluded the Program of All-Inclusive Care for the Elderly and low-income new enrollment transition plans, which allow individuals who are eligible for the LIS but not yet enrolled in a Part D prescription drug plan to obtain immediate prescription drug coverage.
- 13 For 2013, plan sponsors were able to negotiate rebates and discounts that reduced total gross benefit spending by about 13 percent. The net benefit spending is calculated by allocating those rebates and discounts in proportion to the gross spending amounts incurred across different phases of the benefit.
- 14 In 2014 and thereafter, Part D contracts are subject to "medical loss ratio" requirements that they spend at least 85 percent of revenues on benefit costs. Because the data analyzed here are from 2013, those requirements did not apply.
- 15 The measure needs to be used with caution because it can be misleading in some circumstances. For example, some plan sponsors list relatively few drugs on their formulary but have an exceptions process that permits good access to other medications. Alternatively, other sponsors list most drugs on their formulary but require prior authorization for relatively larger numbers of drugs.

- 16 The average share of pharmacies is not weighted by enrollment.
- 17 The minimum standard for pharmacy network access, based on the TRICARE standard, is as follows: urban areas—at least 90 percent of Medicare beneficiaries in the sponsor’s service area reside within 2 miles of a network retail pharmacy; suburban areas—at least 90 percent of Medicare beneficiaries in the sponsor’s service area reside within 5 miles of a network retail pharmacy; rural areas—at least 70 percent of Medicare beneficiaries in the sponsor’s service area reside within 15 miles of a network retail pharmacy.
- 18 Beneficiaries had access to preferred pharmacies in 46 percent of plans in urban areas, 87 percent in suburban areas, and 95 percent in rural areas.
- 19 Sixty-six percent of commercial health plans mandate that self-administered specialty drugs be dispensed by a specialty pharmacy, and about three-quarters of health plans require beneficiaries to use designated specialty pharmacy providers (Fein 2015).
- 20 Specialty pharmacies can be operated by PBMs, retail drugstore chains, health plans, pharmaceutical wholesalers, physician practices, and hospital systems (Fein 2015).
- 21 CMS regulations state that Part D plans may not restrict access to certain Part D drugs to “specialty” pharmacies within their Part D network in such a manner that contravenes the convenient access protections of § 1860D–4(b)(1)(C) of the Social Security Act and 42 CFR § 423.120(a).
- 22 An individual NDC uniquely identifies the drug’s labeler, drug, dosage form, strength, and package size. Typically, the same drug has many different NDCs.
- 23 For this index, Acumen grouped NDCs that are pharmaceutically identical, aggregating prices across drug trade names, manufacturers, and package sizes. As a result, brand-name drugs are grouped with their generics if they exist, and the median price more closely reflects the degree to which market share has moved between the two.
- 24 In a proposed rule published January 6, 2014, CMS suggested removing three classes—antidepressants, antipsychotics, and immunosuppressants for transplant rejection—from protected status. In a comment letter, the Commission was supportive of CMS’s approach in applying objective criteria to determine drug categories or classes of clinical concern while balancing the goals of beneficiary access and welfare with Part D plans’ tools to manage the drug benefit and appropriately constrain costs. The Commission also shared CMS’s concerns about antipsychotics and supported CMS’s move to proceed slowly (Medicare Payment Advisory Commission 2014a). However, CMS did not include the proposed action in its final rule.
- 25 Differences in GDRs vary by therapeutic classes. In 2012, for some of the most commonly used classes of drugs, the average GDR for LIS enrollees was from 5 percentage points to 13 percentage points lower than that of non-LIS enrollees. We observed this finding in both PDPs and MA–PDs.
- 26 The price index for antiretrovirals grew by 46 percent between 2006 and 2013.
- 27 In 2012, our price index for biologic products rose steeply by about 30 percent, a rate much higher than was observed in previous years. The increase was due in part to a change in how prescription quantities were reported for Avonex, a self-injectable biologic used to treat multiple sclerosis. Spending for Avonex accounted for a relatively high share of total expenditures for the market basket of biologic products used to calculate the price index. We are exploring this issue further.
- 28 The industry does not have one consistent definition of specialty drugs, but these drugs tend to be characterized as high cost (e.g., the Medicare threshold described by the Centers for Medicare & Medicaid Services (2015c) of \$600 or more per month) and are used to treat a rare condition, require special handling, use a limited distribution network, or require ongoing clinical assessment. Most biologics are a subset of specialty drugs. See <http://www.ajmc.com/payer-perspectives/0213/The-Growing-Cost-of-Specialty-PharmacyIs-it-Sustainable>.
- 29 The share of Part D enrollees who reach the catastrophic phase of the benefit decreased between 2007 and 2013 (from 8.8 percent to 7.6 percent), due to the influx of relatively younger and healthier cohorts of enrollees associated with the retirement of baby boomers and employer group waiver plans (EGWPs). Much of the growth in EGWPs is likely attributable to the changes made by the Patient Protection and Affordable Care Act of 2010 (PPACA) that increased the generosity of Part D coverage. (See <http://www.medpac.gov/documents/payment-basics/part-d-payment-system-15.pdf?sfvrsn=0> for more detail on changes made by PPACA to phase out the coverage gap, and see endnote 4 in this chapter for changes to the tax treatment of the retiree drug subsidy.)
- 30 Among pharmacy benefit managers (PBMs), growth in price and use of specialty drugs has been driving the overall trend in spending. Across their entire non-Medicare and Medicare books of business, PBMs’ spending on specialty drugs has reached about 30 percent in 2012 and may reach 50 percent of total spending by 2018 (Roberts 2013).
- 31 The prescription drug coverage that beneficiaries had before 2006 may or may not have been as generous as the Part D benefit. Since implementation of Part D, nearly 90 percent of beneficiaries have drug coverage that is as generous as Part D’s basic benefit.

