MARCH 2012

REPORT TO THE CONGRESS

Medicare Payment Policy

MEDPAC Medicare Payment Advisory Commission

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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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601 New Jersey Avenue, NW • Suite 9000 • Washington, DC 20001
(202) 220-3700 • Fax: (202) 220-3759 • www.medpac.gov

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Washington, DC 20001
202-220-3700 • Fax: 202-220-3759
www.medpac.gov

Glenn M. Hackbarth, J.D., Chairman
Robert A. Berenson, M.D., F.A.C.P., Vice Chairman
Mark E. Miller, Ph.D., Executive Director

March 15, 2012

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

The Honorable John A. Boehner
Speaker of the House
U.S. House of Representatives
U.S. Capitol
Room H-232
Washington, DC 20515

Dear Mr. Vice President and Mr. Speaker:

I am pleased to submit the Medicare Payment Advisory Commission's March 2012 *Report to the Congress: Medicare Payment Policy*. This report fulfills the Commission's legislative mandate to evaluate Medicare payment issues and to 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;
- a chapter that describes the Commission's analytical framework for assessing payment adequacy;
- nine chapters that describe the Commission's recommendations on rate updates and related issues, such as distribution of payments and increasing efficiency, for the major payment systems used by traditional Medicare;
- a chapter with updated statistics on enrollment, plan offerings, and payments in Medicare Advantage plans; and
- a chapter with updated statistics on enrollment and plan offerings for plans that provide prescription drug coverage and a recommendation to modify copayments for beneficiaries receiving the low-income subsidy to encourage use of generic drugs.

In this report, we continue to make recommendations to increase the efficiency of Medicare—that is, to find ways to provide high-quality care for Medicare beneficiaries at lower costs to the program. I draw your attention to four areas in particular.

First, we provide a series of fee-for-service payment system update recommendations that result in net savings to Medicare while maintaining access and quality.

Second, we make a recommendation to equalize payment rates for evaluation and management office visits provided in hospital outpatient departments (OPDs) and physician offices. In 2011, Medicare paid about 80 percent more for a 15-minute office visit in an OPD than in a freestanding physician office. The Commission maintains that Medicare should seek to pay similar amounts for similar services, taking into account differences

in the definitions of services and differences in patient severity. Setting the payment rate equal to the rate in the more efficient sector would save money for the Medicare program, lower cost sharing for beneficiaries, and reduce the incentive to provide services in the higher paid sector.

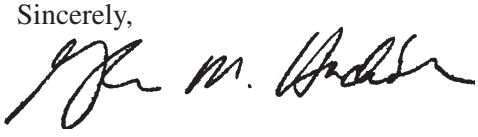
Third, we recommend revising and rebasing the skilled nursing facility (SNF) prospective payment system to more closely match SNFs' costs. Revising the payment system to more accurately pay for nontherapy ancillary services and to base therapy payments on patient characteristics will shift payment from facilities that concentrate on intensive therapy to facilities that treat medically complex patients. Rebasing will reduce Medicare spending and bring Medicare's payments more in line with SNFs' costs. We also recommend reducing payments to SNFs with relatively high rates of rehospitalizations. Avoidable rehospitalizations of SNF patients increase Medicare's spending, expose beneficiaries to additional disruptive care transitions, and can result in hospital-acquired infections or other adverse health consequences.

Fourth, we recommend modifying the Part D low-income subsidy (LIS) copayments to encourage the use of generic drugs when available in selected therapeutic classes. Switching from brand-name drugs to generic drugs can result in significant cost savings. Part D drug plan sponsors have been more successful at encouraging generic substitution among non-LIS enrollees than among LIS enrollees. Plans often use cost-sharing differentials to motivate beneficiaries to use generic drugs. However, since cost sharing for LIS enrollees is set by law rather than by each plan, sponsors have limited ability to manage drug spending for this population. By revising the LIS copayment structure, Medicare may be able to reduce program spending without substantially affecting access to needed medications. The policy would take into account the limited income of this population and retain the existing exceptions and appeals process.

Finally, I draw your attention to Appendix B, which addresses a long-standing problem in Medicare: the sustainable growth rate (SGR) system. In this Appendix, we reproduce the Commission's October 2011 letter to the Congress in which we recommended repealing the SGR (Medicare's method for updating physician fee schedule services) and replacing it with specified updates that would no longer be based on an expenditure-control formula. Under this approach, the resulting Medicare rates would favor primary care, in light of our recent findings on beneficiaries' access to those services. We also recommended that specialists be allowed to mitigate this effect by providing services through an accountable care organization and that the Secretary work to increase the accuracy of the fee schedule, in particular by reducing rates for overpriced services. It is critical for the Congress to act now to resolve the SGR for three reasons. First, the total cost of repealing the SGR grows inexorably with each passing year, as does the cost of temporary fixes. Second, growth in the size of the deficit has increased pressure to fully offset the cost of repealing the SGR. And third, opportunities to offset the costs of the SGR within Medicare are becoming more difficult to identify and are being used for other purposes. The Commission concluded that the risks of retaining the SGR outweigh its benefits. While the SGR may have resulted in lower updates for Medicare's physician payments, it has failed to restrain volume growth. In addition, temporary, stop-gap "fixes" to override the SGR are undermining the credibility of Medicare by engendering uncertainty and frustration among providers, which may be causing anxiety among beneficiaries.

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 high-quality care and providing sufficient payment for efficient providers.

Sincerely,



Glenn M. Hackbarth, J.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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Finally, the Commission wishes to thank Cay Butler and Hannah Fein for their help in editing and producing this report. ■

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Executive summary

Executive summary

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 Medicare program spending in terms of the federal budget and national gross domestic product (GDP).
- evaluate payment adequacy and make recommendations concerning Medicare FFS payment policy in 2013 for: hospital inpatient, hospital outpatient, physician and other health professional, ambulatory surgical center, outpatient dialysis, skilled nursing facility, home health care, inpatient rehabilitation facility, long-term care hospital, and hospice.
- take the first steps toward paying the same amount for the same service in different sectors by recommending that payment rates for evaluation and management (E&M) office visits be made equal in hospital outpatient departments and physician offices.
- review the status of the MA plans beneficiaries can join in lieu of traditional FFS Medicare.
- review the status of the plans that provide prescription drug coverage and recommend modifying copayments for beneficiaries receiving the low-income subsidy.
- review recent Commission recommendations on repealing the sustainable growth rate system.

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. Although this report addresses many topics to increase value, its principal focus is the Commission's recommendations for the annual rate updates under Medicare's various fee-for-service payment systems.

We recognize that managing updates and relative payment rates alone will not solve the fundamental problem with current Medicare FFS payment systems—that providers are paid more when they deliver more services without regard to the quality or value of those additional services. To address that problem directly, two approaches must be pursued. First, payment reforms, such as penalties for excessive readmission rates and linking some percentage of payment to quality outcomes, need to be implemented. Second, delivery system reforms, such as medical homes, bundling, and accountable care organizations, need to be tested 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 services across sectors—an important topic. In addition, if unit prices were constrained, that could create pressure on providers to control their own costs and to be more receptive to new payment methods and delivery system reforms.

Each chapter presents the payment adequacy information that informs our FFS update recommendations. We present each recommendation; its rationale; and its implications for beneficiaries, providers, and program spending. The spending implications are presented as ranges over one- and five-year periods and, unlike official budget estimates, they do not take into account the complete package of policy recommendations or the interactions among them. All of the recommendations in this report were developed and voted on before the effective date of the sequester provision in the Budget Control Act of 2011. The sequester provision is scheduled to take effect starting February 1, 2013. If a Medicare sequester does occur, it will change the spending implications of the recommendations. In addition, the report was prepared prior to passage of the The Middle Class Tax Relief and Job Creation Act of 2012; the provisions of this act defer the effect of the sustainable growth rate (SGR) system and reduce Medicare bad debt payments in certain other sectors (hospitals, skilled nursing facilities, inpatient rehabilitation facilities, and long-term care hospitals). These small changes are not reflected in this report.

In Appendix A, we list all recommendations and the Commissioners' votes. In Appendix B, we reproduce the Commission's October 2011 letter to the Congress in which it recommended repealing the SGR system (Medicare's method for updating physician fee schedule services) and replacing it with specified updates that would

no longer be based on an expenditure-control formula. In the initial years, these updates would favor primary care in light of our recent findings on beneficiaries' access to those services. Medicare faces increased urgency to resolve the growing problems created by the SGR system and its destabilizing short-term "fixes."

Context for Medicare payment policy

In Chapter 1, we consider Medicare payment policies in the broader context of the nation's overall health care spending and the realities of the federal budget. Health care accounts for a large and growing share of total economic activity in the United States, nearly doubling as a share of GDP in the past 30 years, from 9.2 percent in 1980 to 17.9 percent in 2010. Although growth in health care spending in 2010 slowed to the second lowest rate since 1960, much of the slowdown was due to the lingering effects of the financial crisis that peaked in 2008. Projections of health care spending through 2020 show it to continue growing as a share of GDP.

Growing health care costs have a significant fiscal impact on federal, state, and local governments, as government payers directly sponsor nearly half of all health care spending. Furthermore, the federal government may be less able to provide financial support to fiscally strapped states as a result of its own long-term deficit picture. While the federal government's short-term fiscal outlook could modestly improve as the economy recovers, the United States faces a long-term deficit that needs to be addressed by cutting spending, by increasing revenue, or by some combination of the two. Growth in health care spending in the Medicare and Medicaid programs contributes materially to that deficit.

Over the next 10 years, the Medicare population is projected to grow by a third, about twice the rate seen in recent years. The average age of the Medicare population will decline slightly as the baby boom generation turns 65. The new beneficiaries may have fewer retirement assets as a result of the economic recession and may be more likely to still be working. New Medicare beneficiaries also may be more receptive to managed care as a result of changes in the health insurance market.

However, even as the number of Medicare beneficiaries grows rapidly, Medicare's spending over the next 10 years is projected to grow at 5.9 percent annually, a much slower rate than the 8.8 percent annual growth in the 10 prior years. This slower expected growth results largely from smaller projected updates in the prices that Medicare pays relative to past updates. The projected updates are smaller because by law they adjust for economy-wide multifactor productivity. Nonetheless, the Medicare program still faces substantial deficits over the long term, the Hospital Insurance trust fund is projected to be exhausted within 15 years, and beneficiaries' cost sharing and premiums are projected to grow faster than Social Security benefits.

There are indications that some share of health care dollars is misspent, which if true potentially opens an avenue for controlling the growth in health care spending. There is significant variation in the use of health care in different regions of the United States and yet the high-use regions are not clearly associated with better outcomes, even after adjusting for health status, calling some of the use into question. In addition, comparisons between the United States and other countries suggest the potential to achieve similar levels of quality with lower spending.

Pressure from growth in health care spending, combined with the rise in the number of beneficiaries and indications that potential savings are possible, makes it incumbent on the Medicare program to spend limited funds wisely by providing incentives for beneficiaries to seek, and providers to deliver, high-value services.

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

The Commission makes payment update recommendations annually for FFS Medicare. An update is the amount (usually expressed as a percentage change) by which the base payment for all providers in a prospective payment system (PPS) is changed. In Chapter 2, we describe the general approach we use to determine an update. We first assess the adequacy of Medicare payments for providers in the current year (2012) 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—2013). As part of the process, we examine payment adequacy for the "efficient" provider to the extent possible. Finally, we make a judgment on what, if any, update is needed.

These update recommendations can significantly change the revenues providers receive from Medicare and help create pressure for broader reforms to address the fundamental problem in FFS payment systems—that providers are paid more when they deliver more services without regard to the quality or value of those additional services. Each year, the

Commission looks at all available indicators of payment adequacy and reevaluates any prior year assumptions using the most recent data available to make sure its recommendations accurately reflect current conditions. We also consider changes that redistribute payments within a payment system to correct any biases that may result in inequity among providers, make patients with certain conditions financially undesirable, or make particular services or procedures unusually profitable.

The principle that Medicare should pay the same rate for the same service across sectors is a good guide for the Commission's thinking as it considers changes to Medicare's payment systems. Medicare often pays different amounts for similar services across sectors. Setting the payment rate equal to the rate in the more efficient sector would save money for the Medicare program, reduce cost sharing for beneficiaries, and lessen the incentive to provide services in the higher paid sector. However, putting this principle into practice can be complex because it requires that the definition of the services and the characteristics of the beneficiaries across sectors be sufficiently similar. This year we make a recommendation to equalize payment rates for E&M office visits provided in hospital outpatient departments (OPDs) and physician offices. Our analysis shows that the definition of the service and the characteristics of the patients are sufficiently similar to allow this service to be compared across these two sectors. We are beginning to analyze opportunities for applying this principle to other services and sectors, such as the sectors that provide post-acute care (discussed below and in Chapter 3).

Hospital inpatient and outpatient services

From 2009 to 2010, Medicare payments per FFS beneficiary for inpatient and outpatient services in acute care hospitals grew by over 3 percent. As a result, the 4,800 hospitals paid under the Medicare PPS and critical access payment systems received $153 billion for roughly 10 million Medicare inpatient admissions and 166 million outpatient services.

In Chapter 3, we review our findings on hospital payment adequacy:

- Access measures were positive for the period reviewed. The number of hospitals and the range of services offered continued to grow. Inpatient admissions per FFS beneficiary declined 1 percent per year from 2004 to 2010 while the volume of hospital outpatient services per Medicare FFS beneficiary grew on average by 4 percent per year, reflecting a long-standing shift from inpatient to outpatient care.
- Quality continues to improve on most measures. Hospitals reduced in-hospital and 30-day mortality rates across 5 prevalent clinical conditions. Patient safety indicators have generally improved, but readmission rates have not improved significantly.
- Access to capital has been volatile over recent years because of the economic downturn but appears adequate at this time. As inpatient use and hospital occupancy declined, hospitals slowed the pace of new construction and shifted spending toward outpatient facilities and remodeling existing inpatient facilities.
- Overall aggregate Medicare profit margins improved from –7.1 percent in 2008 to –4.5 percent in 2010 for two reasons: First, hospitals slowed their cost growth in reaction to the economic downturn, and second they made changes in documentation and coding that led to higher hospital payments. Although the average hospital Medicare margin is negative, we find that Medicare payments more than covered the fully allocated costs of the median efficient hospital, which operated with a 4 percent Medicare margin in 2010. We project overall aggregate margins of –7 percent in 2012.

The Commission recommends that the Congress should increase payment rates for the inpatient and outpatient PPSs in 2013 by 1.0 percent. For inpatient services, the Congress should also require the Secretary of Health and Human Services, beginning in 2013, to use the difference between the increase under current law and the Commission's recommended update to gradually recover past overpayments due to documentation and coding changes.

The Commission balanced three factors in reaching its inpatient update recommendation. First, most payment adequacy indicators are positive. Second, hospitals' documentation and coding changes led to overpayments in 2010, 2011, and 2012. Updates must be lowered to recover these overpayments. Third, while relatively efficient hospitals generated positive overall Medicare margins in 2010, most hospitals have negative overall Medicare margins.

For outpatient services, the Commission also recommends a 1 percent increase in payment rates. On the one hand, growth in the volume of outpatient services has been strong, suggesting the outpatient update in current law is too high. On the other hand, overall hospital margins are

negative, suggesting a positive update is appropriate. A 1 percent update would balance these two considerations and also help limit growth in the disparity in payment rates between services provided in outpatient departments and payment rates in other sectors.

Paying the same for the same service in different sectors

The Commission maintains that Medicare should seek to pay similar amounts for similar services, taking into account differences in the definitions of services and patient severity. Under current payment systems this is not always the case. For example, in 2011, Medicare paid 80 percent more for a 15-minute office visit in an OPD than in a freestanding physician office. This payment difference creates a financial incentive for hospitals to purchase freestanding physician offices and convert them to OPDs without changing their location or patient mix. Indeed, E&M clinic visits provided in OPDs increased 6.7 percent in 2010, potentially increasing Medicare program and beneficiary expenditures without any change in patient care. Beneficiary cost sharing is substantially higher when E&M office visits are billed as OPD visits, and beneficiaries' Part B premiums increase as services shift to OPDs due to higher OPD rates.

To begin paying the same rates for the same service across different sectors, the Commission recommends that the Congress direct the Secretary of Health and Human Services to reduce payment rates for E&M office visits provided in OPDs so that the payment rates for these visits are the same whether the service is provided in an OPD or a physician office. These changes should be phased in over three years. During the phase-in, payment reductions to hospitals with a higher than usual share of poor patients (i.e., those with a disproportionate share patient percentage at or above the median) should be limited to 2 percent of their overall Medicare payments. This action would limit the policy's impact on those hospitals. Further, the Secretary should study the policy's impact on low-income patients' access to ambulatory physician and other health professional services.

Equalizing office visit E&M rates in OPDs and physician offices will reduce beneficiary cost sharing and eliminate one incentive to convert physician offices to OPDs. In the future, we plan to examine payment differentials between OPDs and physician offices for other services and among the sectors providing post-acute care services.

Physician and other health professional services

Physicians and other health professionals perform a broad range of services, including office visits, surgical procedures, and a variety of diagnostic and therapeutic services furnished in all health care settings. In 2010, FFS Medicare spent about $62 billion under the physician fee schedule for physician and other health professional services. Approximately 900,000 health professionals billed Medicare for fee schedule services in 2010. Almost all FFS Medicare beneficiaries (97 percent) received at least one fee schedule service in 2010.

In Chapter 4 we find that most indicators of payment adequacy for Medicare fee schedule services are positive, suggesting that most beneficiaries can obtain care from physicians and other health professionals when needed.

- We found in our survey in the fall of 2011 that beneficiary access to fee schedule services is good and generally similar to access reported by privately insured patients age 50 to 64. Among the small share of beneficiaries looking for a new physician, most could find one without major problems; however, finding a new primary care physician was more difficult in 2011 than it was in 2010 and continues to be more difficult than finding a new specialist.
- The number of physicians and other health professionals billing Medicare grew almost 4 percent in 2010. In addition, the 2009 National Ambulatory Medical Care Survey found that among physicians with at least 10 percent of their practice revenue coming from Medicare, 90 percent accepted new Medicare patients.
- The number of services per FFS beneficiary decreased by 0.2 percent in 2010, consistent with recent trends among the privately insured.
- Most claims-based indicators for ambulatory care quality that we examined for the elderly improved slightly or did not change significantly from 2008 to 2010.
- Medicare's payment for physician fee schedule services in 2010 averaged 81 percent of private insurer preferred provider organization (PPO) payments. This rate is very similar to the rate calculated for the previous year—80 percent.

Although payments may be adequate at the moment, the major issue concerning payment for physicians and other health professionals is the SGR system and the consequent urgent need to move beyond it.

Moving forward from the sustainable growth rate system

Medicare faces increased urgency to resolve the growing problems created by the SGR system—Medicare's formulaic method for updating fee schedule services—and its destabilizing short-term "fixes." In an October 2011 letter to the Congress (Appendix B), the Commission recommended repealing the SGR and replacing it with specified updates that would no longer be based on an expenditure-control formula. Specifically, these updates would include a freeze in current payment levels for primary care where potential access problems are most readily apparent, and for all other services annual payment reductions of 5.9 percent for three years, followed by a freeze.

It is critical for the Congress to act now to resolve the SGR for three reasons. First, the total cost of repealing the SGR grows inexorably with each passing year, as does the cost of temporary "fixes." Second, growth in the size of the deficit has increased pressure to fully offset the cost of repealing the SGR. And third, opportunities to offset the costs of the SGR within Medicare are becoming more difficult to identify and are being used for other purposes.

In considering its recommendation, the Commission concluded that the risks of retaining the SGR outweigh the benefits. While the SGR may have resulted in lower updates, it has failed to restrain volume growth and, in fact, in some specialties may have exacerbated it. In addition, temporary, stop-gap "fixes" to override the SGR are undermining the credibility of Medicare by engendering uncertainty and frustration among providers, which may be causing anxiety among beneficiaries.

The Commission's recommendation carries a high budgetary score—roughly $200 billion over 10 years. Understanding the need for fiscal responsibility, the Commission offered the Congress a list of potential offsets within the Medicare program including some that in other contexts we might not consider. However, the Congress is not limited by our charter and can choose offsets outside Medicare; it may also determine, as evidence on access develops, that a different schedule of updates is appropriate in future years.

Ambulatory surgical center services

Ambulatory surgical centers (ASCs) furnish outpatient surgical services to patients not requiring hospitalization and for whom an overnight stay is not expected after surgery. In 2010, just over 5,300 Medicare-certified ASCs served 3.3 million FFS Medicare beneficiaries. Medicare program spending on ASC services was about $2.7 billion.

Our results in Chapter 5 indicate that most of the available indicators of payment adequacy for ASC services are positive. However, our results also indicate slower growth in the number of ASCs and volume of services in 2010 than in previous years.

- Beneficiaries' access to ASC care is adequate. From 2005 through 2009, the number of Medicare-certified ASCs grew by an average annual rate of 4.6 percent and the volume of services per FFS beneficiary grew by an average annual rate of 7.6 percent. However, facility growth slowed to 1.9 percent in 2010 and volume growth slowed to 1.6 percent. The relatively slow growth in 2010 may reflect the sluggish recovery from the financial crisis that peaked in 2008 and the substantial revisions to the ASC payment system that same year. In addition, Medicare payment rates in 2012 are 74 percent higher in OPDs than in ASCs. This payment gap may have influenced some ASC owners to sell their facilities to hospitals.
- Although CMS has established a program for ASCs to submit data on quality of care, ASCs will not begin submitting these data until October 2012. Consequently, we do not have data to assess ASCs' quality of care.
- ASCs' access to capital appears to be adequate, as the number of ASCs has continued to increase.
- 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 in other sectors to help assess payment adequacy. From 2005 through 2009, Medicare payments per FFS beneficiary increased at an average annual rate of 6.8 percent and in 2010, by 2.6 percent.

The Commission recommends that the Congress should update payment rates for ASCs by 0.5 percent for calendar year 2013. The Congress should also require ASCs to submit cost data.

The indicators we have suggest that payments have been at least adequate. However, it is vital that CMS begin collecting cost data from ASCs without further delay. The lack of such data for ASCs is a major reason why our recommended update for ASCs is lower than that for OPDs (1 percent). Cost data from ASCs would help determine the costs of an efficient provider and inform decisions about the ASC update. Such data are also needed to examine whether an ASC-specific market basket should be developed or if an existing input price index is an adequate proxy for ASC costs.

The Commission also recommends that the Congress should direct the Secretary to implement a value-based purchasing program for ASC services no later than 2016.

Outpatient dialysis services

Outpatient dialysis services are used to treat the majority of individuals with end-stage renal disease (ESRD). In 2010, more than 355,000 ESRD beneficiaries on dialysis were covered under FFS Medicare and received dialysis from about 5,500 facilities. Medicare expenditures in 2010 for outpatient dialysis services were $9.5 billion. For most facilities, 2010 was the last year that Medicare paid a prospective payment for each dialysis treatment and separate payments for certain drugs during dialysis. The modernized PPS began in 2011 and now includes dialysis drugs in the payment bundle.

As we discuss in Chapter 6, our payment adequacy indicators for outpatient dialysis services are generally positive:

- Dialysis facilities appear to have the capacity to meet demand. Growth in the number of dialysis treatment stations has generally kept pace with growth in the number of dialysis patients.
- Between 2009 and 2010, the number of FFS dialysis patients and dialysis treatments grew at similar rates (4 percent and 5 percent, respectively).
- In 2010, per capita use of erythropoiesis-stimulating agents, the drug class accounting for three-quarters of dialysis drug spending, declined. This decline is linked to clinical evidence showing that higher use of these drugs is associated with increased risk of cardiovascular events. It also may be linked to facilities' and physicians' modifying their prescribing patterns in anticipation of the new payment method that began in 2011 that no longer pays separately for these drugs.
- Dialysis quality has improved over time for some measures, such as use of the recommended type of vascular access—the site on the patient's body where blood is removed and returned during hemodialysis. Other measures, such as rates of rehospitalization within 30 days, suggest that improvements in quality are still needed.
- Access to capital for dialysis providers continues to be adequate, and the number of facilities, particularly for-profit facilities, continues to increase.
- In 2010, the Medicare margin for dialysis services and drugs was 2.3 percent for freestanding dialysis facilities. We project the Medicare margin for outpatient dialysis services will be 2.7 percent in 2012.

The Commission recommends that the Congress update the outpatient dialysis payment rate by 1 percent for calendar year 2013. The evidence on payment adequacy suggests that a moderate update of the outpatient dialysis payment rate is in order to ensure continued beneficiary access to outpatient dialysis services.

Skilled nursing facility services

Skilled nursing facilities (SNFs) furnish short-term skilled nursing and rehabilitation services to beneficiaries after a stay in an acute care hospital. In 2010, more than 15,000 SNFs furnished covered care to almost 1.7 million FFS beneficiaries. In 2011, Medicare spent almost $32 billion on SNF care.

We find in Chapter 7 that most indicators of payment adequacy for SNFs are positive:

- Access to SNF services remains stable for most beneficiaries. The number of SNFs participating in the Medicare program decreased less than 1 percent between 2010 and 2011. Available SNF bed days in freestanding facilities remained unchanged between 2009 and 2010 and days and admissions per FFS beneficiary decreased slightly, reflecting fewer hospital admissions (a prerequisite for Medicare coverage of a SNF stay).
- SNF quality of care in 2009 was basically unchanged from the prior year and has improved only slightly since 2000. Two indicators of quality in SNFs are the rates at which patients are discharged to the community within 100 days of admission and the rates of rehospitalization of patients with any of five potentially avoidable conditions.

- Because most SNFs are parts of larger nursing homes, we examine nursing homes' access to capital. Lending is expected to be slow in 2012. Uncertainties surrounding federal and state budgets and possible rate freezes or reductions have made borrowers and lenders wary. This lending environment reflects the economy in general, not the adequacy of Medicare payments. Medicare remains a preferred payer.
- Increases in payments between 2009 and 2010 outpaced increases in providers' costs, reflecting the continued concentration of days in the highest payment case-mix groups. In 2010, the aggregate Medicare margin for freestanding SNFs was 18.5 percent.
- We project the Medicare margin to be 14.6 percent in fiscal year 2012 continuing a pattern of high and sustained Medicare margins.

We conclude that Medicare should revise and rebase the SNF PPS to more closely match provider costs. In 2008, the Commission recommended revising the PPS to more accurately pay for nontherapy ancillary services and to base therapy payments on patient characteristics, not service provision. Such a revised design would shift payment from facilities that concentrate on intensive therapy to facilities that treat medically complex patients. The recommended changes should improve access to services for beneficiaries who are disadvantaged by the current design of the payment system. Rebasing is indicated because we find:

- cost growth well above the market basket that reflects little fiscal pressure from the Medicare program.
- relatively efficient SNFs that have below-average costs, above-average quality, and more than adequate Medicare margins.
- the continued ability of the industry to maintain high margins despite changing policies.
- MA payments to SNFs that, in some cases, are considerably lower than the program's FFS payments.

Therefore, the Commission recommends that the Congress should eliminate the market basket update and direct the Secretary to revise the SNF PPS for 2013. Rebasing payments should begin in 2014, with an initial reduction of 4 percent and subsequent reductions over an appropriate transition until Medicare's payments are better aligned with providers' costs.

Avoidable rehospitalizations of SNF patients increase Medicare's spending, expose beneficiaries to additional disruptive care transitions, and can result in hospital-acquired infections or other adverse health consequences. The Commission recommends that the Congress should direct the Secretary to reduce payments to SNFs with relatively high rates of rehospitalization. Initially, the time period for the rate calculation should be the Medicare-covered stay; as measures are developed, the time period should be expanded to include the stay plus some period of time (e.g., 30 days after discharge from the facility).

Our recommendation would help counter the financial incentive SNFs have to rehospitalize beneficiaries. Because a readmission policy will penalize hospitals with high readmission rates beginning in October 2012, a SNF rehospitalization policy would better align hospitals' and SNFs' incentives to reduce avoidable rehospitalizations, encourage providers in both sectors to work together to better manage transitions between them, and represent a step toward payments for larger bundles of services.

As required by the Patient Protection and Affordable Care Act of 2010 (PPACA), we also report SNF Medicaid utilization, spending, and non-Medicare (private pay and Medicaid) margins. Medicaid finances mostly long-term care services provided in nursing homes but also covers copayments for dual-eligible beneficiaries who stay 21 or more days in a SNF. The number of Medicaid-certified facilities decreased slightly between 2010 and 2011. Between 2009 and 2010, Medicaid-covered days increased slightly, while spending decreased slightly. Non-Medicare margins improved between 2008 and 2010, although they were still negative (–1.2 percent), while total margins (for all payers and all lines of business) improved to 3.6 percent in 2010.

Home health care services

Home health agencies provide services to beneficiaries who are homebound and need skilled care (nursing or therapy). In 2011, about 3.4 million Medicare beneficiaries received home health services from almost 11,900 home health agencies. Medicare spent about $19.4 billion on home health services in 2010.

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

- Access to home health care is generally adequate: 99 percent of beneficiaries live in a ZIP code where a Medicare home health agency operates and 98 percent

live in an area with two or more agencies. The number of agencies continues to increase, with more than 420 new agencies in 2011. Most new agencies are for profit and concentrated in a few states. The volume of services continues to rise and a larger share of beneficiaries are receiving home health care.

- In 2011, most beneficiaries who were not hospitalized at the end of their home health stay showed some improvement in function. The risk-adjusted rate of hospitalization from home health agencies declined slightly between 2006 and 2008.
- The major publicly traded for-profit home health companies have sufficient access to capital markets for their credit needs, although not as favorable as prior years. For smaller agencies, the significant number of new agencies in 2011 suggests that they have access to capital necessary for start-up.
- Payments have consistently and substantially exceeded costs in the home health PPS. For 2010, costs declined slightly while payments increased. Medicare margins for freestanding providers in 2010 were 19.4 percent.

Because these indicators are similar to last year, the Commission is repeating our recommendations from our March 2011 report to the Congress that the home health payment system be rebased commencing in 2013. This policy would lower payments beginning in 2013. We also recommended: changes to the home health case-mix system that would base payments for therapy services on patient characteristics and reduce incentives for selection of certain types of patients, that the Congress implement a copay for certain home health episodes to address the volume-rewarding aspects of the PPS, and that the Secretary use her authority to investigate and stop fraud and abuse in areas with aberrant patterns of utilization.

Inpatient rehabilitation facility services

Inpatient rehabilitation facilities (IRFs) provide intensive rehabilitation services to patients after an injury, illness, or surgery. These services include physical and occupational therapy, rehabilitation nursing, prosthetic and orthotic services, and speech–language pathology. In 2010, almost 360,000 Medicare FFS beneficiaries received care in IRFs and Medicare spent over $6.3 billion for IRF services.

Our indicators of Medicare payment adequacy for IRFs are generally positive, as discussed in Chapter 9:

- Beneficiaries have maintained access to IRF services. The aggregate supply of IRFs remained relatively stable in 2010 as did the volume of Medicare FFS beneficiaries treated in IRFs.
- Preliminary quality measures from 2004 through 2009 indicate that there was some improvement in IRF patients' quality of care as measured by functional improvement between admission and discharge, rates of discharge to community, rates of discharge from an IRF directly to an acute care hospital, admission to an acute care hospital within 30 days of discharge to the community, and admission to a SNF within 30 days of discharge to the community. Ongoing refinements to risk adjustment for these measures may produce different results.
- Hospital-based units, through their parent institutions, have adequate access to capital. One major freestanding IRF chain that accounts for about 50 percent of freestanding IRF revenues also appears to have adequate access to capital. We are not able to determine the ability of independent freestanding facilities to raise capital.
- Total Medicare payments to IRFs grew slightly faster than aggregate costs in 2010. The IRF aggregate Medicare margin for 2010 was 8.8 percent. We project that the 2012 Medicare IRF margin will be 8.0 percent.

The Commission recommends that the Congress eliminate the update to the Medicare payment rates for IRFs in fiscal year 2013. Our analyses show that IRFs should be able to absorb cost increases and continue to provide care to clinically appropriate Medicare cases with no update to payments in 2013.

Long-term care hospital services

Long-term care hospitals (LTCHs) furnish care to patients with medically complex problems 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 have an average length of stay of greater than 25 days for its Medicare patients. Medicare is the predominant payer for most LTCHs, accounting for about two-thirds of LTCH discharges. In 2010, Medicare spent $5.2 billion on care furnished in roughly 412 LTCHs nationwide. About 118,300 beneficiaries had almost 134,700 LTCH stays.

In Chapter 10, we review Medicare payment adequacy for LTCHs:

- In spite of the moratorium imposed by law, the number of LTCHs increased 6.1 percent between 2008 and 2010. Almost all of this growth took place in 2009. As expected, the entry of new LTCHs into the market slowed significantly during the later years of the moratorium. Only one new LTCH entered in 2010. Controlling for the number of FFS beneficiaries, we found that the number of LTCH stays rose 3.5 percent between 2009 and 2010, suggesting that access to care is not a problem.
- LTCHs do not submit quality data to CMS. Using claims data, we found stable or declining rates of readmission, death in the LTCH, and death within 30 days of discharge for most of the top 25 diagnoses in 2010.
- The moratorium on new beds and facilities reduces the need for capital in the industry by eliminating opportunities for LTCH expansion. However, in 2011 the two major LTCH chains, which together own slightly more than half of all LTCHs, acquired the capital needed to purchase other LTCHs as well as other post-acute care providers. Smaller LTCH chains and nonchain LTCHs likely do not have the same access to capital.
- Between 2009 and 2010, cost growth was under 1 percent. The 2010 Medicare margin for LTCHs was 6.4 percent. We expect growth in costs to be modest, albeit somewhat greater than the current pace. As a result, we estimate LTCHs' aggregate Medicare margin will be 4.8 percent in 2012.

Our analyses suggest that LTCHs are able to operate within current payment rates. The Commission recommends that the Secretary should eliminate the update to the payment rate for LTCHs for fiscal year 2013.

Research by the Commission and others has been unable to clearly distinguish LTCH patients from the medically complex patients receiving care in acute care hospitals and some SNFs. If medically complex cases in LTCHs are, in essence, indistinguishable from medically complex cases in acute care hospitals or SNFs, then Medicare must ensure that its payments for the same set of services are equitable, regardless of where the services are provided. In addition, policymakers must consider whether certain models of care will best serve the needs of medically complex patients. These steps will help ensure that Medicare beneficiaries receive appropriate, high-quality care in the least costly setting consistent with their clinical conditions.

Hospice services

The Medicare hospice benefit covers palliative and support services for beneficiaries with a life expectancy of six months or less. Beneficiaries must "elect" the Medicare hospice benefit; in so doing they agree to forgo Medicare coverage for conventional treatment for their terminal condition. In 2010, more than 1.1 million Medicare beneficiaries received hospice services from more than 3,500 providers, and Medicare expenditures totaled about $13 billion.

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

- Hospice use among Medicare beneficiaries has grown substantially in recent years, suggesting greater awareness of and access to hospice services. The supply of hospices increased 53 percent between 2000 and 2010, with an increase of almost 3 percent in 2010. For-profit providers accounted for almost the entire increase in the number of hospices, both over the past decade and in the past year. Use of Medicare hospice services continues to increase, with growth in both the number of hospice users and the average length of stay. In 2010, 44 percent of Medicare beneficiaries who died that year used hospice, up from 23 percent in 2000. Average length of stay among decedents grew from 54 days in 2000 to 86 days in 2010 while the median length of stay remained stable at about 17 days. The increase in average length of stay over the last decade mostly reflects longer stays among patients with the longest stays.
- We do not have sufficient data to assess the quality of hospice care provided to Medicare beneficiaries. PPACA mandates that CMS publish hospice quality measures by 2012. Beginning in fiscal year 2014, hospices that do not report quality data will receive a 2 percentage point reduction in their annual payment update.
- Hospices are less capital intensive than some other provider types because they generally do not require extensive physical infrastructure. Continued entry of new for-profit freestanding providers (a 5 percent increase in 2010), and modest (1 percent) growth in the number of nonprofit freestanding providers,

suggests that access to capital is adequate. Hospital-based and home-health-based hospices have access to capital through their parent providers.

- The aggregate Medicare margin was 7.1 percent in 2009, up from 5.1 percent in 2008. The projected 2012 margin is 5.1 percent.

The Commission recommends that the Congress update the payment rates for hospice for fiscal year 2013 by 0.5 percent. Our indicators of payment adequacy in 2012 are generally positive. The Commission maintains hospices can operate within the Medicare payment system with a modest update in fiscal year 2013.

The Medicare Advantage program: Status report

In Chapter 12, we provide a status report on the MA program. The MA program allows Medicare beneficiaries to receive benefits from private plans rather than from the traditional FFS Medicare program. The Commission supports private plans in the Medicare program; beneficiaries should be able to choose between the traditional FFS Medicare program and the alternative delivery systems that private plans can provide. Private plans, because they are paid a capitated rate rather than on an FFS basis, have greater incentives to innovate and to use care management techniques. However, to encourage efficiency and innovation, Medicare should place some degree of financial pressure on MA plans, just as the Commission has recommended for providers in the traditional FFS program.

In 2011, MA enrollment increased to 12.1 million beneficiaries (25 percent of all Medicare beneficiaries) and MA program payments were about $124 billion. Enrollment in HMO plans—the largest plan type—increased 6 percent. Enrollment in private FFS (PFFS) plans declined from about 1.7 million to about 0.6 million enrollees, continuing the expected decline resulting from the new network requirements for PFFS plans required by law that began in 2011. Beginning in 2010, many plan sponsors reduced PFFS offerings and transitioned their enrollment to network-based PPO plans; others changed their PFFS offerings to network plans. As a result, PPOs exhibited rapid growth in enrollment between 2010 and 2011, with local PPO enrollment growing about 65 percent and enrollment in regional PPOs growing about 34 percent. The MA plan bids submitted to CMS project an increase in overall enrollment for 2012, primarily in HMOs.

In 2012, virtually all Medicare beneficiaries have access to an MA plan, and 99 percent have access to a network-based coordinated care plan (CCP). Eighty-eight percent of beneficiaries have access to an MA plan that includes Part D drug coverage and charges no premium (beyond the Medicare Part B premium). Beneficiaries are able choose from an average of 12 MA plan options, including 8 CCPs in 2012.

For 2012, the base county benchmarks used to set plans' payment rates average approximately 3 percent less than the benchmarks for 2011. However, 93 percent of 2012 plan enrollment is projected to be in plans that will receive add-ons to their benchmarks through a CMS MA quality bonus demonstration program (the statutory provisions would have given bonuses only to plans with about 25 percent of the projected MA enrollment). These add-ons will range from 3 percent to 10 percent in 2012, substantially offsetting the statutory PPACA benchmark reductions and resulting in additional program costs of $2.8 billion.

We estimate that Medicare will pay MA plans 7 percent more for their enrollees than the program would have paid had those beneficiaries remained in FFS in 2012. MA benchmarks (including the quality bonuses), bids, and payments in 2012 will average 112 percent, 98 percent, and 107 percent of FFS spending, respectively (assuming no SGR reduction in Medicare physician payment rates during 2012). Last year, we estimated that, for 2011, these figures would be 113 percent, 100 percent, and 110 percent, respectively. There is considerable variation over geography and plan type for each of these parameters. For example, the average bid for HMOs in 2012 was 95 percent of FFS, well below that for other plan types.

Overall, some improvement occurred in the quality indicators for MA plans in 2011. A larger number of process measures and outcome measures showed improvement compared with past years. The health outcomes survey of MA enrollees showed some improvement in outcomes, accompanied by a small number of plans showing worse-than-expected outcomes. Because quality indicators are now the basis of bonus payments, we expect to see continued improvement in measures, as plans pay closer attention to quality initiatives and seek to improve their documentation and record keeping.

The continued increase in MA enrollment, wide access to plans, movement of benchmarks and payments toward

FFS levels, bids below FFS in many areas, and improving quality are all promising trends for the MA program. Those trends should be continued by encouraging efficiency and innovation in MA plans through financial pressure and ensuring that Medicare spending is controlled, beneficiary choice is preserved, and quality of care is high.

Status report on Part D, with focus on beneficiaries with high drug spending

In Chapter 13, we provide a status report on Part D including enrollment, plan bids and availability, premiums, benefit designs, formularies, quality, and program costs. This year, we focus on program attributes for beneficiaries who receive the low-income subsidy (LIS) and also report on beneficiaries with high drug spending and the relationship between the high use of drugs and quality of care in Part D.

In 2011, more than 70 percent of Medicare beneficiaries (about 35 million) were enrolled in Part D plans or in employer plans that receive Medicare's retiree drug subsidy. Other beneficiaries receive their drug coverage through other sources of creditable coverage. In 2010, about 10 percent of beneficiaries had no drug coverage or coverage less generous than Part D. Roughly two-thirds of Part D enrollees are in stand-alone prescription drug plans (PDPs); the rest are in Medicare Advantage–Prescription Drug plans, or MA–PDs. MA–PD enrollees are much more likely than those in PDPs to receive basic and supplemental benefits combined in their drug plan that often include some coverage in the gap. Most enrollees report high satisfaction with the Part D program and with their plans. Among those in Part D plans, 10.6 million low-income individuals (about 36 percent of Part D enrollees) received the LIS.

The number of plan offerings remained relatively stable from 2011 to 2012. Sponsors are offering about 6 percent fewer stand-alone PDPs and about 2 percent more MA–PDs than in 2011. Beneficiaries will continue to have between 25 and 36 different PDP options to choose from, along with many MA–PDs. For 2012, most LIS enrollees will continue to have many premium-free plans available. However, in two regions, Florida and Nevada, only a handful of plans qualified despite changes made in PPACA to increase the number of qualifying plans.

In 2012, the base beneficiary premium will be $31.08, which is a slight decrease from $32.34 in 2011. The base beneficiary premium reflects the basic portion of the benefit (that which does not include premiums for enhanced, or supplemental, benefits). The actual monthly premium paid depends on which plan a beneficiary chooses.

Between 2006 and 2010, Part D spending increased from $42.5 billion to $56 billion, and CMS expects it will have reached $59 billion in 2011. These expenditures include the direct monthly subsidy plans receive for their Part D enrollees, reinsurance paid for very high-cost enrollees, premiums and cost sharing for LIS enrollees, and payments to employers that continue to provide drug coverage to their retirees who are Medicare beneficiaries. In 2010, LIS payments continued to be the largest component of Part D spending. Medicare's reinsurance payments were the fastest growing component of Part D spending, driven primarily by LIS enrollees, who tend to use more medications than non-LIS enrollees. Between 2007 and 2009, average annual per capita gross spending for Part D–covered drugs grew by 3.6 percent. Growth in per capita spending was much greater for LIS enrollees (6.1 percent per year) than for other enrollees (2.2 percent per year).

Switching from brand-name drugs to generic drugs can result in significant cost savings. Plan sponsors have been more successful at encouraging generic substitution among non-LIS enrollees than among LIS enrollees, who have little incentive to switch because their cost-sharing is minimal. For example, in 2009 among prescriptions filled for diabetic therapies, the generic dispensing rate was 67 percent for non-LIS enrollees and 53 percent for LIS enrollees. Multiple factors contribute to the difference in generic use rate across populations, including financial incentives. Plans often use cost-sharing differentials to motivate beneficiaries to use generic drugs. However, since cost sharing for LIS enrollees is set by law rather than by each plan, sponsors have limited ability to manage drug spending for this population. Although copays for LIS enrollees are structured to encourage the use of lower cost generics when they are available, the financial incentives are much weaker than those typically faced by non-LIS enrollees. By revising the LIS copayment structure, Medicare may be able to reduce program spending without substantially affecting access to needed medications. The policy would retain the existing exceptions and appeals process allowing beneficiaries to appeal the coverage and/or cost-sharing amounts.

Therefore, the Commission recommends that the Congress should modify the Part D LIS copayments for Medicare beneficiaries with incomes at or below 135 percent of

poverty to encourage the use of generic drugs when available in selected therapeutic classes. The Congress should direct the Secretary to develop a copay structure, giving special consideration to eliminating the cost sharing for generic drugs. The Congress should also direct the Secretary to determine appropriate therapeutic classifications for the purposes of implementing this policy and review the therapeutic classes at least every three years. The policy would give the Secretary the authority to provide stronger financial incentives to use lower cost generics when they are available, while taking into account the limited income of this population.

Part D plans are required to implement medication therapy management programs (MTMPs) to improve the quality of the pharmaceutical care that high-risk beneficiaries receive. Patients with high use of medications may have medical problems caused or exacerbated by their heavy use of medications (polypharmacy). In addition, research shows that high use of medication is associated with lower adherence to medication therapies. Our earlier review of MTMPs revealed wide variations in eligibility criteria, the kinds of interventions provided to enrollees, and the outcomes sponsors measured. Since 2010, CMS has tightened criteria for MTMPs. The agency has begun an evaluation of the impact of MTMPs on high-risk, chronically ill beneficiaries. We currently do not have sufficient data to determine whether the programs increase the quality of pharmaceutical care to participants but will continue to monitor this program. ■

CHAPTER 1

Context for Medicare payment policy

CHAPTER 1

Context for Medicare payment policy

Chapter summary

This report's analyses of Medicare payment policies must be considered in the broader context of the nation's health care spending overall and the realities of the federal budget. Health care accounts for a large and growing share of total economic activity in the United States, nearly doubling as a share of gross domestic product (GDP) in the past 30 years, from 9.2 percent in 1980 to 17.9 percent in 2010. Growth in health care spending in 2010 slowed to the second lowest rate since 1960. However, projections of health care spending show it growing faster than GDP by 1.1 percentage points annually through 2020.

Growth in health care costs has a significant fiscal impact on federal, state, and local governments, as government payers directly sponsor nearly half of all health care spending. Furthermore, the federal government may be less able to provide financial support to fiscally strapped states as a result of its own long-term deficit picture. While the federal government's short-term fiscal outlook could modestly improve as the economy recovers, the United States faces an even more significant long-term deficit that needs to be addressed by cutting spending, by increasing revenue, or by some combination of the two. Growth in health care spending in the Medicare and Medicaid programs contributes materially to that deficit.

Medicare's spending projections over the next 10 years envision much smaller growth in spending (5.9 percent annually) than in recent history (8.8 percent in the 10 prior years), even as the number of Medicare beneficiaries will grow about twice as fast. This smaller growth is largely due to recent legislation

In this chapter

that calls for smaller updates in the prices that Medicare pays relative to what was generally true in the past. Those smaller updates are largely in the form of a change in Medicare's prices to account for economy-wide multifactor productivity. However, the Medicare program still faces substantial deficits over the long term, and the Hospital Insurance trust fund is projected to be exhausted within 15 years. Medicare spending growth will also affect beneficiaries through cost sharing and premiums that are projected to grow faster than Social Security benefits.

Over the next 10 years, the Medicare population is projected to grow by a third. The average age of the Medicare population will decline slightly as the baby boom generation turns 65. The new beneficiaries may have fewer retirement assets as a result of the economic recession and may be more likely to still be working. Finally, new Medicare beneficiaries may be more receptive to managed care as a result of changes in the health insurance market.

The Medicare program has an important influence on the shape of the health care delivery system in the United States, and, conversely, trends in the delivery system will affect how the Medicare program develops. The success or failure of new systems to reform Medicare payment will depend on features in the health care system, such as industry structure and consolidation, innovations in payment systems, benefit structures, and other aspects of health care delivery.

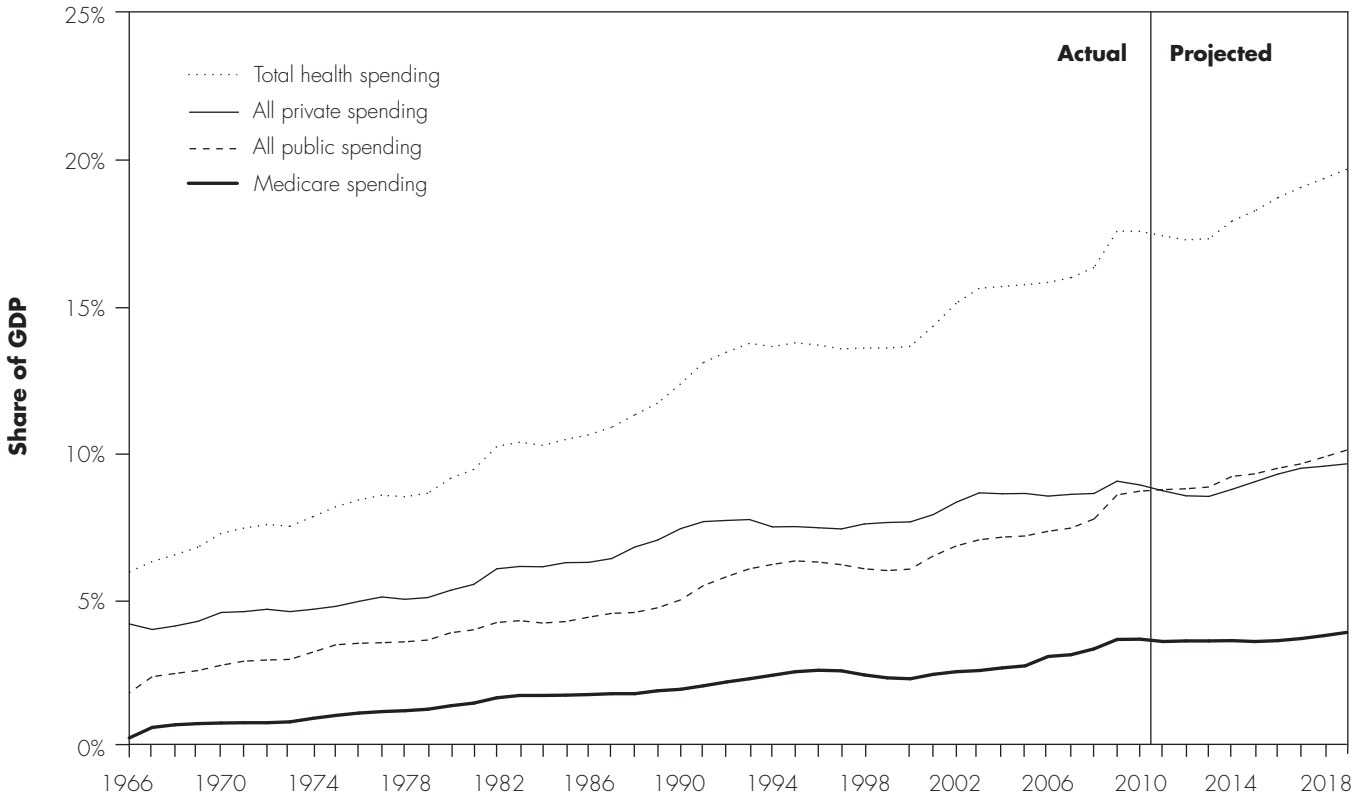
Many researchers have credited the introduction, expansion, and diffusion of new technology with having the largest single effect on growth in health care spending. Researchers typically include nearly all changes in the practice of medicine in the definition of technology—the adoption of new technologies, diffusion to new populations, complementary and supplementary procedures, and changes in a person's demand for health care downstream of a particular intervention. Given the breadth of this term, other factors such as health insurance, incomes, health status, and prices have a comparatively smaller effect on growth in health care spending.

There are some indications that a share of health care dollars is misspent. There is significant variation in the use of health care in different regions in the United States, and yet the high-use regions are not clearly associated with better outcomes even when adjusting for health status, calling some of the use into question. In addition, comparisons between the United States and other countries suggest the potential to achieve similar levels of quality with lower spending. There are also indications that some share of spending may be misallocated; for example, there are notable differences in access to quality care for different demographic groups.

The current pressure from growth in health care spending combined with the rise in the number of beneficiaries and indications that potential savings are possible makes it incumbent on the Medicare program to spend limited funds wisely by providing incentives for beneficiaries to seek, and providers to deliver, high-value services. ■

FIGURE 1–1

Health care spending has grown more rapidly than GDP, with public financing making up nearly half of all funding



Note: GDP (gross domestic product). Medicare spending reflects current law, which includes the sustainable growth rate provisions cutting physician payment rates.

Source: Centers for Medicare & Medicaid Services, National Health Expenditures.

Introduction

This chapter describes the context for Medicare payment policy. It discusses the overall trends in health care spending at the national level, for public programs, and for the Medicare program itself; reviews changes in the Medicare population and in the health care market for payers and providers; discusses the generally accepted factors driving growth in health care spending; and discusses indicators of substantially misspent or misallocated health care dollars—namely, variations in quality that are particularly acute for certain demographic groups and higher per person spending compared with other countries.

Growth in health care spending: Trends

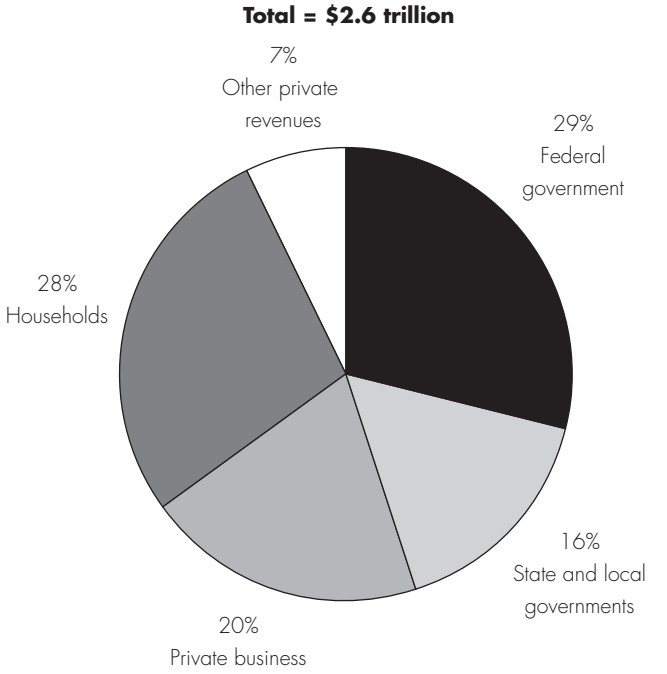
Since the government began tracking the National Health Expenditure accounts in 1960, the average annual growth rate for per capita health care spending has been approximately 8.5 percent, or 2.6 percentage points higher than gross domestic product (GDP) per capita (Figure 1-1).[1] Even over shorter time periods that more heavily weight the low-growth managed care era of the 1990s, growth in health care spending exceeded growth in GDP by 2 percentage points from 1990 to 2010. In 2010, health care spending accounted for 17.9 percent of GDP, nearly twice what it was in 1980 (Martin et al. 2012). Nearer term effects of growth in health care spending include growth in health insurance premiums that exceeds growth in average wage and the projected exhaustion of the Medicare Hospital Insurance (HI) trust fund in 2024.

National health care spending

In 2010, individuals, government, and businesses spent $2.6 trillion on health care, corresponding to nearly $8,300 per person. Among all payers, in 2010, the largest share of personal spending on health care was for hospital (37 percent) and physician and clinical (24 percent) services,

FIGURE 1–2

National health spending, by sponsor, 2010



Source: Centers for Medicare & Medicaid Services, National Health Accounts.

with smaller shares spent on prescription drugs (12 percent), nursing home care (7 percent), and home health (3 percent) services (Martin et al. 2012).

Slowdown in health care spending since 2008

National health expenditures grew at a near-historic low of 3.9 percent from 2009 to 2010, slightly higher than the prior low of 3.8 percent in 2009 (Martin et al. 2012). This amount is due to low growth in private health insurance and out-of-pocket spending as individuals lost their private insurance coverage and income growth slowed.

Total growth in Medicare spending was also relatively low, at 5.0 percent—much lower than the rates in 2008 and 2009 (8.0 percent and 7.0 percent, respectively) (Martin et al. 2012). The federal government (29 percent) and households (28 percent) were the largest direct sponsors of health spending, with private businesses following (20 percent) (Figure 1-2).

Health care employment

Despite the slowdown in health spending, the health care sector has still grown compared with other parts of the economy. Employment in this sector increased by 8.4 percent from January 2008 to December 2011, while employment outside the health sector was 5.8 percent below the January 2008 level (Figure 1-3). Employment growth varied by sector, increasing 4.9 percent in the hospital sector compared with an increase of over 20 percent in the home health sector over the four-year time period shown in Figure 1-3.

Projections show shift in type and source of coverage

The 10-year projections from National Health Expenditure data show a shift from uninsured to enrollment in other types of coverage, such as plans purchased through the new health insurance exchanges and Medicaid. Medicare, Medicaid, and the Children's Health Insurance Program (CHIP) are projected to cover 40 percent of the population by 2020, compared with 32 percent in 2010 (Keehan et al. 2011).

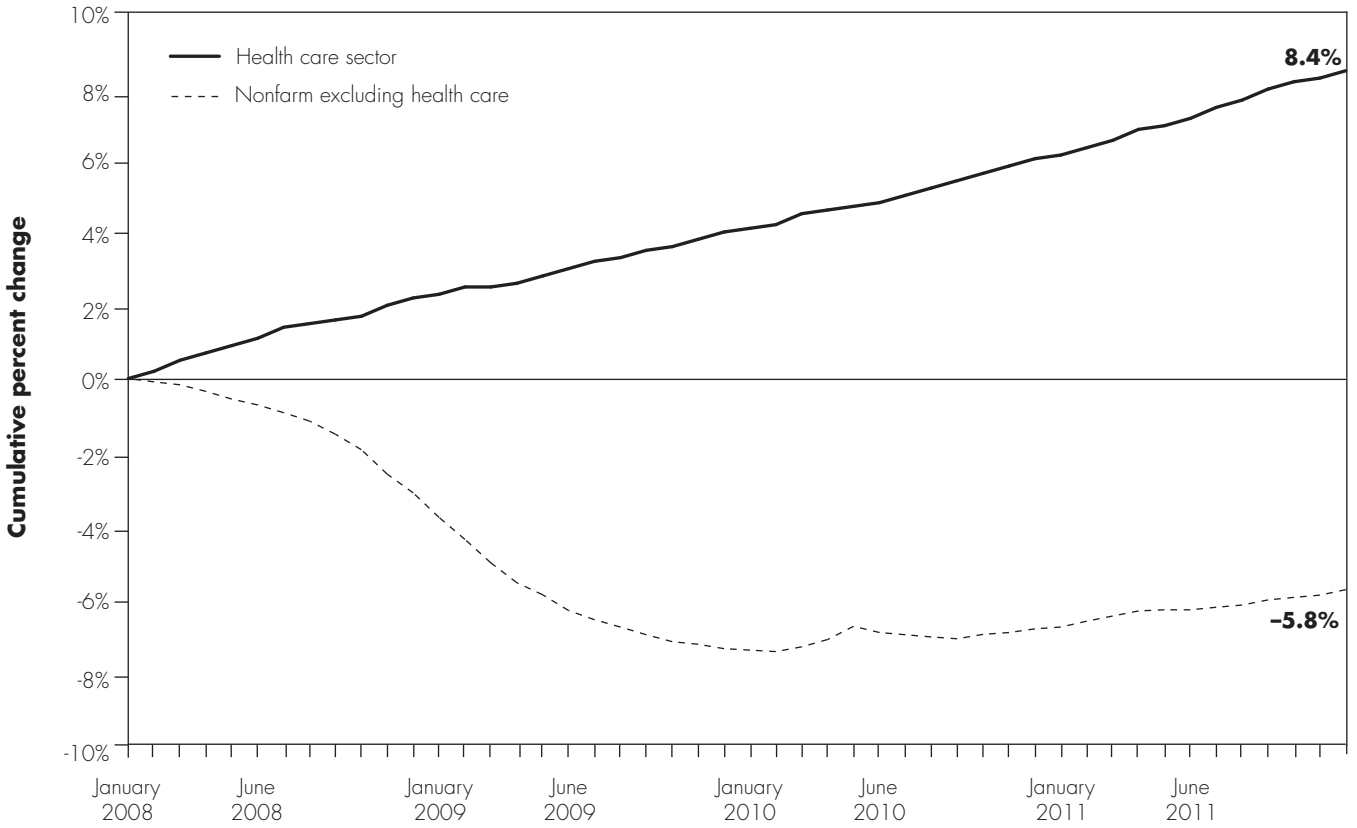
Growth in health care spending is a challenge for public payers

The financing challenges facing federal, state, and local governments as a result of the economic recession and population aging are magnified by growth in health care spending. Today, the government directly sponsors about 45 percent of all health care spending; after the Medicaid expansions and the health care exchanges are created in 2014, the government's share will increase to nearly 50 percent in 2020 (Keehan et al. 2011). The government also indirectly supports health care through tax incentives for employer-sponsored insurance.[2] Increases in the cost of private insurance could result in fewer people with private coverage, further pressuring public programs. Therefore, the need to slow growth in health care spending is one that state and local governments as well as the federal government share.

Like the federal government, states must find additional revenue to pay for higher enrollment in income assistance programs during the recession. States also have some unique features that make their fiscal problems different from those of the federal government. Nearly all states have balanced budget requirements, whereas the federal government can run yearly deficits. States also receive federal matching funds for Medicaid as well as temporary revenue sharing such as the State Fiscal Stabilization Fund and the increase in federal matching funds for Medicaid in

FIGURE 1–3

Cumulative percent change in employment, 2008–2011



Source: Bureau of Labor Statistics, Current Employment Statistics.

the American Recovery and Reinvestment Act (Recovery Act) (Pew Center on the States 2010).

Medicaid dominates many states' fiscal outlooks

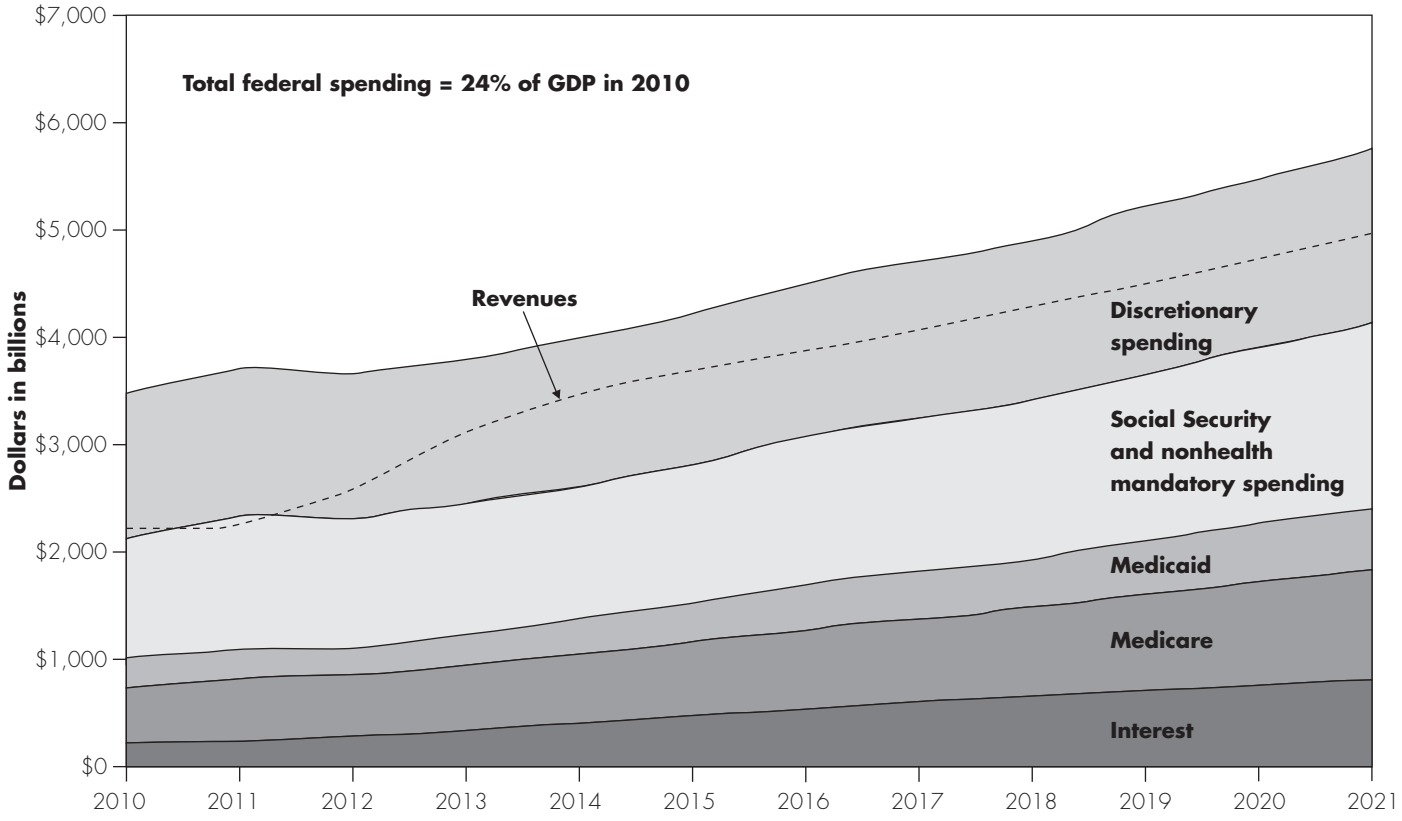
Medicaid spending accounts for 20 percent of all state spending, and the share exceeds 25 percent in nine states (Pew Center on the States 2010). In 2010, Medicaid covered 68 million people and CHIP covered an additional 7 million; together they accounted for over $400 billion in state and federal spending (Medicaid and CHIP Payment and Access Commission 2011c). Medicaid is a significant payer for some providers, accounting for 18 percent of hospital revenues and a third of nursing home revenues in 2009 (Medicaid and CHIP Payment and Access Commission 2011c). Overall, Medicaid directly funds about half of long-term care services and supports.

Federal matching funds for Medicaid range from 50 percent to 75 percent by state and type of service, with the federal match averaging 57 percent (Medicaid and CHIP Payment and Access Commission 2011c). The Recovery Act temporarily increased the federal share of Medicaid, and this increase expired in June 2011. However, enrollment in Medicaid remains high because of the nature of income assistance programs—when the unemployment rate rises, Medicaid enrollment rises. Between 1999 and 2008, the number of Medicaid enrollees grew by 4.1 percent per year overall—with the number of children and adults growing by 4.2 percent and 6.2 percent per year, respectively, and the aged and disabled category growing more slowly at 2.4 percent per year (Medicaid and CHIP Payment and Access Commission 2011b).

The decline in state revenues resulting from the recent economic downturn and higher spending on assistance programs has focused the attention of some states on reducing their Medicaid expenditures. However, states must keep the eligibility requirements that were in place when the Patient Protection and Affordable Care Act

FIGURE 1–4

Ten-year budget projections show continued deficits



Note: The figure reflects current law, which includes the sustainable growth rate and expiration of the 2001 and 2003 tax cuts.

Source: Congressional Budget Office 2011 Budget and Economic Outlook.

(PPACA) was enacted in 2010 until 2014, when the Medicaid expansions go into effect. Therefore, states' ability to reduce or constrain Medicaid spending is largely limited to reducing provider payments, controlling pharmacy costs, and reducing benefits for some populations (Kaiser Family Foundation 2011).

Medicaid makes widespread use of managed care, particularly for the nondisabled population. In 2009, 71 percent of Medicaid enrollees received some form of managed care services during the year, and managed care accounted for 21 percent of Medicaid spending (Medicaid and CHIP Payment and Access Commission 2011a). This information implies that use of managed care is less prevalent among the higher cost Medicaid enrollees, such as the disabled and long-term care populations. From 1995 to 2009, the share of Medicaid enrollees in comprehensive, risk-based managed care plans grew from 15 percent to 47 percent (Medicaid and CHIP Payment and Access Commission 2011a).

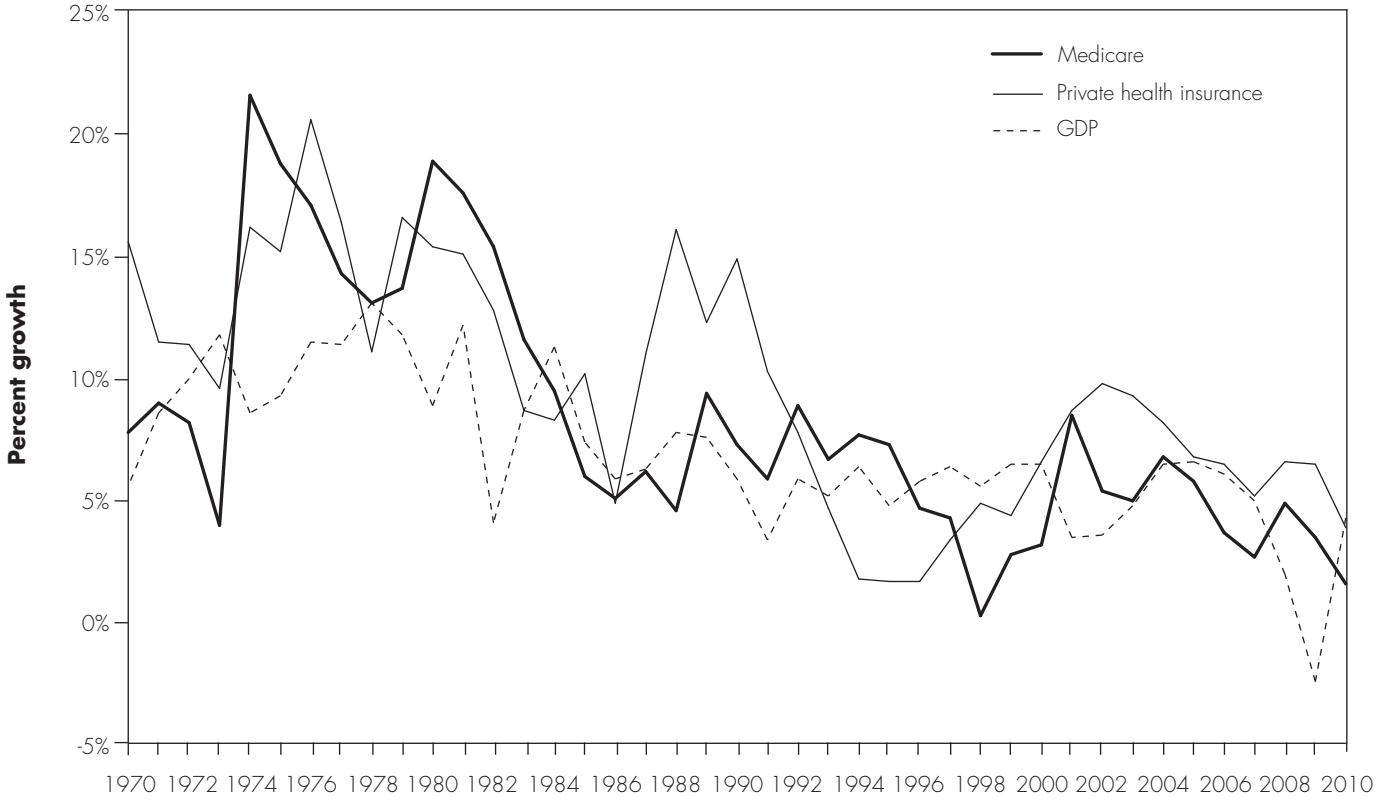
Federal fiscal outlook

The federal government's spending on Medicare and Medicaid accounted for 23 percent of total federal spending in 2010, or $793 billion, and this amount is projected to grow to $1.608 trillion by 2021 (Figure 1-4).[3] The Congressional Budget Office (CBO) projected that spending for the major mandatory health care programs is projected to grow from 6 percent of GDP to 9 percent in 2035 (Congressional Budget Office 2011a). This share would be even higher if certain modifications were made to current law—for example, if the sustainable growth rate formula for physician payment were repealed and replaced with a mechanism for larger updates.

Beyond the short-term fiscal picture, which largely reflects the recent economic recession, is a much larger deficit over the long term. Increased health spending, driven both by the aging of the population and by growth in per capita health spending, is a major contributor to that deficit. As

FIGURE 1–5

Per enrollee annual growth in common benefits for Medicare and private health insurance, and GDP growth



Note: GDP (gross domesic product). Common benefits are hospital services, physician and clinical services, other professional services, and durable medical products.

Source: Centers for Medicare & Medicaid Services, National Health Accounts.

seen in Table 1-1, over the short term, the growth in the number of Medicare beneficiaries and Medicaid recipients is of the same magnitude as the growth in health care spending. However, over the long term, CBO projects that growth in per beneficiary health care spending is the dominant driver in the growth in Medicare and Medicaid.[4] Further worsening the fiscal outlook is the increase in Social Security spending occurring over the same time frame and a decline in the working-age share of the population.

Growth in Medicare spending: Trends

When changes are made to account for the differences in population and in the benefit package, the overall growth rates for Medicare and for private insurance are similar, with growth in Medicare exceeding growth in private health insurance in some years and the converse occurring in other years, although in recent years Medicare spending has been slightly lower (Figure 1-5). This similarity in the growth rates over the long term is notable because Medicare's benefits differ from the benefits in private plans, the health

TABLE 1–1

Sources of growth in major federal health care programs

Source	2010–2035	2010–2085
Age and demographic changes and changes in number of beneficiaries and recipients	48%	29%
Growth in spending per beneficiary and recipient	52	71

Source: Congressional Budget Office, *Long-Term Budget Outlook* 2011.

TABLE 1–2 **Projected Medicare average annual growth rates from 2011 to 2020**

Category	Per beneficiary growth	Change in number of beneficiaries	Total spending growth
All Medicare	**3.0%**	**3.0%**	**5.9%**
Part A	1.6	3.0	4.8
Part B	2.7*	2.9	5.8
Part D	6.6	3.1	9.9
Medicare Advantage	2.0	–3.0	–0.8

Note: Medicare Advantage is also included in per capita growth for Part A, Part B, and Part D but not in the enrollment figures. Totals may not sum due to rounding. *Part B estimates include the 30 percent payment cut for physicians in 2012 due to the sustainable growth rate provision. Under the Trustees' illustrative alternative scenario, per beneficiary Part B spending would grow by 5.2 percent annually (instead of 2.7 percent as under current law).

Source: 2011 annual report of the Boards of Trustees of the Medicare trust funds, Tables V.B1, III.A3, IV.C2, and IV. C3.

and demographics of the Medicare population differ from those of the privately insured population, and the distribution of services is different (see text box, opposite page, for a description of program financing).

Medicare spending over the next 10 years

The projected growth rates for the Medicare program from 2011 to 2020 are much lower than recent trends, even as the number of beneficiaries will increase about twice as fast as in the previous 10 years. The 2011 Trustees report projects that from 2011 through 2020 Medicare will grow by nearly 6 percent annually, of which 3.0 percent is due to growth in the number of beneficiaries and 3.0 percent is due to growth in spending per beneficiary (Table 1-2) (Boards of Trustees 2011). By contrast, over the past 10 years, total Medicare spending grew by 8.8 percent per year, of which 1.3 percent was due to the change in the number of beneficiaries and 7.4 percent was due to growth in spending per beneficiary (see text box on p. 13 for a description of the sources of Medicare spending growth over the next 10 years).[5]

Growth rates for Part A and Part B are generally projected to be low compared with historical growth rates as a result of reductions in prices to account for economy-wide productivity, while Part D, which is not subject to reductions in prices for economy-wide productivity, is scheduled to grow at rates more in line with historical trends. The 2011 Trustees report projects that Medicare Advantage enrollment will decline throughout the next 10 years, largely as a result of the PPACA provisions that would reduce payments to Medicare Advantage plans (Boards of Trustees 2011).

TABLE 1–3 **Medicare's share of GDP**

Category	2011	2050	2085
All Medicare	**3.7%**	**5.9%**	**6.2%**
Part A	1.7	2.3	2.1
Part B	1.5	2.4	2.4
Part D	0.4	1.3	1.7

Note: GDP (gross domestic product). Percents may not sum to totals due to rounding.

Source: 2011 annual report of the Boards of Trustees of the Medicare trust funds, Table III.A2.

Long-run Medicare projections

By 2085, the Medicare Trustees project that Medicare's share of GDP will approach 6.2 percent, from 3.7 percent today (Table 1-3).[6] Under an alternative Trustees' scenario (not shown), in which physician payments are updated by the Medicare Economic Index and productivity adjustments are phased out after being in effect for 10 years, Medicare's share of GDP would reach 8.0 percent by 2050 and 10.4 percent by 2080 (Shatto and Clemens 2011).

The Hospital Insurance trust fund currently runs a yearly deficit, which requires redeeming HI trust fund assets that are projected to be exhausted by 2024. Part B and Part D are financed through general revenue and premiums; as a result, these parts of Medicare do not have a trust fund exhaustion date. Given the burden of high federal deficits,

Medicare program financing

The Medicare program is funded through a mix of premiums and cost sharing, payroll taxes, general revenues, and other sources (Figure 1-6). In addition to its dedicated funding sources, in 2010, $205 billion in general revenue, equivalent to 19 percent of all income taxes collected by the government, went to support the Medicare program (Congressional Budget Office 2011a).

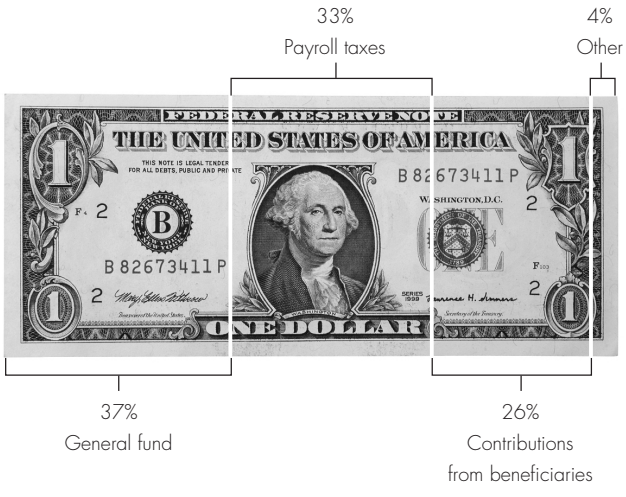
- ***Part A is Medicare's Hospital Insurance (HI) benefit,*** which covers acute hospitalizations and post-acute care. Part A is financed through a 2.9 percent payroll tax split between employers and employees as well as an additional 0.9 percent payroll tax on wages over $200,000 for single filers and $250,000 for married filers starting in 2013.
- ***Part B is Medicare's supplementary medical insurance benefit,*** and it covers outpatient hospital services and ambulatory care. Part B is financed through beneficiary premiums and general revenue. Starting in 2011, Medicare collects a fee from pharmaceutical manufacturers and this revenue is credited to Part B.
- ***Part C is the Medicare Advantage program,*** which contracts with private plans to offer Part A and Part B. Part C is funded through beneficiary premiums and transfers from Part A and Part B.
- ***Part D is the part of Medicare's supplementary medical insurance benefit for outpatient pharmaceuticals,*** and it is financed through beneficiary premiums and general revenue.

Nearly all parts of Medicare have some beneficiary cost sharing through deductibles and coinsurance. The Medicare program does not have a catastrophic limit on cost sharing, other than in Part D. ■

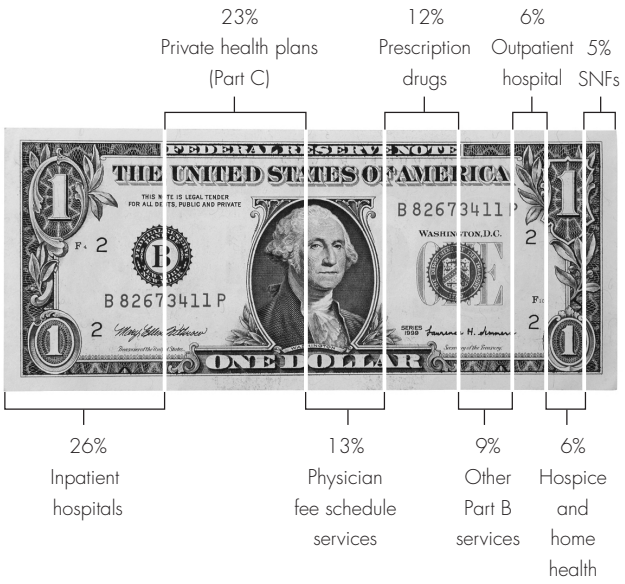
FIGURE 1–6

Sources and uses of funds for Medicare expenditures, 2011

Sources of funds for Medicare expenditures



Uses of funds for Medicare expenditures

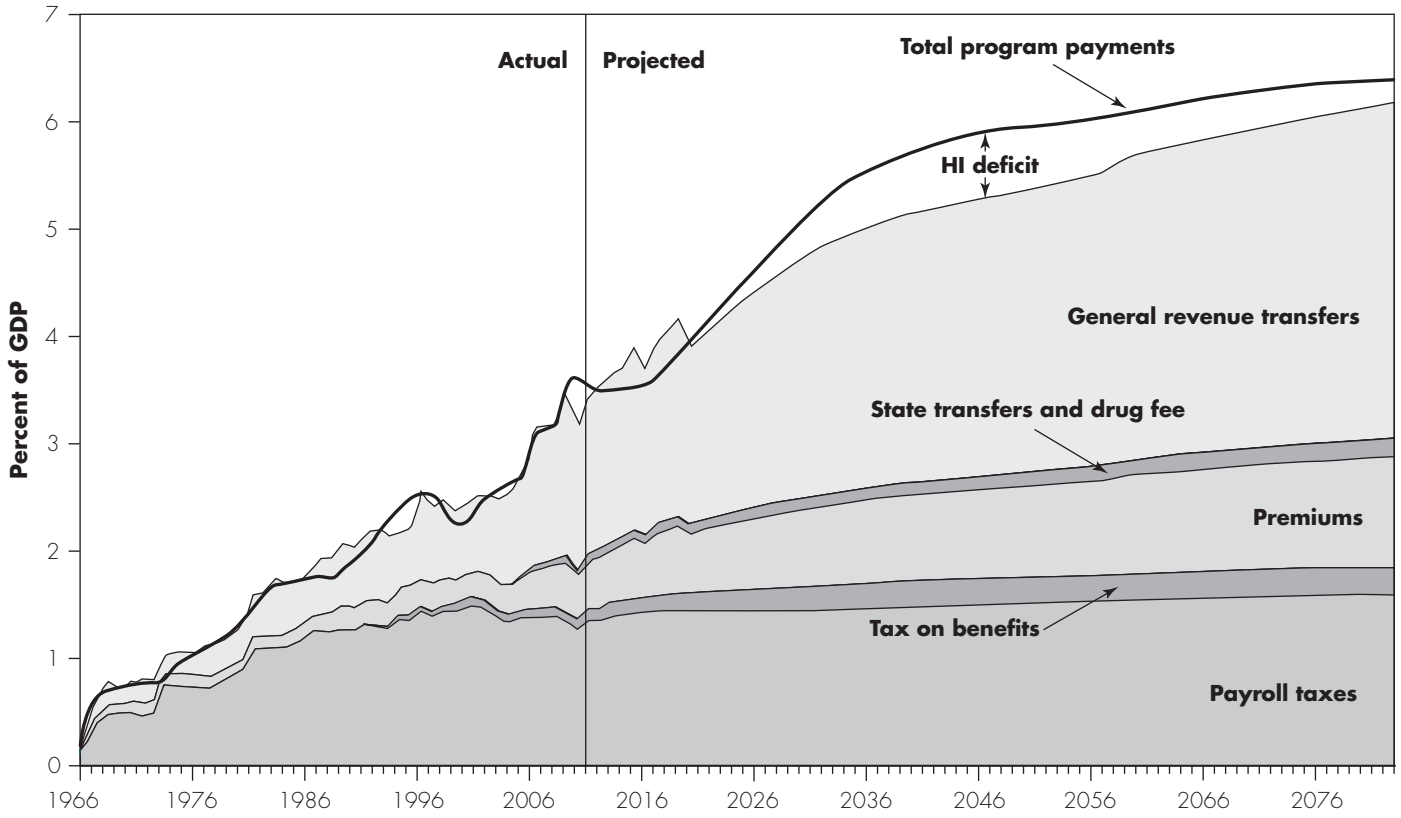


Note: SNF (skilled nursing facility). Sources of funds graphic includes beneficiary premiums and cost sharing. Uses of funds graphic does not include expenditures funded by beneficiary cost sharing.