- 32 We first estimated the share of drug costs that were paid by beneficiaries (OOP share) by annual spending levels in \$100 increments for both 2007 and 2013. We then calculated the average spending by benefit phase, using 2013 data on drug spending, and multiplied those amounts by the OOP shares that would have applied in 2007 and 2013 to obtain the hypothetical cost-sharing amounts that would have applied for a beneficiary with average spending in each spending range (benefit phase) in 2007 and 2013.
- 33 The maximum OOP amounts for LIS enrollees are set by law, with the majority paying nominal copays that are indexed to the consumer price index for all urban consumers. Because the law requires the copays to be indexed in this manner, the OOP amounts would not be expected to follow the patterns observed for average total program spending or the cost-sharing amounts set by plan sponsors.
- 34 Today, the most common way people become infected with hepatitis C is by sharing needles or equipment to inject drugs, but the virus can also be transmitted through contact with infected blood (e.g., needle sticks in health care settings or, before 1992, blood transfusions) or less commonly through sexual contact.
- 35 The \$11.1 billion was for all drugs provided through Part D, not just HCV drugs. The amount was made up of \$2.2 billion in additional low-income cost-sharing subsidies and \$8.9 billion in additional individual reinsurance subsidies for enrollees who reached Part D's out-of-pocket limit, but net of \$0.1 billion in risk-corridor payments from plans to Medicare (data provided to Commission staff by CMS as of October 29, 2015). Two billion dollars of the \$8.9 billion in additional reinsurance payments were to EGWPs, which receive all of their reinsurance subsidies as a lump sum at reconciliation rather than through prospective payments during the benefit year.
- 36 CMRs must include an interactive, person-to-person, or telehealth consultation performed by a pharmacist or other qualified provider and a written summary of the review that includes a medication list and action plan, if any, provided to beneficiaries in CMS's standardized format. A TMR is distinct from a CMR because it is focused on specific medication-related problems, actual or potential. A TMR can be person-to-person or system generated, and interventions can be delivered by mail or faxed to the beneficiary or the prescriber, as appropriate (Centers for Medicare & Medicaid Services 2014b).
- 37 Section 1860D-11 [42 U.S.C. 1395w-111].
- 38 There is no consensus on what constitutes polypharmacy. Some researchers identify polypharmacy in terms of the number of drugs taken concurrently by a patient. Most commonly, researchers describe polypharmacy as a situation in which a patient takes five to seven drugs concurrently.
- 39 A Request for Application for the model test was released in early November 2015 to sponsors of basic stand-alone PDPs in the following five regions: Region 7 (Virginia), Region 11 (Florida), Region 21 (Louisiana), Region 25 (Iowa, Minnesota, Montana, Nebraska, North Dakota, South Dakota, Wyoming), and Region 28 (Arizona) (<https://innovation.cms.gov/initiatives/enhancedmtm/>).

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A P P E N D I X

A

**Commissioners' voting
on recommendations**

Commissioners' voting on recommendations

In the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000, the Congress required MedPAC to call for individual Commissioner votes on each recommendation and to document the voting record in its report. The information below satisfies that mandate.