Source: MedPAC analysis and the 2011 annual report of the Boards of Trustees of the Medicare trust funds.

FIGURE 1–7

Medicare still faces significant challenges with long-term financing



Note: GDP (gross domestic product), HI (Hospital Insurance). These projections are based on the Trustees' intermediate set of assumptions. Tax on benefits refers to a 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") refer to payments called for within the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 from the states to Medicare for assuming primary responsibility for prescription drug spending. Drug fee refers to a tax on manufacturers and importers of brand-name prescription drugs, which is credited to the Part B trust fund.

Source: 2011 annual report of the Boards of Trustees of the Medicare trust funds.

there will be continued pressure to find savings throughout the Medicare program (Figure 1-7).

Effects of Medicare's growth in spending on beneficiary out-of-pocket costs

Medicare's growth in spending and growth in health care spending overall affect beneficiaries in three ways—monthly premiums for Part B and Part D, cost sharing (coinsurance and deductibles), and out-of-pocket spending for services not covered by Medicare (such as long-term nursing home care). Approximately 90 percent of Medicare fee-for-service enrollees have additional coverage—private medigap policies, Medicaid, or employer coverage—to supplement Medicare's traditional benefit (Medicare Payment Advisory Commission 2011a).

In 2009, the average Medicare beneficiary's cost-sharing liability was $428 for Part A and $1,188 for Part B (Medicare Payment Advisory Commission 2011a). However, most beneficiaries are insured against Medicare's cost sharing through medigap or other supplemental coverage. Growth in Medicare cost sharing is projected to continue outpacing the growth in Social Security benefits, which constitute about 40 percent of income for the median Medicare beneficiary and close to 90 percent of income for Medicare beneficiaries in the bottom two income quartiles (Figure 1-8, p. 14) (Kaiser Family Foundation 2010).

Sources of Medicare spending over the next 10 years

Growth in Medicare spending consists of three key factors: the volume and intensity of services provided per beneficiary, the prices paid by Medicare (input costs minus productivity for baseline projections), and the number of beneficiaries and their demographic profiles. These factors are subject to legislative or regulatory changes, which can affect the level of services provided per beneficiary (e.g., by covering a yearly wellness visit), the prices paid by Medicare (e.g., through annual fee schedule rulemaking), and the number of beneficiaries (e.g., by changing Medicare's eligibility age).

The Congressional Budget Office Medicare baseline projections over the next 10 years examine separately the effect of these factors—that is, the effect of enrollment, automatic price adjustments, and volume and intensity, among other trends—on growth in Medicare spending (Table 1-4). The analysis indicates that, of these factors, the per beneficiary rise in volume and intensity of services accounts for the largest share of growth in Medicare spending. One caveat is that this analysis assumes that payment rates to physicians would be cut by 30 percent in 2012. If that cut were overridden, the increase in Medicare spending due to automatic adjustments would be larger and spending in 2021 would be higher. ■

TABLE 1–4 **Sources of Medicare spending growth for 2011 through 2021 under CBO's baseline**

	Dollars (in billions)
Spending in 2011	**$572**
Change in caseloads (number of beneficiaries)	43
Other changes in benefits (intensity, volume per beneficiary, and legislative changes)	306
Automatic adjustments (statutory payment updates)	115
Spending in 2021	**$1,021**

Note: CBO (Congressional Budget Office). These figures include the sustainable growth rate payment update of approximately 30 percent in 2012. Sum does not add to total due to shift in payment dates.

Source: Congressional Budget Office, *The Budget and Economic Outlook, FY 2011–2021*. Tables 3-1 and 3-4.

Changes in the population attaining Medicare eligibility

The Medicare population is projected to grow by a third within the next 10 years, and the population attaining eligibility in that time frame will differ in some ways from current Medicare beneficiaries. First, the Medicare population will grow younger on average over the next 10 years. Second, the income and assets of the newly eligible Medicare population could be smaller as a result of the recent economic recession and there could be rising participation in the labor force after age 65. Third, the share of people with health insurance coverage through an employer has fallen over the past 10 years, and the share of those insured through an employer with an indemnity plan has fallen nearly to zero (Kaiser Family Foundation and Health Research & Educational Trust 2011).

Age and demographic changes

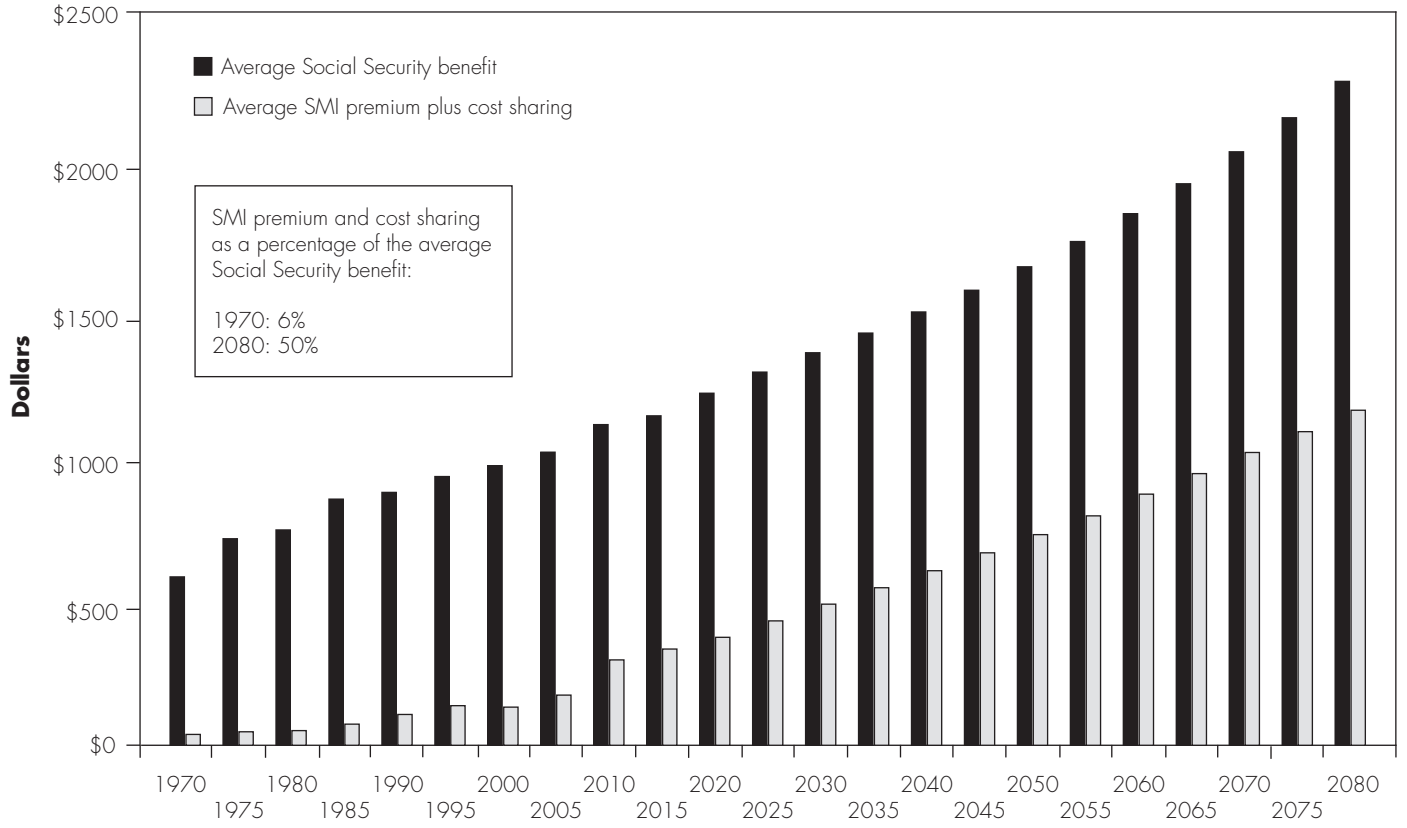
As the bulk of the baby boom generation becomes eligible for Medicare, the average age of Medicare beneficiaries will decline slightly, and this effect will continue through this decade (Figure 1-9a, p. 15), when nearly a third of all Medicare beneficiaries will be between the ages of 65 and 69. Over the longer term, racial and ethnic changes among the Medicare population will be notable, with the Hispanic share of the Medicare population increasing to 14 percent by 2040 (Figure 1-9b) (Census Bureau 2008).

Household assets and attachment to the labor force

Two features of the current economic picture will be important considerations for the Medicare program, particularly in evaluating the effect of changes to

FIGURE 1–8

Average monthly SMI premium and cost sharing will grow faster than the average Social Security benefit



Note: SMI (Supplementary Medical Insurance).

Source: 2011 annual report of the Boards of Trustees of the Medicare trust funds.

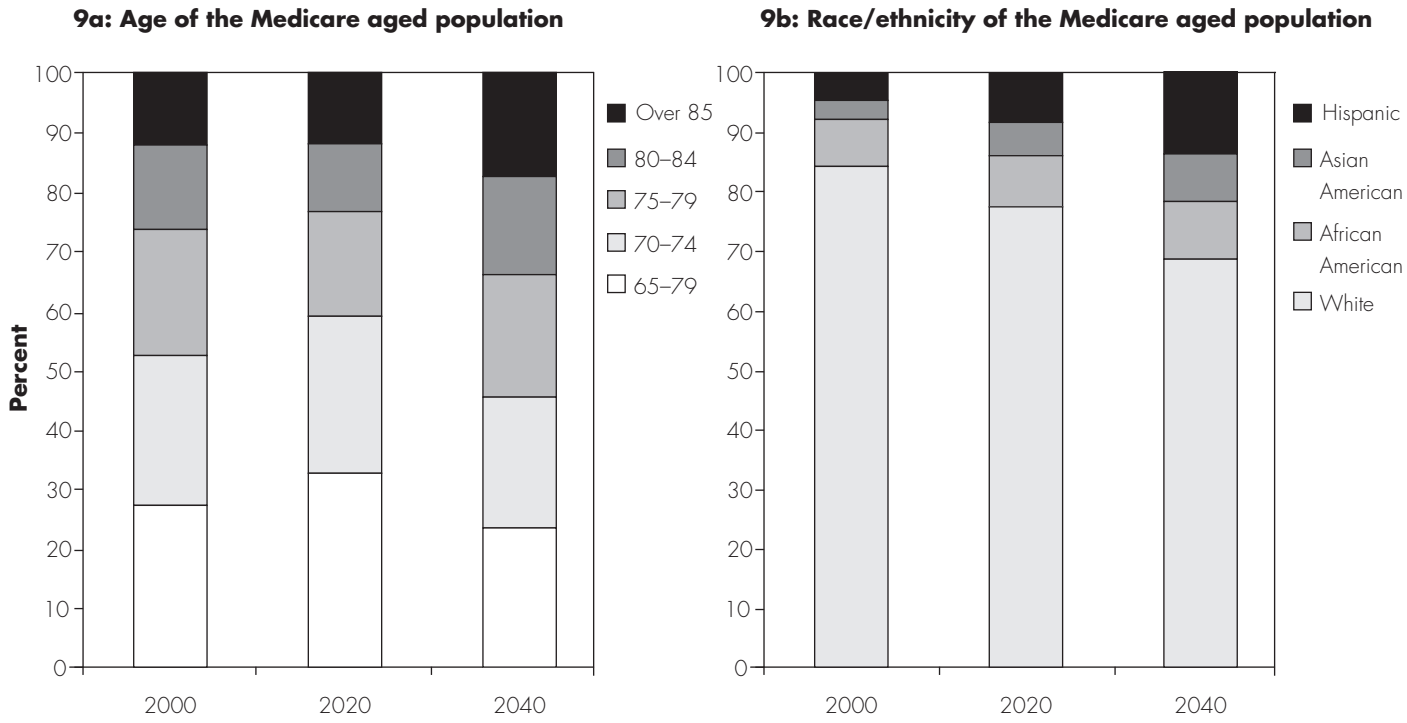
beneficiary cost sharing. First, the economic downturn has had an effect on the economic resources of families in or near retirement. Second, median family income for most groups has stayed relatively flat over the last decade.

In the Survey of Consumer Finances, about 60 percent of families reported a decline in family wealth between 2007 and 2009, with somewhat larger shares reporting a decline among older age brackets (Bricker et al. 2011). For many near retirees, stock market wealth is not a large share of their overall wealth, so the direct effect of the stock market decline may be muted for them (Gustman et al. 2010). However, in combination with the increase in unemployment and decline in housing value, the effect can be significant. In the American Life survey conducted by RAND, a quarter of respondents between ages 50 and 59 indicated that they had lost more than 35 percent of their retirement savings, and 40 percent of respondents had been affected by unemployment, negative home equity, arrears on their mortgage, or foreclosure (Hurd and Rohwedder 2010).

Between 2009 and 2010, average per capita income for all families fell slightly in nominal terms ($50,599 to $49,445), while per capita income for those ages 55 to 64 declined by a similar share, from $57,914 to $56,575, on average. Overall, median family income has stayed relatively flat in nominal terms over the last decade, implying eroding purchasing power (DeNavas-Walt et al. 2011). Among the population over age 65, the share

FIGURE 1–9

Projected characteristics of the Medicare aged population



Note: Native Hawaiians and Pacific Islanders are included in the Asian American category.

Source: Census Bureau population projections.

actively in the labor force has grown over time, and this trend could be expected to continue (Figure 1-10, p. 16).

There is some evidence that the overall stagnation in net family income may be due in large part to increased spending on health care: premiums, out-of-pocket spending, and taxes for health care are estimated to have absorbed nearly all growth in real income over the prior decade for an illustrative four-person family (Auerbach and Kellermann 2011).

Insurance coverage

The share of individuals covered by employer-sponsored insurance fell from 64 percent to 55 percent between 2000 and 2010 (DeNavas-Walt et al. 2011). This drop is an effect of a decline in the share of employers offering health insurance coverage (from 68 percent in 2000 to 60 percent in 2011) and take-up by employees (84 percent in 2000 to 81 percent in 2011) (Kaiser Family Foundation and Health Research & Educational Trust 2011).

Among large firms (200 or more employees) that offer health insurance to their employees, the share offering retiree coverage fell from 34 percent to 26 percent between 2000 and 2011(Kaiser Family Foundation and Health Research & Educational Trust 2011). Of those firms that offered retiree coverage during this period, the rate offering coverage to Medicare-age retirees remained unchanged, at about 70 percent (Kaiser Family Foundation and Health Research & Educational Trust 2011).

In addition to a shift among sources of insurance coverage, the type of insurance coverage employers offer has changed over time. The share of covered employees in preferred provider organizations between 2000 and 2011 grew from 42 percent to 55 percent, while the share in conventional indemnity plans dropped from 8 percent to 1 percent and the share in HMOs fell from 29 percent to 17 percent over the same period (Kaiser Family Foundation and Health Research & Educational Trust 2011).

FIGURE 1–10

Employment rates among the over-65 population have grown over time

Source: Bureau of Labor Statistics, Current Employment Statistics.

Environmental scan of health care delivery system

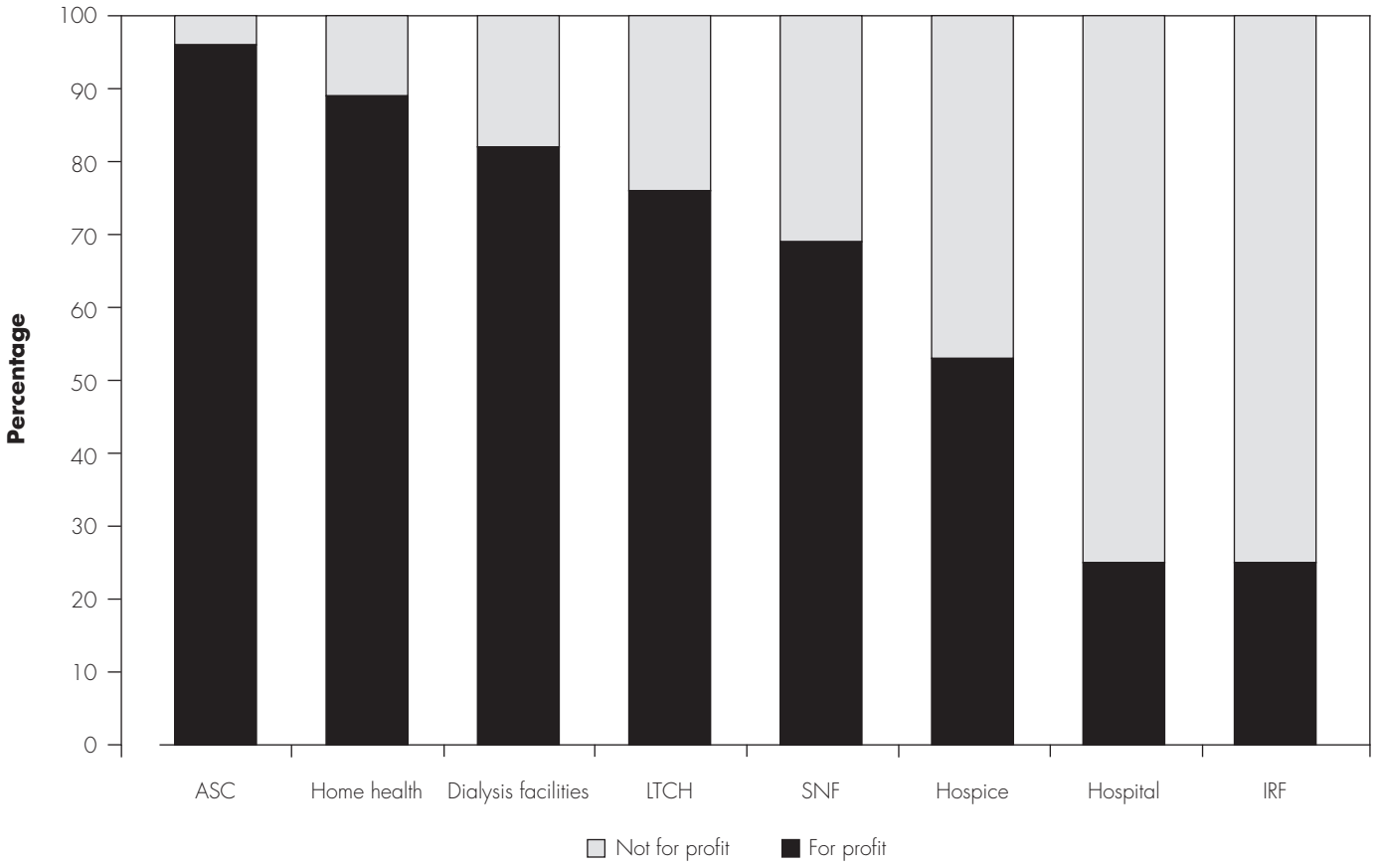
By virtue of its size, the Medicare program has an important influence on the shape of the health care delivery system in the United States. At the same time, trends in the health care delivery system, such as industry structure and consolidation, can influence the success of, or present obstacles to, Medicare payment reforms. For example, the prospects for delivering the Medicare benefit through private plans in a market with strong provider consolidation may differ from those in a less consolidated market; analogously, a beneficiary's choice of plans may be reduced in a market with only one or two large insurers.

The health care delivery system faces notable uncertainty both as a result of the fiscal pressures facing state and local governments and because of pressures on individuals covered by private insurance resulting from growth in health care costs. The current fiscal situation facing federal and state governments in conjunction with the slow economic recovery means that there will be significant pressure to extract additional savings from government health programs. The persistence of high rates of growth in private insurance will also create pressure for employers and workers to seek innovations that slow spending relative to historical trends.

One approach to controlling cost growth is to constrain the growth in unit payments; another approach could be to reform payment systems to reduce duplication or provide incentives for care coordination, which would lower spending. Both alternatives will increase uncertainty for providers, who may respond by looking for cost savings—for example, by being more judicious in their purchasing or by pursuing efficiencies in allocating staff resources. They might also seek to position themselves to coordinate care through new arrangements among providers such as between hospitals and physicians. As these cost controls

FIGURE 1–11

Industry structure



Note: ASC (ambulatory surgical center), LTCH (long-term care hospital), SNF (skilled nursing facility), IRF (inpatient rehabilitation facility).

Source: MedPAC's March 2011 report to the Congress and the June 2011 data book.

and new arrangements develop, they will in turn change the context for Medicare payment reforms. We have examined several trends in the larger health care system and changes at the federal level that can influence how Medicare will develop in the future.

Industry consolidation and structure

The health care industry varies widely across sectors and markets in how it is organized and in how strongly it is consolidated. One parameter is the degree to which sectors are controlled by for-profit versus not-for-profit (NFP) providers.

Ownership mix in the industry

For-profit providers dominate most health care sectors. As shown in Figure 1-11, ambulatory surgical centers, for example, are 96 percent for profit and the home health, dialysis, long-term care hospital, skilled nursing facility, and hospice sectors are all over 50 percent for profit. In addition, the number of for-profit providers has increased more rapidly than the number of NFPs in many sectors. For example, the rate of growth of for-profit hospices from 2004 to 2009 was 68 percent, 10 times that of NFP hospices. For-profit long-term care hospitals saw positive growth of 18 percent from 2005 to 2009, while the number of NFPs decreased by 8 percent. Only the hospital and inpatient rehabilitation facility sectors are dominated by NFPs, with only about 25 percent for-profit providers (inpatient rehabilitation facilities are mostly hospital-based units and thus tend to mirror the distribution of hospitals).

For all sectors in which we measure margins, for-profit providers have higher Medicare margins than NFP providers. For example, in 2008, for-profit hospices had an aggregate margin of 10.0 percent in 2008 compared with

a 0.2 percent margin for NFP hospices. The predominance of for-profit providers in many sectors and their greater Medicare margins may have important implications moving forward for the prospect of cost control. On the one hand, for-profit hospitals have shown a greater ability to control costs when not under financial pressure than NFP hospitals (Medicare Payment Advisory Commission 2011c). If for-profit margins show that higher margins under Medicare rates are achievable, this may influence the perception of whether rates are adequate (assuming equivalent quality, mix of patients, and other factors). In addition, if providers come under more financial pressure, NFPs may start to control their costs more like for profits and the gap in margins may narrow. On the other hand, for profits may tend to focus their efforts on providing services that Medicare has inaccurately priced and that therefore provide more opportunity for profit. If Medicare, or the market, can reduce pricing inaccuracies, those opportunities decrease. A recent study found greater presence in a market of hospitals, skilled nursing facilities, and home health agencies organized as for profits to be modestly associated with higher total Medicare spending (Reschovsky et al. 2011). An older study concluded that both total adjusted Medicare spending and spending growth were greater in areas served by for-profit hospitals than in areas served by NFP hospitals (Silverman et al. 1999).

Private equity firms have recently moved into the hospital market. For example, Caritas Christi in Boston was bought by Cerberus Capital and the resulting Steward Health Care System has expanded from the 6 Caritas Christi hospitals to 11 hospitals. Joint ventures have also been announced by the Ascension Health Care System (the largest NFP system in the country) and Oak Hill Partners, a private equity fund. This move into the hospital sector may be part of a larger trend of investment. A recent survey suggests that private equity is aggressively investing in several health care sectors in addition to hospitals, including ambulatory surgical center chains, health care information technology, and hospices, among others (Becker et al. 2011).

Industry consolidation

The health care industry varies widely across sectors and markets in how it is organized and in how strongly it is consolidated. In some sectors, a small number of for-profit chains control a large share of facilities. For example, the two largest dialysis chains control over 60 percent of capacity in that industry and the two largest long-term care hospital chains control almost 50 percent of capacity. The largest psychiatric hospital chain owns 102 of the 300 freestanding psychiatric hospitals.

Consolidation across markets may allow for increased economies of scale in supply chain and other functions and may also create opportunities for learning among facilities in the same system. Consolidation could also make it easier for Medicare reforms to diffuse across markets. In some cases, it may also increase the market power of facilities in the same system by forcing insurers to bargain across several markets in which a system could have dominant or "must have" providers. This effect has been noted in Northern California, where several systems now represent a large share of hospitals and can negotiate accordingly (Berenson et al. 2010).

A recent review of market consolidation of hospitals concludes that "hospital ownership in 2009 is highly concentrated in 80 percent of metropolitan statistical areas" and that the trend to greater consolidation has been continuing since the 1990s (Capps and Dranove 2011). The Federal Trade Commission has intervened several times in recent years to prevent mergers or acquisitions that it found to be anticompetitive. The concern is that consolidation can result in higher prices for commercial insurers. This issue has been raised in several recent studies including one by the Massachusetts Attorney General, which concluded that price variations are correlated with market leverage (Coakley 2010).

Employment of physicians by hospitals has also become more prevalent. The Center for Studying Health Systems Change finds that hospital employment of physicians is growing rapidly in 12 markets studied (O'Malley et al. 2011). By some estimates, almost half (49 percent) of physicians hired out of residency or fellowship were placed in hospital-owned practices (Medical Group Management Association 2010). Physicians employed by hospitals or in groups tightly associated with hospitals may benefit from the market power of the hospital when negotiating rates with insurers and may prefer the more favorable work–life balance associated with an employment-type relationship.

The development of accountable care organizations, which in some cases combine physicians, hospitals, and other providers into organizations that are accountable for the cost and quality of care for a defined population, also has implications for provider consolidation. Under Medicare, accountable care organizations can participate in the shared savings program scheduled to start in 2012. Accountable

care organizations present an opportunity to control overall costs under Medicare by controlling the volume of services and by providing greater care coordination.

Also, market domination can occur when an insurer dominates the market. In some markets, and in some entire states, one or two insurers dominate the market and can force providers to accept lower payment rates (Melnick et al. 2011). However, lower payment rates do not necessarily lead to lower premiums for consumers. If there is a lack of competition in the insurance market, insurers may be able to retain the difference between low payment rates and high premiums as profit and not pass it on to employers or individuals.

Upcoming federal policies affecting health care

In addition to the market environment for health care, changes are taking place at the federal level that will affect providers, insurers, and employers. Below is a list of some key actions and time frames.

- ***Budget Control Act of 2011.*** The Act established the Congressional Joint Select Committee on Deficit Reduction, which was charged with proposing legislation to reduce the deficit by at least $1.5 trillion over the next 10 years. Because the Congress did not enact legislation resulting from the Committee by January 15, 2012, to reduce the deficit by $1.2 trillion, automatic reductions (or a "sequester") will be made to discretionary and mandatory spending equal to $1.2 trillion over nine years, starting January 2, 2013. The Act limits the amount of automatic cuts for most categories of Medicare spending to 2.0 percent. The Budget Control Act also includes statutory caps through 2021 for discretionary spending (such as CMS's program management account). A special allocation (or "cap adjustment") provides additional funding above the caps of $270 million in 2012 and $3.9 billion over 10 years for the Health Care Fraud and Abuse Control program.

- ***Census changes.*** The 2010 decennial census will result in changes to the core-based statistical areas, which are used in Medicare payment systems. The Office of Management and Budget expects to update those areas in 2013.

- ***Center for Medicare and Medicaid Innovation.*** PPACA established the center to "test innovative payment and service delivery models to reduce program expenditures, while preserving or enhancing the quality of care."

- ***Changes for insurers.*** PPACA makes a number of changes to the rules for insurers. CMS and the Departments of Treasury and Labor issued rules in 2010 subjecting insurers in the individual and small group markets to regulations on the plans' medical loss ratios, guaranteed issue, benefit caps, and grandfathered plans. By 2014, all plans in the individual and group markets will be prohibited from writing coverage that would exclude preexisting conditions, deny coverage based on medical conditions, use medical underwriting, or have waiting periods. All plans must offer an essential benefit package, and risk sharing in the individual and small group market will also start in 2014.

- ***Coverage expansions.*** Under PPACA, starting in 2014, nearly all individuals under age 65 with incomes less than 138 percent of the federal poverty threshold will be eligible for Medicaid. The state exchanges will aggregate private health insurance options, individuals and families with incomes up to 400 percent of the federal poverty threshold will be eligible for premium subsidies through the income tax system, and individuals and families with income up to 250 percent of the federal poverty threshold will be eligible for cost-sharing subsidies. Most individuals must obtain qualifying health insurance coverage or pay a penalty through the tax system. The coverage expansions could have a significant effect on providers, by changing the mix of payers of the patients they see (and resulting reimbursement).[7]

- ***Employer coverage.*** PPACA institutes penalties for larger employers whose employees receive subsidized health insurance in the exchange. An excise tax of 40 percent goes into effect for high-cost employer-sponsored insurance in 2018.

- ***Federal financing.*** The Recovery Act provided payment incentives to encourage hospitals and physicians to adopt electronic health record technology. These payments for the technology began in fiscal year 2011 and will continue each year until fiscal year 2017. Starting in 2015, eligible hospitals and physicians who do not satisfy electronic health record "meaningful use" criteria specified by CMS will be subject to a Medicare payment reduction.

- ***Independent Payment Advisory Board.*** PPACA created the Independent Payment Advisory Board to reduce the per capita rate of growth in Medicare spending. Starting in 2013, subject to a determination by the CMS Chief Actuary that the per capita Medicare spending exceeds certain targets set out in the law, the Board is to develop a proposal to reduce the Medicare growth rate. Absent further action, the Secretary of the Department of Health and Human Services is directed to implement the board's proposals.
- ***Medicaid.*** The provisions in the Recovery Act providing a higher level of federal Medicaid matching funds to states were extended through June 2011 and have now expired. States are currently under maintenance of effort requirements until the coverage expansions are put in place in 2014, limiting their ability to cut Medicaid spending or reduce enrollment.
- ***Tax changes.*** Under PPACA, the expanded HI tax (0.9 percent for individuals making more than $200,000) takes effect in 2013, and an additional Medicare contribution applies to investment income in 2013. A fee is imposed on (1) pharmaceutical companies in 2011, (2) medical device manufacturers in 2013, and (3) insurance providers in 2014.

Reasons for growth in health care spending

As previously noted, per capita or per enrollee health care spending has grown at least 2 percentage points faster than economic growth, and these trends persist across all payers. Understanding the reasons for the growth in health care spending is critical to successfully designing interventions to slow it.

However, measuring the effect of different factors on growth in health care costs is challenging. First, health care prices vary for many reasons, beyond the costs of inputs. Second, the interactive relationship of certain factors, such as insurance coverage and technology, make attribution to individual factors difficult. Third, many researchers use the term "technology" to cover all unexplained growth beyond aging, insurance, and other discrete factors. As a result, the term technology generally encompasses nearly all changes to the practice of medicine.[8] With these caveats, the factors affecting growth in health care spending are still well agreed upon, even if the share attributable to each factor is debated (Congressional Budget Office 2011b, Smith et al. 2009).

Further complicating efforts to decompose health care spending is that some factors are believed to affect the high growth rate of health care spending, while others are believed to contribute to the high level of health care spending, and others are believed to affect both the level and growth.

Technology

The introduction, expansion, and diffusion of new technology are credited with having the largest single effect on growth in health care spending. Technologies in this context include a new intervention or treatment, changes in procedures or process, and changes in the appropriate population for a treatment. Several downstream effects are also often incorporated in this definition of technology. First, it can include expanding an intervention to new populations as well as the tools to profile and target the intervention to the appropriate population. Second, when an intervention either increases or reduces the use of other treatments, these effects are included (Chernew 2010, Cutler and McClellan 2001). Third, a technological intervention can result in higher overall population spending if it makes it possible to survive a previously terminal condition (McKinsey Global Institute 2008).

This broad definition of technology is often used because current research methods, while distinguishing among other spending factors—such as income, insurance, and demographics—often cannot separate the downstream effects of using a new drug, device, or treatment from its introduction into clinical practice (Chernew 2010, Congressional Budget Office 2008).

Price

Identifying the effect of prices on growth in health care spending is challenging because of measurement problems in defining both inputs and outputs. Prices are often not transparent and can vary across geographic areas, payers, and providers for the same service. Studies of the health care system across countries have found that prices for health care products in the United States are higher than in other countries (Anderson et al. 2003, Anderson et al. 2005). Higher prices may also result from a lack of competition in a region or for a specific service or product.

Competition and regulation

The evidence of competition on growth in total health care spending is mixed, although many researchers believe that markets with provider consolidation (or with less competition) may have faster growth in health care spending (Vogt and Town 2006). Researchers have shown that providers have obtained market power to negotiate higher payer rates (Berenson et al. 2010) and that increased integration has led to higher prices for health care services in hospital markets (Capps and Dranove 2004, Dranove et al. 1993, Vogt and Town 2006). Moriya and colleagues found that increases in insurance market concentration significantly decreased hospital prices, while hospital concentration resulted in higher prices, although the latter effect was not significant (Moriya et al. 2010). Finally, consolidation in the insurer market (Robinson 2004) has resulted in many markets with a few dominant providers and a few dominant payers (Ginsburg and Lesser 2006).

Another feature often mentioned as having the potential to slow growth in health care spending is regulation through administered pricing. However, as presented earlier, the growth rates for public and private health payers are similar, implying that neither competition (as it currently exists in the private market for health care) nor the government's ability to set prices (as it currently exists for Medicare and Medicaid) has successfully constrained growth in health care spending.

Health insurance

The scope of health insurance coverage is also believed to contribute to growth in health care spending (Feldstein 1973, Manning et al. 1987). Being insured against the cost of a health care intervention, when coupled with the lack of complete information about the marginal effectiveness, could result in less incentive to seek the lowest priced effective care. Some researchers also postulate that technology and health insurance work in tandem to drive growth in health care spending. For example, Finkelstein studied the introduction of the Medicare program and growth in health care spending and found that the effect of the spread of health insurance more generally from 1950 through 1990 could explain up to half of the increase in per capita health care spending over this time period (Finkelstein 2007).

Income, wealth, and demographics also affect spending growth

Increases in national income and wealth also contribute to growth in health care spending, and, like insurance, the interaction effects between income and other factors could be significant. Smith and colleagues found that national income growth worked in tandem with expanding insurance coverage to drive technological change in health care (Smith et al. 2009). The aging of the population and changes in health status also affect the rate of growth of health care spending, although to a smaller extent than technology.

National and international variation in health care spending suggests inefficiencies

As Medicare is the largest single purchaser of health care in the United States, it is important to review the evidence that some health care spending is inefficient—that it does not improve the population's health or ultimate outcomes, or that it is inefficiently allocated across populations or regions. First, although assessing the value of health care is difficult, many researchers believe that the value of the marginal dollar spent on health care is declining over time (Cutler et al. 2006). Second, despite years of attention to disparities in the delivery of health care, outcomes are still worse for individuals in racial and ethnic minorities and for those with low incomes (Agency for Healthcare Research and Quality 2011). Finally, many observers contend that the lack of consistently better health outcomes—despite higher per capita spending relative to other countries—is evidence of inefficiency in U.S. health expenditures (Anderson and Frogner 2008).

Value of health care

Researchers use a couple of approaches to assess the value of health care spending. Some analyses evaluate the effect of the total increase in spending on a macro-level indicator, such as mortality or life expectancy. One study that took this approach found that the increase in health care spending from 1960 to 2000 provided reasonable value. However, the study also noted that the value of health care spending appeared to be decreasing over time, particularly among the elderly (Cutler et al. 2006). Other approaches review the marginal improvement in health for a specific disease, finding that the improvement in outcomes after heart attacks was worth the increase in spending (Cutler and McClellan 2001).

Even when an intervention is effective in a clearly defined population, it is often diffused far more widely to populations for whom the effectiveness is not well established (Garber et al. 2007). This practice can lead

to higher spending (and faster growth in spending as the intervention is diffused across populations for whom a lower cost, less invasive method may be available) and lower value for the additional cost. For example, a study of screening colonoscopies among the Medicare population found that 46 percent of the population who received a negative screening colonoscopy received another screening within seven years, even though expert panels recommend that screening colonoscopies be repeated no more frequently than 10 years after a negative test (Goodwin et al. 2011).

Wide variation in spending and use of care provided across the country and within regions

Geographic variation in the amount of health care received and spending on health care is notable, which cannot be fully explained by difference in disease burden, severity, or supply (Fisher et al. 2003a, Fisher et al. 2003b, Medicare Payment Advisory Commission 2011d, Zhang et al. 2010, Zuckerman et al. 2010). However, it is not the case that only areas with high spending have inappropriate care—it appears that areas with both high and low spending have some level of appropriate and inappropriate care (Chassin et al. 1987, Leape et al. 1993).

The Commission's work on geographic variation found significant variation even among the use of services for comparable populations. Variation in total Medicare spending between the 90th percentile and the 10th percentile of metropolitan statistical areas was 55 percent; taking out Medicare's explicit price adjustments and special payments reduces this variation to 44 percent, and further adjusting for health status—resulting in a measure of service use rather than spending—reduces variation to 30 percent (Medicare Payment Advisory Commission 2011d). Furthermore, variation in post-acute sector services (such as home health care and durable medical equipment) is particularly high and those services disproportionately contribute to overall variation (Medicare Payment Advisory Commission 2011d). Finally, work on physician resource use has found significant variation among physicians in the same geographic area and specialty—physicians at the 90th percentile had resource use between 40 percent and 60 percent higher than the median physician in the same specialty and geographic area treating the same condition (Houchens 2010). Wide variation in the amount of care persists even when observable characteristics are accounted for.

Disparities across populations

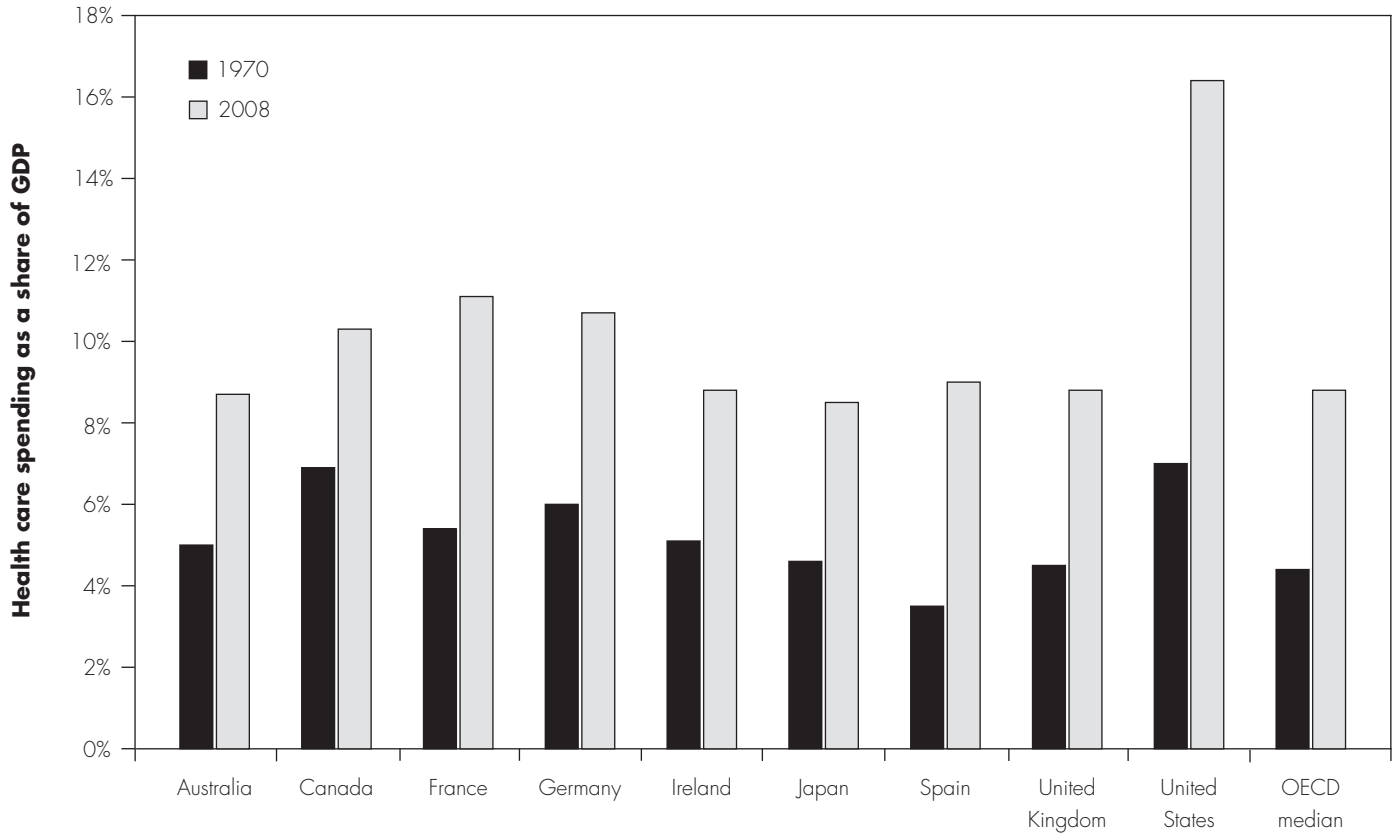
Notable differences in access to quality care for different demographic groups are of concern to the Commission. First, as described in our June 2011 report in the chapter on quality improvement, Medicare beneficiaries in racial and ethnic minorities or with low income are more likely to seek care from poorer quality providers (Bach et al. 2004, Jha et al. 2007, Medicare Payment Advisory Commission 2011b). Furthermore, racial and ethnic minorities tend to have poorer outcomes, depending on where they receive their care; for example, risk-adjusted mortality after acute myocardial infarction was higher in hospitals that treated African Americans at a higher rate (Skinner et al. 2001) and the risk of admission to a high-mortality hospital was 35 percent higher for African Americans than for whites in a market with high racial segregation (Sarrazin et al. 2009).

Differences also exist in general treatment patterns and in where facilities and other health care resources are likely to locate. First, low-income individuals are more likely to use the emergency department than other ambulatory care settings (Tang et al. 2010). Second, closure of facilities can be related to racial, ethnic, and income characteristics of the neighborhood—one study found that being located in a poor area or serving a predominantly lower income population was correlated with a greater chance of emergency department closure, and nursing home closures were more prevalent in areas with a higher proportion of African Americans or minorities and a larger share of residents in poverty (Feng et al. 2011, Hsia et al. 2011).