Chapter 1: Context for Medicare payment policy

No recommendations

Chapter 2: Assessing payment adequacy and updating payments in fee-for-service Medicare

No recommendations

Chapter 3: Hospital inpatient and outpatient services

The Congress should direct the Secretary of the Department of Health and Human Services to:

- update inpatient and outpatient payments by the amount specified in current law,
- reduce Medicare payment rates for 340B hospitals' separately payable 340B drugs by 10 percent of the average sales price (ASP),
- direct the program savings from reducing Part B drug payment rates to the Medicare-funded uncompensated care pool, and
- distribute all uncompensated care payments using data from the Medicare cost reports' Worksheet S-10. The use of S-10 uncompensated care data should be phased in over three years.

Yes: Armstrong, Baicker, Buto, Christianson, Coombs, Crosson, Gradison, Hall, Hoadley, Naylor, Redberg, Samitt, Thompson, Uccello

No: Kuhn, Nerenz, Thomas

Chapter 4: Physician and other health professional services

The Congress should increase payment rates for physician and other health professional services by the amount specified in current law for calendar year 2017.

Yes: Armstrong, Baicker, Buto, Christianson, Coombs, Crosson, Gradison, Hall, Hoadley, Kuhn, Naylor, Nerenz, Redberg, Samitt, Thomas, Thompson, Uccello

Chapter 5: Ambulatory surgical center services

The Congress should eliminate the update to the payment rates for ambulatory surgical centers for calendar year 2017. The Congress should also require ambulatory surgical centers to submit cost data.

Yes: Armstrong, Baicker, Buto, Christianson, Coombs, Crosson, Gradison, Hall, Hoadley, Kuhn, Naylor, Nerenz, Redberg, Samitt, Thomas, Thompson, Uccello

Chapter 6: Outpatient dialysis services

The Congress should increase the outpatient dialysis base payment rate by the update specified in current law for calendar year 2017.

Yes: Armstrong, Baicker, Buto, Christianson, Coombs, Crosson, Gradison, Hall, Hoadley, Kuhn, Naylor, Nerenz, Redberg, Samitt, Thomas, Thompson, Uccello

Additionally, the Commission reiterates its March 2014 recommendation for redesigning the low-volume payment adjustment and auditing dialysis facilities' cost reports. See text box, p. 167.

Chapter 7: Skilled nursing facility services

The Congress should eliminate the market basket update for 2017 and 2018 and direct the Secretary to revise the prospective payment system (PPS) for skilled nursing facilities. In 2019, the Secretary should report to the Congress on the effects of the reformed PPS and make any additional adjustments to payments needed to more closely align payments with costs.

Yes: Armstrong, Baicker, Buto, Christianson, Coombs, Crosson, Gradison, Hall, Hoadley, Kuhn, Naylor, Nerenz, Redberg, Samitt, Thomas, Thompson, Uccello

Chapter 8: Home health care services

The Congress should direct the Secretary to eliminate the payment update for 2017 and implement a two-year rebasing of the payment system beginning in 2018. The Congress should direct the Secretary to revise the prospective payment system to eliminate the use of therapy visits as a factor in payment determinations, concurrent with rebasing.

Yes: Armstrong, Baicker, Buto, Christianson, Coombs, Crosson, Gradison, Hall, Hoadley, Kuhn, Naylor, Nerenz, Redberg, Samitt, Thomas, Thompson, Uccello

Additionally, the Commission reiterates its March 2011 recommendations on improving the home health care benefit. See text box, pp. 218–219.

Chapter 9: Inpatient rehabilitation facility services

9-1 The Congress should eliminate the update to the Medicare payment rate for inpatient rehabilitation facilities in fiscal year 2017.

Yes: Armstrong, Baicker, Buto, Christianson, Coombs, Crosson, Gradison, Hall, Hoadley, Kuhn, Naylor, Nerenz, Redberg, Samitt, Thomas, Thompson, Uccello

9-2 The Secretary should conduct focused medical record review of inpatient rehabilitation facilities that have unusual patterns of case mix and coding.

Yes: Armstrong, Baicker, Buto, Christianson, Coombs, Crosson, Gradison, Hall, Hoadley, Kuhn, Naylor, Nerenz, Redberg, Samitt, Thomas, Thompson, Uccello

9-3 The Secretary should expand the inpatient rehabilitation facility outlier pool to redistribute payments more equitably across cases and providers.

Yes: Armstrong, Baicker, Buto, Christianson, Coombs, Crosson, Gradison, Hall, Hoadley, Kuhn, Naylor, Nerenz, Redberg, Samitt, Thomas, Thompson, Uccello

Chapter 10: Long-term care hospital services

The Secretary should eliminate the update to the payment rates for long-term care hospitals for fiscal year 2017.

Yes: Armstrong, Baicker, Buto, Christianson, Coombs, Crosson, Gradison, Hall, Hoadley, Kuhn, Naylor, Nerenz, Redberg, Samitt, Thomas, Thompson, Uccello

Chapter 11: Hospice services

The Congress should eliminate the update to the hospice payment rates for fiscal year 2017.