A meta-analysis of health literacy conducted for the Agency for Healthcare Research and Quality found that low health literacy resulted in increased use of high-intensity sites (such as hospitals and emergency departments), worse health outcomes (including higher mortality and poorer overall health status), and lower levels of prevention screening. Using the definition of health literacy in this analysis, low health literacy was disproportionately high among the elderly, racial and ethnic minorities, those with low education levels, and people in poverty (Berkman et al. 2011). The persistence of poorer outcomes for racial and ethnic minorities and those who are low income indicates that, even with the high level of spending in the United States, gaps in the quality of care exist.

FIGURE 1–12

Health care spending as a share of GDP, 1970 and 2008



Note: GDP (gross domestic product).

Source: Anderson and Frogner 2008 and the Organisation for Economic Co-operation and Development.

Level and growth of health care spending in the United States exceeds that in other developed countries

The level of health care spending, measured as per capita spending, share of GDP, or spending adjusted for purchasing power, is much higher in the United States than in other Organisation for Economic Co-operation and Development (OECD) countries. Furthermore, health care spending as a share of GDP has grown faster in the United States than in other countries, growing at 2 percentage points above economic growth between 1970 and 2008, while in other OECD countries it grew at rates closer to 1 percentage point above economic growth (Figure 1-12) (White 2007).

Comparing the United States and other countries on health outcomes is challenging because measures such as life expectancy incorporate differences outside the health care system, such as lifestyle and socioeconomic status, disease burden, and accident rates (Docteur and Berenson 2009). However, life expectancy at age 65 in the United States is roughly in the middle of all OECD countries (Docteur and Berenson 2009) and U.S. survival rates have not improved as fast as in some OECD countries, even when factors such as smoking, obesity, and population diversity are taken into account (Muennig and Glied 2010). The technical quality of care in the United States is also mixed for preventive, chronic, and acute care, with relatively high quality of care for cancer but relatively lower quality of care for chronic conditions amenable to treatment (Docteur and Berenson 2009).

Overall, compared with the United States, other OECD countries appear to obtain similar or better outcomes with significantly lower total spending (Anderson and Squires 2010). In fact, public health care spending in the

United States is essentially equivalent to what the median OECD country spends on public and private health care combined (Squires 2011).

Conclusion

Health care's growth as a share of the economy means that an ever-increasing amount of economic gain goes to purchase additional health care. While it appears that on average the aggregate increase in health care spending has improved well-being, there is some evidence that a share of health care spending does not improve health or that the marginal benefit is declining (Cutler et al. 2006, Skinner et al. 2001).The presence of significant variation that does not correspond to better quality also raises flags that a considerable share of medical spending is not improving overall welfare. While explicit fraud and abuse make up some of the misuse in health care, it appears that a much larger share of health care spending is misspent and does not improve ultimate outcomes (Schuster et al. 2005).

Despite the relatively lower growth rates projected for the Medicare program under current law, the program will still continue to absorb high and growing levels of federal revenues. The current fiscal pressure facing federal and state budgets, in combination with the downward pressure of growth in health care costs on income, underscores the importance of ensuring that Medicare is a wise purchaser of health care. ■

Endnotes

1 The National Health Expenditure data—collected by CMS, the Census Bureau, and the Bureau of Economic Analysis—track health spending in the United States. There are two dimensions: spending for health care goods and services and the programs and other payers that purchase those goods and services.

2 The value of the federal tax exclusion for employer-sponsored health insurance was estimated to be $160 billion in 2010, according to the 2012 President's budget.

3 These figures exclude the effect of the deficit reduction resulting from the Budget Control Act of 2011.

4 CBO's long-range health care assumptions are 1.2 percentage points above GDP growth for Medicare and 0.8 percentage point above GDP growth for Medicaid on average over the 2022–2085 period.

5 The per capita growth rate for Part A and Part B, excluding Part D, from 2001 to 2010 is about 5.4 percent.

6 Over the long term, the Trustees assume that Medicare spending per beneficiary will grow by GDP minus 0.1 percentage point for Part A and Part B, or about 4 percent annually. Part D, which is not affected by a productivity adjustment, is projected to grow at GDP plus 1 percentage point, which is roughly 5.1 percent on average. These growth rates are smaller than the Trustees' long-range projections before PPACA (which was GDP plus 1 percentage point) and smaller than historical trends in Medicare per beneficiary spending, which have averaged about GDP plus 2 percentage points (Boards of Trustees 2011).

7 For example, the coverage expansions could result in fewer bad debts for providers if their uninsured patients are now covered by insurance.

8 One example is changing guidelines for cancer screening.

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CHAPTER 2

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

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

Chapter summary

The Commission makes payment update recommendations annually for 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 prospective 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 (2012) 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—2013). As part of the process, we examine payment adequacy for the "efficient" provider to the extent possible. Finally, we make a judgment on what, if any, update is needed.

This year, we make update recommendations in 10 FFS sectors: hospital inpatient, hospital outpatient, physician and other health professional, ambulatory surgical center, outpatient dialysis, skilled nursing facility, home health care, inpatient rehabilitation facility, long-term care hospital, and hospice. These update recommendations can significantly change the revenues providers receive from Medicare and help create pressure for broader reforms to address the fundamental problem in FFS payment systems—that providers are paid more when they deliver more services without regard to the quality or value of those additional services. Each year, the Commission

In this chapter

looks at all available indicators of payment adequacy and reevaluates any prior year assumptions using the most recent data available to make sure its recommendations accurately reflect current conditions. We also consider changes that redistribute payments within a payment system to correct any biases that may result in inequity among providers, make patients with certain conditions financially undesirable, or make particular procedures unusually profitable.

The principle that Medicare should pay the same rate for the same service across sectors is a good guide for the Commission's thinking as it considers changes to Medicare's payment systems. Medicare often pays different amounts for similar services across sectors. Setting the payment rate equal to the rate in the more efficient sector would save money for the Medicare program, reduce cost sharing for beneficiaries, and lessen the incentive to provide services in the higher paid sector. However, putting this principle into practice can be complex because it requires that the definition of the services and the characteristics of the beneficiaries across sectors be sufficiently similar. This year we make a recommendation to equalize payment rates for evaluation and management office visits provided in hospital outpatient departments and physician offices. Our analysis shows that the definition of the service and the characteristics of the patients are sufficiently similar to allow this service to be compared across these two sectors. We are beginning to analyze opportunities for applying this principle to other services and sectors, such as the sectors that provide post-acute care. ■

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. Necessary steps toward achieving 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' ability to control; and
- considering the need for annual payment updates and other policy changes.

Our general approach to developing payment policy recommendations attempts to do two things: first, make enough funding available to ensure that payments are adequate to cover the costs of efficient providers; and second, improve payment accuracy among services and providers. Together, these two steps should maintain Medicare beneficiaries' access to high-quality care while creating financial pressure on providers to make better use of taxpayers' and beneficiaries' resources.

In the first step, our goal is to base our judgment of payment adequacy on the performance of efficient providers in a sector, as is required by our charter. 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. We are exploring ways to approximate the characteristics of efficient providers. For example, we continue to examine the financial performance of hospitals with consistently low risk-adjusted costs per discharge, mortality, and readmissions (Medicare Payment Advisory Commission 2010, Medicare Payment Advisory Commission 2011). We also continue our analysis of efficient providers in the skilled nursing facility (SNF) sector. We have found that some SNFs have considerably lower costs than others and substantially better quality (Medicare Payment Advisory Commission 2011). We plan to continue to refine our identification of efficient providers in the SNF and hospital sectors and extend our efficient provider analysis to additional sectors, such as inpatient rehabilitation facilities (IRFs) and home health agencies (HHAs). However, for many sectors we are limited by the available data to assessing the aggregate performance in a sector over both efficient and inefficient providers.

To help determine the appropriate level of aggregate funding for a given payment system in 2013, we first consider whether payments are adequate for providers in 2012. 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 2012. We then consider how providers' costs will change in 2013. Taking these factors into account, we then determine how Medicare payments for the sector in aggregate should change in 2013.

Within a given level of funding, we may also consider changes in payment policy that would affect the distribution of payments among providers in a sector. The intent is to change the incentives and thus improve equity among providers or improve access to care for beneficiaries. For example, we have made recommendations to remove biases in the SNF prospective payment system (PPS) that make treating complex patients less financially desirable than treating patients who need therapy.

We compare our recommendations for updates and other policy changes for 2013 with current law to understand the implications for providers, beneficiaries, 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 2012?

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:

- beneficiaries' access to care
- the quality of care
- providers' access to capital
- Medicare payments and providers' costs for 2012

Some measures focus on beneficiaries (e.g., access to care) and some focus on providers (e.g., the relationship

between payments and costs in 2012). We consider multiple measures because 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.

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 Medicare payments are too low. However, factors unrelated to Medicare's payment policies may also affect access to care. These factors include coverage policy, beneficiaries' preferences, supplemental insurance, and transportation difficulties.

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' willingness to serve beneficiaries and beneficiaries' opinions about their access to physician care. 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 their costs. Changes in technology and practice patterns may also affect providers' capacity. For example, less invasive procedures or lower priced equipment could increase providers' 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. For instance, rapid growth in the number of HHAs suggests that Medicare's payment rates are potentially more than adequate and, because the growth has been accompanied by increased cases of fraud, raises concerns about the definition of the benefit. If Medicare is not the dominant payer for a given provider type, 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 thus must at least be able to access those services—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, on the other hand, may indicate that revenues are inadequate for providers to continue operating or to provide the same level of services. Finally, rapid changes in the volume of services between sectors whose services can be substituted for one another may indicate distortions in payment and raise questions about provider equity. For example, there has been a recent increase in the volume of evaluation and management office visits in the hospital outpatient sector; some of those services may previously have been provided in physicians' offices.

However, changes in the volume of services are often difficult to interpret because increases and decreases could be explained by other factors such as population changes, changes in disease prevalence among beneficiaries, technology, practice patterns, 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 2008 CMS substantially increased the number of surgical procedures covered under the ambulatory surgical center payment system. As a result, the volume of services per FFS beneficiary for those services grew rapidly over the next several years. Changes in the volume of physician services must be interpreted particularly cautiously. Evidence suggests that for services for which use is discretionary, volume may go up when payment rates go down—the so-called volume offset. For other services, such as those requiring significant investment in equipment, volume may contract. 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 quality and Medicare payment adequacy is not direct. Simply increasing payments through an update for all providers in a sector regardless of their individual quality is unlikely to solve quality problems, because historically there has been little or no incentive in Medicare payment systems for providers to spend additional resources on improving quality. Medicare's payment systems are not generally based on quality; payment is usually the same regardless of the quality of care. In fact, undesirable outcomes (e.g., unnecessary complications) may result in additional payments, and sectors with more than adequate payments may have little incentive to improve quality. The Commission has recommended for the past several years that a fundamental change is needed to create incentives in Medicare FFS payment systems to reward better quality, and the program recently has begun to implement several quality-based payment policies.

Providers' access to capital

Access to capital is necessary for providers to maintain and modernize their facilities and capabilities for patient care. Widespread inability to access capital throughout a sector may in part reflect on the adequacy of Medicare payments (or, in some cases, even on the expectation of changes in the adequacy of Medicare payments). Some sectors, such as hospitals, require large capital investments and access to capital can be a useful indicator. In other sectors, such as home health care, there is little need for large capital investments and access to capital is a more limited indicator. In some cases, a broader measure, such as 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 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.

The past few years have seen dramatic changes in financial markets. In late 2008, because of the extraordinary conditions in the credit market, access to capital was driven almost entirely by factors other than Medicare payment adequacy and markets essentially froze. In 2009, liquidity began to return and now credit markets appear to have returned to more normal conditions under which access to capital depends on borrowers' individual circumstances and creditworthiness.

Medicare payments and providers' costs for 2012

For most payment sectors, we estimate Medicare payments and providers' costs for 2012 to inform our update recommendations for 2013.

For providers that submit cost reports to CMS—acute care hospitals, SNFs, HHAs, 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 less 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 2011 and 2012 to our base data (2010 for most sectors). We then model the effects of other policy changes that will affect the level of payments in 2012. To estimate 2012 costs, we consider the rate of input price inflation and, as appropriate, we adjust for changes in the product, such as fewer visits in an 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 complementarities of 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, however, applies only to hospital inpatient and outpatient payments; the payments for other distinct units of the hospital, such as SNFs, are governed by payment rates for those payment systems.

Total margins—which include payments from all payers as well as revenue from nonpatient sources—do not play a direct role in the Commission's update deliberations. 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 and to inform our judgment about payment adequacy. There will always be a distribution of margins about the average and our intent is not to ensure that every provider has a positive 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 the case-mix adjustment of the payment unit, and other changes in the product (e.g., reduced lengths of stay at inpatient hospitals). Information about the extent to which these factors have contributed to margin changes may help in deciding how much to change payments.

In sectors where the data are available, the Commission makes a judgment when assessing the adequacy of payments relative to costs. No single standard governs this relationship for all sectors, and margins are only one indicator for determining payment adequacy. Moreover, although payments can be known 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 relation 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 providers' efficiency and response to changes in the payment system, 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 patient classification system in 2008 that will result in more accurate payments. However, thus far, it has resulted in higher payments because provider coding changed, making patient complexity appear higher—although the underlying patient complexity was unchanged. Any kind of rapid change in policy, technology, or product can make it difficult to measure costs per unit of comparable product.

To assess whether reported costs reflect the costs of efficient providers, we examine recent trends in the average cost per unit of output, variation in standardized costs and cost growth, and evidence of change in the product being furnished. 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 that are under pressure to constrain costs generally have managed to slow their growth in cost more than those that face less pressure (Berenson et al. 2010, Gaskin and Hadley 1997, Medicare Payment Advisory Commission 2005, Robinson 2011). Lack of cost pressure is more common in markets where a few providers dominate and have negotiating leverage over payers.

In contrast, some have suggested that hospital costs, for example, are largely outside the control of hospitals and that hospitals shift costs onto private insurers to offset Medicare losses. This belief argues that costs are immutable and are 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. (See the hospital chapters in our 2009–2011 March reports for a more complete discussion of the relation between

cost pressure and Medicare margins.) In some sectors, Medicare itself could exert greater pressure on providers to reduce costs.

Variation in cost growth among providers in a sector can give us insight into the range of performance that facilities are capable of achieving. For example, if some providers in a given sector have more rapid growth in cost than others, we might question whether those increases are appropriate.

Changes in product can significantly affect unit costs. Returning to the example of home health services, substantial reductions in the number of visits in home health episodes would be expected to reduce the growth in 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 sum, 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 economic conditions, relative market power, and other factors. Policymakers should accommodate cost growth in payment policy 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 2013?

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 above 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 applicable CMS price index. 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 2013?

The Commission's judgments about payment adequacy 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 PPS is changed relative to the prior year. 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 the 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 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 about the distribution of payments among providers. These distributional changes are sometimes, but not always, budget neutral. Our recommendations to shift payment weights from therapy to medically complex SNF cases is one example of a distributional change that will affect providers differentially based on their patients' characteristics.

The Commission, as it makes its update recommendations, may, in some cases, take payment differentials across sectors into consideration and make sure the relative update recommendations for the sectors do not exacerbate existing incentives to choose the sector based on payment considerations. The difficulty of harmonizing payments across sectors to remove inappropriate incentives points out one weakness of FFS payments specific to each provider type and the importance of moving beyond FFS to more global and patient-centric Medicare payment

Harmonizing payments across sectors in post-acute care

More than a third of Medicare beneficiaries discharged from a hospital use skilled nursing or rehabilitation services from post-acute care (PAC) providers. Medicare beneficiaries can seek this care in four PAC sectors: skilled nursing facilities, home health agencies, long-term care hospitals, and inpatient rehabilitation facilities (rehabilitation services can also be provided in a number of ambulatory sectors). There are four obstacles to defining the same service, comparable patients, and the efficient sector in PAC:

- The PAC product is not well defined. Thus, it may not be clear if the services are the same across sectors or if the goal is recovery or preventing further deterioration.
- Patient assessment instruments, needed to adjust payments for patients with different risks and to assess the outcomes of the care they receive, differ among sectors.
- Payments are not accurately calibrated to costs in each sector. The level of payments may be too high in a sector and may also be maldistributed within the sector. The latter problem can result in selection and treatment decisions based on financial rather than clinical considerations.
- A provider may appear to be efficient by discharging patients to another sector, thereby reducing its costs and shifting costs to another provider. This practice may at the same time increase total Medicare program spending.

Several efforts are under way to help overcome these obstacles. CMS is developing a patient assessment instrument that can be used across sectors and will help define each patient's characteristics and eventually help compare outcomes and quality across sectors. Calibrating payments to costs in each sector may require refining the prospective payment systems. The Commission has recommended rebasing the prospective payment systems and revising the case-mix classification systems for home health agencies and skilled nursing facilities. Better patient assessment at admission and discharge together with more accurate payments will start to help resolve the question of which sector is relatively more efficient. However, the problems of shifting cost to another provider and determining which services are similar will still need to be resolved.

An additional issue is that some patients who require PAC services could receive them in an acute care hospital, reducing the number of care transitions a beneficiary experiences and avoiding a costly stay with a PAC provider. Eventually, payments should be harmonized across both the PAC sector and the acute care hospital sector.

Medicare should seek to ensure that beneficiaries receive the most clinically appropriate and effective care, regardless of the sector. Within the fee-for-service system, if similar services can be delivered in different sectors with no appreciable difference in quality or outcome, payments across sectors should be set at the level of the most efficient sector. Alternatively, this end could be achieved by moving from fee-for-service payments by sector to a more bundled approach that would pay an entity for all necessary PAC services or for those PAC services and the initial inpatient admission. In either case, payments should reflect the characteristics of the patients' care needs, not the sector. ■

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.

Paying the same for the same service across sectors

A beneficiary can sometimes receive a similar service in different sectors. Depending on which sector the beneficiary chooses, Medicare and the beneficiary pay different amounts. For example, upon leaving the hospital,

patients with joint replacements might go home with home health care or outpatient therapy, to a SNF, or to an IRF, and Medicare payments (and beneficiary cost sharing) can differ widely as a result.

A core principle that guides the Commission's thinking is that Medicare should pay the same amount for the same service, even when it is provided in different sectors. It seems fair for providers in different sectors to be paid the same amount when the same service is provided to similar patients. Putting this principle into practice requires that the definition of services in the sectors be sufficiently similar and that the characteristics of the patients be 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. Those differences create opportunities for Medicare and beneficiary savings, if payments can be set at the level of the more efficient sector. For example, under the current payment systems, a beneficiary can receive the same physician visit service in an outpatient clinic or in a physician's office. In fact, the same physician or other professional 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. Nevertheless, it can be difficult to find services in different sectors that are defined similarly and to determine whether patients have the same characteristics. The text box on harmonizing payments across sectors in post-acute care outlines some of this complexity.

In this report, the Commission recommends that payments for evaluation and management (E&M) office visits in the outpatient and physician office sectors be made equal. This service is comparable across the two sectors. E&M office visits are defined similarly in both sectors. In addition, because the coding for the service incorporates a specific length of time (e.g., 15 minutes), patient characteristics are accounted for. That is, a more complex patient in either sector would have a longer office visit than a less complex patient. Our recommendation will set payment rates for E&M office visits in both the outpatient department and physician office sectors equal to those in the physician fee schedule, lowering both program spending and beneficiary liability. (See Chapter 3, pp. 74–78, for a detailed discussion of this recommendation.) The Commission will continue to study other services that are provided in multiple sectors to find additional services for which the principle of the same payment for the same service could be applied.

Budgetary consequences

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 requires the Commission to consider the budget consequences of our recommendations. We document in this report how spending for each recommendation would compare with expected spending under current law. For each sector, we develop rough estimates of the impact of recommendations relative to the current budget baseline, placing each recommendation into one of several cost-impact categories. In addition, we assess the impacts of our recommendations on beneficiaries and providers. All the recommendations in this report were developed and voted on before the effective date of the sequester provision in the Budget Control Act of 2011 (for a summary of that provision see Chapter 1, p. 19). The sequester provision is scheduled to take effect starting February 1, 2013. If a Medicare sequester does occur, it will change the spending implications of the recommendations. In addition, the report was prepared prior to passage of the The Middle Class Tax Relief and Job Creation Act of 2012; the provisions of this act defer the effect of the sustainable growth rate system and reduce Medicare bad debt payments in certain other sectors (hospitals, skilled nursing facilities, inpatient rehabilitation facilities, and long-term care hospitals). These small changes are not reflected in this report.

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 the long-term trend in Medicare spending per beneficiary—a growth rate that has been well above that of the economy overall—without a commensurate increase in value to the program, such as higher quality of care or improved health status. Growth in spending per beneficiary, combined with aging of the baby boomers, will result in the Medicare program absorbing increasing shares of the gross domestic product and of federal spending. Slowing the increase in Medicare outlays is important. Medicare's rising costs are projected to exhaust the Hospital Insurance trust fund and significantly burden taxpayers.

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 value of the program to beneficiaries and taxpayers. CMS is beginning to take steps on this road, such as pay for performance, which links payments to the quality of care providers furnish, and collecting and distributing information about how providers' practice styles and use of resources compare with those of their peers. We discuss these steps in more detail in the sector-specific chapters that follow. Ultimately, increasing the value of the Medicare program to beneficiaries and taxpayers requires knowledge about the costs and health outcomes of services. Until more information on 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 can 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 accountable care organizations may start to address these issues but their impact lies in the future. 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 providers qualify for a payment update each year. ■

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CHAPTER 3

Hospital inpatient and outpatient services

RECOMMENDATIONS

3-1 The Congress should increase payment rates for the inpatient and outpatient prospective payment systems in 2013 by 1.0 percent. For inpatient services, the Congress should also require the Secretary of Health and Human Services beginning in 2013 to use the difference between the increase under current law and the Commission's recommended update to gradually recover past overpayments due to documentation and coding changes.

COMMISSIONER VOTES: YES 16 • NO 1 • NOT VOTING 0 • ABSENT 0

3-2 The Congress should direct the Secretary of Health and Human Services to reduce payment rates for evaluation and management office visits provided in hospital outpatient departments so that total payment rates for these visits are the same whether the service is provided in an outpatient department or a physician office. These changes should be phased in over three years. During the phase-in, payment reductions to hospitals with a disproportionate share patient percentage at or above the median should be limited to 2 percent of overall Medicare payments.

COMMISSIONER VOTES: YES 14 • NO 2 • NOT VOTING 1 • ABSENT 0

3-3 The Secretary of Health and Human Services should conduct a study by January 2015 to examine whether access to ambulatory physician and other health professionals' services for low-income patients would be impaired by setting outpatient evaluation and management payment rates equal to those paid in physician offices. If access will be impaired, the Secretary should recommend actions to protect access.

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

CHAPTER 3

Hospital inpatient and outpatient services

Chapter summary

From 2009 to 2010, Medicare payments per fee-for-service (FFS) beneficiary for inpatient and outpatient services in acute care hospitals grew by more than 3 percent. As a result, the 4,800 hospitals paid under the Medicare prospective payment system and critical access hospital payment system received $153 billion for roughly 10 million Medicare inpatient admissions and 166 million outpatient services. To evaluate whether aggregate payments were adequate, we consider beneficiaries' access to care, the volume of services provided, hospitals' access to capital, quality of care, and the relationship of Medicare's payments to the average cost of caring for Medicare patients. In addition to examining the costs of the average provider, we compare Medicare payments with the costs of relatively efficient hospitals.

We also discuss the equity in Medicare payments across regions and across sectors. We examine the equity of rural hospital payments compared with urban hospital payments. We also examine the payment rates for evaluation and management (E&M) clinic visits in hospital outpatient departments (OPDs) compared with rates paid for E&M visits at freestanding physician offices.

Assessment of payment adequacy and update recommendation

The Commission balanced three factors in reaching its inpatient update recommendation. First, most payment adequacy indicators (including access

In this chapter

to care, quality of care, and access to capital) are positive. Second, hospitals changed their documentation and coding starting in 2008 in response to the introduction of Medicare severity–diagnosis related groups (MS–DRGs), leading to overpayments in 2008 through 2012. While 2008 and 2009 overpayments are currently being recovered, the 2013 updates must be lowered to recover the overpayments from 2010, 2011, and 2012. Third, while relatively efficient hospitals generated positive overall Medicare margins in 2010, most hospitals have negative overall Medicare margins (–4.5 percent in 2010, projected to reach –7 percent in 2012). Balancing these factors, the Commission recommends reducing the 2013 increase in inpatient payments from the level in current law (expected to be 2.9 percent) to 1 percent. The difference between the update under current law and 1 percent should be used to gradually recover overpayments that occurred between 2010 and 2012 due to documentation and coding changes. This update recommendation will allow Medicare to recover past overpayments and keep 2013 inpatient payment rates adequate.

For outpatient services, the Commission also recommends a 1 percent increase in payment rates. On the one hand, growth in the volume of outpatient services has been strong, suggesting the outpatient update in current law (1.9 percent) may be too high. On the other hand, overall hospital margins are negative, suggesting a positive update is appropriate. A 1 percent update would balance these two considerations and help limit growth in the disparity in payment rates between services provided in OPDs and payment rates in other sectors. The Commission maintains that Medicare should seek to pay similar amounts for similar services, taking into account differences in the quality of care and in the relative risks of patient populations.

Beneficiaries' access to care—Access measures include the capacity of providers and changes in the volume of services over time. These measures were positive for the period reviewed.

- ***Capacity and supply of providers—***The number of hospitals and the range of services offered continue to grow.
- ***Volume of services—***Outpatient volume has continued to grow at a robust pace, while per beneficiary inpatient admissions continued to decline. Inpatient admissions per FFS beneficiary declined 1 percent per year from 2004 to 2010 and 1.3 percent from 2009 to 2010. Inpatient use also has declined among non-Medicare patients, and as a result inpatient occupancy has declined as well. The volume of hospital outpatient services per Medicare FFS beneficiary grew on average by 4.2 percent per year from 2004 to 2010 and by 4.0 percent

from 2009 to 2010. Part of the growth was due to a shift of services from the inpatient to the outpatient setting. Twenty percent of all outpatient volume growth, however, was due to a shift in physician office visits from freestanding physician offices to hospital-owned physician offices that are deemed parts of OPDs. Hospital-based outpatient physician office visits grew by 6.7 percent from 2009 to 2010.

***Quality of care*—**Quality continues to improve on most measures. Hospitals reduced in-hospital and 30-day mortality rates across five prevalent clinical conditions. Patient safety indicators have generally improved, but readmission rates have not improved significantly.

***Providers' access to capital*—**Access to capital has been volatile in recent years but appears adequate at this time. As inpatient use and hospital occupancy declined, hospitals slowed the pace of new construction and shifted spending toward outpatient facilities and remodeling existing inpatient facilities.

***Medicare payments and providers' costs*—**Overall aggregate Medicare margins improved from –7.1 percent in 2008 to –4.5 percent in 2010. The margins improved for two reasons. First, hospitals faced a decline in their profitability and investment portfolios in the fall of 2008. After the decline in the economy, they constrained cost growth in 2009 and 2010. Second, they made changes in clinical documentation and coding of patients' diagnoses on hospital claims in response to the adoption of MS–DRGs, which increased hospital payments from 2008 through 2010. Starting in 2011, CMS made two payment adjustments related to overpayments from documentation and coding changes. First, CMS adjusted payments in 2011 and 2012 to recover overpayments made in 2008 and 2009. Second, CMS reduced the 2012 update to begin to reduce further overpayments. While the documentation and coding changes contributed to margins improving from 2008 to 2010, changes put in place to recover these overpayments will cause margins to decline from –4.5 percent in 2010 to a projected margin of roughly –7 percent in 2012.

- ***Efficient providers*—**While Medicare payments are currently less than costs for the average hospital, a key question is whether current Medicare payments are adequate to cover the costs of efficient providers. To explore this question, we have examined financial outcomes for a set of hospitals that consistently perform relatively well on cost, mortality, and readmission measures. We find that Medicare payments more than covered the costs of the median efficient hospital, with the median efficient hospital generating a 4 percent Medicare margin in 2010.

- ***Rural hospital payments and costs*—**In the 1990s, rural hospitals generally had lower Medicare margins due to Medicare payment rules that tended to favor urban providers. After a series of changes in the law (some of which were recommended by the Commission), rural payments increased and rural Medicare margins have exceeded urban margins for the past seven years. Looking forward, we expect the differential between rural and urban margins to grow due to the introduction of a new temporary low-volume adjustment in 2011 and 2012.

Addressing differences in payment rates across sites of care

In an effort to move toward paying the same rates for the same service across different sites of care, we are recommending equalizing the rate paid for E&M visits in OPDs and freestanding physician offices. Under current policy, Medicare pays 80 percent more for a 15-minute office visit in an OPD than in a freestanding physician office. This payment difference creates a financial incentive for hospitals to purchase freestanding physicians' offices and convert them to OPDs without changing their location or patient mix. Indeed, E&M clinic visits provided in OPDs increased 6.7 percent in 2010, potentially increasing Medicare program and beneficiary expenditures without any change in patient care. To remove this distortion in the payment system, the Commission recommends making payments for E&M visits equal in the physician office and OPD settings. To smooth the transition to lower rates for E&M visits, rates should be equalized over a three-year transition period. During the transition, we recommend limiting the policy's impact on providers serving a disproportionate share of poor patients and requiring the Secretary of Health and Human Services to study the policy's impact on low-income patients' access to ambulatory physician and other health professional services. In the future, we plan to examine payment differentials between OPDs and physician offices for other services. ■

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

Hospital services	2005	2009	2010	Average annual change 2005–2009	Change 2009–2010
Inpatient services					
Total FFS payments (in billions)	$106	$113	$116	1.5%	2.7%
Payments per FFS enrollee	2,972	3,290	3,360	2.6	2.1
Outpatient services					
Total FFS payments (in billions)	27	34	37	5.9	8.8
Payments per FFS enrollee	811	1,097	1,181	7.8	7.7
Inpatient and outpatient services					
Total FFS payments (in billions)	133	147	153	2.5	4.1
Payments per FFS enrollee	3,783	4,387	4,541	3.8	3.5

Note: FFS (fee-for-service). Reported hospital spending includes all hospitals covered by Medicare's inpatient prospective payment system along with critical access hospitals. Maryland hospitals are excluded. Fiscal year 2010 payments include partial imputation to account for hospitals that typically do not submit their cost reports to CMS before CMS makes the most recent year available to the public. Although the number of Medicare beneficiaries grew significantly from 2005 to 2009, the number of FFS beneficiaries declined over that time due to the shift of beneficiaries to the Medicare Advantage program. The number of FFS beneficiaries increased slightly from 2009 to 2010. For the purposes of calculating payments per beneficiary we identified populations of beneficiaries eligible for inpatient (Part A) and outpatient (Part B) coverage and excluded enrollees in Maryland.

Source: MedPAC analysis of CMS hospital cost reports and MedPAR files.

Background

Acute care hospitals provide Medicare beneficiaries with inpatient care for the diagnosis and treatment of acute conditions and manifestations of chronic conditions. They also provide ambulatory care through outpatient departments (OPDs) and emergency rooms. In addition, many hospitals provide home health, skilled nursing facility, psychiatric, and rehabilitation services. To be eligible for Medicare payment, short-term general and specialty hospitals must meet the program's conditions of participation and agree to accept Medicare rates as payment in full.

Medicare spending on hospitals

In 2010, Medicare paid acute care hospitals approximately $116 billion for fee-for-service (FFS) inpatient care and $37 billion for FFS outpatient care (Table 3-1). Acute inpatient and outpatient services represented more than 92 percent of Medicare FFS spending on acute care hospitals. From 2009 to 2010, Medicare inpatient spending per FFS beneficiary—including spending at critical access hospitals (CAHs)—grew, on average, by 2.1 percent, and outpatient spending per FFS beneficiary grew by 7.7 percent. Growth in the overall payment per FFS beneficiary was 3.5 percent; this amount was slightly below the average rate of growth of 3.8 percent from 2005 to 2009. The higher growth in outpatient spending reflects the ongoing shift of services from the inpatient to the outpatient setting, changes in available technology, and the growth in hospital-owned physician practices, which bill for physician office visits as outpatient services.

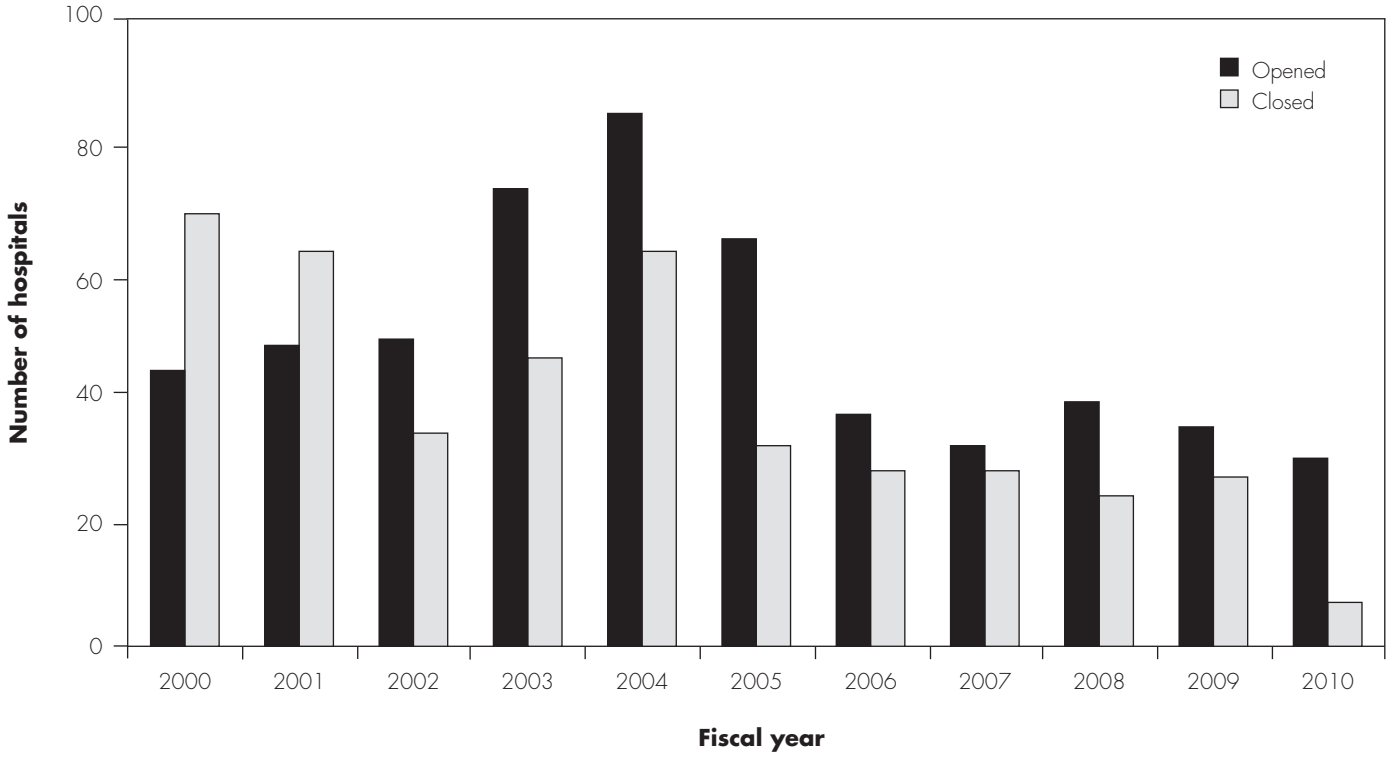
Medicare's payment systems for inpatient and outpatient services

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

Acute inpatient payment system

Medicare's acute inpatient PPS (IPPS) pays hospitals a predetermined amount for most discharges. The payment rate is the product of a base payment 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

FIGURE 3–1 More hospitals opened than closed each year from 2002 to 2010



Note: Hospitals refers to general short-term acute care hospitals. The Commission's reported number of open and closed hospitals can change from year to year because some hospitals may enter Medicare as acute care facilities but later convert to more specialized types of facilities, such as long-term care hospitals.

Source: MedPAC analysis of CMS's Provider of Service file, Inpatient Prospective Payment System Final Rule Impact file, and hospital cost reports.

account for differences in area wages. Payment rates are updated annually.

In 2008, CMS implemented a new clinical categorization system called Medicare severity–diagnosis related groups (MS–DRGs). The MS–DRG system classifies patient cases in 1 of 749 groups, which reflect similar principal diagnoses, procedures, and severity levels. The new severity levels are determined according to whether patients have a complication or comorbidity (CC) associated with the base DRG (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/MedPAC_Payment_Basics_11_hospital.pdf.

Hospital outpatient payment system

The outpatient PPS (OPPS) pays hospitals a predetermined amount per service. CMS assigns each outpatient service to 1 of approximately 850 ambulatory payment classification (APC) groups. Each APC has a relative weight based on its median cost of service compared with the median cost of a midlevel clinic visit. A conversion factor translates relative weights into dollar payment amounts. A more detailed description of the OPPS can be found at: http://www.medpac.gov/documents/MedPAC_Payment_Basics_11_OPD.pdf.

Are Medicare payments adequate in 2012?

To judge whether payments for 2012 are adequate to cover the costs efficient hospitals incur, we examine several indicators of payment adequacy. We consider beneficiaries' access to care, hospitals' access to capital, changes in the quality of care, 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 margins on Medicare patients remain negative for most hospitals.

Beneficiaries' access to care: Access remained positive, as hospital capacity generally grew over the period reviewed

We assess beneficiaries' access to care by tracking the number of hospitals participating in the Medicare program, the volume of services received, and the proportions of hospitals offering certain specialty services. In general, we find that access to hospital services is good and has expanded from the previous year.

More hospitals opened than closed

The number of acute care hospitals entering the Medicare program exceeded the number of hospitals exiting the program in 2010, and inpatient bed capacity remained relatively flat. In 2010, 30 acute care hospitals opened and 7 closed (Figure 3-1). It was the ninth consecutive year hospital openings exceeded closings. Approximately 4,800 short-term acute care hospitals participated in the Medicare program in 2010, of which about 1,300 were CAHs (Flex Monitoring Team 2011).

Volume of services: Outpatient grew, inpatient declined

From 2004 to 2010, the volume of Medicare outpatient services per FFS beneficiary increased at roughly a 4.2 percent average annual rate for a cumulative increase of 28 percent over the seven-year period (Figure 3-2). During the same period, Medicare inpatient discharges per FFS beneficiary declined at roughly a 1.0 percent average annual rate, a cumulative reduction of about 6 percent. To examine changes in volume of services, we used the number of discharges per FFS beneficiary as an indicator of inpatient volume and measured outpatient volume by the number of services per FFS beneficiary. The measurement units differ because the IPPS generally pays for a bundle of services, while the OPPS generally pays for individual services.[1]

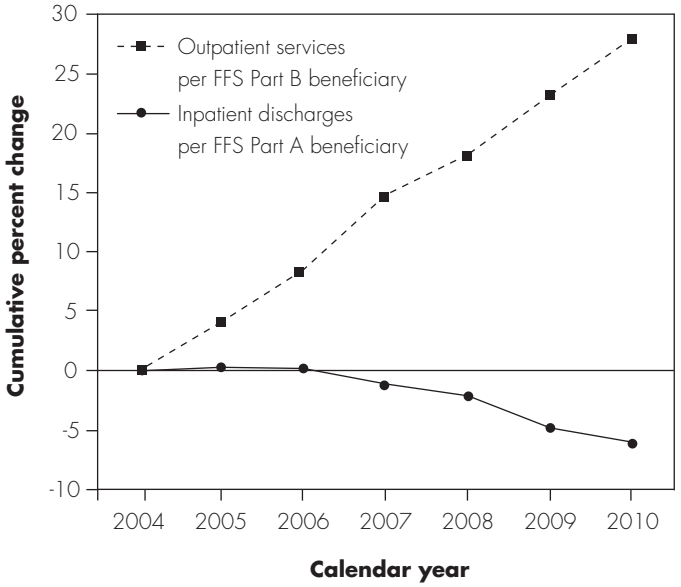
The rapid growth in outpatient services coupled with the decline in inpatient services is consistent with a shift in site of service from inpatient care units to OPDs. Many surgical procedures, such as pacemaker implantation, that were once performed solely as an inpatient service are now often done in an outpatient setting as well.

However, growth in the number of outpatient services is not purely a shift in settings from inpatient to outpatient care. About 20 percent of the increase in volume in OPDs is due to increased evaluation and management ("office") visits in OPDs. This increase could be a result of hospitals' acquisition of physician practices, which are then deemed part of the OPD. Such acquisitions can result in increased Medicare payments for office visits, even if the care provided does not change. In a freestanding practice, Medicare pays a physician based on the physician fee schedule, which includes a professional component (for the value of the physician's work), a practice expense component, and a professional liability insurance component. For an office visit in a hospital's OPD, Medicare pays a facility fee to the hospital and a reduced fee for the physician's services. The combined fees paid for visits to hospital-based practices can be 80 percent greater than rates paid to freestanding practices. In 2010, the volume of visits to the higher paid outpatient-based practices owned by hospitals grew by 6.7 percent, while visits to the lower paid freestanding practices grew by less than 1 percent.[2] This finding suggests that the differential in payment rates is contributing to a shift in the site of service and underscores the need to equalize payment rates across sectors for office visits.

The shift away from the inpatient setting is reflected in declining inpatient occupancy rates and a decline in the

FIGURE 3–2

From 2004 to 2010, Medicare outpatient services grew while hospital inpatient discharges per FFS beneficiary declined



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

Source: MedPAC analysis of MedPAR and hospital outpatient claims data from CMS.

TABLE 3–2 **Shares of urban and rural hospitals offering specific services, 2005–2010**

Type of service	Urban		Rural	
	Percentage of hospitals in 2010	Percentage point change 2005–2010	Percentage of hospitals in 2010	Percentage point change 2005–2010
High-tech services				
Robotic surgery	36%	22	2%	1
PET or PET/CT scanner	60	10	16	4
MRI	93	3	85	9
Core services				
Palliative care	54	9	22	2
Indigent care clinic	37	9	11	4
Orthopedics	87	5	60	8
Open heart surgery	48	5	4	1
Cardiac catheterization	63	4	7	0
Oncology	76	1	39	2
Geriatrics	53	1	32	–1
Trauma center	46	1	37	4
Post-acute services				
Skilled nursing	35	–6	43	–3
Home health	61	–3	56	–5

Note: CT (computed tomography). The American Hospital Association's annual survey generally has overall response rates of more than 80 percent, but response rates vary by line of service.

Source: American Hospital Association annual survey of hospitals.

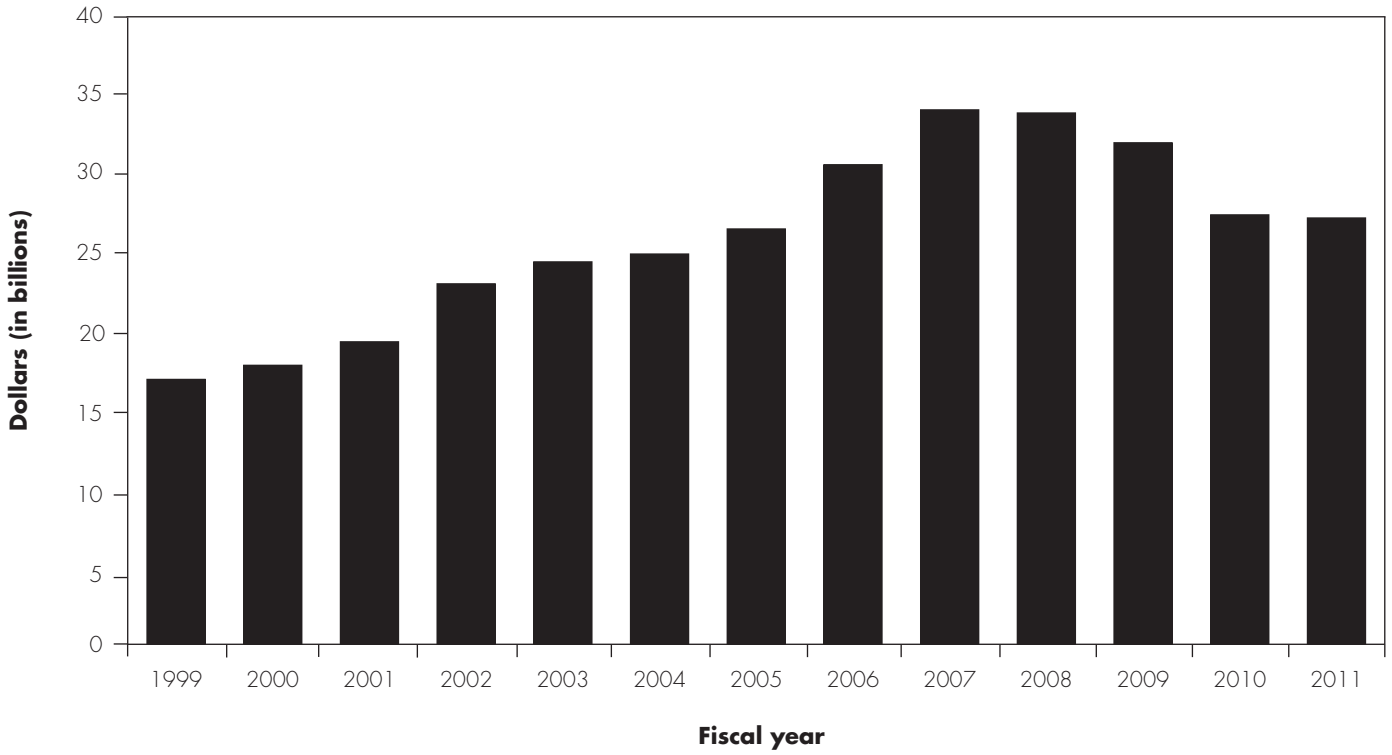
share of beneficiaries using inpatient services. From 2004 to 2010, the overall hospital bed occupancy rate declined 2 percentage points, from approximately 68 percent to 66 percent.[3] In addition, the share of Medicare FFS beneficiaries using inpatient hospital services declined 2 percentage points, from 22 percent to 20 percent from 2006 to 2010. Similarly, from 2006 to 2010, the number of Medicare inpatient bed days per beneficiary declined from 1.9 in 2006 to 1.7 bed days per beneficiary in 2010. For this utilization indicator, we observed wide variation across states. Oregon, Idaho, and Utah had consistently low rates of inpatient utilization (approximately 1 inpatient day per beneficiary) while Mississippi, Kentucky, and New York had consistently high inpatient utilization rates (approximately 2 inpatient days per beneficiary).

Hospitals have continued to expand the scope of services they offer. Our analysis of 50 specialized hospital services from 2005 to 2010 found that the share of hospitals and their affiliates providing each of these services increased for most services.[4] New technologies, such as robotic surgery and PET services, were among those that grew most rapidly. Core hospital services, such as trauma care, cardiac services, and oncology, generally were offered by more hospitals in 2010 than in 2005. Post-acute care was the only area in which the share of hospitals offering a type of service declined by more than 1 percent. Rural hospitals tended to offer fewer high-tech services but have been expanding their imaging and orthopedic surgery offerings (Table 3-2). The change from 2009 to 2010 was similar to the average change for the six-year period.

Access to capital: Access remains positive, as the industry focuses on shifting capacity to the outpatient setting

In general, access to capital appears adequate. Access to capital allows hospitals to maintain and modernize their facilities. If hospitals were unable to access capital, it might in part reflect problems with the adequacy of

FIGURE 3–3 **Spending on hospital construction slowed after 2008 but remains high**



Note: Spending is for nonfederal hospital construction and deflated to September 2011 dollars using McGraw-Hill's construction cost index. Data for 2011 are an annualized estimate based on data for the first five months of 2011.

Source: Census Bureau. http://www.census.gov/const/www/c30index.html.

Medicare payments, as Medicare provides about 30 percent of hospital revenues.

After the financial difficulties of 2008, hospitals began controlling costs in 2009 in part by reducing their capital expenditure plans (Fitch Ratings 2011, Moody's Investors Service 2011, Standard & Poor's 2011). For a sample of nonprofit hospitals, Fitch Ratings found that capital expenditures as a share of total revenue declined from 7.9 percent of revenues in 2008 to 6.6 percent in 2009 to 5.8 percent in 2010. Using a different methodology, Moody's concluded that in 2010 hospitals spent just slightly more than would be necessary to maintain or replace their existing level of capacity: specifically, that median capital spending declined from 1.6 times depreciation expenses in 2008 to 1.2 times depreciation in 2009 to 1.1 times depreciation in 2010. If a hospital were to merely maintain its existing capacity in a given year, the ratio would be approximately 1.0. Similarly, after reaching a peak of $34 billion in 2008, spending on hospital construction moderated to just over $27 billion by 2010 (Figure 3-3). Projects for 2010 and 2011 focused on outpatient services, such as emergency departments, imaging centers, and cancer centers, or involved the installation or modernization of health information technology systems (Carpenter 2011, Robeznieks 2010, Robeznieks 2011). This allocation of capital spending is consistent with the declines in inpatient occupancy discussed earlier.

Quality of care: Overall, quality indicators show improvement

Our analysis of several inpatient quality-of-care indicators shows generally positive trends. We use five of the inpatient quality indicators (IQIs), developed and maintained by the Agency for Healthcare Research and Quality (AHRQ), to measure in-hospital and 30-day postdischarge mortality rates (Agency for Healthcare Research and Quality 2007a). We also analyze six of the AHRQ patient safety indicators (PSIs), which measure the frequency of potentially

preventable adverse events that can occur during an inpatient stay, such as the development of postoperative blood clots or deaths from treatable surgical complications (Agency for Healthcare Research and Quality 2007a, Agency for Healthcare Research and Quality 2007b). To assess sector-wide quality trends, we calculate risk-adjusted rates for these measures across all IPPS hospitals for a rolling four-year period and determine whether there was a statistically significant change in each rate from the first year to the fourth year of the period. We use the IQIs and PSIs that AHRQ has concluded have the strongest base of clinical and statistical evidence (Agency for Healthcare Research and Quality 2009a). We calculate the IQIs and PSIs using MedPAR inpatient hospital data files for 2007 through 2010 and version 4.1b of the AHRQ mortality and PSI software (Agency for Healthcare Research and Quality 2009b).

Most in-hospital and 30-day mortality rates declined

In-hospital and 30-day postdischarge mortality rates, as measured by the AHRQ IQIs, declined by a statistically significant amount for four of the five conditions we monitor. From 2007 through 2010, risk-adjusted in-hospital and 30-day mortality rates declined by a statistically significant amount for acute myocardial infarction, congestive heart failure, stroke, and pneumonia as measured by the AHRQ methods. The in-hospital and 30-day mortality rate for patients admitted with hip fracture also declined but not by a statistically significant amount.

Patient safety indicators improved

Rates improved from 2007 to 2010 for five of the six PSIs we analyzed, including iatrogenic pneumothorax, postoperative respiratory failure, postoperative pulmonary embolism or deep-vein thrombosis, postoperative wound dehiscence, and accidental puncture or laceration. The PSI that did not improve from 2007 to 2010 was the rate of deaths among surgical inpatients with treatable serious complications. Caution should be used in interpreting all the reported PSI rates. The PSIs measure rates of very rare events, and it is difficult to detect statistically significant changes in these indicators. In addition, AHRQ and other researchers have found that changes over time in providers' coding practices and variations among providers in how patient safety events are captured and reported can affect the accuracy and reliability of some of the PSIs (Agency for Healthcare Research and Quality 2007a, Agency for Healthcare Research and Quality 2007b, Agency for Healthcare Research and Quality 2009a, Rosen et al. 2012). Nonetheless, we monitor sector-level trends in selected PSIs as indicators, though not definitive evidence, of increases and decreases in rates of harm to patients resulting from their medical care that can be avoided if providers adhere to known clinical safety practices. In this light, the recent decreases in several of these indicators are encouraging, particularly given recent evidence that, overall, hospitals treating Medicare beneficiaries have significant room for improvement in patient safety (Landrigan et al. 2010).

Readmission rates

In 2010, CMS reported on the Hospital Compare website that the medians for hospitals' 30-day readmission rates were 18 percent for pneumonia, 20 percent for acute myocardial infarction, and 25 percent for heart failure (Department of Health and Human Services 2010). Those rates have not changed significantly over the past five years (Centers for Medicare & Medicaid Services 2010). However, the literature suggests that financial incentives can induce changes in quality and that progress can be made with readmissions (Jha et al. 2010). To stimulate greater improvement in readmission rates, the Commission recommended that a financial penalty be placed on hospitals with high readmission rates, and the Congress enacted a financial penalty for hospitals with above-average risk-adjusted rates of readmissions. CMS will begin to apply the penalty in fiscal year 2013 (see text box, p. 57, for details).

Value-based incentive payments

As mandated by the Patient Protection and Affordable Care Act of 2010 (PPACA), CMS released final regulations in 2011 for the hospital value-based purchasing (VBP) program, which will start in fiscal year 2013. For the first year of the VBP program, CMS will reduce all DRG payments to about 3,100 participating hospitals by 1.0 percent to create the pool of funds from which value-based (i.e., performance-based) incentive payments will be made. CMS estimates that this payment adjustment will total $850 million in fiscal year 2013. As required by law, the VBP program must be budget neutral, meaning that the total amount of withheld payments must be redistributed to hospitals participating in the VBP program. In 2013, each hospital's performance score will be based on 12 process measures and 1 patient experience measure (Hospital Consumer Assessment of Healthcare Providers and Systems); in fiscal year 2014, CMS will add three outcome measures (condition-specific mortality

rates) to the VBP program. The agency had proposed to also add AHRQ PSI and IQI composite measures, several hospital-acquired condition measures, and a per beneficiary spending measure but decided to drop those measures at least for fiscal year 2014 (Centers for Medicare & Medicaid Services 2011).

In 2008, the Commission suggested measures that should be included in the hospital VBP program, including a robust set of patient safety measures and risk-adjusted outcome measures, such as mortality rates and efficiency measures (Medicare Payment Advisory Commission 2008a). The measures used in the VBP program, and the weighting that different measure domains contribute to a hospital's performance score, should evolve to reflect the program's quality improvement priorities. This progression would involve giving more weight to patient safety and outcome measures. We also have some technical concerns about the measures proposed (see text box, p. 57).

Medicare payments and providers' costs

In assessing payment adequacy, the Commission also considers the estimated relationship between Medicare payments for and hospitals' costs of furnishing care to Medicare patients. We assess the adequacy of Medicare payments for the hospital as a whole, and thus our primary indicator of the relationship between payments and costs is the overall Medicare margin. This margin includes all payments and Medicare-allowable costs attributable to Medicare patients for the services hospitals provide plus graduate medical education payments and costs.

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 when an in-hospital SNF allows hospitals to safely discharge patients sooner from their acute care beds, thus reducing the cost of the inpatient stay. In addition, the precise allocation of costs presents challenges. For example, under current cost accounting rules, hospitals may allocate too much of their administrative costs to a home health subsidiary, which can distort the apparent profit margins of both the home health agency and the hospital's other service lines. By combining data for all major services, we can estimate Medicare margins without the influence of how overhead costs are allocated.

Our hospital update recommendations below apply to hospital inpatient and outpatient payments. Payments for the other distinct units of the hospital, such as SNFs, are addressed by our update recommendations for those payment systems, which apply to both hospital-based and freestanding providers.

Rise in payments per discharge from 2008 to 2010 was partly due to documentation and coding changes

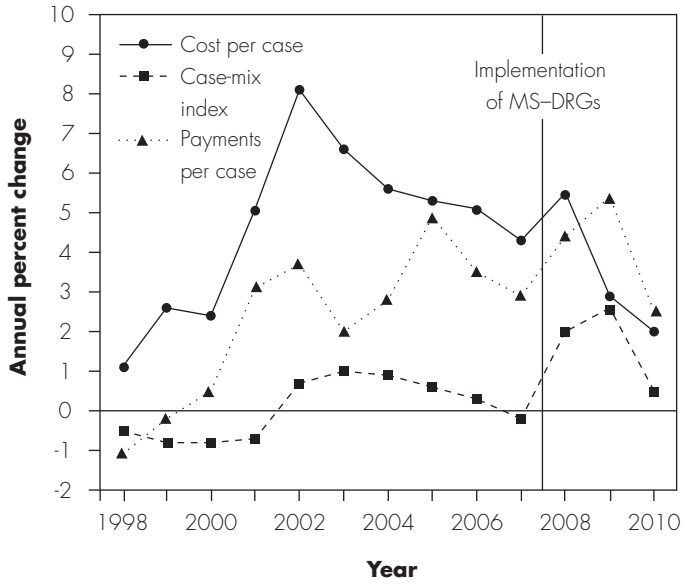
Growth in Medicare hospital payments per discharge under the IPPS depends primarily on three factors: (1) annual payment updates, (2) changes in reported case mix, and (3) policy changes that are not implemented in a budget-neutral manner. In 2010, IPPS hospitals received a 2.1 percent payment update to operating rates and a 1.4 percent update to capital rates. Inpatient payments per case, however, increased 2.5 percent, about 0.5 percentage point more than the update. Per case payments increased faster than the update in 2010 primarily due to increases in reported case mix. Growth in reported case mix was an even bigger factor in the high per case payment increases in 2008 and 2009, when the reported case-mix index (CMI) increased 2.0 percent and 2.6 percent, respectively (Figure 3-4, p. 56).

Much of the increase in reported case mix that occurred from 2008 through 2010 was due to the diagnosis documentation and coding changes hospitals made after adoption of the new MS–DRGs in 2008. Implementation of MS–DRGs in 2008 gave hospitals an incentive to change diagnosis documentation and coding to more fully account for each patient's severity of illness. While documentation and coding changes help hospitals measure patient severity more accurately, they also increase the CMI and payments without real increases in patient severity or the resources hospitals must use to furnish inpatient care. The large increase in the CMI (2.0 percent, 2.6 percent, and 0.5 percent, respectively) that occurred in the 3 years after implementation of MS–DRGs in 2008 followed a decade in which the CMI declined in 5 of the 10 years and never grew by more than 1 percent in any one year (Figure 3-4).

Analyses by both CMS and the Commission have concluded that the increases in case mix reported from 2008 through 2010 resulted from hospitals' documentation and coding rather than from an actual shift toward patients whose care required greater resources (Medicare Payment Advisory Commission 2010a). This finding explains how

FIGURE 3–4

Changes in Medicare payments, costs, and case mix, 1998–2010



Note: MS–DRG (Medicare severity–diagnosis related group). Changes in case mix are based on national aggregate case-mix indexes calculated for the cohorts of hospitals included in the inpatient prospective payment system (IPPS) in each pair of years. Case-mix index is computed for each year's inpatient claims using the Medicare DRG grouper and weights in place for that year.

Source: MedPAC analysis of Medicare cost reports and annual MedPAR claims for IPPS hospitals for fiscal years 1997–2010 from CMS.

hospitals could record high case-mix growth from 2008 to 2010 without a corresponding increase in cost growth (Figure 3-4). In fact, the rate of cost growth declined in 2009 and 2010 for the reasons discussed. We estimate that documentation and coding improvements led to more than $6 billion of additional payments in 2008 and 2009; CMS has been recovering these overpayments in 2011 and 2012. However, at least another $11 billion in overpayments have been accumulating in 2010, 2011, and 2012 that CMS cannot recover because of a lack of authority under current law. (For a more detailed description of this issue, see the Commission's comment letter on the 2012 proposed rule, June 17, 2011, at http://medpac.gov/documents/06172011_FY12IPPS_MedPAC_COMMENT.pdf.)

Hospital cost increases fell to their lowest level in a decade in 2010

A combination of low input price inflation and financial pressure on hospitals resulted in a continued slowing of hospital cost growth in 2010. Medicare inpatient costs per case rose only 2.0 percent in 2010, down from 2.9 percent in 2009. This rate is the slowest rate of increase since 1998 and less than half any rate since 2001. Growth in outpatient costs also slowed, increasing only 0.1 percent per service unit in 2010 (Table 3-3).

The lower cost growth in 2009 and 2010 was partly due to lower input price inflation facing hospitals; the 2.1 percent increase in 2010 was the lowest rate of increase in input prices in more than a decade. The slower growth in hospital input prices reflects lower general economy-wide inflation for goods and services and slower wage growth in the economy and the hospital industry. Compensation costs for hospital workers, for example, increased on average 2.0 percent in 2010, the smallest increase in more than a decade (Bureau of Labor Statistics, http://www.bls.gov/web/eci/echistrynaics.pdf). Hospitals may also have worked to control cost growth in response to the recession and difficult year they had financially in 2008, when the industry experienced historically low total all-payer margins (1.8 percent) and had steep declines in their balance sheets.

Lower cost growth also could be the result of a less complex mix of patients, as the overall mix of services for both Medicare inpatient and outpatient services declined. Although the reported inpatient CMI increased, after accounting for documentation changes, inpatient case mix declined slightly as some high-cost surgical services shifted from the inpatient setting to outpatient settings. Outpatient service mix also declined as physician office visits, a relatively inexpensive service, became a larger share of overall outpatient services, resulting in cost growth per service of 0.1 percent.

TABLE 3–3

Cost growth slowed in 2010

	Annual cost growth			
Cost measure	**2007**	**2008**	**2009**	**2010**
Inpatient costs per discharge	4.3%	5.5%	2.9%	2.0%
Outpatient costs per service	5.6	5.1	4.8	0.1*
Weighted average	4.5	5.4	3.3	1.6
Input price inflation	3.4	4.3	2.6	2.1

Note: Cost growth numbers are not adjusted for reported changes in case mix. Analysis excludes critical access hospitals and Maryland hospitals. The weighted average is based on services provided to Medicare patients in hospitals, including costs for inpatient, outpatient, skilled nursing facility, inpatient rehabilitation, and home health services.
*Cost growth was 1.7 percent if adjusted for complexity of services provided.

Source: MedPAC analysis of Medicare Cost Report and claims files from CMS.

Mortality and readmission measures: Considerations and challenges

Mortality and readmissions are outcomes of particular importance to Medicare beneficiaries, providers, and policymakers. Commission staff recently convened two expert panels on these outcome measures: the first, to understand how providers, commercial health plans, and other payers use mortality and readmission measures; the second, to understand the technical properties of specific measures.

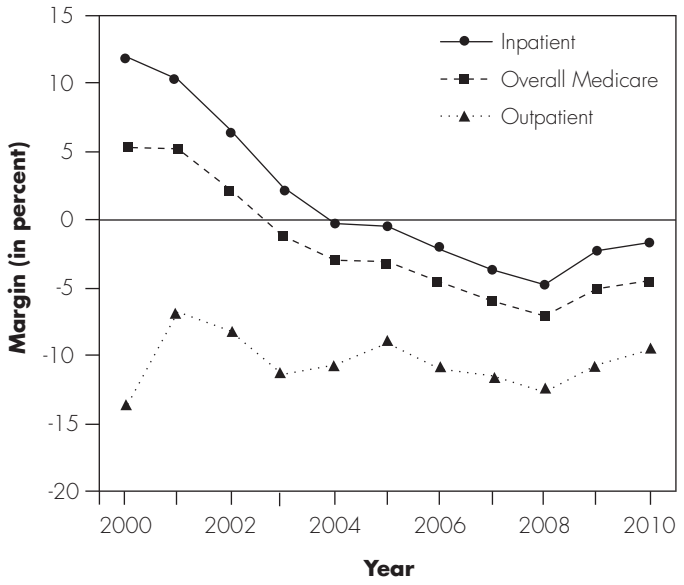
The predominant view from the first panel was that providers and payers place great value on these risk-adjusted outcome measures and use them to motivate change within their organizations to improve quality. For example, several panelists reported using mortality measures to focus on specific clinical conditions or hospital units with high mortality, guide implementation of corrective actions, and improve performance over time. They also saw value in examining trends in outcomes without risk adjustment to confirm that risk-adjusted outcome trends are not being driven by coding. However, mortality measurement is complicated by the need to identify patients entering hospitals for palliative care or in anticipation of death. Panel members noted that do-not-resuscitate orders are not a sufficient indicator of patients' objectives for entering hospitals given that these orders are often issued well into a hospital stay. When examining readmission metrics, the main challenge for the hospital systems was a lack of data on patients who were readmitted to hospitals outside their own system.

The second panel discussed the statistical question of how to make reliable estimates for hospitals with a small number of cases. CMS's approach uses a "random effects" method in which the estimated mortality rates and readmission rates are blended toward the national mean before being reported on the Medicare Hospital Compare website. Ideally, the goal is for observed differences in rates to represent real differences in outcomes and not be subject to random statistical variation from a small number of observations. To minimize the chance of categorizing a hospital as a poor or good performer due to random variation, CMS presents data for each hospital that blends the experience of the subject hospital and the average experience for all hospitals in the country. The smaller the hospital, the less its actual performance information is used and the more the national average is used. "In essence, the predicted mortality rate for a hospital with a small number of cases is moved toward the overall U.S. national mortality rate for all hospitals" (Centers for Medicare & Medicaid Services 2011). For all six measures reported on Hospital Compare, more than 90 percent of hospitals are reported to be indistinguishable from the national average. For example, readmission rates for more than 97 percent of hospitals are reported as "no different than the U.S. national rate" for acute myocardial infarction readmissions. As a result, beneficiaries have little useful information on hospital performance and hospitals have little information on where they stand relative to other hospitals and where they could improve. Most panel members agreed that CMS's measures underestimate differences among groups of providers when true differences exist. For that reason, they concluded that the Hospital Compare data should not be used as an input into research studies that compare groups of hospitals. When groups of data are being evaluated, the number of observations is large enough to let the data stand on their own rather than blending the data with national average data. We concur and use metrics developed by the Agency for Healthcare Research and Quality and 3M Health Information Systems for measuring mortality and readmission rates when comparing groups of providers. Questions remain about what methods would be best for reporting an individual hospital's performance. ■

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 exclude CAHs, which are 1,300 rural hospitals paid based on their incurred costs. We also exclude hospitals in Maryland, which are excluded from the IPPS and paid under a state-wide all-payer prospective payment system. The overall Medicare margin trended downward from 1997 through 2008 and has been negative since 2003 (Figure 3-5, p. 58).[5] From 2008 to 2010, however, the overall Medicare margin went up from –7.1 percent in

FIGURE 3–5 **Hospital Medicare margins: Inpatient, outpatient, and overall**



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. Medicare inpatient margins include services covered by the acute inpatient prospective payment system. Overall Medicare margin includes acute inpatient, outpatient, hospital-based home health and skilled nursing facility (including swing bed), and inpatient psychiatric and rehabilitation services, plus graduate medical education.

Source: MedPAC analysis of Medicare Cost Report file from CMS.

2008 to –4.5 percent in 2010. The overall Medicare margin is dominated by inpatient and outpatient services, which represent 92 percent of hospitals' Medicare revenues. Both inpatient and outpatient margins improved in 2010, although both remained negative. Between 2008 and 2010, the margin for Medicare inpatient services rose from –4.8 percent to –1.7 percent, and the margin for Medicare outpatient services went up from –12.7 percent to –9.6 percent (Figure 3-5). The increase in inpatient and overall margins in 2009 was due primarily to increases in reported case mix; the increase in 2010 was due primarily to lower cost growth and continued increases in reported case mix for inpatients and increases in the volume of outpatient services.[6] Outpatient margins improved as a result of cost growth being lower than the hospital update in 2010.

2010 Medicare margins by hospital type

We further examined the overall aggregate Medicare margin by hospital type. In 2010, the –2.6 percent overall Medicare margin for rural PPS hospitals was higher than the –4.8 percent margin for urban hospitals (Table 3-4). Overall Medicare margins at for-profit hospitals remained above those at nonprofit hospitals. In 2010, for-profit hospitals' overall Medicare margins were 0.1 percent compared with –5.7 percent at nonprofit hospitals. For-profit hospitals also had positive inpatient margins (1.3 percent) and positive outpatient margins (0.1 percent) in 2010 (not shown).

In 2010, the overall Medicare margin was –0.2 percent for major teaching hospitals, increasing from a low point of –1.9 percent in 2008. Major teaching hospitals have higher overall Medicare margins than the average IPPS hospital in large part due to the extra inpatient payments they receive through the indirect medical education and disproportionate share adjustments in the IPPS. A Commission analysis shows that both of these adjustments provide payments that are substantially larger than the estimated effects that teaching intensity and service to

TABLE 3–4 **Overall Medicare margins by hospital group**

Hospital group	2006	2007	2008	2009	2010
All hospitals	–4.6%	–6.0%	–7.1%	–5.1%	–4.5%
Urban	–4.7	–6.1	–7.3	–5.2	–4.8
Rural					
Excluding CAHs	–4.4	–5.1	–6.0	–4.4	–2.6
Including CAHs	–3.3	–3.9	–4.4	–3.3	–1.7
Nonprofit	–5.4	–6.7	–8.2	–6.3	–5.7
For profit	–2.4	–3.5	–2.6	–0.1	0.1
Government*	N/A	N/A	N/A	N/A	N/A
Major teaching	2.2	0.1	–1.9	–0.5	–0.2
Other teaching	–5.1	–6.3	–7.4	–5.1	–4.5
Nonteaching	–8.2	–9.2	–10.0	–7.8	–7.0

Note: CAH (critical access hospital), N/A (not applicable). Data are for all hospitals covered by the Medicare acute inpatient prospective payment system in 2010 and 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 bed), home health, and inpatient psychiatric and rehabilitation services, plus graduate medical education. The rural margins are shown with and without CAHs. 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, so their margins are not necessarily comparable.

Source: MedPAC analysis of Medicare Cost Report file, MedPAR, and impact file from CMS.

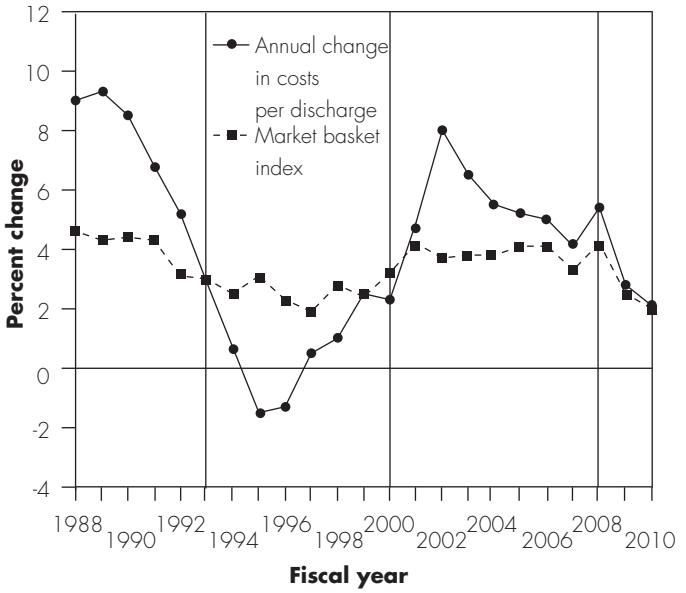
low-income patients have on hospitals' average costs per discharge. In June 2010, the Commission made recommendations to use teaching hospital payments as incentives to train physicians for the skill sets needed by future Medicare beneficiaries (Medicare Payment Advisory Commission 2010b). Nonteaching hospitals, most of which are in urban areas, had the lowest Medicare margins of any hospital group, –7.0 percent in 2010.

Historically, other hospital-based units—SNFs, home health agencies, inpatient rehabilitation facility units, and inpatient psychiatric units—have had lower Medicare margins than their freestanding counterparts. However, hospitals with these units have higher overall Medicare margins than hospitals without them. In aggregate, hospitals with some type of post-acute care unit in 2010 had higher overall Medicare margins than hospitals that had no post-acute units, –4.0 percent compared with –7.4 percent. The higher margins for hospitals with post-acute providers could in part reflect the ability of hospitals with an in-hospital SNF or inpatient rehabilitation facility to discharge their patients quicker and improve their inpatient margins. For example, in 2010, the overall Medicare margin for hospitals with a SNF unit was –3.9 percent compared with –4.6 percent for hospitals without a SNF unit—despite the average –67.0 percent margin for hospital-based SNFs. A Commission analysis has shown that hospitals are able to cover their total direct costs for patients who use both inpatient and SNF services. The effect that one service line can have on another service line is the reason we examine hospitals' overall Medicare margins rather than focusing on the profitability of each service line.

Cycles of industry-wide financial pressure and cost growth

The level of hospitals' cost growth has cycled up and down through four time periods (Figure 3-6). During the first time period (1988–1992), most insurers paid hospitals on the basis of their charges, with little price negotiation or selective contracting. With limited pressure from private payers, hospital margins on private-payer business increased rapidly. In the second cycle (1993–1999), HMOs and other private insurers began to negotiate more assertively with hospitals, and most insurers switched to paying for inpatient services on the basis of DRGs or flat per diem amounts for broad types of services. Because managed care restrained private-payer payment rates, hospitals were under pressure to constrain their costs and the rate of cost growth was below input price inflation from 1994 through 2000 (Figure 3-6).

FIGURE 3–6 **Cost growth falls in 2009 and 2010 as financial pressure increases**



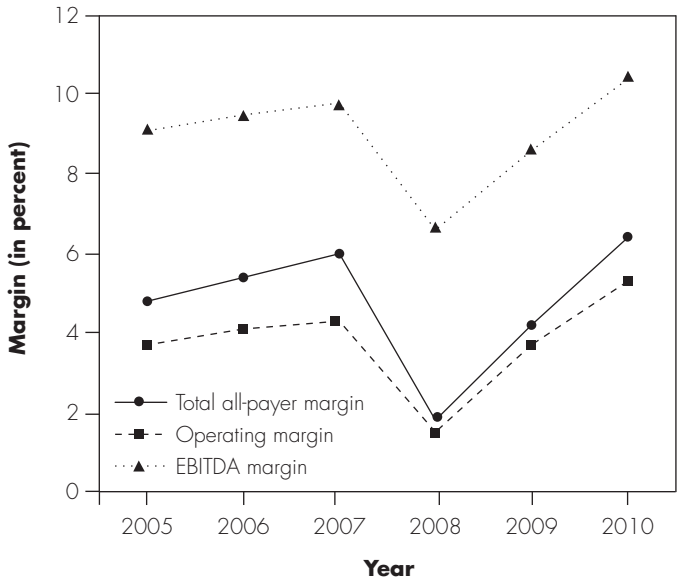
Note: The market basket index measures annual changes in the prices of the goods and services hospitals use to deliver care. Cost growth refers to Medicare inpatient allowable costs per discharge.

Source: Medicare analysis of Medicare Cost Report files from CMS and CMS final rules for the inpatient prospective payment system in years 1988 through 2010.

By 2000, hospitals had regained the upper hand in price negotiations because of hospital consolidations and consumer backlash against managed care. In the third cycle (2000–2007), private-payer payment rates rose rapidly. Because of these high rates, all-payer margins for hospitals reached 6.0 percent in 2007 (Figure 3-7, p. 60). Cost growth was high in 2008 (5.5 percent), as many hospitals started the year with little pressure to constrain costs. However, the picture changed rapidly in September 2008 with the collapse of the bond and stock markets. Total all-payer margins in 2008 fell to 1.8 percent, the lowest level in more than two decades. Operating margins fell, investment income declined dramatically, some defined benefit pension plans needed larger contributions from their hospital sponsors, and the economic outlook was uncertain. This situation created financial pressure to constrain costs. In response, hospitals pulled back from the high levels of capital expenditures and employment

FIGURE 3–7

Hospitals' financial performance has been improving after poor performance in 2008



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

Source: MedPAC analysis of Medicare cost report data from CMS.

growth seen in 2007 and 2008 to more moderate levels in 2009 and 2010. As capital and labor growth slowed, cost growth slowed in 2010 to the lowest level recorded in more than 10 years, reflecting both slowing input price growth and hospitals' efforts to constrain cost growth. For the first time in 10 years, cost growth slowed to the rate of input price inflation (Figure 3-6, p. 59).

Cost growth may start to increase in response to the rebound in hospitals' total all-payer margin in 2010, which reached 6.4 percent, the highest level in more than 20 years, as shown in Figure 3-7. The figure also shows a corresponding increase in operating profits and operating cash flow as measured by earnings before interest, taxes, depreciation, and amortization (EBITDA).[7] This increase suggests that hospitals were under less financial pressure in 2011, and some indicators suggest that hospital hiring and capital costs are increasing. Following a slowdown in hospital employment growth in 2009 and 2010, hospital employment in 2011 grew at 1.8 percent (Bureau of Labor Statistics 2011).

Margins projected to decline in 2012

Growth in inpatient payment rate slows Total inpatient payment rates grew by 1 percent from 2010 to 2012. This relatively low rate of payment growth is due to two adjustments that were made in 2011 and 2012 to correct for overpayments associated with documentation and coding changes. First, CMS reduced payment rates by 2.9 percent in 2011 and left this reduction in place in 2012 to recover overpayments that occurred in 2008 and 2009. Second, CMS reduced payment rates by 2 percent in 2011 to limit future overpayments. These corrections for past overpayments almost fully offset the market basket–based update in hospital inpatient payment rates. Outpatient payments were not affected by the documentation and coding issues, and those payment rates increased by 4.2 percent from 2010 to 2012.

Hospital cost growth may increase We expect the rate of annual cost growth per discharge to increase to roughly 3 percent in 2011 and 2012. Two factors are expected to increase cost growth. First, hospitals' financial performance has rebounded as we discussed earlier. This factor could lead to weaker cost control. We see some evidence of higher cost growth from Census Bureau data through June 2010, from Bureau of Labor Statistics data on employment growth in 2011, and from data from publicly traded hospital systems through the third quarter of 2011. Second, the projected rate of input inflation is expected to rise from close to 2 percent to closer to 3 percent (IHS Global Insight 2011) .

Because costs are growing faster than payment rates, we project the overall Medicare margin to decline from –4.5 percent in 2010 to roughly –7 percent in 2012. This decline should not be unexpected. The increase in margins from 2008 to 2010 was largely due to hospitals' documentation and coding changes, and the expected decline in margins in 2011 and 2012 will reflect the reduction in payment updates required to correct for these documentation and coding changes.

Hospital-level financial pressure and hospital costs

The effect of financial pressure on hospitals' costs is not only evident over time; it is also evident when comparing hospitals facing different levels of financial pressure to constrain costs. Some hospitals have strong profits on non-Medicare services and investments and are under little pressure to constrain their costs. Other hospitals, with thin profits 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 non-Medicare profits (margins) and other factors from 2005 to 2009. 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 2005 to 2009 ended up with lower costs per discharge in 2010 than hospitals under low levels of financial pressure during the same five-year period. For more details on our analytic methods, see our prior year's analysis of payment adequacy (Medicare Payment Advisory Commission 2011c).

Key findings from our analysis of financial pressure on hospitals are:

- *High pressure = low cost:* The 25 percent of hospitals under the most financial pressure had median standardized costs per case that were roughly 10 percent lower than the national median for all 2,893 IPPS hospitals with available data. Because of their lower costs, hospitals under pressure generated a median overall Medicare profit margin of 5 percent, which is 10 percentage points above the national median.
- *Low pressure = high cost:* The 60 percent of hospitals that were under a low level of financial pressure had median standardized costs per case that were 4 percent above the national median. Because of higher costs, they generated a median Medicare profit margin of –9 percent, which is 4 percentage points below the national median.
- *For profits have different incentives:* For-profit hospitals tended to keep their median standardized costs per case at the national median even when they were under little financial pressure. This finding suggests that if both types of hospitals receive high payment rates from private payers, the higher revenues tend to result in higher costs in nonprofit hospitals, but in for-profit hospitals a larger share of the revenue is retained as operating profit for shareholders.

The overarching conclusion is that costs are at least partially under hospitals' control, and those hospitals with the strongest cost control can generate profits treating Medicare patients. This conclusion has been supported in recent literature that finds hospitals in more competitive markets tend to control their costs more than hospitals in less competitive markets (Robinson 2011). The next question is whether some set of hospitals can have both low costs and high-quality outcomes.

Relatively efficient hospitals

The goal of this analysis is to examine payment adequacy for the group of hospitals that perform relatively well on both cost and quality metrics while serving a broad spectrum of patients. The variables we use to identify relatively efficient hospitals are hospital-level mortality rates (AHRQ IQIs), readmission rates (3M Health Information Systems potentially preventable readmissions), standardized inpatient costs per case, providers' payer mix, and the annual level of total FFS Medicare service use per capita in the county where the hospital is located. As data and risk-adjustment methodologies improve, our measures of efficiency will continue to evolve. Our assessment of efficiency is not in absolute terms but rather relative to other IPPS hospitals.

Ideally, we would limit our set of efficient hospitals to those that not only had high in-hospital quality and low unit costs but also low overall costs to the Medicare system during the year. To avoid having hospitals from high-use areas in our analysis, we removed hospitals from the population studied if they were in counties in the top 10 percent of annual Medicare FFS service use per FFS beneficiary.[8] This method reduces the chance that a hospital will appear to have low unit costs of service simply because it is in an area with a high volume of admissions of low-cost patients who could be treated on an outpatient basis.

We further restricted the population of hospitals that we evaluated for efficiency by removing the 10 percent of hospitals with the smallest shares of Medicaid patients. This process reduces the likelihood of including hospitals in our efficient group simply because they had a favorable selection of patients. Our goal in this screening process is to improve our ability to identify hospitals that can provide good outcomes at a reasonable cost while serving a broad spectrum of patients (including Medicaid) without driving up the overall volume of hospital and nonhospital services provided.

Categorizing hospitals as relatively efficient We assigned hospitals to the relatively efficient group or the control group according to each hospital's performance on a set of risk-adjusted cost and quality metrics during the period 2007–2009. We then examined the performance of the two hospital groups in fiscal year 2010.

TABLE 3–5

Performance of relatively efficient hospitals

	Type of hospital	
	Relatively efficient during 2007–2009	**Other hospitals**
Number of hospitals	188	1,943
Share of hospitals	9%	91%
Historical performance, 2007–2009		
Relative risk-adjusted:		
Composite 30-day mortality (AHRQ)	82%	102%
Readmission rates (3M Health Information Systems)	96	100
Standardized cost per discharge	91	102
Performance metrics, 2010		
Relative risk-adjusted:		
Composite 30-day mortality (AHRQ)	83%	101%
Composite 30-day readmission (3M Health Information Systems)	95	101
Standardized cost per discharge	89	102
Relative percent of patients highly satisfied, 2010 (H–CAHPS®)	103	98
Median:		
Overall Medicare margin, 2010	4%	–5%
Non-Medicare margin, 2010	6	8
Total (all payer) margin, 2010	5	4

Note: AHRQ (Agency for Healthcare Research and Quality), H–CAHPS® (Hospital Consumer Assessment of Healthcare Providers and Systems). Relative percents 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) due to concerns that socioeconomic conditions and aggressive treatment patterns can influence unit costs and outcomes.

Source: MedPAC analysis of impact file, MedPAR, and Medicare cost report data from CMS, and CMS Hospital Compare data.

Hospitals were identified as relatively efficient if they met four criteria every year of the 2007 to 2009 period:

- Risk-adjusted mortality levels were in the best two-thirds.
- Risk-adjusted readmission rates were in the best two-thirds.
- Standardized costs per discharge were in the best two-thirds.
- Risk-adjusted mortality or standardized costs per discharge were in the best one-third.

The objective is 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 is discussed in detail in our March 2010 report (Medicare Payment Advisory Commission 2010b).

Examining performance of relatively efficient and other hospitals from 2007 to 2009 Of the 2,131 hospitals that met our screening criteria, 188, or about 9 percent, were found to be relatively efficient during the 2007–2009 period. The set of relatively efficient providers was a diverse array of hospitals, including large teaching hospitals and smaller rural hospitals. CAHs were excluded

from the analysis because they are not paid under the IPPS and have different cost accounting rules.

We examined the performance of relatively efficient hospitals for 2007–2009 on three measures by reporting the group's median performance divided by the median for the set of 2,131 hospitals in our analysis (Table 3-5). The median efficient hospital's relative risk-adjusted 30-day mortality rate from 2007 through 2009 was 82 percent of the national median, meaning that the 30-day mortality rate for the efficient group was 18 percent below the national median. The median readmission rate for the efficient group was 4 percent below the national median. Standardized cost per discharge for the efficient group was 9 percent below the national median. The group of efficient hospitals tends to be larger than average but otherwise had diverse characteristics. For a more complete description, see our March 2011 report (Medicare Payment Advisory Commission 2011b).