Yes: Armstrong, Baicker, Buto, Christianson, Coombs, Crosson, Gradison, Hall, Hoadley, Kuhn, Naylor, Nerenz, Redberg, Samitt, Thomas, Thompson, Uccello

Chapter 12: The Medicare Advantage program: Status report

12-1 The Congress should eliminate the cap on benchmark amounts and the doubling of the quality increases in specified counties.

Yes: Armstrong, Baicker, Buto, Christianson, Coombs, Crosson, Gradison, Hall, Hoadley, Kuhn, Naylor, Nerenz, Redberg, Samitt, Thomas, Thompson, Uccello

12-2 The Congress should direct the Secretary to:

- develop a risk adjustment model that uses two years of fee-for-service (FFS) and Medicare Advantage (MA) diagnostic data and does not include diagnoses from health risk assessments from either FFS or MA, and
- then apply a coding adjustment that fully accounts for the remaining differences in coding between FFS Medicare and Medicare Advantage plans.

Yes: Armstrong, Baicker, Buto, Christianson, Coombs, Crosson, Gradison, Hall, Hoadley, Kuhn, Naylor, Nerenz, Redberg, Samitt, Thompson, Uccello

No: Thomas

Additionally, the Commission reiterates its March 2014 recommendations on improving the bidding rules in the MA program and integrating hospice care into the MA benefit package and its March 2004 recommendation on allowing beneficiaries with end-stage renal disease to enroll in private plans. See text box, pp. 361–363.

Chapter 13: Status report on Part D

No recommendations

Acronyms

Acronyms

AAC	actual acquisition cost	CHF	congestive heart failure
AARP	(formerly) American Association of Retired Persons	CHIP	Children's Health Insurance Program
ABIM	American Board of Internal Medicine	CKD	chronic kidney disease
ACH	acute care hospital	CLABSI	central line–associated bloodstream infection
ACO	accountable care organization	CMG	case-mix group
ADL	activity of daily living	CMI	case-mix index
AHCA	American Health Care Association	CMMI	Center for Medicare and Medicaid Innovation
AHRQ	Agency for Healthcare Research and Quality	CMR	comprehensive medication review
AIDS	acquired immunodeficiency syndrome	CMS	Centers for Medicare & Medicaid Services
ALF	assisted living facility	CMS–HCC	CMS–hierarchical condition category
ALOS	average length of stay	CON	certificate of need
AMA	American Medical Association	COPD	chronic obstructive pulmonary disease
AMI	acute myocardial infarction	CPI–U	consumer price index for all urban consumers
APC	ambulatory payment classification	CPT	Current Procedural Terminology
APM	alternative payment model	C–SNP	chronic condition special needs plan
APR–DRG	all-patient refined–diagnosis related group	CT	computed tomography
APRN	advanced practice registered nurse	CY	calendar year
ASC	ambulatory surgical center	DoD	Department of Defense
ASCQR	ASC Quality Reporting	DRG	diagnosis related group
ASP	average sales price	DSH	disproportionate share
AWV	annual wellness visit	D–SNP	dual-eligible special needs plan
BLS	Bureau of Labor Statistics	E&M	evaluation and management
CAH	critical access hospital	EBITDA	earnings before interest, taxes, depreciation, and amortization
CAHPS®	Consumer Assessment of Healthcare Providers and Systems®	ED	emergency department
CAHPS®–MA	Consumer Assessment of Healthcare Providers and Systems® Medicare Advantage	EGWP	employer group waiver plan
C–APC	comprehensive ambulatory payment classification	EHR	electronic health record
CARE	Continuity Assessment Record and Evaluation [tool]	ER	emergency room
CAUTI	catheter-associated urinary tract infection	eRx	electronic prescribing
CBO	Congressional Budget Office	ESA	erythropoiesis-stimulating agent
CBSA	core-based statistical area	ESCO	ESRD Seamless Care Organizations
CC	complication or comorbidity	ESRD	end-stage renal disease
CCI	chronically critically ill	FDA	Food and Drug Administration
CCP	coordinated care plan	FFS	fee-for-service
CCU	coronary care unit	FIM™	Functional Independence Measure™
CCW	Chronic Conditions Warehouse	FY	fiscal year
CDC	Centers for Disease Control and Prevention	GAO	Government Accountability Office
CEO	chief executive officer	GDP	gross domestic product
CHC	continuous home care	GDR	generic dispensing rate
		GI	gastrointestinal
		GIP	general inpatient care
		GME	graduate medical education