Historically strong performers had lower mortality and readmissions in 2010 The composite mortality level for the efficient group was 17 percent below the national median in 2010. In addition, the risk-adjusted 30-day readmission rate was 5 percent lower in the efficient group. The efficient group also performed slightly better than other hospitals on patient satisfaction. The share of patients who gave the median hospital a top rating in 2010 was 3 percent higher than the national median (69 percent) for the efficient group and 2 percent lower than the median (66 percent) for the comparison group.

Historically strong performers continue to have lower costs in 2010 Hospitals that were low-cost and low-mortality providers from 2007 through 2009 continued to have lower costs in 2010. The median standardized Medicare cost per discharge in the efficient group was 11 percent lower than the national median, compared with 2 percent higher for the other group. 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 4 percent, while the median hospital in the comparison group had an overall Medicare margin of –5 percent. Among the relatively efficient hospitals, 65 percent had positive Medicare margins compared with 35 percent for other hospitals. The distribution for the efficient hospitals ranged from –2 percent to 9 percent at the 25th and 75th percentiles, respectively. For the comparison group, the distribution of Medicare margins ranged from –15 percent to 4 percent at the 25th and 75th percentiles, respectively. Among the relatively efficient hospitals 50 percent were under high or medium financial pressure to constrain their costs compared with 40 percent for the other hospitals. This result suggests that some of the efficient hospitals may have been pressured to constrain their inpatient costs, while others made the choice to constrain their costs to generate financial reserves for the future.

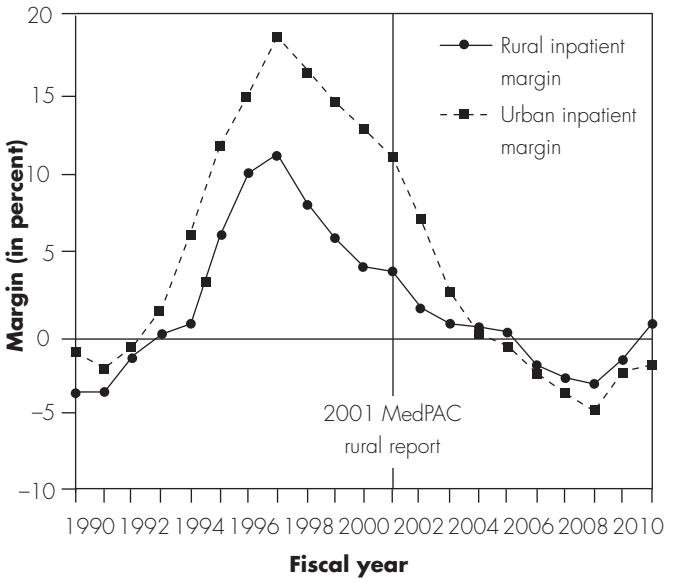
Rural hospital payments and costs

PPACA requires that the Commission analyze the adequacy of Medicare payments to rural providers as part of a larger report on rural health care. To prepare for that larger rural report, we present additional data on rural hospital payments and costs. The key question is whether Medicare payment rates are inappropriately low (or inappropriately high) in rural areas relative to urban areas. If rural payment rates are too low or too high relative to urban areas, the current set of special rural payments may need to be adjusted.

The Commission conducted a similar review of rural payment adequacy in 2001 as part of a larger report on rural health care. In 2001 the Commission noted that rural PPS hospitals' inpatient margins were lower than urban PPS inpatient margins and the gap had increased from less than 1 percent in 1992 to more than 10 percent in 1999 (Medicare Payment Advisory Commission 2001).[9] As a result of the 2001 report, the Commission made a series of payment recommendations including raising the base payment rate for rural providers up to the urban level, increasing disproportionate share (DSH) payments by moving closer to the formula used for urban hospitals, and introducing a low-volume adjustment for hospitals with few total discharges. The Congress enacted payment changes that were similar to these policy recommendations. The Congress also enacted several additional increases in rural payments including adjustments to the wage index, enhancing the sole community hospital (SCH) program, enhancing the Medicare-dependent hospital program (MDH), and adding a more generous low-volume adjustment, which we will discuss later. The SCH and MDH programs pay hospitals based on their historical costs of providing inpatient care updated for inflation, if those payments are higher than standard IPPS rates.[10]

FIGURE 3–8

Rural–urban margin gap was closed by 2004



Source: MedPAC analysis of Medicare cost reports.

The payment changes have closed the gap between rural and urban Medicare hospital margins, and rural hospitals now have Medicare inpatient margins that are higher than urban margins by 2.6 percentage points (Figure 3-8).

Rural hospital overall Medicare margins, which combine revenues and costs for inpatient, outpatient, and post-acute care services, have also improved relative to urban margins. Rural hospitals receive special hold-harmless payments for outpatient services, which maintain a floor on the profitability of outpatient services equivalent to the margin in 1998, before implementation of the OPPS system. In addition, SCHs receive a 7 percent add-on payment to their outpatient payments. The net result of the special inpatient and outpatient payments is that overall Medicare margins for rural hospitals are now higher than margins for urban hospitals, and margins are higher as hospitals become more rural. In 2010, urban hospitals had an aggregate overall Medicare margin of –4.8 percent, compared with margins of –3.4 percent for rural hospitals in micropolitan areas, –0.9 percent for rural hospitals in areas adjacent to urban areas, and 0.8 percent for rural hospitals that are in the most rural areas (Table 3-6). In contrast to Medicare margins, total (all-payer) margins tend to be higher for urban providers.

Low-volume adjustments became much more generous in 2011

In our 2001 rural report, the Commission recommended that the Congress direct the Secretary to create a low-volume adjustment for hospitals that are more than a specified distance from other facilities. The Congress enacted a low-volume adjustment in 2003 and, as the Commission recommended, left implementation up to the Secretary. The Secretary then determined that only hospitals with fewer than 200 total discharges and that are more than 25 miles from another hospital warrant a low-volume adjustment. Because many of the smallest hospitals have elected CAH status, the low-volume adjustment applied to fewer than 10 IPPS hospitals in 2010.

In 2010, the Congress enacted a new, more generous, low-volume adjustment for IPPS hospitals. Rather than leave the eligibility criteria up to the Secretary, the Congress mandated that inpatient payments increase for any hospital with fewer than 1,600 Medicare discharges and that is 15 or more miles from another IPPS hospital. In practice, the program is not focused on isolated hospitals because hospitals eligible for the low-volume adjustment can be any distance from CAHs. The adjustment increases payments to IPPS hospitals with 200 or fewer Medicare discharges by 25 percent; the adjustment decreases linearly until it phases out for hospitals with 1,600 or more Medicare discharges. For example, a hospital with 200 Medicare discharges receives a 25 percent add-on; with 900 Medicare discharges, a 12.5 percent add-on; and with 1,600 Medicare discharges, no add-on. In 2011, 529 hospitals received a low-volume adjustment (Centers for Medicare & Medicaid Services 2011). This adjustment raises several issues:

- The empirical support for the magnitude of the low-volume adjustment is unclear; the adjustment is larger than past estimates of the effect of volume on inpatient costs per discharge.
- The adjustment is added on top of SCH and MDH cost-based payments, both of which increase payments based on a hospital's historical costs and reflect any impact of historically low volume on its base-year costs per case. Therefore, a hospital can be paid its historical costs, plus inflation, plus a low-volume adjustment of up to 25 percent.
- The adjustment is not well targeted. It is based on Medicare discharges rather than total discharges.

TABLE 3–6 **Does payment adequacy in 2010 differ between rural and urban areas?**

	Urban	Micropolitan	Rural adjacent to urban	Rural nonadjacent
Number of IPPS hospitals	2,264	587	185	130
Overall Medicare margin	–4.8%	–3.4%	–0.9%	0.8%
Inpatient Medicare margin	–2.0	–0.6	4.4	4.7
Total (all payer) margin	6.4	6.3	0.7	3.9

Note: IPPS (inpatient prospective payment system). Urban is a county in a metropolitan statistical area (MSA). Micropolitan areas refer to counties that are associated with a city of over 10,000 people but are located outside of an MSA. Rural adjacent areas are in counties without a city of 10,000 people but are adjacent to an MSA. Rural nonadjacent counties are not located next to an MSA and do not have a city of 10,000 or more people. We did not report frontier counties separately because they include only 26 IPPS hospitals. The rural IPPS margins do not include data for critical access hospitals, which receive 1 percent above costs.

Source: MedPAC analysis of Medicare cost report files.

Economies of scale depend on total discharges (not just Medicare discharges), so the adjustment has a weaker connection to a provider's economies of scale problem than an adjustment based on total discharges. Basing the adjustment on Medicare discharges also discriminates in favor of hospitals with large numbers of private-payer patients and against hospitals with larger shares of Medicare discharges (Table 3-7).

Table 3-7 shows Medicare, non-Medicare, and total discharges for two hospitals and simulates how the low-volume adjustment would have affected those hospitals in 2011. In this simulation, both hospitals have 2,200 total discharges and therefore might be expected to have similar problems related to economies of scale. Hospital A, with a 70 percent Medicare share, receives only a 1 percent low-volume add-on because it has almost 1,600 Medicare discharges (the upper limit for the Medicare low-volume adjustment). But hospital B receives a 17 percent add-on because it has a relatively small share of Medicare patients. The Commission's analysis for the 2001 rural report and current analysis using 2010 payments and costs found higher unit costs per case-mix-adjusted discharge for hospitals with up to 500 total discharges. A policy that applied to hospitals with fewer than 500 total discharges would benefit roughly 200 hospitals, compared with the more than 500 hospitals that benefit from the current low-volume policy.

A key question is the degree to which the current low-volume adjustment biases payment in favor of low-volume hospitals by paying more than the estimated effect of low volume on costs per discharge. Table 3-8 (p. 66) shows the 2010 Medicare inpatient margins for rural hospitals, dividing the hospitals into quintiles based on their total patient volume. We report actual 2010 margins and simulated margins as if the 2011 low-volume adjustment had been in effect. The lowest volume rural hospitals (quintile 1) tend to have higher inpatient margins (without the 2011 low-volume adjustment) than the next two quintiles of rural hospitals. This result is in part due to special payments many of them receive under the SCH and MDH programs. An additional low-volume adjustment will exacerbate those differences in 2011 and

TABLE 3–7 **Low-volume policy favors hospitals with larger non-Medicare shares, 2011**

Type of hospital	Medicare discharges	Non-Medicare discharges	Total discharges	Low-volume adjustment
Hospital A: high Medicare share (70%)	1,550	650	2,200	1% increase
Hospital B: low Medicare share (30%)	650	1,550	2,200	17% increase

Source: MedPAC analysis of CMS data.

TABLE 3–8

Estimated effect of the new low-volume adjustment

Total (all-payer) volume of discharges	Medicare inpatient margins: Rural: Actual 2010	Medicare inpatient margins: Rural: Simulated with low-volume adjustment*
Lowest quintile	0.8%	14.0%
Second quintile	0.1	9.4
Third quintile	–2.9	2.4
Fourth quintile	0.1	0.7
Highest quintile	1.6	1.6
All hospitals	0.6	2.8

Note: *The margin with 2011 low-volume adjustment is a simulated margin where payments are adjusted to what they would have been if the low-volume adjustment had been in effect in 2010. The cut points for the volume quintiles for rural hospitals are 1,349; 2,145; 3,291; and 5,124 total discharges.

Source: MedPAC analysis of Medicare cost report files. The margin with the low-volume adjustment is simulated using 2010 cost report data adjusted for the low-volume effect.

2012, creating greater inequity among classes of hospitals. For example, the inpatient margins of the smallest rural hospitals would have increased to 14.0 percent in 2010 if they had received the low-volume adjustment that was adopted in 2011.

To focus on isolated providers and be empirically justified, the low-volume adjustment would have to be restricted to hospitals that were not close to any other acute care hospital (IPPS or CAH) and be based on total discharges rather than Medicare discharges. In addition, the low-volume adjustment is duplicative for hospitals that receive MDH and SCH adjustments, which are also intended to compensate small hospitals for factors that result in higher costs, such as their low volume of patients.

How should Medicare payments change in 2013?

Each year, we provide update recommendations for services covered by Medicare's inpatient operating and outpatient prospective payment systems.[11] These recommendations apply only to acute care inpatient and outpatient services; updates for services furnished in hospital-owned rehabilitation, home health, skilled nursing, and psychiatric units are based on separate recommendations for those types of Medicare services.

Current law: Projected increase in inpatient rates would be 2.9 percent

For both the acute IPPS and the OPPS, the update in current law for fiscal year 2013 equals the projected increase in the hospital operating market basket index minus an adjustment equal to the Secretary's forecast of the 10-year average productivity growth in the country and a –0.1 percent budgetary adjustment. The operating market basket index is a projection of input price inflation for the goods and services hospitals use in producing inpatient and outpatient services. CMS's latest forecast of the change in this index for fiscal year 2013 is 2.9 percent, but it will update the forecast twice before using it to revise payments in 2013. The productivity forecast is currently 0.9 percent. The net result is a current law update of 1.9 percent (2.9 – 0.9 – 0.1). In addition, CMS temporarily reduced payment rates by 2.9 percent in fiscal year (FY) 2011 and FY 2012 to recoup overpayments in FY 2008 and FY 2009 due to hospitals' changes in documentation and coding. Therefore, if no further documentation and coding change adjustments were needed, inpatient payments would increase by a projected 1.9 percent plus 2.9 percent or 4.8 percent in total. However, CMS has also stated that an additional –1.9 percent documentation and coding change adjustment is needed to prevent further overpayments, and that: "While we are not at this time stating when we will make the remaining required 1.9 percent prospective adjustment, we consider it feasible

Policy changes between 2010 and 2013 increase some payments and decrease others

A number of payment policy changes in recent years affect our projection of 2012 hospital margins as well as payments to hospitals in 2013.

Inpatient payments

CMS and the Congress made a variety of policy changes affecting the acute inpatient prospective payment system (IPPS) for fiscal years (FYs) 2011, 2012, and 2013. Among them are the series of adjustments CMS made in FY 2011 and FY 2012 to account for increases in payments due to hospitals' changes in medical record documentation and coding. In 2009, CMS completed its implementation of Medicare severity–diagnosis related groups (MS–DRGs) and cost-based relative weights. CMS and the Commission concur that hospitals responded to the financial incentives of the MS–DRG system by changing medical record documentation and diagnosis coding, which resulted in assignment of cases to higher weighted MS–DRGs. Because this change in assignments increased payments without an accompanying increase in resources used, it resulted in unintended increases in payments.

As a part of the TMA, Abstinence Education, and QI Programs Extension Act of 2007 (TMA), the Congress mandated a payment reduction of 0.6 percent in FY 2008 and an additional 0.9 percent reduction in FY 2009 to offset the effects of changes in documentation and coding projected by the CMS Office of the Actuary. To the extent that the TMA reductions differ from the actual effects of hospitals' coding improvements, the Secretary of the Department of Health and Human Services (HHS) is required by law to adjust hospital payments in FY 2010, FY 2011, and FY 2012 to recover (restore) any overpayments (underpayments) that occurred in FY 2008 and FY 2009. The Secretary is also required to adjust payment rates further to prevent overpayments from continuing. Analyses by both CMS and the Commission found that hospitals' changes in documentation and coding increased payments by 2.5 percent in 2008 and by a cumulative 5.4 percent by 2009. After accounting for the statutory adjustments of –1.5 percent taken in 2008 and 2009, the net overpayments to hospitals were 1.9 percent in 2008 and 3.9 percent in 2009, or 5.8 percent cumulatively. To recover the 5.8 percent in overpayments that occurred in 2008 and 2009, CMS decided to make a temporary adjustment of –2.9 percent in 2011 and to leave that adjustment in place in 2012. (Without action, payments will go back up by 2.9 percent in 2013.) In addition to recovering past overpayments, CMS concluded that to fully prevent future overpayments, it must reduce payments by a total of 5.4 percent. CMS has taken 0.6 percent in 2008, 0.9 percent in 2009, and 2.0 percent in 2012 and indicated it will take the remaining 1.9 percent in future years.

The Patient Protection and Affordable Care Act of 2010 (PPACA) mandated several policy changes that affect inpatient hospital payments for FY 2011, FY 2012, and FY 2013. Among them are five permanent and two temporary policy changes. Two of the five permanent policies affect hospital wage indexes.

- The first permanent policy is the frontier wage index policy, which states that the wage index for the most rural states (frontier states) cannot be less than the national average. We are not aware of any empirical support for this policy, which implicitly assumes that the frontier states always have wage rates that are equal to or above the national average. Because of this policy, hospitals in frontier states (Montana, Nevada, North Dakota, South Dakota, and Wyoming) that have a wage index less than 1.0 are granted a wage index equal to 1.0. The frontier wage index policy began in FY 2011, and the Commission estimates that in FY 2012 payments for the 48 urban and rural hospitals affected by this policy will increase by $43 million in aggregate.
- The second permanent policy is the rural floor policy, which states that urban areas cannot have a lower wage index than rural areas of their state. We are not aware of any empirical support for this policy, which implicitly assumes that rural areas always have wages that are equal to or below urban areas. To pay for the additional payments that some hospitals receive because of the "rural floor," PPACA mandated that the Secretary of HHS enact a national budget-neutrality factor. The adjustment

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Policy changes between 2010 and 2013 increase some payments and decrease others (cont.)

can be substantial. For example, when the rural Nantucket Cottage Hospital deactivated its critical access hospital status, thus becoming the only rural IPPS hospital in Massachusetts, it set the rural floor for all Massachusetts hospitals at the wages paid on Nantucket, a very high-cost island community. CMS estimated that this change yielded $274 million in extra payments to 60 urban hospitals in Massachusetts—a nearly 9 percent increase in inpatient payments. These extra payments will be offset by lowering payments to other IPPS hospitals across the country. In aggregate, the rural floor policy can reduce payments to hospitals that do not receive this benefit by up to 0.5 percent. The Commission recommended eliminating these special wage index adjustments and adopting a new wage index system to avoid geographic inequities that can occur due to current wage index policies (Medicare Payment Advisory Commission 2007).

- The third permanent policy is PPACA's mandate to apply budget and productivity adjustments in determining annual hospital payment updates. The adjustments began with a 0.25 percentage point reduction to the hospital payment update for the second half of FY 2010. A 0.25 percentage point reduction was also applied in FY 2011. For FY 2012, the reduction is 0.1 percentage point, but it is paired with a reduction for productivity growth equal to the 10-year moving average of nonfarm multifactor productivity for the period ending in FY 2012 (1.0 percentage point). Therefore, in FY 2012 the payment update based on 3.0 percent projected input price inflation is reduced to 1.9 percent. Adjustments for documentation and coding changes and other factors brought the 2012 net change in payment rates down to 1 percent. For FY 2013, the payment update will be reduced by 0.1 percentage point as well as the projected 10-year moving average of nonfarm multifactor productivity for the period ending in FY 2013 and any adjustments to prevent further accumulation of overpayments due to documentation and coding changes.
- The fourth permanent policy mandated by PPACA was the value-based purchasing (VBP) program. Beginning in FY 2013, the VBP program will redistribute a pool of dollars equal to 1 percent of inpatient DRG payments ($850 million in FY 2013) to hospitals based on their overall performance on a set of quality measures. The size of the VBP redistribution pool is mandated to increase 0.25 percentage point each year, reaching a maximum of 2 percent of DRG payments in FY 2017.
- The fifth permanent policy mandated by PPACA was the hospital readmissions reduction program. Also beginning in FY 2013, this policy will reduce payments to hospitals that have higher than expected risk-adjusted readmissions. (See our hospital readmissions discussion.)

Two temporary hospital payment policies PPACA authorized will expire at the conclusion of FY 2012.

- First, PPACA mandated the expansion of the low-volume adjustment policy for FY 2011 and FY 2012. This policy is intended to provide additional payments to rural hospitals that have a low volume of Medicare (not all payers) inpatient discharges and that are 15 miles or more from the nearest IPPS hospital. We estimate that the expansion of the low-volume adjustment increased payments to rural hospitals by approximately $380 million in FY 2011 and $365 million in FY 2012.
- Second, PPACA also authorized creation of the low-spending county hospital payment policy for FY 2011 and FY 2012. This policy provides additional payments to hospitals in counties with relatively low levels of Medicare spending per beneficiary. In both years, approximately 400 hospitals qualified for the additional payments and, as mandated, shared the fixed pool of dollars available ($150 million for FY 2011 and $250 million for FY 2012).[12] Absent legislative action, both programs will expire at the end of FY 2012.

Two non-PPACA hospital payment policies are due to expire during the policy window stretching from FY 2011 to FY 2013.

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Policy changes between 2010 and 2013 increase some payments and decrease others (cont.)

- First, Section 508 of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, which gave eligible hospitals an opportunity for a one-time reclassification to a different labor market and allowed them the opportunity to increase their payments, expired at the end of FY 2011. CMS estimated that the expiration of Section 508 would decrease overall inpatient spending by more than $220 million in one year.

- Second, the Medicare-dependent hospital (MDH) program will expire at the end of FY 2012. As a part of the MDH program, eligible hospitals can receive an additional payment to augment their standard IPPS payments if they are rural, if they have fewer than 100 beds, and if at least 60 percent of the inpatient days or discharges are covered under Medicare Part A. We estimate that the MDH program will provide $120 million in additional payments in FY 2012.

New readmission policy starting in 2013

As required by PPACA, the hospital readmission reduction program will be implemented beginning in FY 2013. Under the readmission reduction program, hospitals that have excess Medicare readmissions for selected conditions will have their IPPS payments reduced. In FY 2013 and FY 2014, the readmission reduction program applies to just three conditions: acute myocardial infarction (AMI), heart failure, and pneumonia. In FY 2015, the program will be expanded to at least four additional conditions, including chronic obstructive pulmonary disease, coronary artery bypass graft surgery, percutaneous transluminal coronary angioplasty, other vascular conditions, and other conditions the Secretary may deem appropriate.

The Secretary will use the National Quality Forum–endorsed risk-adjusted 30-day readmission measures for AMI, heart failure, and pneumonia currently reported on Hospital Compare. The Secretary plans to use three years of data to evaluate each hospital's readmission performance; a hospital must have at least 25 initial Medicare admissions for an individual condition to be evaluated. Hospitals whose Medicare risk-adjusted readmission rates for any of the three conditions are greater than the national average rates for the conditions (in other words, those that have "excess readmissions") will have their 2013 IPPS payment rates reduced. The payment penalty will be applied to IPPS payments for all Medicare discharges, not just discharges for the measured conditions. The payment penalty is calculated as the sum of base DRG payments for excess readmissions (based on the initial discharges that resulted in readmissions) divided by the sum of base DRG payments for all Medicare cases.[13] The payment penalty is capped at 1 percent of a hospital's base DRG payments in 2013, 2 percent in 2014, and 3 percent in 2015 and thereafter.

Two aspects of the readmissions penalty are counterintuitive. The first is that CMS's current estimates of risk-adjusted readmission rates are based on a method that blends the experience of the subject hospital with the average experience in the country. The smaller the hospital, the less of its information is used and the more of the national average is used. If CMS continues to use this method in the readmission reduction program, it will tend to underestimate excess readmissions, especially for small hospitals that have high readmission rates. This underestimate would have the effect of reducing potential penalties.

The second counterintuitive aspect of the policy tends to work in the opposite direction and could increase potential penalties. The formula in the law produces a higher count of excess readmissions than if the calculation were based on taking the difference between actual and expected readmissions, thus producing a higher estimate of Medicare spending on excess readmissions. The law, however, is explicit in how it lays out the size of the penalty. The two counterintuitive aspects of the policy tend to somewhat offset each other. Therefore, any reexamination of how the readmission policy functions should consider both aspects.

Outpatient payments

Outpatient policy changes for rural and cancer hospitals change our projections of margins in FY 2012. First, sole community hospitals and other rural hospitals with 100

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Policy changes between 2010 and 2013 increase some payments and decrease others (cont.)

or fewer beds receive hold-harmless outpatient payments through 2011. Payment rates for these hospitals were based on the higher of the current outpatient prospective payment system (PPS) rates or the hospital's historic payment-to-cost ratio applied to its current reported outpatient costs. For example, if a hospital received payment equal to 95 percent of its costs for care in 1998 before implementation of the outpatient PPS and its outpatient PPS payments in the current year were below this level, the hospital would receive hold-harmless payments. In 2011, a hospital's hold-harmless payments were equal to 85 percent of the difference between the hospital's historic cost-based payments and its outpatient PPS payments. As of January 2012, these adjustments expired, which will result in a decline in outpatient payments for some rural hospitals. Second, PPACA directed the Secretary to study whether the outpatient costs incurred by 11 cancer centers exceed those incurred by other hospitals. CMS found that the cancer centers incur higher costs for outpatient services than do other hospitals. In response, CMS has increased the outpatient PPS payment rates for the 11 cancer hospitals. These hospitals already received payments that were roughly 20 percent above base PPS rates due to an outpatient hold-harmless policy, and this new adjustment increased payments by an additional 10 percent. The net result is that outpatient payments to cancer hospitals are roughly 30 percent above base payment rates. Because this change is budget neutral, outpatient payments to all other PPS hospitals are expected to decrease by 0.2 percent ($71 million) in FY 2012.

Health information technology

The American Recovery and Reinvestment Act of 2009 initiated the electronic health record (EHR) incentive payment program to provide payment incentives for hospitals and physicians to adopt EHR technology. Hospitals began earning payments under this program in FY 2011, and payments will continue each year until FY 2017. Under the law, a hospital can earn as many as four years of incentive payments if it is deemed a meaningful user of EHRs—based on meeting specified criteria concerning the capabilities of its EHR system released in CMS's Medicare and Medicaid EHR Incentive Program final rule (Centers for Medicare & Medicaid Services 2010).[14] The payment each hospital receives will equal the sum of an initial payment amount per hospital ($2 million base amount) plus a discharge-related amount of $200 per patient discharge for all discharges between the 1,150th and 23,000th discharge, both multiplied by the hospital's share of Medicare days. Therefore, hospitals' EHR incentive payments vary with the shares that their Medicare inpatient days represent of their total days. Under the Medicare portion of this program, payments to hospitals decline in value over the course of four consecutive payment years. According to this mandated formula and assumptions we have made about the share of hospitals that will meet the EHR meaningful use criteria, we estimate that the Medicare EHR program will distribute approximately $3 billion in additional payments in 2012. We also estimate that the average large hospital (more than 400 beds) will receive payments of $2.7 million in its first year of participation and the average smaller hospital will receive payments of about $1.6 million in its first year. The law also stipulates that, in FY 2015, hospitals that fail to meet the meaningful use criteria will be penalized through the IPPS. ■

to make all or most of the adjustment in FY 2013, when a +2.9 percent adjustment will be factored into rates to offset the one-time FY 2012 recoupment adjustment" (Centers for Medicare & Medicaid Services 2011). If CMS made a –1.9 percent adjustment for documentation and coding in 2013, the projected change in payment rates under current law would be 2.9 percent. The 2.9 percent increase in payment rates would reflect the sum of a 2.9 percent market basket increase, –0.9 percent productivity adjustment, –0.1 percent budget adjustment, 2.9 percent expiration of temporary documentation and coding adjustment, and –1.9 percent prospective documentation and coding adjustment. While it is in the process of recovering 2008 and 2009 overpayments due to documentation and coding, CMS needs additional legislative authority to recover overpayments that occurred or are occurring in 2010, 2011, and 2012.

RECOMMENDATION 3-1

The Congress should increase payment rates for the inpatient and outpatient prospective payment systems in 2013 by 1.0 percent. For inpatient services, the Congress should also require the Secretary of Health and Human Services beginning in 2013 to use the difference between the increase under current law and the Commission's recommended update to gradually recover past overpayments due to documentation and coding changes.

RATIONALE 3-1

The Commission balanced three factors in reaching its inpatient update recommendation. First, most payment adequacy indicators (including access to care, quality of care, and access to capital) are positive. Second, hospitals' documentation and coding changes led to overpayments in 2010, 2011, and 2012. Updates must be lowered to recover these overpayments. Third, while relatively efficient hospitals generated positive overall Medicare margins in 2010, most hospitals have negative overall Medicare margins (–4.5 percent in 2010 and projected to reach –7 percent in 2012). Balancing these factors, the Commission recommends reducing the 2013 increase in inpatient payments from the level in current law (currently expected to be 2.9 percent) to 1 percent.[15] The difference between the update under current law and 1 percent should be used to gradually recover overpayments that occurred due to documentation and coding changes, which will allow Medicare to recover past overpayments and keep 2013 inpatient payment rates adequate.

For outpatient services, the Commission also recommends a 1 percent increase in payment rates. On the one hand, growth in the volume of outpatient services has been strong, suggesting the outpatient update in current law (1.9 percent) is too high. On the other hand, overall hospital margins are negative, suggesting a positive update is appropriate. A 1 percent update would balance these two considerations and also help limit growth in the disparity in payment rates between services provided in OPDs and payment rates in other sectors. The Commission maintains that Medicare should seek to pay similar amounts for similar services, taking into account differences in the quality of care and in the relative risks of patient populations.

IMPLICATIONS 3-1

Spending

- This recommendation would decrease Medicare spending by more than $2 billion in 2013 and would save more than $10 billion over five years. The spending implication of this recommendation is based on Medicare spending projections that were made prior to a sequester, as the recommendation was developed and voted on before the sequester was triggered and became current law. If a Medicare sequester does occur, it will change the spending implication of the recommendation.

Beneficiary and provider

- This recommendation should have no negative impact on beneficiary access to care and is not expected to affect providers' willingness and ability to provide care to Medicare beneficiaries.

Equalizing payment rates for outpatient office visits in freestanding physician offices and outpatient departments

As we considered an update to outpatient payment rates, we also considered ways to limit the differences in payment rates between hospitals and physician offices for the same (or similar) services. This effort is the start of a broader effort by the Commission to move toward having the same payment for the same service provided to similar patients across sites of care.

The issue of E&M payment rates is particularly timely because of the increase in physician employment by hospitals in recent years. Many factors have been cited for this trend:

- Financially, physicians are faced with rising costs associated with private practice, including new technology such as electronic health records and the administrative costs of dealing with insurers, each of which has its own requirements for submitting claims. Also, they may not have the leverage with insurers to negotiate payment rate increases that keep pace with rising expenses. Further, physicians of all specialties desire to avoid the uncertainty of changes in professional liability insurance premiums (Ginsburg 2011b, O'Malley et al. 2011).
- Many physicians—especially younger ones—desire a different work–life balance and more lifestyle flexibility than has been typical in the past (BDC Advisors 2010, Ginsburg 2011a, Healthcare Financial Management Association 2011, Kocher and Sahni 2011, O'Malley et al. 2011). Hospital employment may enable physicians to work fewer and more predictable hours and to focus on the clinical aspects of medicine. They may be willing to give up their autonomy in exchange for these benefits.

TABLE 3–9

Differences in program payments and beneficiary cost sharing for midlevel outpatient office visit provided in freestanding practices and hospital-based entities, 2011

		Service provided in hospital-based entity		
	Service provided in freestanding physician practice*	Physician facility rate*	Outpatient PPS rate**	Total, hospital-based rate
Program payment	$55.18	$39.42	$60.10	$99.52
Beneficiary cost sharing	+13.79	+9.85	+15.03	+24.88
Total payment	68.97	49.27	75.13	124.40

Note: PPS (prospective payment system). The Current Procedural Terminology code for this visit is 99213.
* Paid under the Medicare physician fee schedule.
**Paid under the outpatient PPS.

Source: MedPAC analysis of payment rates from the outpatient PPS and physician fee schedule in 2011.

- Hospitals often choose to employ physicians to ensure a stable stream of tests, admissions, and referrals to specialists who perform their services at the hospital.
- PPACA creates a Medicare shared savings program for accountable care organizations (ACOs), which are integrated health care systems composed of physicians and health care facilities that take responsibility for controlling spending and increasing quality. ACOs could be established by hospitals or by groups of physicians working together. Hospitals may be acquiring physician practices to position themselves to establish ACOs.
- Physicians and hospitals can benefit financially from hospital employment of physicians. Large hospital systems can use their market power to obtain higher rates for physician services from private insurers in some markets (Ginsburg 2010). In addition, for most services that can be provided in a physician office or OPD, total Medicare payments (program payments and cost sharing) are substantially higher if the service is provided in an OPD rather than in a physician office. The combination of higher private insurance payments and higher Medicare payments may allow hospitals to offer physicians comparable incomes as employees, even if the hospital has higher overhead than freestanding practices.

As more physicians become employed by hospitals, billing of services is likely to shift from freestanding physician practices to OPDs. Because most services have higher payment rates under the OPPS than under Medicare's physician fee schedule (PFS), the result of such a shift is higher program spending and beneficiary cost sharing.

We start our evaluation of this issue by examining differences in payment rates for E&M office visits provided in OPDs and physician offices. For example, in 2011 Medicare paid 80 percent more for a 15-minute visit—Current Procedural Terminology (CPT) code 99213—provided in an OPD than in a freestanding office of a physician or other health care professional paid under the PFS. This payment difference creates a financial incentive for hospitals to purchase freestanding physician offices and convert them to OPDs without changing their location or patient mix. We have seen a 6.7 percent increase in the number of these visits furnished in OPDs from 2009 to 2010. Thus, Medicare expenditures and beneficiary cost sharing could increase without any difference in patient care. In this section, we consider a policy of making Medicare payments for E&M office visits equal whether they are provided in OPDs or in physician offices. In the future, we plan to examine payment differentials between hospitals and physician offices for other services.

Comparing Medicare's payments for services in physician offices and outpatient departments

Services covered under the PFS have two payment rates: one rate for when the physician provides the service in his or her office (the nonfacility rate) and another rate for when the physician provides the service in a facility such as an OPD or other provider-based entity (the facility rate).[16] An outpatient facility or organization that has

provider-based status is considered part of a hospital, and provider-based status is generally available for hospital-owned entities that are on the hospital campus or within 35 miles of the hospital campus. In general, the nonfacility rate is higher than the facility rate in the PFS because physician practice costs are higher when physicians provide care in their offices than in facilities, as they have to cover their direct costs (e.g., equipment, supplies, and staff). When a service is provided in a physician office, there is a single payment for the service. However, when a service is provided in a facility, Medicare makes a payment to the facility in addition to a payment to the physician. For example, if a 15-minute E&M office visit for an established patient (CPT code 99213) is provided in a freestanding physician office, the program pays the physician 80 percent of the nonfacility payment rate from the PFS, and the patient is responsible for the remaining 20 percent. In 2011, the nonfacility rate for this service was $68.97; the program pays $55.18 and the patient is responsible for $13.79 (Table 3-9). If the same service is provided in an OPD-based entity, the program pays 80 percent of the PFS facility rate and 80 percent of the outpatient PPS rate, and the patient is responsible for 20 percent of both rates.[17] The PFS facility rate in 2012 is $49.27, and the OPPS payment is $75.13, for a total payment of $124.40. The program pays $99.52, and the patient is responsible for $24.88 (Table 3-9).

Potential spending effects of services moving from physician offices to hospital-based entities

Medicare data on the site of care for E&M office visits suggest that the increase in hospital employment of physicians has been associated with a shift of services from offices to OPDs. In 2004, 8 percent of specialists and 23 percent of primary care physicians were employed by hospitals (Kocher and Sahni 2011). In 2008, the percentages of specialists and primary care physicians employed by hospitals had increased to 15 percent and 31 percent, respectively. The proportion of E&M office visits provided in OPDs reflects this increased hospital employment of physicians. The percentage of E&M office visits provided in OPDs increased from 5.1 percent in 2004 to 7.3 percent in 2010. However, growth in the percentage of E&M office visits that are provided in OPDs has accelerated, increasing at an annual rate of 3.5 percent from 2004 through 2008, by 9.9 percent in 2009, and by 12.9 percent in 2010.[18] As more physicians become employed by hospitals, it is likely that more services will migrate from physician offices to OPDs (or other hospital-based entities), which would increase Medicare spending.

The magnitude of the increased Medicare spending is difficult to estimate for some OPD services where the packaging of ancillary services differs between the PFS and the OPPS. The OPPS packages many ancillary services and supplies with their associated procedures for payment purposes, whereas the PFS often pays separately for ancillary items and services (Medicare Payment Advisory Commission 2011b). However, we have greater confidence in estimating the potential effect of a shift of E&M office visits from offices to OPDs because the level of packaging is relatively low for these services, about 2.5 percent of the total cost. The potential effect on Medicare spending of a large shift in these visits from freestanding physician practices to hospital-based clinics that are billing as part of an OPD is significant. If the percentage of E&M office visits that are provided in OPDs grows at 12.9 percent (as it did in 2010) over 10 years, about 24.5 percent of E&M office visits will occur in OPDs in 2020. Such a shift would increase program spending by $2.0 billion per year and beneficiary cost sharing by $500 million per year (assuming 2010 payment rates).

Options for equalizing payment rates for E&M office visits across settings

Variations in payment rates among different ambulatory care settings raise questions about how Medicare should pay for the same (or similar) services in different settings. Medicare should strive to ensure that patients have access to settings that provide the appropriate level of care. If the same service can be safely provided in different settings, it may be undesirable for a prudent purchaser to pay more for that service in one setting than in another. Payment variations across settings may encourage arrangements among providers that result in more care being provided in higher cost (and higher paid) settings, thereby increasing total Medicare spending. Therefore, to be a prudent purchaser of medical care, the Commission believes that Medicare should base payment rates on the resources needed to treat patients in the most efficient setting, adjusting for differences in patient severity, to the extent that severity differences affect costs.

The easiest way to address this issue is to set payment rates in the OPPS and PFS so that payments are equal whether a service is provided in a freestanding practice or in an OPD. However, for many services, we are concerned

that such a policy would fail to account for some important differences between physician offices and OPDs:

- Hospitals incur costs to maintain standby capacity for handling emergencies and to comply with additional regulatory requirements. Hospitals are subject to the Emergency Medical Treatment and Active Labor Act, which requires them to screen and stabilize (or transfer) patients who believe they are experiencing a medical emergency, regardless of their ability to pay.[19] This mission may make the cost of certain services performed in OPDs higher than in physician offices, which typically do not provide emergency care. In addition, hospitals are required to meet conditions of participation in the Medicare program that likely increase hospital costs; these conditions do not apply to physician offices.
- Patient complexity may differ in these two sectors. For many services, greater patient complexity may result in higher costs of care.
- For services covered under both the OPPS and the PFS, the OPPS typically packages the cost of ancillary services and supplies to a greater extent than does the PFS.

For many services, these factors can cause higher costs in OPDs than in physician offices.[20] Therefore, we chose to narrow our focus for equalizing payment rates across these two sectors to E&M office visits, which are indicated by CPT codes 99201 through 99215. For these services, we believe it is reasonable to set payment rates equal in the PFS and the OPPS because:

- Hospitals should not need to maintain standby capacity for E&M office visits that are not provided in an emergency department, nor should requirements to stabilize patients presenting at the emergency room affect the costs of furnishing E&M office visits.
- To a large extent, differences in resource needs because of patient complexity for these visits are reflected in their coding structure, which classifies visits based on their length and complexity. For example, CPT code 99213 is for visits that typically include 15 minutes of face-to-face time between the physician and patient, whereas CPT code 99214 is for visits that typically include 25 minutes of face-to-face time between the physician and patient and involve a more detailed history and examination. This coding structure is the same whether the visit is provided in a physician office or in an OPD.[21]
- On the basis of our analysis of 10,000 OPD claims that included an E&M office visit, the cost of ancillary services that are packaged with these visits when provided in an OPD is about 2.5 percent of the visits' total cost, which means that ancillaries add about $2 to the payment rate of the average E&M office visit provided in OPDs; therefore, the content of the unit of payment is similar across settings.

We conclude that the E&M visits are a service in which rates should be equalized between PPS hospital OPDs and other sites of care that use the physician fee schedule. The payment rate for both settings should be based on the cost of the most efficient setting where high-quality care can be provided. In this case, our best proxy for the cost of efficiently delivering E&M services is the E&M rate paid to physician offices. We realize that over time adjustments to E&M rates in the physician fee schedule will also affect the price paid in OPDs. Although fee schedule payment rates for primary care services such as E&M visits have increased over the past several years, the Commission has recommended further improvements to the accuracy of fee schedule payments (see text box, p. 76).

To ensure that payments for E&M services are equal across PPS settings, Medicare should set the OPPS rate equal to the difference between the nonfacility practice expense and the facility practice expense in the physician fee schedule. Under this formula, total Medicare payment rates would be the same whether the E&M visit occurs in an OPD or in a nonfacility ambulatory site such as a physician office (Table 3-10). The payment to physicians for their work would not change and payments to cost-based providers such as CAHs would not change under the proposal.

RECOMMENDATION 3-2

The Congress should direct the Secretary of Health and Human Services to reduce payment rates for evaluation and management office visits provided in hospital outpatient departments so that total payment rates for these visits are the same whether the service is provided in an outpatient department or a physician office. These changes should be phased in over three years. During the phase-in, payment reductions to hospitals with a disproportionate share patient percentage at or above the median should be limited to 2 percent of overall Medicare payments.

TABLE 3–10

Payment rates to physicians and OPDs for a midlevel E&M office visit under current payment rates and policy that aligns payment rates across settings, 2011

	Payment amount	Calculation
Current payment rates		
Service in physician office		
Payment to physician	$68.97	Work/PLI ($35.33) + nonfacility PE ($33.64)
Service in OPD		
Payment to physician	49.27	Work/PLI ($35.33) + facility PE ($13.94)
Payment to hospital	75.13	Hospital outpatient department rate ($75.13)
Total payment	$124.40	
Policy that aligns rates across settings		
Service in OPD		
Payment to physician	49.27	Work/PLI ($35.33) + facility PE ($13.94)
Payment to hospital	19.70	Nonfacility PE ($33.64) – facility PE ($13.94)
Total payment	$68.97	

Note: OPD (hospital outpatient department), E&M (evaluation and management), PLI (professional liability insurance), PE (practice expense). The Current Procedural Terminology code for this visit is 99213. Payments include both program spending and beneficiary cost sharing.

Source: MedPAC analysis of payment rates in the 2011 physician fee schedule and outpatient prospective payment system.