GPCI	geographic practice cost index	KDE	kidney disease education
HAC	hospital-acquired condition	LDO	large dialysis organization
HbA1c	hemoglobin A1c	LEP	late enrollment penalty
H-CAHPS®	Hospital Consumer Assessment of Healthcare Providers and Systems	LIS	low-income [drug] subsidy
HCBS	home- and community-based services	LLC	limited liability corporation
HCC	hierarchical condition category	LOS	length of stay
HCPCS	Healthcare Common Procedure Coding System	LPN	licensed practical nurse
HCV	hepatitis C virus	LTCH	long-term care hospital
HEDIS®	Healthcare Effectiveness Data and Information Set®	LVN	licensed vocational nurses
HHA	home health agency	MA	Medicare Advantage
HHS	Department of Health and Human Services	MACPAC	Medicaid and CHIP Payment and Access Commission
HHVBP	home health value-based purchasing	MACRA	Medicare Access and CHIP Reauthorization Act of 2015
HI	Hospital Insurance (Medicare Part A)	MA-PD	Medicare Advantage–Prescription Drug [plan]
HIT	health information technology	MCBS	Medicare Current Beneficiary Survey
HIV	human immunodeficiency virus	MCC	major complication or comorbidity
HMO	health maintenance organization	MCCM	Medicare Care Choices Model
HOPD	hospital outpatient department	MedPAC	Medicare Payment Advisory Commission
HOS	Health Outcomes Survey	MEI	Medicare Economic Index
HPSA	health professional shortage area	MEPS	Medical Expenditure Panel Survey
HRA	health risk assessment	MGMA	Medical Group Management Association
HRR	hospital referral region	MHA	Missouri Hospital Association
HRRP	Hospital Readmissions Reduction Program	MIPPA	Medicare Improvements for Patients and Providers Act of 2008
HRSA	Health Resources and Services Administration	MIPS	Merit-based Incentive Payment System
HUD	Department of Housing and Urban Development	MMP	Medicare–Medicaid Plan
HWH	hospital-within-hospital	MMSEA	Medicare, Medicaid, and SCHIP Extension Act of 2007
ICD-9	International Classification of Diseases, Ninth Revision	MRI	magnetic resonance imaging
ICD-10-CM	International Classification of Diseases, Tenth Revision, Clinical Modification	MRSA	methicillin-resistant staphylococcus aureus
ICL	initial coverage limit	MS-DRG	Medicare severity–diagnosis related group
ICU	intensive care unit	MS-LTC-DRG	Medicare severity long-term care diagnosis related group
IGC	impairment group code	MSS	medical social services
IME	indirect medical education	MTM	medication therapy management
IMPACT	Improving Medicare Post-Acute Care Transformation Act of 2014	N/A	not applicable
IOL	intraocular lens	N/A	not available
IOM	Institute of Medicine	NCQA	National Committee for Quality Assurance
IPPS	inpatient prospective payment system	NDC	national drug code
IPS	interim payment system	NHSN	National Healthcare Safety Network
IRC	inpatient respite care	NORC	(formerly) National Opinion Research Center
IRF	inpatient rehabilitation facility	NP	nurse practitioner
IRF-PAI	Inpatient Rehabilitation Facility–Patient Assessment Instrument	NSAS	National Survey of Ambulatory Surgery
I-SNP	institutional special needs plan	NTA	nontherapy ancillary
		OIG	Office of Inspector General

OOP	out-of-pocket	RN	registered nurse
OPPS	outpatient prospective payment system	RRC	rural referral center
OR	operating room	RUG	resource utilization group
PA	physician assistant	RVU	relative value unit
PAC	post-acute care	SCH	sole community hospital
PBM	pharmacy benefit manager	SCHIP	State Children’s Health Insurance Program
PCI	percutaneous coronary intervention	SES	socioeconomic status
PCIP	Primary Care Incentive Payment [program]	SGR	sustainable growth rate
PD	peritoneal dialysis	SMI	Supplementary Medical Insurance (Medicare Part B)
PDP	prescription drug plan	SNF	skilled nursing facility
PDQ	Providing Data Quickly [system]	SNP	special needs plan
PFFS	private fee-for-service	SSI	Supplemental Security Income
PFS	physician fee schedule	SSI	surgical site infection
POS	Provider of Services	SSO	short-stay outlier
PPACA	Patient Protection and Affordable Care Act of 2010	TEFRA	Tax Equity and Fiscal Responsibility Act of 1982
PPO	preferred provider organization	TMR	targeted medication review
PPS	prospective payment system	TPS	Total Performance Score
PQI	Prevention Quality Indicator	UA	urbanized area
PQRS	Physician Quality Reporting System	UC	urban cluster
PSA	prostate-specific antigen	VA	Department of Veterans Affairs
PSI	patient safety indicator	VBP	value-based purchasing [program]
QIP	quality incentive program	VM	value modifier
RDS	retiree drug subsidy	VSSO	very short-stay outlier
RHC	routine home care		