RATIONALE 3-2

Hospitals have been acquiring physician practices and employing physicians at an increasing rate. As more physicians become employed by hospitals, E&M office visits will shift from being billed as physician office services to being billed as OPD services. When hospitals bill for E&M office visits as OPD services, there are negative consequences for the Medicare program, beneficiaries, and the efficiency of the health care system:

- Medicare currently pays higher rates for care in existing OPD clinics. If the movement toward OPD billing continues, spending would increase by an additional $2 billion annually by 2020 if the OPD share of E&M visits grows at its current rate.
- Beneficiary cost sharing is substantially higher when E&M office visits are billed as OPD visits, and beneficiaries' Part B premiums increase as services shift to OPDs due to higher OPD rates. In addition, beneficiaries can be confused when they receive two coinsurance bills for a single E&M office visit.
- When hospitals convert physician office buildings to OPD status, they spend money to comply with the life safety codes and take on the cost of generating additional bills for the hospital's facility payment. For E&M office visits, these additional expenditures result in higher Medicare payments but fail to create clear benefits for patients. To improve the efficiency of the health care system, Medicare should be discouraging, not encouraging, expenditures by health care providers that do not benefit patients.

Setting the payment rates for E&M office visits provided in OPDs equal to the difference between the nonfacility practice expense rate and the facility practice expense in the PFS would result in payment rates that are equal whether an E&M office visit is provided in an OPD or in a freestanding practice. This practice would reduce the negative effects on the Medicare program, beneficiaries, and the health care system's efficiency.

Reducing OPPS rates for E&M office visits would reduce overall and outpatient Medicare revenue for most hospitals. If this recommendation were fully implemented, we estimate that hospital overall Medicare revenue would be 0.6 percent lower under this policy than it otherwise would be, and outpatient revenue would be 2.8 percent lower (Table 3-11, p. 77). However, it is prudent to allow time for hospitals to adjust to the lower rates for E&M

Payments for primary care services

The process through which CMS reviews the accuracy of the physician fee schedule's relative values has problems that led to primary care services (such as evaluation and management services) becoming undervalued over time and other services becoming overvalued (Medicare Payment Advisory Commission 2010b). These concerns led the Commission to make a series of recommendations to improve the process for identifying and correcting misvalued services (Medicare Payment Advisory Commission 2006). As a result of our recommendations, greater scrutiny of misvalued services, and changes to the methodology and data used to calculate practice expense values, payment rates for primary care services have increased in recent years (Medicare Payment Advisory Commission 2011c). In addition, the Commission recommended an adjustment to raise payments for selected primary care services furnished by primary care practitioners, which was adopted by the Congress (Medicare Payment Advisory Commission 2008b).

Nevertheless, the Commission is still concerned that many fee schedule services are overvalued and that resources should be reallocated to other services, including primary care. For example, the relative value units (RVUs) for practitioner work are largely a function of estimates of the time it takes a practitioner to perform each service. The current time estimates rely primarily on surveys conducted by physician specialty societies that have a financial stake in the process. Research for CMS and for the Assistant Secretary for Planning and Evaluation of the Department of Health and Human Services has shown that the time estimates are likely too high for some services (Medicare Payment Advisory Commission 2011c).

In a recent letter to the Congress on the sustainable growth rate system, the Commission recommended that the Congress direct the Secretary to regularly collect data—including service volume and work time—to establish more accurate work and practice expense values (Medicare Payment Advisory Commission 2011a). To help assess whether Medicare's fees are adequate for efficient care delivery, the data should be collected from a cohort of efficient practices rather than from a sample of all practices. The Commission also recommended that the Congress direct the Secretary to identify overpriced fee schedule services and reduce their RVUs accordingly. These reductions should be budget neutral within the fee schedule, which would redistribute payments from overpriced to underpriced services. In addition, the Congress should set an annual numeric goal for RVU reductions of at least 1 percent of fee schedule spending. See Appendix B for a full description of these recommendations. ■

visits; therefore, we recommend that this policy be phased in over three years. During the phase-in, one-third of the adjustment would occur in the first year, two-thirds in the second year, and payments would be fully adjusted in the third year.

One benefit of the phase-in is to delay full implementation of the policy until after Medicare starts paying hospitals a portion of their uncompensated care costs in 2014. Starting in 2014, a portion of funds currently distributed as DSH payments will start to be distributed to compensate hospitals for a share of their uncompensated care costs (charity care and bad debts). To the extent that a hospital is serving an above-average share of uninsured and underinsured individuals, it will receive a larger share of the payments from the uncompensated care pool. If the objective is to assist hospitals serving the poor, paying a portion of their uncompensated care costs is a far better targeting of Medicare dollars than making high payments to all hospitals for E&M visits.

To evaluate the effect of this policy on the adequacy of Medicare payments for different categories of hospitals, we focus on its effect on overall Medicare revenue. However, for completeness, we also present the effect as a share of outpatient revenue only (Table 3-11). We find that the aggregate effect of this policy on hospitals' overall Medicare revenue will be 0.6 percent or less, but the effect will vary widely by hospital. As a category, major teaching hospitals would have the largest loss of Medicare revenue (1.1 percent). For-profit hospitals would have the smallest loss (0.2 percent overall Medicare revenue). More than 10

TABLE 3–11

Reduction in Medicare revenue from equalizing OPPS and PFS rates for E&M office visits varies widely among hospitals

Hospital group	Percent reduction in overall Medicare revenue	Percent reduction in outpatient Medicare revenue
All hospitals	0.6%	2.8%
Urban	0.6	2.7
Rural	0.7	2.8
Major teaching	1.1	6.1
Other teaching	0.4	2.2
Nonteaching	0.4	2.0
Nonprofit	0.6	2.8
For profit	0.2	1.0
Government	1.0	4.3
Ranking of percent revenue loss		
5th percentile	0.0	0.0
10th percentile	0.0	0.0
Median	0.1	0.6
90th percentile	1.2	6.9
95th percentile	2.6	8.5

Note: OPPS (outpatient prospective payment system), PFS (physician fee schedule), E&M (evaluation and management). The reduction may be smaller to the extent hospitals shift patients to other types of clinics such as rural health clinics once payment rates for hospital-based clinics decline.

Source: MedPAC analysis of 2010 cost reports and 2009 outpatient claims.

percent of all hospitals would lose no Medicare revenue, and 5 percent would lose at least 2.6 percent of overall Medicare revenue.

Moreover, reductions in revenue would be smaller if hospitals convert some of their outpatient clinics to rural health clinics or federally qualified health centers, which receive payments above traditional physician office rates due to serving populations that appear to be underserved. In addition, hospitals may choose to start operating the physician practices that they own as freestanding clinics, which would result in cost savings for the hospitals due to lower billing and overhead costs.

We are concerned that some of the hospitals losing the most Medicare revenue provide ambulatory physician services to many low-income members of their communities. Large reductions in Medicare revenue for these hospitals may adversely affect access to ambulatory physician services in these low-income populations. Therefore, during the three-year phase-in, we recommend that revenue losses from this policy be limited to 2 percent of overall Medicare revenue for hospitals that serve a relatively large share of low-income patients. Specifically, we recommend that during the phase-in, losses be limited to 2 percent of the hospital's overall Medicare revenue for hospitals with a DSH percentage that is at or above the median for all hospitals (a stop-loss provision). A hospital's DSH percentage is the sum of the percentage of Medicare inpatient days that are for patients who are eligible for supplemental security income and the percentage of total inpatient days that are for patients who participate in Medicaid. For 2010, the median DSH percentage among all PPS hospitals was about 25 percent.

Assuming no change in hospitals' operations under a fully implemented policy, we estimate that about 4 percent of hospitals would qualify for the stop loss discussed above. We find that the profile of these hospitals is mixed, but they do have some different characteristics from other hospitals. The hospitals qualifying for the stop loss are more likely to be government owned, more likely to have major teaching status, have a higher percentage of

Medicaid patients, and have a lower all-payer margin than all other hospitals. However, hospitals that qualify for the stop loss also have a higher overall Medicare margin, probably because of relatively high payments for their DSH and teaching status.

IMPLICATIONS 3-2

Spending

- This recommendation would reduce Medicare program spending by between $250 million and $750 million in 2013 and by between $1 billion and $5 billion over 5 years. The spending implication of this recommendation is based on Medicare spending projections that were made prior to a sequester, as the recommendation was developed and voted on before the sequester was triggered and became current law. If a Medicare sequester does occur, it will change the spending implication of the recommendation.

Beneficiary and provider

- Beneficiaries would see reductions in Medicare cost sharing and in Part B premiums due to lower outpatient spending.[22] However, because this recommendation would reduce payment rates for E&M office visits provided in OPDs, we need to monitor beneficiaries' access to these services.

Ensuring access to ambulatory physician and other professional services among vulnerable populations

Although we have included a phase-in that has a stop loss as part of our recommendation for setting Medicare payments for E&M office visits equal across freestanding practices and OPDs, we believe more investigation is needed on the potential effects this policy could have on access to ambulatory physician and other professional services among low-income populations.

RECOMMENDATION 3-3

The Secretary of Health and Human Services should conduct a study by January 2015 to examine whether access to ambulatory physician and other health professionals' services for low-income patients would be impaired by setting outpatient evaluation and management payment rates equal to those paid in physician offices. If access will be impaired, the Secretary should recommend actions to protect access.

RATIONALE 3-3

In some communities, OPDs serve as a primary source of ambulatory physician services for the low-income population. Some of these safety-net hospitals are among those that would lose the most from equal payments for E&M office visits across OPDs and physician offices. To ensure that access to ambulatory physician and other health professional services is maintained for low-income patients that rely on these safety-net hospitals, the Secretary should study whether equal payments across OPDs and physician offices for E&M office visits impair access of low-income patients to those services. If the Secretary finds access problems, actions should be undertaken to protect access.

IMPLICATIONS 3-3

Spending

- This recommendation would have no effect on program spending.

Beneficiary and provider

- This recommendation may help identify problems beneficiaries are having with regard to accessing ambulatory physician services. ■

Endnotes

1 Outpatient service volume is measured by counting the number of separately payable Healthcare Common Procedure Coding System (HCPCS) codes. HCPCS definitions can change over time, as can the HCPCS codes that are paid separately and the ones that are bundled, which can have some effect on annual changes in volume.

2 The data on visits to hospital-based practices come from outpatient claims files. Data on visits to freestanding physician offices come from physicians' Medicare claims.

3 Occupancy reflects both Medicare and non-Medicare patients. Because occupancy is declining, we can infer that the decline in Medicare days per beneficiary is not due to a lack of capacity.

4 The share of hospitals and their affiliates providing each service was calculated as the percentage of hospitals indicating availability of the services within the hospital, network, system, or joint venture.

5 The services included in the overall 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.

6 In 2009 there was a substantial difference between the forecasted market basket used to set payment updates, projected to increase by 3.6 percent, and the actual increase of 2.6 percent, measured after the year is completed. Payment updates were set based on the forecasted market basket increase. Inpatient cost growth per discharge was roughly in between the actual and forecasted increase in the market basket. On a case-mix-adjusted basis, outpatient costs grew at underlying input prices.

7 Another common measure of hospitals' financial pressure is "days cash on hand." However, we find wide differences in this metric not just due to pressure but also due to financing choices among hospital systems. For-profit hospitals routinely have less cash on hand than nonprofits. This situation reflects differences in nonprofit and for-profit choices with respect to using available cash for investments or to pay down debt. It may in part reflect the fact that income on investments is taxable to for profits and not taxable to nonprofits. The measure is further confounded by the large numbers of hospitals that hold cash off their balance sheet in foundations.

8 Medicare spending varies in part because of the factors Medicare uses to account for differing wages, payment rates, and health status. We adjust for those factors to arrive at service use. A discussion of our methods to compute regional variation in service use is available at: http://www.medpac.gov/documents/Dec09_RegionalVariation_report.pdf.

9 Figure 3-8 shows a smaller difference between the urban and rural margins than the 2001 report because the figure excludes margin data for any hospital that has become a CAH.

10 The MDH and SCH payments tend to increase payments toward a hospital's historical level of costs, which increases the hospitals' inpatient margin to zero. The result is SCH inpatient margins were 2.8 percent and MDH inpatient margins were –1.7 percent in 2010. The SCH add-on tends to be higher than the MDH add-on for two reasons: First, it adjusts all inpatient payments, while the MDH payment is a blend of 75 percent based on historical costs and 25 percent based on PPS rates; second, the SCH payments are based on a base year of 2006 or earlier and the MDH payments are based on a base year of 2002 or earlier. The more recent base year is more advantageous. For more details see the text box (pp. 67–70) on recent changes in payment rules.

11 Our update recommendations focus on inpatient operating payment rates and payment rates for outpatient services (which encompass both operating and capital costs of outpatient services). The Secretary of Health and Human Services makes a separate evaluation of updates to per discharge payment rates for inpatient capital costs.

12 Hospitals located in counties with relatively low levels of spending will receive a share of the fixed $150 million reserved for 2011 and $250 million reserved for FY 2012 based on their relative proportion of IPPS operating payments. PPACA set the two-year payment total at $400 million.

13 Base DRG payments reflect the sum of the hospital's wage index and cost of living adjusted operating and capital payment rates multiplied by the DRG relative weight for the (affected) MS–-DRG(s). Base DRG payments do not include payments for the indirect costs of graduate medical education, service to a DSH share of low-income patients, outlier payments, or additional payments, such as those under the SCH and MDH programs.

14 The American Recovery and Reinvestment Act of 2009 mandates that EHR payments also be made to hospitals through the Medicaid program.

15 That is, the Commission recommends that the payment rates for 2013 be increased by 1 percent from the 2012 rates. The Congress would have to override other existing statutory provisions to achieve this result.

16 The payment rates in the physician fee schedule have three parts: physician's work, practice expense, and professional liability insurance. Of the three, only practice expense differs when a service is provided in an office or a hospital-based entity.

17 In the PPS, the coinsurance rate for some services is above 20 percent. This rate is a result of a policy that CMS implemented when it launched the OPPS. In the cost-based payment system that preceded the OPPS, the coinsurance rate for most services was above 20 percent and averaged nearly 50 percent. When CMS launched the OPPS, the agency determined a dollar-denominated national coinsurance amount for each APC that occurred under the cost-based payment system. If the national coinsurance amount for an APC was above 20 percent of the APC's payment rate, CMS kept the national coinsurance amount frozen over time, while it updated the APC's payment rate annually by the hospital market basket. As the payment rates increased, the frozen national coinsurance amounts became smaller fractions of the payment rates. For each APC, CMS maintains this policy until the national coinsurance amount is 20 percent of the payment rate. After that, the national coinsurance amount is increased each year at the same rate as the payment rate. Currently, about two-thirds of the services covered under the OPPS have coinsurance rates of 20 percent, while the remaining services are above 20 percent.

18 The outpatient office services are represented by the following CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, and 99215.

19 The most obvious feature of standby capacity for a hospital is the emergency department (ED). In the OPPS, CMS has established two broad categories of APCs for payment of ED visits, Type A and Type B. A Type A ED is an "organized hospital-based facility for the provision of unscheduled episodic services to patients who present for immediate medical attention. The facility must be available 24 hours a day." CMS indicates that a Type B facility has less stringent criteria than a Type A facility, but its (lengthy) definition indicates that it is available for emergency care on an urgent basis.

20 The arguments for higher costs in OPDs than in physician offices that we discuss in this chapter are similar to those discussed for higher costs in OPDs than in ASCs discussed in Chapter 5. In particular, OPDs face higher costs than ASCs because of greater regulatory burdens and higher patient complexity.

21 For clinic and emergency department visits, CMS has instructed hospitals to develop internal guidelines for reporting the appropriate visit level. Although this procedure gives hospitals some leeway in how they code E&M office visits, CMS has advised hospitals to follow the intent of the descriptions for these CPT codes.

22 Because beneficiaries' Part B premiums are based on total Part B spending (including OPD spending), the new E&M policy will reduce Part B premiums. The rate of reduction will be slowed by the transition policies, which act to slow the financial impact of the policy on OPD spending. The policy will also act to reduce beneficiaries' direct cost-sharing burden due to lower prices for E&M visits on which the 20 percent cost sharing is based. The speed at which cost sharing is reduced will be slowed by the three-year transition. However, the 2 percent stop-loss provision would not directly affect cost sharing because it will be an adjustment to overall payments, not an adjustment to payment rates from which the beneficiaries' 20 percent cost sharing is derived.

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CHAPTER 4

Physician and other health professional services

RECOMMENDATIONS

(For previous recommendations on updating Medicare's payments to physicians and other health professionals, see Appendix B, pp. 377–400.)

CHAPTER 4

Physician and other health professional services

Chapter summary

Physicians and other health professionals perform a broad range of services, including office visits, surgical procedures, and a variety of diagnostic and therapeutic services furnished in all health care settings. In 2010, fee-for-service (FFS) Medicare spent about $62 billion under the physician fee schedule on physician and other health professional services, accounting for 12 percent of total Medicare spending and 18 percent of Medicare's FFS spending. Approximately 900,000 health professionals billed Medicare for fee schedule services in 2010. Among them were 588,000 physicians and 335,000 other clinicians, such as podiatrists, chiropractors, nurse practitioners, physician assistants, and physical therapists. Almost all FFS Medicare beneficiaries (97 percent) received at least one fee schedule service in 2010. Under current law, fee schedule rates are supposed to be updated annually based on a statutory formula called the sustainable growth rate (SGR) system. However, since 2003, the Congress has implemented multiple temporary overrides of the SGR formula to prevent fee cuts—including two overrides in 2012 to avert a 27 percent cut.

In this chapter

Moving forward from the sustainable growth rate system

Medicare faces increased urgency to resolve the growing problems created by the SGR system and its destabilizing short-term "fixes." In a recent letter to the Congress, the Commission recommended repealing the SGR and replacing it with specified updates that would no longer be based on an expenditure-

control formula. In the initial years, these updates would favor primary care, given our assessment that access risks are concentrated in primary care.

It is critical for the Congress to act now to resolve the SGR for a number of reasons. First, the total cost of repealing the SGR grows inexorably with each passing year, as does the cost of temporary "fixes." Second, growth in the size of the deficit has increased pressure to fully offset the cost of repealing the SGR. And third, opportunities to offset the costs of repealing the SGR within Medicare are becoming more difficult to identify and are being used for other purposes (such as to help finance coverage for the uninsured or for deficit reduction).

In determining our recommendation, the Commission concluded that the SGR's formulaic update mechanism has failed to restrain volume growth and, in fact, may have exacerbated it. Although the pressure of the SGR likely minimized fee increases in the past decade, this effect has disproportionately burdened physicians and health professionals in specialties with less ability to increase volume. Additionally, temporary stop-gap "fixes" to override the SGR undermine the credibility of Medicare by engendering uncertainty and frustration among providers, which may cause anxiety about Medicare among beneficiaries. The Commission concluded that the risks of retaining the SGR outweigh the benefits.

With this assessment, the Commission recommended repeal of the SGR system and proposed a series of legislated updates that would no longer be based on an expenditure-control or volume-control formula. Specifically, these updates would include a freeze in current payment levels for primary care and, for all other services, annual payment reductions of 5.9 percent for three years followed by a freeze. Even with these cuts, this recommendation carries a high budgetary score—costing roughly $200 billion over 10 years. Understanding the need for fiscal responsibility, the Commission offered the Congress a list of potential offsets within the Medicare program—purposefully limiting ourselves to options within Medicare, given our legislative mission. The Congress may seek offsets for repealing the SGR inside or outside of the Medicare program, and the Commission is not necessarily recommending that the cost of repealing the SGR be offset entirely within Medicare. We emphasize (as we did in our letter to the Congress) that our update recommendations and potential offsets were outlined specifically in the context of repealing the SGR system, recognizing that the high cost of repealing the SGR compels difficult choices that, in other contexts, the Commission might not support.

When repealing the SGR, it is important to realize that legislating a new schedule of updates (the schedule we propose or another) is not an irrevocable step. The Congress may determine in later years that a different course is appropriate to ensure sufficient access to fee schedule services. To assist the Congress, the Commission will continue annual reviews of whether payments to physicians and

other health professionals are adequate. Although we currently recommend fee reductions for three consecutive years for nonprimary care services, if, on the basis of access concerns, the Congress decides to discontinue the cuts after one or two years, then the full cost of repealing the SGR would still be lower than if fee cuts were never implemented.

In addition to our recommendation on the SGR, the Commission also proposed refinements to the accuracy of Medicare's fee schedule through targeted data collection and reducing payments for overpriced services. Even with such improvements to the fee schedule's pricing, the Commission stressed that Medicare must ultimately implement payment policies that shift providers away from FFS and toward payment approaches that better support delivery models that reward improvements in quality, efficiency, and care coordination—particularly for chronic conditions. Accordingly, the Commission recommended incentives in Medicare's accountable care organization program to accelerate this shift because new payment models—distinct from FFS and the SGR—may have greater potential to slow volume growth while also improving care quality. Similarly, incentives for physicians and health professionals to participate in the newly established Medicare bundling pilot projects could also improve efficiency across sectors of care.

Assessment of payment adequacy

Our analysis of payment adequacy for Medicare fee schedule services finds that most indicators are positive, suggesting that most beneficiaries can obtain care from physicians and other health professionals when needed. The Commission underscores, however, the increasing urgency to resolve the problems created by the SGR system, as described above.

***Beneficiaries' access to care*—**Overall, beneficiary access to fee schedule services is good and generally similar to access reported by privately insured patients age 50 to 64. In our survey conducted in the fall of 2011, among beneficiaries who needed a routine care appointment in the past year, 74 percent reported that they never had to wait longer than they wanted to get an appointment; percentages were even better for illness or injury appointments. Among the small share of beneficiaries looking for a new physician, most could find one without major problems; however, finding a new primary care physician continues to be more difficult than finding a new specialist. In our survey, this discrepancy in access between specialty and primary care has grown, with more frequent reports of big problems finding a new primary care physician in 2011 compared with 2010. Because the share of people looking for a new primary care physician is very small, survey results are expected to fluctuate from year to year. Nonetheless, the Commission remains concerned about beneficiary access to primary care. In addition to our previous recommendations for payment rate increases for primary care, we eagerly await results from CMS and private insurer efforts to

examine payment approaches that move away from FFS, such as medical home initiatives and care coordination payments for primary care providers.

As in past surveys, racial and ethnic minorities in both the Medicare and the privately insured populations were more likely to experience access problems, particularly in finding a new specialist. In future work, the Commission will conduct research to ask questions and learn more about the specific difficulties minority beneficiaries face when trying to find new specialists. Responses could help inform the Commission's consideration of policy options for addressing this important issue.

Other indicators of access include the supply of providers serving Medicare beneficiaries and changes over time in the volume of services provided.

- ***Supply of providers*—**The number of physicians and other health professionals billing Medicare grew by almost 4 percent in 2010. Additionally, the 2009 National Ambulatory Medical Care Survey found that among physicians with at least 10 percent of their practice revenue coming from Medicare, 90 percent accepted new Medicare patients. By specialty, 82 percent of primary care physicians and 96 percent of physicians in other specialties accepted new Medicare patients according to this survey.
- ***Volume of services*—**The number of services per FFS beneficiary decreased slightly (0.2 percent) in 2010 consistent with recent trends among the privately insured. Growth rates varied among broad categories of services, ranging from −1.5 percent for imaging to 1.1 percent for major procedures.

***Quality of care*—**Most claims-based indicators for ambulatory care quality that we examined for the elderly improved slightly or did not change significantly from 2008 to 2010.

***Medicare payments and providers' costs*—**In the absence of cost reports from physicians and other health professionals, we use certain indirect measures of this sector's financial status, including a comparison of Medicare's payments with private insurers' payments and an analysis of physician compensation.

- Medicare's payment for physician fee schedule services in 2010 averaged 81 percent of private insurer payments for preferred provider organizations. This rate is very similar to the rate calculated for the previous year—80 percent.
- In 2010, compensation was lower for primary care physicians than for most specialists, and the disparity between them was large enough to raise significant concerns about fee schedule pricing.

Although fee schedule payments may be adequate at the moment, the major policy issue concerning Medicare payment for physicians and other health professionals is the SGR system and the urgent need to move beyond it. ■

Background

Physicians and other health professionals perform a broad range of services, including office visits, surgical procedures, and a variety of diagnostic and therapeutic services. These services are furnished in all settings, including physicians' offices, hospitals, ambulatory surgical centers, skilled nursing facilities, other post-acute care settings, hospices, outpatient dialysis facilities, clinical laboratories, and beneficiaries' homes. Approximately 900,000 health professionals billed Medicare for fee schedule services in 2010. Among them were 588,000 physicians and 335,000 other clinicians, such as podiatrists, chiropractors, nurse practitioners, physician assistants, and physical therapists.

Under the physician fee schedule in Medicare Part B, fee-for-service (FFS) payments for physician and other health professional services totaled $62 billion in 2010, accounting for about 12 percent of Medicare's overall spending and 18 percent of Medicare's FFS spending (Boards of Trustees 2010). From 2000 to 2010, Medicare spending per beneficiary on physician fee schedule services grew by 64 percent. Almost all FFS Medicare beneficiaries (97 percent) received at least one physician service in 2010.

In the FFS program, Medicare pays for physician and other health professional services according to a fee schedule that lists services and their associated payment rates. The fee schedule assigns each service a set of three relative weights (physician work, practice expense, and professional liability insurance) intended to reflect the typical resources needed to provide the service. These weights are adjusted for geographic differences in practice costs and multiplied by a dollar amount—the conversion factor—to determine payment amounts. In general, Medicare updates payments for physician services by increasing or decreasing the conversion factor. For further information, see the Commission's *Payment basics: Physician services payment system.*[1]

By law, the update of the physician fee schedule conversion factor is determined by a formula—the sustainable growth rate (SGR)—set forth in the Balanced Budget Act of 1997. It ties payment updates to four factors: changes in input costs, changes in Medicare FFS enrollment, changes in the volume of physician services relative to growth in the national economy, and changes in law and regulation. Although the SGR formula has yielded negative updates for the past several years, the Congress has overridden the formula multiple times since 2003 to prevent payment reductions—including two overrides in 2012 to avert a 27 percent cut.

Moving forward from the sustainable growth rate system

Responding to the increasing urgency of the problems created by the SGR system, the Commission submitted a letter to the Congress with several policy recommendations, including one to repeal the SGR and replace it with specified updates that would no longer be based on an expenditure-control formula. In the initial years, these updates would favor primary care. We include a copy of this October 2011 letter in Appendix B of this report.

In summary, the Commission determined that the SGR system is fundamentally flawed and is creating instability in the Medicare program for providers and beneficiaries. This system, which links annual updates to cumulative expenditures since 1996, has failed to restrain volume growth and, in fact, may have exacerbated it. Although the pressure of the SGR likely minimized fee increases in the past decade, this effect has disproportionately burdened physicians and health professionals in specialties with less ability to increase volume. Additionally, temporary, stop-gap "fixes" to override the SGR undermine the credibility of Medicare because they engender uncertainty and frustration among physicians and other health professionals, which may cause anxiety about Medicare among beneficiaries. The Commission concluded that the risks of retaining the SGR outweigh the benefits.

It is critical for the Congress to act now to resolve the SGR for a number of reasons. First, the total cost of repealing the SGR grows inexorably with each passing year, as does the cost of temporary "fixes." Second, as the deficit grows, there is greater need to offset the full cost of repealing the SGR. And third, opportunities to offset the costs of repealing the SGR within Medicare are becoming more difficult to identify and are being used for other purposes (such as to help finance coverage for the uninsured or for deficit reduction).

With this assessment, the Commission recommended that the Congress repeal the SGR system and replace it with specified updates for the physician fee schedule. The Commission drew on three governing principles to form its proposal. First, the link between cumulative fee schedule expenditures and annual updates is unworkable

and should be eliminated. Second, beneficiary access to care must be protected. Third, proposals to replace the SGR must be fiscally responsible.

From these principles, the Commission recommended repeal of the SGR system and proposed a series of updates that would no longer be based on an expenditure-control or volume-control formula. Specifically, these updates would include a freeze in current payment levels for primary care and, for all other services, annual payment reductions of 5.9 percent for three years, followed by a freeze. Given expected volume growth over the next decade, these legislated updates are expected to increase Medicare expenditures for fee schedule services annually—roughly doubling over the next 10 years. Approximately two-thirds of this increase would be attributable to growth in beneficiary enrollment and one-third would be attributable to growth in per beneficiary service use. Although our proposed updates reduce fees for most services, current law (under the SGR) calls for far greater fee reductions and could lead to potential access problems. The Commission finds it crucial to protect primary care from fee reductions, considering that the most recent data show that access risks are concentrated in primary care.

When repealing the SGR, it is important to realize that legislating a new schedule of updates (the schedule we propose or another) is not an irrevocable step. The Congress may determine in later years that a different course is appropriate to ensure sufficient access to fee schedule services. To assist the Congress, the Commission will continue to conduct our annual review of whether payments to physicians and other health professionals are adequate, as we do in this report. To this end, we will maintain our beneficiary survey, conduct physician focus groups, track physician and practitioner participation in Medicare, and examine changes in the volume and quality of ambulatory care. If, through these analyses, we determine that a future increase in fee schedule rates is needed to ensure beneficiary access to care, then the Commission will submit such a recommendation to the Congress.

Enacting our initial recommendation would eliminate the SGR and would alter the trajectory of fee schedule spending in Medicare's baseline. Therefore, future fee increases relative to this new baseline would require new legislation and would carry a budgetary cost. Nevertheless, if, on the basis of access concerns, the Congress decides to discontinue the cuts after one or two years, then the full cost of repealing the SGR would still be lower than if fee cuts were never implemented.

The Commission's recommendation for repealing the SGR carries a high budgetary score—roughly $200 billion over 10 years. Understanding the need for further fiscal responsibility, the Commission offered the Congress a list of potential offsets within the Medicare program—limiting ourselves only to Medicare, given our legislated purview. The Congress may seek offsets for repealing the SGR inside or outside of the Medicare program, and the Commission is not necessarily recommending that the cost of repealing the SGR be offset entirely within Medicare. The Commission emphasizes (as we did in our letter to the Congress) that these update recommendations and potential offsets were outlined specifically in the context of repealing the SGR system, recognizing that the high cost of repealing the SGR compels difficult choices that, in other contexts, the Commission might not support.

The Commission also proposed refinements to the accuracy of Medicare's physician fee schedule through targeted data collection and reducing payments for overpriced services. Even with such improvements to the fee schedule's pricing, Medicare must ultimately implement payment policies that shift providers away from FFS and toward payment approaches that better support delivery models that reward improvements in quality, efficiency, and care coordination, particularly for chronic conditions. Accordingly, the Commission recommended incentives in Medicare's accountable care organization program to accelerate this shift because new payment models—distinct from FFS and the SGR—may have greater potential to slow volume growth while also improving care quality. Similarly, incentives for physicians and health professionals to participate in the newly established Medicare bundling pilot projects could also improve efficiency across sectors of care.

Are Medicare's fee schedule payments adequate?

Our annual analysis of payments for Medicare fee schedule services finds that current payments are generally adequate. However, the Commission recently recommended that the Congress realign Medicare's fee schedule to bring primary care fees closer to those for specialty services and identify overpriced services and correct fees accordingly (Appendix B). Our annual assessment of payment adequacy examines several indicators: beneficiary access to care provided by

physicians and other health professionals, including rates of physicians participating with Medicare and taking assignment, and changes in the volume of services provided, quality of care, and Medicare reimbursement levels compared with those in the private sector. In the most recent years for which we have data, most payment adequacy indicators were positive. Unlike our assessments of other providers in this report, we cannot examine the financial performance of physicians and other health professionals directly because they are not required to report their costs to Medicare.

Beneficiaries' access to care: Generally good with relatively few problems reported

Physicians and other health professionals are often the most important link between Medicare beneficiaries and the health care delivery system. Our analysis of the 2009 Medicare Current Beneficiary Survey shows that about 85 percent of noninstitutionalized FFS beneficiaries report that a doctor's office or clinic is their usual source of care. Beneficiary access to physicians, therefore, is an important indicator to monitor when assessing Medicare's payment adequacy. Our analysis of access to physician services focused on indicators from several sources, including patient surveys, physician surveys, beneficiary focus groups, physician focus groups, and claims data.

2011 patient survey shows that, overall, access is good, but primary care continues to be a concern

To obtain the most current access measures possible, the Commission sponsors a telephone survey each year of a nationally representative, random sample of two groups of people: Medicare beneficiaries age 65 years or older and privately insured individuals age 50 to 64. The sample size is about 4,000 in each group (totaling 8,000 completed interviews, including an oversample of minority respondents).[2] By surveying both groups of people—privately insured individuals and Medicare beneficiaries—we can assess the extent to which access problems, such as delays in scheduling an appointment and difficulty finding a new physician, are unique to the Medicare population.[3]

Results from our 2011 survey indicate that most beneficiaries have reliable access to physician services. Most beneficiaries are able to schedule timely medical appointments and find a new physician when needed, but some beneficiaries experience problems, particularly when they are looking for a primary care physician. For both Medicare beneficiaries and privately insured individuals age 50 to 64, access to specialists is better than access to primary care when looking for a new physician.

On a national level, this survey does not find widespread problems with physician access, but certain market areas may experience more access problems than others due to factors unrelated to Medicare—or even private—payment rates, such as relatively rapid population growth. Moreover, although the share of beneficiaries reporting a major problem finding a primary care physician is small (representing about 1.3 percent of the entire Medicare population), this issue is a serious concern not only to the beneficiaries who are personally affected but also—on a larger scale—for the functioning of our health care delivery system. Our concern is amplified by the most recent survey results, which show that, among the small subset of beneficiaries who looked for a primary care physician in the past year, the share that reported "a big problem" finding one is larger this year than it was in the two preceding years. As described earlier, the Commission sought to protect primary care from payment reductions in its recommendation to repeal the SGR system because beneficiary access risks are concentrated in primary care. Before this recommendation, the Commission recommended budget-neutral increases for primary care services in reports that we released in 2008 and 2009. The Patient Protection and Affordable Care Act, enacted in 2010, contains several provisions to enhance access to primary care, including increasing Medicare payments for primary care services.

Most beneficiaries report timely appointments

Because most Medicare beneficiaries have multiple doctor appointments in a given year, an important access indicator we examine is their ability to schedule timely appointments. As in previous years, most beneficiaries continue to have good access to timely appointments. For 2011 specifically, among those seeking an appointment, most beneficiaries (74 percent) and most privately insured individuals (71 percent) reported "never" having to wait longer than they wanted for an appointment for routine care (Table 4-1, p. 92). Another 18 percent of Medicare beneficiaries and 21 percent of privately insured individuals reported that they "sometimes" had to wait longer than they wanted for a routine appointment. Though relatively small, the differences between the Medicare and the privately insured populations on this measure were statistically significant, suggesting that Medicare beneficiaries were more satisfied with the timeliness of their routine care appointments.

TABLE 4–1

Most Medicare beneficiaries and older privately insured individuals have good access to physician care, 2008–2011

Survey question	Medicare (age 65 or older) 2008	2009	2010	2011	Private insurance (age 50–64) 2008	2009	2010	2011
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	76%[a]	77%[a]	75%[a]	74%[a]	69%[a]	71%[a]	72%[a]	71%[a]
Sometimes	17[a]	17[a]	17[a]	18[a]	24[a]	22[a]	21[a]	21[a]
Usually	3[a]	2[ab]	3[a]	3	5[a]	3[a]	4[a]	4
Always	2	2	2	2[a]	2	3	3	3[a]
For illness or injury								
Never	84[a]	85[ab]	83[a]	82	79[a]	79[a]	80[a]	79
Sometimes	12[a]	11[ab]	13[a]	14[a]	16[a]	17[a]	15[a]	17[a]
Usually	1	2	2	2	2	2	2	2
Always	1[a]	1	1[a]	1	2[a]	2	2[a]	1
Looking for a new doctor: "In the past 12 months, have you tried to get a new...?" (Percent answering "Yes")								
Primary care doctor	6	6	7	6	7	8	7	7
Specialist	14[a]	14[a]	13[a]	14[a]	19[a]	19[a]	15[a]	16[a]
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	71	78[b]	79[ab]	65	72	71	69[a]	68
Percent of total insurance group	*4.6*	*5.0*	*5.2*	*3.6*	*4.8*	*5.4*	*4.8*	*4.5*
Small problem	10	10	8	12	13	8[b]	12	16
Percent of total insurance group	*0.6*	*0.6*	*0.5*	*0.7*	*0.9*	*0.6*	*0.8*	*1.1*
Big problem	18	12[ab]	12[b]	23[a]	13	21[a]	19	14[a]
Percent of total insurance group	*1.1*	*0.8*	*0.8*	*1.3*	*0.9*	*1.6*	*1.3*	*0.9*
Specialist								
No problem	88	88	87[a]	84	83	84	82[a]	86
Percent of total insurance group	*12.8*	*12.5*	*11.0*	*12.1*	*15.5*	*16.1*	*12.6*	*13.9*
Small problem	7	7	6[a]	8	9	9	11[a]	8
Percent of total insurance group	*1.0*	*1.0*	*0.8*	*1.1*	*1.7*	*1.7*	*1.8*	*1.3*
Big problem	4	5	5	7	7	7	6	6
Percent of total insurance group	*0.6*	*0.7*	*0.7*	*1.0*	*1.4*	*1.3*	*1.0*	*1.0*
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[a]	7[ab]	8[a]	8[a]	12[a]	11[a]	12[a]	11[a]

Note: Numbers may not sum to 100 percent because missing responses ("Don't know" or "Refused") are not presented. Sample sizes for each group (Medicare and privately insured) were 3,000 in 2008 and 4,000 in 2009, 2010 and 2011. Overall sample sizes for individual questions varied.

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

[b] Statistically significantly different from 2011 within the same insurance coverage category (at a 95 percent confidence level).

Source: MedPAC-sponsored telephone survey conducted in 2008, 2009, 2010, and 2011.

As expected, patients have an easier time scheduling illness-related and injury-related appointments than routine care appointments. Among those needing appointments for injury or illness, 82 percent of Medicare beneficiaries and 79 percent of privately insured individuals reported "never" having scheduling problems; 14 percent of Medicare beneficiaries and 17 percent of privately insured individuals reported "sometimes" having to wait longer than they wanted.

Beneficiaries' access to appointments in 2011 varied by race, with minorities reporting access problems more frequently than whites (Table 4-2, p. 94). This racial disparity existed for both the Medicare and the privately insured populations. Although a wider racial disparity in access is seen among privately insured patients, for routine care appointments, minority Medicare beneficiaries were more likely to report problems finding a specialist, as discussed later in this section. Disparities in access between whites and minorities have been documented by a large body of research, notably summarized in the Agency for Healthcare Research and Quality's 2010 National Healthcare Disparities Report. These reports show that disparities related to race, ethnicity, and socioeconomic status remain a factor in patient access to care (Agency for Healthcare Research and Quality 2011, Institute of Medicine 2002, Reschovsky and O'Malley 2008, Williams et al. 2004).

When respondents were asked about what they did when faced with not being able to schedule a timely appointment for either routine or illness care, most reported that they took a later appointment date; that was the case for 64 percent of the Medicare sample and 76 percent of the privately insured sample.

Among respondents who said they went to the emergency room during the year (25 percent of Medicare beneficiaries and 18 percent of privately insured individuals), 16 percent of Medicare beneficiaries and 11 percent of privately insured individuals reported that their doctor met them there. For both the Medicare sample and the privately insured sample, minorities were more likely than whites to report that their doctor met them at the emergency room.

Most beneficiaries can find a new physician but more difficulties reported for primary care

In addition to the ease of scheduling appointments, our survey also asks about respondents' ability to find a new physician if they are seeking one. As in previous years, relatively few survey respondents reported that they tried to find a new primary care physician or specialist in the past year. This finding suggests that most respondents were either satisfied with their current physician or did not have a health event or other reason that made them search for a new one. Specifically, in 2011 6 percent of Medicare beneficiaries and 7 percent of privately insured individuals reported that they looked for a new primary care physician in the preceding year; larger percentages (14 percent of Medicare beneficiaries and 16 percent of privately insured individuals) reported seeking a new specialist.

In our 2011 survey, we asked respondents who looked for a primary care physician about the main factors that caused them to seek a new primary care physician. The most commonly reported reason for both Medicare and privately insured respondents was that they wanted to change doctors. The next most common reason was that their doctor retired or stopped practicing. Also, some respondents said that they did not have a primary care doctor in their area (e.g., because they recently moved). Compared with these reasons, relatively few respondents stated that they were looking because their doctor was no longer accepting Medicare (in the case of respondents age 65 or older) or their private insurance (in the case of people age 50–64).

Among the small share of people (6 percent in Medicare and 7 percent in private insurance) who looked for a new primary care physician in the past year, similar percentages of Medicare and privately insured patients reported "no problem" (65 percent with Medicare and 68 percent with private insurance). When these findings are translated to the population at large, 3.6 percent of Medicare beneficiaries and 4.5 percent of privately insured individuals looked for a new primary care physician and reported "no problem" finding one.

Of the patients reporting a problem, Medicare beneficiaries were more likely to characterize their problem as "big." Specifically, 1.3 percent of Medicare beneficiaries and 0.9 percent of privately insured individuals said that they looked for a new primary care physician and experienced a "big problem" finding one in the past year. When confining results to those respondents who said they searched for a new primary care physician in the past year, 23 percent of Medicare beneficiaries and 14 percent of privately insured individuals said they experienced a "big problem."