More about MedPAC

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Commissioners' biographies

Scott Armstrong, M.B.A., F.A.C.H.E., is president and chief executive officer (CEO) of Group Health Cooperative, a consumer-governed health system serving 650,000 enrollees through coordinated care plans for groups and individuals and for Medicare, Medicaid, and Children's Health Insurance Program beneficiaries. He has worked at Group Health since 1986, serving in positions ranging from assistant hospital administrator to chief operating officer; he became president and CEO in 2005. Before joining Group Health, Mr. Armstrong was assistant vice president for hospital operations at Miami Valley Hospital in Dayton, OH. Mr. Armstrong is a member of the board of the Alliance of Community Health Plans and board member of America's Health Insurance Plans and the Seattle Chamber of Commerce. He is also immediate past chair of the Board of the Pacific Science Center and a fellow of the American College of Healthcare Executives. He received his bachelor's degree from Hamilton College in New York and a master's degree in business with a concentration in hospital administration from the University of Wisconsin–Madison.

Katherine Baicker, Ph.D., is C. Boyden Gray Professor of Health Economics and chair of the Department of Health Policy and Management at the Harvard T. H. Chan School of Public Health, where her research focuses on health insurance finance and the effect of reforms on the distribution and quality of care. From 2005 to 2007, Professor Baicker served as a Senate-confirmed member of the President's Council of Economic Advisers. She is a research associate at the National Bureau of Economic Research and the Jameel Poverty Action Lab, serves on the Congressional Budget Office's Panel of Health Advisers, is a director of Eli Lilly, chairs the Group Insurance Commission of Massachusetts, and is an elected member of the Institute of Medicine. She also served as chair of AcademyHealth and on the faculty of the Economics Department at Dartmouth College. She received her B.A. in economics from Yale University and her Ph.D. in economics from Harvard University.

Kathy Buto, M.P.A., is an expert in U.S. and international health policy. She has recently been involved in a range of volunteer professional engagements with, among others, the Arlington Free Clinic, the National Academy of Social Insurance, the Robert Wood Johnson Foundation's Healthcare Legacy Forum, and the National Science

Foundation's Study of Women in Policy Making. Her previous positions include vice president of global health policy at Johnson & Johnson, senior health adviser at the Congressional Budget Office, deputy director of the Center for Health Plans and Providers at the Health Care Financing Administration (now Centers for Medicare & Medicaid Services), and deputy executive secretary for health at the Department of Health and Human Services. Ms. Buto received her master's in public administration from Harvard University.

Jon B. Christianson, Ph.D., is the James A. Hamilton Chair in Health Policy and Management in the Division of Health Policy and Management at the School of Public Health at the University of Minnesota. His research has addressed the areas of health finance, payment structures, rural health care, managed care payment, and the quality and design of care systems. Dr. Christianson serves on the Institute of Medicine's Board on Health Care Services and on the editorial board of the *American Journal of Managed Care*. He recently served on the Institute of Medicine's Committee on Geographic Adjustment Factors in Medicare Payment and has chaired AcademyHealth's annual research meeting. Dr. Christianson received his Ph.D. in economics from the University of Wisconsin.

Alice Coombs, M.D., is a critical care specialist and an anesthesiologist at Milton Hospital and South Shore Hospital in Weymouth, MA. She is board certified in internal medicine, anesthesiology, and critical care medicine. Dr. Coombs is past president of the Massachusetts Medical Society (MMS) and a member of MMS's Committee on Ethnic Diversity. She chaired the Committee on Workforce Diversity that is part of the American Medical Association's (AMA's) Commission to Eliminate Health Care Disparities and has served on the Governing Council for the AMA Minority Affairs Consortium and the AMA Initiative to Transform Medical Education. She currently serves on the AMA Women Physicians Section Executive Committee. She helped to establish the New England Medical Association, a state society of the National Medical Association that represents minority physicians and health professionals. Dr. Coombs has served as a member and vice chair of the Massachusetts Board of Registration in Medicine Patient Care Assessment Committee. In addition, she was a member of the Massachusetts Special Commission on the

Health Care Payment System, the Massachusetts Health Policy Advisory Committee, and the Massachusetts Health Disparities Council.

Francis “Jay” Crosson, M.D., spent 35 years as a physician and physician executive at Kaiser Permanente. In 1997 he founded and then for 10 years led the Permanente Federation LLC, the national umbrella organization for the physician half of Kaiser Permanente. Later he served as senior fellow at the Kaiser Permanente Institute for Health Policy and director of public policy for The Permanente Medical Group. From July 2012 through October 2014, he was group vice president of the American Medical Association in Chicago, IL, where he oversaw work related to physician practice satisfaction, efficiency, and sustainability. He previously served on MedPAC from 2004 to 2010, including as vice chair from 2009 to 2010. Dr. Crosson received his medical degree from the Georgetown University School of Medicine.

Bill Gradison, Jr., M.B.A., D.C.S., was a scholar in residence in the Health Sector Management Program at Duke’s Fuqua School of Business. He was a member of the U.S. Congress (1975–1993) where he served on the House Budget Committee and the Health Subcommittee of the Committee on Ways and Means. Mr. Gradison was a founding board member of the Public Company Accounting Oversight Board and was vice chairman of the U.S. Bipartisan Commission on Comprehensive Health Care (“Pepper Commission”). Prior positions also include assistant to the Secretary of Health, Education, and Welfare; president of the Health Insurance Association of America; and vice chair of the Commonwealth Fund Task Force on Academic Health Centers. Mr. Gradison received his B.A. from Yale University and an M.B.A. and doctorate from Harvard Business School.

William J. Hall, M.D., M.A.C.P., is a geriatrician and professor of medicine at the University of Rochester School of Medicine where he directs the Highland Hospital Center for Healthy Aging. He previously served as a member of the board of directors of AARP. His career has focused on systems of health care for older adults. He was instrumental in establishing the Program of All-Inclusive Care for the Elderly and developing many senior prevention and wellness programs. Dr. Hall’s prior service and positions include president of the American College of Physicians and leadership positions in the American Geriatrics Society. He received his bachelor’s degree from the College of the Holy Cross and his medical degree

from the University of Michigan Medical School and pursued postdoctoral training at Yale University School of Medicine.

Jack Hoadley, Ph.D., is research professor at the Health Policy Institute in the McCourt School of Public Policy at Georgetown University in Washington, DC. Dr. Hoadley previously served as director of the Division of Health Financing Policy for the Department of Health and Human Services Office of the Assistant Secretary for Planning and Evaluation; as principal policy analyst at MedPAC and its predecessor organization, the Physician Payment Review Commission; and as senior research associate with the National Health Policy Forum. His research expertise includes health financing for Medicare, Medicaid, and the Children’s Health Insurance Program (CHIP); pharmacoeconomics and prescription drug benefit programs; and private sector insurance coverage. Dr. Hoadley has published widely on health care financing and pharmacoeconomics and has provided testimony to government panels.

Herb B. Kuhn is current president and chief executive officer of the Missouri Hospital Association (MHA), the trade association serving the state’s 176 hospitals and health systems. Before joining MHA, Mr. Kuhn served in multiple roles at the Centers for Medicare & Medicaid Services, including deputy administrator from 2006 to 2009 and director of the Center for Medicare Management from 2004 to 2006. From 2000 to 2004, Mr. Kuhn served as corporate vice president for the Premier Hospital Alliance, serving 1,600 institutional members. From 1987 through 2000, Mr. Kuhn worked in federal relations with the American Hospital Association. Mr. Kuhn received his bachelor of science in business from Emporia State University.

Mary Naylor, Ph.D., R.N., F.A.A.N., is the Marian S. Ware Professor in Gerontology and director of the NewCourtland Center for Transitions and Health at the University of Pennsylvania School of Nursing. For the past two decades, Dr. Naylor has led an interdisciplinary program of research designed to improve the quality of care, decrease unnecessary hospitalizations, and reduce health care costs for vulnerable community-based elders. For the past eight years, Dr. Naylor served as the national program director for the Robert Wood Johnson Foundation Interdisciplinary Nursing Quality Research Initiative, which was aimed at generating, disseminating, and translating research to understand how nurses contribute to quality patient care. She was elected to the

National Academy of Medicine in 2005, is a member of the Leadership Consortium on Value and Science-Driven Health Care, and co-chairs the Care Culture and Decision-Making Innovation Collaborative. Dr. Naylor is also a member of the ABIM Foundation Board of Trustees, the RAND Health Board of Advisors, and the Agency for Healthcare Research and Quality National Advisory Council. She recently completed her term on the National Quality Forum Board of Directors.

David Nerenz, Ph.D., is director of the Center for Health Policy and Health Services Research at the Henry Ford Health System in Detroit, MI, as well as director of outcomes research at the Henry Ford Neuroscience Institute and vice chair for research in the Department of Neurosurgery at Henry Ford Hospital. He has served on the National Committee for Quality Assurance's Culturally and Linguistically Appropriate Services Workgroup, the Accountable Care Organization Technical Advisory Committee of the American Medical Group Association, and most recently as co-chair of the National Quality Forum's Expert Panel on Risk Adjustment for Sociodemographic Factors. Dr. Nerenz has served in various roles with the Institute of Medicine, including as chair of the Committee on Leading Health Indicators for Healthy People 2020. He serves on the editorial boards of *Population Health Management* and *Medical Care Research and Review*.

Rita Redberg, M.D., M.Sc., is professor of clinical medicine at the University of California at San Francisco (UCSF) Medical Center. A cardiologist, Dr. Redberg is also core faculty at the UCSF Philip R. Lee Institute of Health Policy Studies and adjunct associate at Stanford University's Center for Health Policy/Center for Primary Care and Outcomes Research. She is editor of *JAMA Internal Medicine* and chairperson of CMS's Medicare Evidence Development and Coverage Advisory Committee. Dr. Redberg serves in numerous positions on committees of the American Heart Association and the American College of Cardiology and was a Robert Wood Johnson Health Policy Fellow. She did her undergraduate work at Cornell University and has graduate degrees from the University of Pennsylvania Medical School and the London School of Economics.

Craig Samitt, M.D., M.B.A., is executive vice president and chief clinical officer at Anthem Inc. He has led major health systems for 20 years, most recently serving as president and CEO of HealthCare Partners, a division of DaVita HealthCare Partners, and, from 2006 through 2013,

as president and CEO of Dean Health System in Madison, WI. Prior to joining Anthem, Dr. Samitt served as partner and global provider practice leader in Oliver Wyman's Health & Life Sciences Practice and previously held senior executive roles at Fallon Clinic, Harvard Pilgrim Health Care, and Harvard Vanguard Medical Associates. He is chair-emeritus of the Group Practice Improvement Network and previously served as an advisory and faculty member of the Centers for Medicare & Medicaid Services' Accountable Care Organization Accelerated Development Learning Sessions. Dr. Samitt received his B.S. in biology from Tufts University, his M.D. from Columbia University College of Physicians and Surgeons, and his M.B.A. from the Wharton School.

Warner Thomas, M.B.A., is president and CEO of the Ochsner Health System in New Orleans, LA. He oversees a network of 10 hospitals, 45 health centers and clinics, and 2,200 affiliated physicians. The Ochsner system includes the Ochsner Medical Center in New Orleans, the Ochsner Clinic group practice, rurally based and subacute care hospitals, skilled nursing and rehabilitation facilities, and hospice. The Ochsner Medical Center operates one of the largest accredited non-university-based graduate medical education programs in the United States. It is also one of the largest Medicare risk contractors in the region and offers an accountable care organization for Medicare. Mr. Thomas's prior positions include chief operating officer of the Ochsner Clinic, vice president of managed care and network development at the Southern New Hampshire Medical Center, and senior auditor and consultant at Ernst & Young. He received his master's of business administration from Boston University Graduate School of Management.

Susan Thompson, M.S., R.N., is Senior Vice President of Integration and Optimization with UnityPoint Health, an integrated delivery system serving Iowa, central and western Illinois, and central Wisconsin. Previously, she was chief executive officer of UnityPoint Health—Fort Dodge health system in Iowa, which serves a predominantly rural and aging population and includes a medical center, a sole community hospital, a clinic, a primary care and multispecialty physician group, management contracts with critical access hospitals throughout the region, and a Pioneer Accountable Care Organization. She previously served in successive clinical and management positions at Trinity Regional Medical Center, including as intensive care staff nurse, director of quality systems, assistant director of patient-focused care, chief information officer,

chief operating officer, and chief executive officer. Ms. Thompson obtained her bachelor of science in nursing and her master of science in health services management from Clarkson College in Omaha, NE.

Cori E. Uccello, F.S.A., M.A.A.A., M.P.P., is senior health fellow of the American Academy of Actuaries, serving as the actuarial profession's chief public policy liaison on health issues. Ms. Uccello focuses on issues related to health insurance financing, coverage and market reforms, and risk-sharing mechanisms. She served as a member of

the 2010–2011 Technical Review Panel on the Medicare Trustees' report. Before joining the academy in 2001, she was a senior research associate at the Urban Institute where she focused on health insurance and retirement policy issues. She previously held the position of actuarial fellow at the John Hancock Life Insurance Company. Ms. Uccello is a fellow of the Society of Actuaries and a member of the American Academy of Actuaries. She received an undergraduate degree in mathematics and biology from Boston College and a master's degree in public policy from Georgetown University.

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