Given that a small share of people seek a primary care physician in the year, annual fluctuations in these results

TABLE 4–2

Medicare beneficiaries have better or similar access to physicians compared with privately insured individuals, but minorities in both groups report problems more frequently, 2011

	Medicare (age 65 or older)			Private insurance (age 50–64)		
Survey question	**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	74%[a]	75%	72%[a]	71%[a]	72%[b]	64%[ab]
Sometimes	18[a]	19	18[a]	21[a]	21[b]	25[ab]
Usually	3	4	3	4	4	4
Always	2[a]	2[ab]	3[ab]	3[a]	3[ab]	6[ab]
For illness or injury						
Never	82	83[b]	75[b]	79	81[b]	75[b]
Sometimes	14[a]	13[ab]	17[b]	17[a]	16[a]	19
Usually	2	2	2	2	2	3
Always	1	1[b]	2[b]	1	1[b]	2[b]
Looking for a new doctor: "In the past 12 months, have you tried to get a new...?" (Percent answering "Yes")						
Primary care physician	6	6	6	7	6	6
Specialist	14[a]	16[b]	9[ab]	16[a]	17[b]	13[ab]
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	67	57	68	72	58
Percent of total insurance group, by race	*3.6*	*3.7*	*3.4*	*4.5*	*4.7*	*3.6*
Small problem	12	10	19	16	15	19
Percent of total insurance group, by race	*0.7*	*0.6*	*1.1*	*1.1*	*1.0*	*1.2*
Big problem	23[a]	23[a]	23	14[a]	12[a]	18
Percent of total insurance group, by race	*1.3*	*1.3*	*1.4*	*0.9*	*0.8*	*1.1*
Specialist						
No problem	84	86[b]	65[ab]	86	88[b]	78[ab]
Percent of total insurance group, by race	*12.1*	*13.5*	*5.7*	*13.9*	*15.0*	*10.1*
Small problem	8	7	11	8	8	10
Percent of total insurance group, by race	*1.1*	*1.2*	*0.9*	*1.3*	*1.3*	*1.3*
Big problem	7	6[b]	19[b]	6	5[b]	11[b]
Percent of total insurance group, by race	*1.0*	*0.9*	*1.6*	*1.0*	*0.8*	*1.5*
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[a]	8[ab]	10[b]	11[a]	11[a]	12

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 presented. Overall sample sizes for each group (Medicare and privately insured) were 4,000. Sample sizes for individual questions varied.

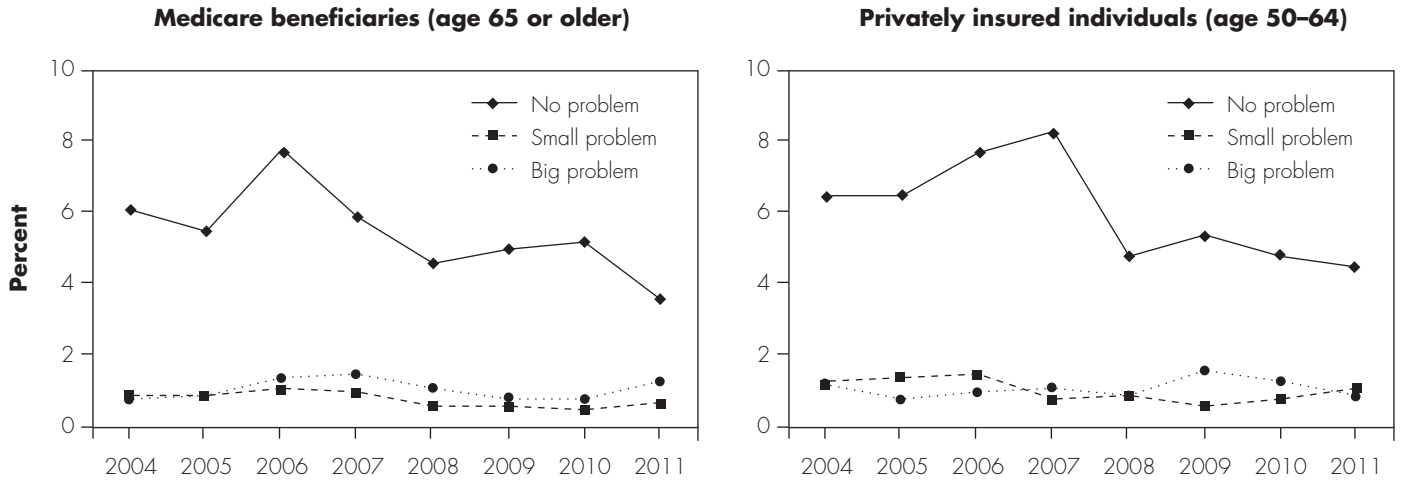
[a] Statistically significant difference between the Medicare and privately insured populations in the given race category (at a 95 percent confidence level).

[b] Statistically significant difference by race within the same insurance category (at a 95 percent confidence level).

Source: MedPAC-sponsored telephone surveys, conducted in 2011.

FIGURE 4–1

Ability to find a new primary care physician, Medicare beneficiaries and privately insured individuals, 2004–2011



Note: The remaining percent of respondents in the survey (e.g., 94 percent with Medicare, 93 percent with private insurance in 2011) did not seek a new primary care physician in the past year. This figure is corrected from the hard copy version of this report in which the lines for "small problem" and "big problem" were transposed for several of the years in both charts.

Source: MedPAC-sponsored telephone surveys, conducted 2004–2011.

are expected. In fact, the graphs in Figure 4-1 show considerable year-to-year variation. For the Medicare population, fluctuations are more apparent among those reporting "no problem"; for the privately insured group, we see more annual variation in those reporting a "big problem." Table 4-1 (p. 92) also shows that the share of beneficiaries reporting a "big problem" finding a primary care physician in 2011 was statistically different from 2009 and 2010 but not from 2008. For both the Medicare and privately insured groups, the rate of people reporting "no problem" finding a primary care physician has declined.

Because several recent media reports and association publications have misstated the numbers that we present in this annual chapter, we want to emphasize, at the risk of being redundant, that the percentage of beneficiaries and privately insured people reporting problems comes from a subset of those who indicate that they were, in fact, looking for a new physician or tried to schedule an appointment in the past year. Survey respondents who did not look for a new physician or did not try to make a physician appointment were not asked about related problems. Thus, the rates of patients reporting problems refer only to those people to whom the question applies and not to the Medicare or privately insured population at large. Accordingly, among the 6 percent of Medicare beneficiaries reporting that they looked for a new primary care physician in the preceding year, those reporting that they experienced a "big problem" correspond to about 1.3 percent of the aged Medicare population. Although this percentage may seem small, the problems these beneficiaries (roughly half a million as calculated from our survey)—and their younger counterparts—face can be personally distressing and are often featured in local and national media reports.

One response to these findings is to examine the accuracy of fee schedule payments and make improvements where needed. In the Commission's letter to the Congress (Appendix B), we recommended stronger efforts by CMS to refine the accuracy of Medicare's physician fee schedule through targeted data collection and reducing payment for overpriced services. Such action could lead to reductions in relatively overpriced procedures and tests. The accuracy of payments for primary care depends also on how services such as office visits are defined. In the fee schedule final rule for 2012, CMS draws attention to a technical expert panel (TEP) convened by the Department of Health and Human Services Assistant Secretary for Planning and Evaluation (Centers for Medicare & Medicaid Services 2011). A major task of the TEP is to develop approaches to defining visits and paying for

TABLE 4–3 **Use of physician assistants and nurse practitioners for primary care, 2011**

	Medicare (age 65 or older)			Private insurance (age 50–64)		
Survey question	**All**	**Urban**	**Rural**	**All**	**Urban**	**Rural**
"For your primary care, do you see a nurse practitioner or physician assistant for…?"						
All or most	11%	10%[b]	14%[b]	10%	9%[b]	13%[b]
Some	22[a]	21[a]	24[a]	26[a]	25[ab]	29[ab]
None	63	64[b]	58[b]	62	63[b]	55[b]

Note: Numbers may not sum to 100 percent because missing responses ("Not applicable," "Don't Know," or "Refused") are not presented.
[a] Statistically significant difference between the Medicare and privately insured populations (at a 95 percent confidence level).
[b] Statistically significant difference between urban and rural within the same insurance category (at a 95 percent confidence level).

Source: MedPAC-sponsored telephone survey, conducted in 2011.

primary care services.[4] Additionally, CMS stated in the final rule mentioned earlier that the Relative Value Scale Update Committee and several organizations have called on CMS to explore Medicare payment and coverage options for many care coordination services that primary care physicians typically perform.

As stated in our letter to the Congress, even with improvements in the fee schedule, Medicare must implement payment policies that shift providers away from FFS and toward delivery models that reward improvements in quality, efficiency, and care coordination, particularly for chronic conditions. Payment approaches that recognize the benefits of non–face-to-face care coordination between visits and among providers may be more appropriate for primary care, particularly for patients with chronic conditions. In addition to examining the feasibility of specific care coordination payments, CMS is embarking on several projects to examine the results (patient health and total spending outcomes) of monthly per patient payments to primary care providers for their care coordination activities. They include the Comprehensive Primary Care initiative, the Multi-payer Advanced Primary Care Initiative, and the Federally Qualified Health Center Advanced Primary Care Practice Demonstration.

Recognizing that physicians are not the only health professionals who provide primary care, our 2011 survey also asked respondents whether they saw a nurse practitioner or physician assistant for primary care in the past year. In general, the responses among the Medicare sample and the privately insured sample were very similar, with about one-third of the respondents in each group reporting that they saw a nurse practitioner or physician assistant for at least some of their primary care (Table 4-3). More specifically, 11 percent of beneficiaries reported that they saw a nurse practitioner or physician assistant for "all or most" of their primary care and an additional 22 percent reported that they saw a nurse practitioner or physician assistant for "some" of their primary care. For the privately insured population, the shares were 10 percent and 26 percent, respectively. Rural respondents in both groups were more likely than urban respondents to see a nurse practitioner or physician assistant for their primary care. Other researchers have also found higher use of nurse practitioners and physician assistants for primary care in rural areas (Everett et al. 2009, Hooker and McCaig 2001).

As in previous years, we continue to find that patients seeking a new specialist were less likely to report problems than those seeking a new primary care physician. In 2011, among those looking for a new specialist, 84 percent of Medicare beneficiaries and 86 percent of privately insured individuals reported "no problem" finding one in the past year. Although our survey results indicate that Medicare patients have an easier time finding a new specialist than a new primary care physician, the Commission is aware that access may be more difficult for some specialties than for others. For example, in previous physician focus groups, psychiatry was the most frequently identified specialty for which physicians reported having difficulty finding referrals for their Medicare patients (Medicare Payment Advisory

Commission 2010). In future work, we will explore ways to examine access by more specific specialty types.

Our patient survey reveals that although minorities were less likely than whites to report looking for a new specialist, when minorities were trying to find one they were more likely to report problems (Table 4-2, p. 94). Specifically, among Medicare beneficiaries seeking a new specialist, 30 percent of minorities reported either a "small problem" or a "big problem" compared with 13 percent of whites. In the privately insured population, a smaller disparity existed: 21 percent of minorities and 13 percent of whites reported problems finding a specialist.

Racial and ethnic differences in Medicare beneficiaries' access to specialists are problematic and compel deeper investigation into possible causes and potential policy options. In future work, the Commission will conduct research to ask questions and learn more about the specific difficulties minority beneficiaries face when trying to find specialists. For example, are fewer specialists practicing in communities with larger shares of minority beneficiaries; are physicians more reluctant to accept Medicare patients who have Medicaid or no supplemental coverage; are there issues related to physician referral networks in minority communities; how do access issues vary by specific race and ethnicity (e.g., Asian American, African American, Hispanic, Native American)? Policy options that this research could inform may highlight potential focus areas, such as workforce goals, quality initiatives targeted for minority populations, and developing ways to ensure that accountable care organizations provide access to specialists comparable to that in surrounding areas.

Several other studies have found racial and ethnic disparities in access to specialists. One study, for example, found that primary care physicians with relatively large proportions of African American patients in their Medicare caseloads reported facing greater difficulty obtaining high-quality referrals to subspecialists (Bach et al. 2004). Though not limited to Medicare patients, a more recent study similarly found that physicians with a larger share of minorities in their practice were more likely to report difficulties obtaining referrals to specialists for their patients (Reschovsky and O'Malley 2008). In this study, physicians attributed such problems to the fact that many of their patients were uninsured or had insurance coverage that posed access barriers rather than to an inadequate supply of qualified specialists in the area. Recent work in the Department of Health and Human Services has focused on developing an action plan to reduce racial and ethnic disparities (Koh et al. 2011).

Reports of not getting needed physician care were more frequent for privately insured individuals

Our survey also examines rates of patients reporting that they did not see a physician when they thought they should have. As in previous years, Medicare beneficiaries (8 percent) were less likely than their privately insured counterparts (11 percent) to say that they should have seen a doctor for a medical problem in the past year but did not (Table 4-1, p. 92). This difference was also reported in a 2007 survey conducted by the Center for Studying Health System Change (Cunningham 2008).

The two most frequently reported reasons for forgoing care among the Medicare respondents were that they "just put it off" and "didn't think the problem was serious." Among the 8 percent of beneficiaries who reported forgoing care, 11 percent (corresponding to 0.9 percent of the entire beneficiary population) listed physician availability issues (e.g., scheduling an appointment time or finding a doctor) as the problem. As in previous years, privately insured individuals were more likely than Medicare beneficiaries to attribute cost as a factor in forgoing care. Specifically, among the 8 percent of beneficiaries who reported forgoing care, 11 percent (corresponding to 0.9 percent of the entire beneficiary population) attributed it to thinking that it "would cost too much." In comparison, among the privately insured individuals who reported forgoing care, more than a quarter attributed it to cost. Although in previous years, for both Medicare and privately insured people, those with lower incomes were more likely to report forgoing physician care, this pattern was less conclusive in 2011.

Rural, urban, and other market area analyses

Despite having 8,000 respondents, our survey is not large enough to evaluate access by specific market areas, but we are able to examine results by rural and urban designation. Rates for getting appointments were more similar between rural and urban patients than rates for finding new physicians. For example, 76 percent of rural beneficiaries and 74 percent of urban beneficiaries reported that they "never" had a problem getting appointments for routine care. Among the privately insured, comparable rates for getting timely appointments were 71 percent for both rural and urban respondents. Among the 6 percent of Medicare beneficiaries looking for a new primary care physician, 75 percent of rural beneficiaries and 63 percent of urban beneficiaries reported "no problem." (For more details, see online Appendix A to this chapter, available at http://www.medpac.gov.)

In 2011, the Commission contracted with NORC (formerly the National Opinion Research Center) to conduct focus groups in Boston, Dallas, and the Washington, DC, area to gain further insight into selected issues in different market areas. Participants in these focus groups included Medicare beneficiaries, future beneficiaries (people aged 55–64), and physicians. In many instances, the focus group results comport with findings from our patient survey.

Specifically, nearly all current and future beneficiaries in the focus groups affirmed that they had a primary care physician. For nonurgent care, most participants said they could be seen on the same day or the next day, while a few said they typically had to wait longer. Several participants, whose primary care physician worked in a larger group practice, said that if their physician was not available, they could see other internists or physician assistants.

A small number of participants reported difficulty finding a new physician for themselves or for a parent because of nonacceptance of Medicare or other provider network restrictions, including Medicare Advantage plans. Participants often stated that they were not aware of many access problems in their own geographic area but that they heard of difficulties in other communities.

In several instances, consumers who changed providers because they had recently moved to the area reported challenges finding a new physician for themselves or a family member and believed that problems were exacerbated by their "newness to the neighborhood" (i.e., limited social connections for recommendations and other physician referrals). For people who did not move but had to change providers (e.g., because of insurance changes, such as enrollment in a Medicare Advantage plan, switching into or out of a closed provider network, or an employer changing insurance carriers), participants reported relatively less difficulty because they had resources and referrals from their previous doctors for their search.

When asked about their ability to find specialists, a few patients in each focus group reported long waits for initial visits with specialists. Patients who were already seeing a specialist regularly, such as a cardiologist or oncologist, did not report problems scheduling appointments.

In our physician focus groups, the vast majority reported that they accepted Medicare patients and "took assignment" (i.e., accepted Medicare fee schedule rates as payment in full for Medicare services and therefore did not balance bill their Medicare patients). Principal reasons physicians gave for not accepting certain types of insurance—including Medicare—were reimbursement rates and paperwork burdens. Among those who reported that they did not accept new Medicare patients, most said that they make exceptions, such as keeping existing patients when they age into Medicare or taking certain referrals. Primary care physicians reported some difficulty referring patients to certain specialists. Some said that their offices had to call the specialists themselves and use their "clout" to ensure that their patients could get appointments. The most frequently cited specialties for access problems were dermatology and psychiatry.

Other national patient surveys show comparable results for access to care

Results from other patient surveys are analogous to the Commission's survey results on access to physician services. We summarize findings from these studies below.

- The Consumer Assessment of Healthcare Providers and Systems for Medicare FFS—a large CMS-sponsored survey of FFS beneficiaries—found that for 2011, 88 percent of Medicare beneficiaries reported "always" or "usually" being able to schedule timely appointments for routine care. Also, 92 percent of beneficiaries reported that they "always" or "usually" were able to schedule an appointment with a specialist as soon as they wanted. The share of beneficiaries reporting major problems accessing physicians (i.e., "never" getting timely appointments) was below 3 percent for both routine care and specialty care.

- Results from the 2009 Medicare Current Beneficiary Survey—another large CMS survey of beneficiaries—found that 94 percent of noninstitutional FFS beneficiaries had a usual place for seeking medical care. For the vast majority of them, it was a doctor's office (73 percent) or a doctor's clinic (11 percent). Other care sites reported included HMOs and Department of Veterans Affairs facilities. About 5 percent of FFS beneficiaries said that they had trouble getting care, and 8 percent reported that they had a health problem in the past year for which they thought they should have seen a doctor but did not.

- Using a variety of methods, the Government Accountability Office also concluded that Medicare beneficiaries had stable access to physician services

TABLE 4–4 **Most physicians accept new Medicare patients**

Patient insurance type	2008 All physicians	2008 Primary care	2008 All other specialties	2009 All physicians	2009 Primary care	2009 All other specialties
Any new patients	94%	90%	98%	94%	87%	98%
Medicare	90	83	95	90	82	96
Medicaid	63	55	69	65	56	70
Capitated private insurance	50	58	44	43	47	42
Noncapitated private insurance	79	76	81	76	73	79
Worker's compensation	58	53	61	58	55	59
Self-pay	91	86	95	88	81	92
No charge	47	40	52	40	34	44

Note: Results include office-based physicians with at least 10 percent of practice revenue coming from Medicare.

Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Ambulatory Medical Care Survey.

(Government Accountability Office 2009). This study found that Medicare beneficiaries experienced few problems accessing physician services during a 2007–2008 study period. Furthermore, the proportion of beneficiaries who received physician services and the number of services per beneficiary served increased nationwide from 2000 to 2008.

The supply of physicians and other health professionals billing Medicare grew and surveys show high acceptance of Medicare patients

Our analysis of Medicare claims data shows that the number of physicians and other health professionals billing Medicare grew almost 4 percent in 2010. More specifically, the number of physicians billing Medicare grew from 571,000 in 2009 to 588,000 in 2010. The number of other health professionals—such as podiatrists, chiropractors, nurse practitioners, physician assistants, and physical therapists—grew from 317,000 in 2009 to 335,000 in 2010.

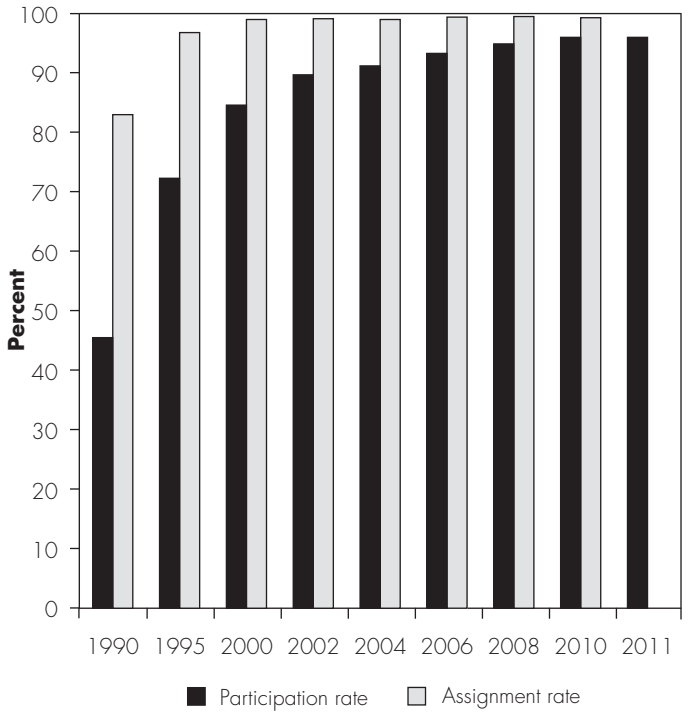
We also measure physician supply and beneficiary access to physicians through information obtained in physician surveys conducted by various organizations and the National Center for Health Statistics. For the most part, these surveys explore physicians' willingness to accept new patients by various insurance types and find that most physicians are willing to accept some or all Medicare patients.

The National Ambulatory Medical Care Survey—a national survey of office-based physicians—shows that over the past several years most physicians continued to accept new Medicare patients (Table 4-4). (This survey does not distinguish physicians who accept all new Medicare patients from those who accept only some new Medicare patients.) For 2009, among physicians with at least 10 percent of their practice revenue coming from Medicare, 90 percent accepted new Medicare patients (Cherry 2011).[5] By specialty, 82 percent of primary care physicians and about 96 percent of physicians in all other specialties accepted new Medicare patients. The rate of primary care physicians accepting new Medicare patients fell slightly, while the rate of specialist physicians accepting new Medicare patients increased slightly.

In the Center for Studying Health System Change 2008 physician survey, 86 percent of physicians reported that they accept at least some new Medicare patients (Boukus et al. 2009). Specifically, 74 percent reported that their practices accepted all or most new Medicare patients and about 12 percent reported accepting some new Medicare patients.[6] For privately insured patients, 96 percent of physicians reported accepting at least some new privately insured patients. Specifically, 87 percent said they accepted all or most and 9 percent said they accepted some new privately insured patients. Physicians' acceptance of new Medicaid patients was lower than for Medicare and privately insured patients.

FIGURE 4–2

Medicare participation and assignment rates have grown to high levels, 1990–2011



Note: "Participation rate" is the percentage of physicians and other health professionals with signed Medicare participation agreements among those in Medicare's registry. Participation agreements require the provider to accept assignment (i.e., accept Medicare's fee schedule rate as payment in full) for all services provided to Medicare beneficiaries. Participation agreements do not require physicians to accept new Medicare patients. "Assignment rate" is the percentage of allowed charges paid on assignment. Data for calculating the assignment rate are not available for 2011.

Source: Ways and Means Greenbook (2004), unpublished CMS data, and MedPAC analysis of Medicare claims for a 5 percent random sample of Medicare beneficiaries.

Physicians who classified themselves in surgical or medical specialties were more likely than primary care physicians to accept all new Medicare and privately insured patients. Physicians in rural areas were more likely than those in urban areas to accept new patients of all insurance types. Newer physicians were more likely than physicians who had been in practice longer to accept new Medicare patients. Additionally, employee physicians and physicians who are part of a group practice were more likely to accept all new Medicare patients. This last finding is consistent with a recent report released by the Medical Group Management Association (MGMA). It stated that 92 percent of surveyed group medical practices currently accept new Medicare patients; another 6.5 percent limit their Medicare patients to those who are established patients aging into Medicare; and 1 percent of practices do not accept any Medicare patients.

In a smaller 2009 survey funded by the Robert Wood Johnson Foundation, physicians were more likely to say that private insurance had better payments than FFS Medicare, but more than half reported that Medicare was the same or better on three measures: paperwork, ease of obtaining services for patients, and autonomy in decision making (Keyhani and Federman 2009).

A different type of study—restricted to claims-processing analysis—also compares Medicare with private insurers. Conducted by the American Medical Association (AMA), the 2011 National Health Insurer Report Card shows that Medicare performed similar to or better than private insurers on several claims-processing measures, such as indicators for payment timeliness, transparency, and accuracy of claims processing (American Medical Association 2011).

Rates of physician participation and services paid on assignment remain high

To supplement our data on the supply of physicians treating Medicare patients and beneficiaries' reported access to physician care, we examine assignment rates (the share of Medicare-allowed charges for which physicians accept assigned fee schedule amounts as payment in full) and provider participation rates (the share of physicians and other health professionals who agree to always accept fee schedule amounts as payment in full). Our analysis of Medicare claims data shows that 99.4 percent of allowed charges for physician services were assigned in 2010 (Figure 4-2); that is, for almost all allowed services that year, physicians agreed to accept the Medicare fee schedule amount as payment in full for the service.[7] The assignment rate has held steady at more than 99 percent since 2000.

The high rate of assigned charges reflects the fact that most physicians and other health professionals who bill Medicare are "participating" physicians and other health professionals. That is, for 2011, 96 percent of physicians, limited license practitioners, and other practitioners who billed Medicare had participation agreements with Medicare. Participating providers agree to accept assignment on all allowed Medicare claims in exchange for a 5 percent higher payment on allowed charges. Participating providers also receive nonmonetary benefits, such as being able to receive payments directly

from Medicare (less the beneficiary cost-sharing portion) rather than having to collect the total amount from the beneficiary. This arrangement is a major convenience for many physicians and other health professionals. Participating providers also have their name and contact information listed on Medicare's website and they have the ability to electronically verify a patient's Medicare eligibility and supplemental insurance status.[8] In contrast, physicians and other health professionals who elect to be "nonparticipating" receive a 5 percent lower payment from Medicare for each service they provide but may charge their Medicare patients rates that are up to 9.25 percent higher. This practice of "balance billing" results in higher cost-sharing liabilities for patients. Balance billing is generally rare but varies by geographic area and specialty.

Changes in service use consistent with reports of decreases outside of Medicare

We analyze annual changes in use of services as an indicator of beneficiary access but caution that interpreting such data is complex because of factors unrelated to Medicare's pricing of services. Decreases in volume could signify price inadequacy if physicians were reluctant to offer such services based on their Medicare payment. However, our evidence indicates that volume decreases are more likely to be due to other factors, such as general practice pattern changes or—in the case of some imaging services—concerns about radiation exposure. For example, the volume of coronary artery bypass grafting has been declining as other interventions substitute for the procedure. Increases in volume may signal overpricing if physicians favor certain services because they are exceedingly profitable; similarly, other factors—including population changes, disease prevalence, changes in Medicare benefits, shifts in the site of care, technology, and beneficiaries' preferences—can also explain volume increases. As an example, procedures for injecting pharmacologic agents into the eye have increased in volume in recent years as therapies have emerged for treating macular degeneration. Another confounding factor is that the volume of services sometimes increases when payment rates decline (Codespote et al. 1998). The possibility of such a response—known as a behavioral or volume offset—makes it particularly difficult to interpret volume increases by themselves as an indicator of payment adequacy.

For this report, we used claims data for 2005, 2009, and 2010; identified the services furnished by physicians and other professionals billing under Medicare's physician fee schedule; and calculated two measures of changes in service use. First, we calculated growth in the units of service per beneficiary. Second, we calculated growth in the volume of services per beneficiary. Volume is units of service weighted by each service's relative value units (RVUs) from the physician fee schedule. The RVUs were those for 2010, which puts service volume for all years on a common scale. The result is that volume growth 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 from X-rays to higher complexity computed tomography (CT) scans.

Our volume analysis also accounts for the policy changes that have occurred in payments for office and inpatient consultations. As of 2010, CMS stopped recognizing the billing codes for consultations.[9] Physicians and other health professionals now use office visit codes and codes for hospital and nursing facility visits. 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—when in fact the change was in payment rates. To avoid this situation, we focus the discussion below on the change in units of service and limit discussion of changes in volume growth to those services not affected by the change in payments for consultations. We will resume discussion of growth in volume of office and inpatient visits in later reports.

Across all services, units of service per FFS beneficiary decreased slightly in 2010, by 0.2 percent (Table 4-5, p. 102). Among broad categories of service, growth rates were negative at –0.1 percent for evaluation and management (E&M), –1.5 percent for imaging, and –0.6 percent for tests. Services with positive growth rates were major procedures, at 1.1 percent, and other procedures, at 0.2 percent.

Small imaging decrease after decade of rapid growth

Despite the decrease in 2010, use of imaging services remained much higher than it was a decade ago. Units of service per 1,000 beneficiaries for the type of CT scan that accounts for the largest share of imaging spending—CT of parts of the body other than the head—grew rapidly from 2000 to 2009: The rate went from 258 to 551. With the 0.7 percent decrease in units of service per beneficiary in 2010, use of this CT service remained at 548 per 1,000 beneficiaries, more than double the rate in 2000. The most

TABLE 4–5

Use of services furnished by physicians and other health professionals, per fee-for-service beneficiary

Type of service	Change in units of service per beneficiary		Change in volume per beneficiary		Percent of 2010 allowed charges
	Average annual 2005–2009	2009–2010	Average annual 2005–2009	2009–2010	
All services	**2.0%**	**–0.2%**	**N/A%**	**N/A%**	**100.0%**
Evaluation and management	**1.2**	**–0.1**	**N/A**	**N/A**	**44.3**
Office visit—new and established	1.5	–0.4	N/A	N/A	24.0
Inpatient visit—hospital and nursing facility	0.5	–0.3	N/A	N/A	15.5
Emergency room visit	1.0	2.7	3.0	4.2	3.1
Hospital visit—critical care	6.1	8.5	8.0	8.7	1.4
Home visit	4.3	5.4	6.1	6.2	0.4
Imaging	**2.2**	**–1.5**	**3.9**	**–2.5**	**13.5**
Advanced—CT: other	6.4	–0.7	6.4	–2.3	2.2
Standard—nuclear medicine	–0.2	–7.8	4.2	–5.4	1.7
Echography—heart	2.6	–0.8	3.7	–1.8	1.5
Advanced imaging—MRI: other	3.0	–2.4	2.5	–4.4	1.4
Standard—musculoskeletal	1.2	–0.5	1.2	–1.4	1.0
Echography—other	6.7	3.5	8.3	4.4	0.9
Imaging/procedure—other	7.0	–5.9	11.9	–1.1	0.7
Standard—breast	5.3	–2.1	4.4	–2.4	0.7
Advanced—MRI: brain	1.5	–4.6	–0.9	–7.5	0.6
Advanced—CT: head	5.0	–0.9	5.3	–3.1	0.5
Standard—chest	–0.3	–2.1	–0.8	–3.0	0.5
Echography—carotid arteries	1.9	–2.6	4.1	–2.4	0.5
Major procedures	**1.6**	**1.1**	**2.8**	**1.4**	**7.7**
Cardiovascular—other	0.0	0.3	4.3	2.1	1.9
Orthopedic—other	6.0	4.6	7.2	5.1	1.0
Knee replacement	2.2	2.6	3.0	3.1	0.5
Coronary angioplasty	–2.6	0.6	–2.9	0.1	0.4
Explore, decompress, or excise disc	4.3	1.6	6.1	2.8	0.3
Coronary artery bypass graft	–7.2	–6.7	–7.3	–6.9	0.3
Hip replacement	2.1	2.3	3.0	2.9	0.3
Pacemaker insertion	2.5	–1.9	0.6	–2.7	0.3
Hip fracture repair	–0.8	–2.9	–0.4	–2.8	0.3
Other procedures	**3.7**	**0.2**	**4.0**	**0.0**	**22.3**
Skin—minor and ambulatory	2.9	0.8	N/A	1.3	4.4
Outpatient rehabilitation	4.7	1.1	5.5	1.8	3.3
Radiation therapy	2.0	–7.4	5.3	–1.9	2.3
Minor—other	3.6	–0.5	3.4	–2.2	2.1
Cataract removal/lens insertion	–0.6	–2.6	–0.1	–2.3	1.5
Minor—musculoskeletal	4.9	–1.2	6.6	–2.3	1.4
Eye—other	12.7	9.7	7.0	6.0	1.1
Colonoscopy	–1.4	–2.2	–1.3	–2.0	0.9
Upper gastrointestinal endoscopy	1.9	0.2	2.6	0.6	0.5
Cystoscopy	0.7	–1.3	1.4	–1.5	0.5
Tests	**0.7**	**–0.6**	**4.6**	**1.6**	**5.2**
Other tests	–1.1	–4.8	4.3	–1.4	2.0
Electrocardiograms	0.5	0.1	1.5	0.3	0.5
Cardiovascular stress tests	–2.6	–4.6	–1.2	–6.2	0.4

Note: N/A (not available), CT (computed tomography). 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 2010. For billing codes not used in 2010, we imputed RVUs based on the average change in RVUs for each type of service. Some low-volume categories are not shown but are included in the summary calculations. Evaluation and management 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 2005 and 2009, office visits and inpatient visits include, respectively, office and inpatient consultations. Skin procedures volume is not reported for 2005 to 2009 due to a change in coding of Mohs procedures that prevented assignment of RVUs for these services in 2005.

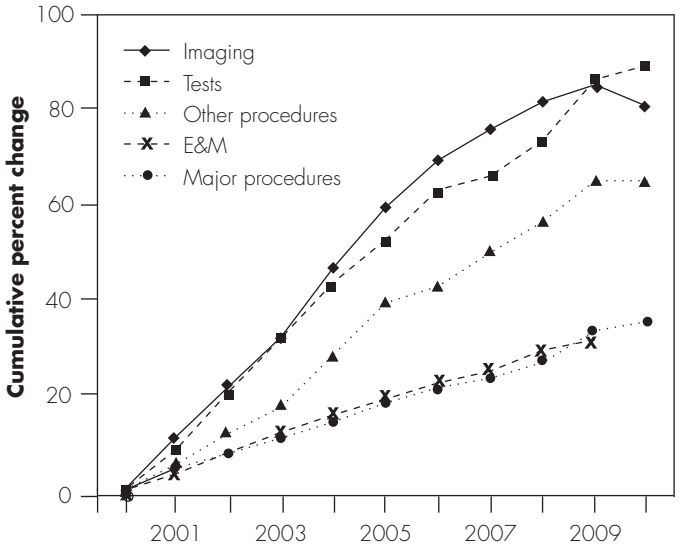
Source: MedPAC analysis of claims data for 100 percent of Medicare fee-for-service beneficiaries.

frequently used MRI service—MRI of parts of the body other than the brain—is another example of an imaging service that experienced rapid growth in use in recent years and then a small decline in 2010. In 2000, beneficiaries received this service at a rate of 64 services per 1,000 beneficiaries. By 2009, the rate had gone up to 144 per 1,000. While there was a 2.4 percent decrease in units of service per beneficiary in 2010, the use rate remained well above double the 2000 rate, at 141 per 1,000.

This pattern—a large increase in service use from 2000 to 2009 followed by a comparatively small decrease in 2010—is characteristic of imaging services overall (Figure 4-3). Cumulative growth in the volume of imaging from 2000 to 2009 totaled 85 percent. By contrast, the 2.5 percent decrease in imaging volume in 2010 was 1/30th of the cumulative increase that occurred the previous decade. The growth in imaging volume from 2000 to 2009 was exceeded only by the growth in use of tests—such as electrocardiograms and cardiovascular stress tests—during those years. Such growth was more than double the cumulative growth rates for E&M and major procedures from 2000 to 2009, which were 32 percent and 34 percent, respectively.

FIGURE 4–3

Growth in the volume of practitioner services, 2000–2010



Note: E&M (evaluation and management). Volume growth for E&M is through 2009 only due to change in payment policy for consultations.

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

Decrease in use of imaging occurred amid concerns about appropriateness

Concerns about use of imaging are widespread.

- Physicians have voiced concerns about diagnostic tests that are ordered without an understanding of how the results could change patient treatment (Redberg et al. 2011). One test can start a cascade of other more invasive tests or treatments.
- In a study for the Commission documenting trends in the services furnished to Medicare beneficiaries by cardiologists from 1999 to 2008, physician researchers found that the bulk of the growth occurred in two established technologies: echocardiograms and stress tests with nuclear imaging (Andrus and Welch 2012). They conclude that it is unlikely that these services were underutilized in 1999 and express doubt that there was a clinical justification for a threefold increase in nuclear stress testing and a twofold increase in echocardiography. They note further that excessive use of such services poses a number of potential harms, including cancer risk due to radiation exposure, anxiety related to false-positive results, and complications of invasive procedures pursued in response to those false-positive results.
- Another study for the Commission—in progress—is considering the extent to which certain diagnostic services are repeated. The list of services includes three imaging services: echocardiography, imaging stress tests, and chest CT. Given the lack of research on this topic, the first aim of the project is to document the extent to which services are repeated at given intervals, such as within one year after an index service. But the study is also showing that some clinicians routinely repeat services, even though standards for doing so are lacking. In addition, a finding of wide geographic variation in the amount and frequency of repeat testing suggests that—in the absence of external standards—local practice style is determining testing thresholds. One reason to study repeat testing is that it is a risk factor for overdiagnosis (Welch et al. 2011). In addition, a tendency to repeat services routinely can reduce the capacity of physicians and other health professionals to serve new patients, raise practice costs as more equipment and personnel are used to serve a given population, and raise spending.
- The popular press has included a number of stories in recent years focused on overuse of services, including

imaging (Elton 2009, Holohan 2011, Johnson 2008, Kolata 2011, Palfrey 2011). For example, in an essay for the *New York Times*, a physician wrote that "Overconsultation and overtesting have now become facts of the medical profession. The culture in practice is to grab patients and generate volume. 'Medicine has become like everything else,' a doctor told me recently. 'Everything moves because of money.'" (Juahar 2008). In a commentary for the *New England Journal of Medicine*, a physician and another author wrote that "The goal should be to redirect nascent physicians from a shotgun approach toward the critical use of imaging in thoughtful and elegant diagnosis.'" (Hillman and Goldsmith 2010).

As discussed in the Commission's June 2011 report, there is evidence that some diagnostic imaging services ordered by physicians are not clinically appropriate and that inappropriate use occurs in both physicians' offices and hospitals. For example, the American College of Cardiology Foundation (ACCF) and UnitedHealthcare sponsored research to assess the appropriateness of nuclear cardiology procedures performed by six nonhospital practices using criteria developed by the ACCF and the American Society of Nuclear Cardiology (Hendel et al. 2010). The researchers found that 14 percent of the studies performed at these sites were inappropriate and 15 percent were of uncertain appropriateness.

Decreases in service use not limited to Medicare

National Health Expenditures data show that spending for the services furnished by physicians and other health professionals grew at a historically low rate in 2010: 2.4 percent (Keehan et al. 2011). For 2009 and 2008, the growth rates were 4.0 percent and 6.7 percent, respectively. Reasons given for the low growth are elevated unemployment, higher cost sharing in employer-based health plans, and a less severe flu season in 2010 compared with 2009.

Decreases in use of imaging may have contributed to the low growth in spending. One report cites decreases in 2010 of 2 percent for outpatient CT and 6 percent for nuclear medicine (The Advisory Board Company 2010). In one market, fears of radiation exposure and physician incentive programs introduced by some insurers have contributed to less use of imaging (Mahar 2011).

There is evidence also of decreases in office visits by nonelderly patients with private insurance. According to a study for the Kaiser Family Foundation based on data for 2009 to 2011, the number of such visits fell by 17 percent (Claxton and Leavitt 2011). It was not the result of a decrease in the number of private insurance enrollees: The enrollment decline from 2009 to 2010 was 2 percent and enrollment is believed to have increased in 2011. The authors cited instead the economic downturn coupled with higher deductibles, copays, and coinsurance.

Quality of care: Most ambulatory care quality measures improved or did not change significantly

Our most recent analysis of a nationally representative sample of Medicare claims data shows that most indicators of ambulatory care quality improved or did not change significantly for the period reviewed. Each year, we compare changes in 38 ambulatory care quality indicators between two time periods—in this case, 2007–2008 and 2009–2010—to determine whether the rates at which beneficiaries with certain diagnoses received clinically indicated care for their conditions improved, worsened, or remained stable. The 38 quality indicators, called the Medicare Ambulatory Care Indicators for the Elderly (MACIEs), were developed by the Commission with input from an expert panel of clinicians. They are designed to measure changes in the rates of clinically indicated treatment and follow-up care from physicians, clinics, and other ambulatory care providers to FFS Medicare beneficiaries who were diagnosed with specific acute or chronic diseases that are prevalent in the Medicare population age 65 or older, such as heart disease, diabetes, cancer, and stroke. The MACIEs include six measures of potentially avoidable hospitalizations for five chronic conditions. A complete description of the development of the MACIEs and a list of the 38 measures is available on the Commission's website at http://www.medpac.gov/chapters/Mar11_Ch04_APPENDIX.pdf.

Our claims analysis found that from 2008 to 2010, 14 MACIE measures improved and 16 showed no statistically significant change. Overall, this finding indicates that in most cases Medicare beneficiaries diagnosed with selected conditions received clinically necessary ambulatory services and averted potentially avoidable hospitalizations at similar or better rates in 2010 compared with 2008. However, we found small but statistically significant declines in rates for eight MACIE measures, including six for care related to cancer and two for potentially avoidable hospital care for beneficiaries with unstable angina and hypertension. For example, there were two very small decreases (less than 1 percentage point) in the rate of

breast cancer screening for all female beneficiaries ages 65 to 74 and in the rate of follow-up mammography for beneficiaries diagnosed with breast cancer. There also were small decreases (2 to 3 percentage points) in the rates of chest X-ray and other diagnostic imaging services for beneficiaries diagnosed with breast cancer.

To examine these declines further, we researched quality reported in the private insurance market, using the Healthcare Effectiveness Data and Information Set—a widely used set of health care performance measures, focusing on results for commercial insurers. For 2010, these measures also showed small declines in rates of imaging for breast cancer for both the HMO and preferred provider organization (PPO) markets (National Committee for Quality Assurance 2011). Reasons for small declines in breast cancer screening across Medicare and private insurers could be related to the current debate on guidelines for how often—and whether—women should be screened for breast cancer. This issue suggests that a review of the MACIE measures could be useful to keep up-to-date with current medical guidelines, particularly for process measures that focus on services that patients receive rather than health outcomes (such as potentially avoidable hospitalizations).

Six of the MACIE indicators measure rates of potentially avoidable hospitalizations and emergency department visits for beneficiaries diagnosed with five chronic conditions: coronary artery disease, congestive heart failure, diabetes, hypertension, and chronic obstructive pulmonary disease (COPD). In this year's analysis, one of these measures improved (hospitalization rates for beneficiaries with COPD), two worsened (rates for emergency department visits for unstable angina and hospitalization for a primary diagnosis of hypertension), and the other three rates did not change significantly. The latter three rates (e.g., hospitalization rates for treatment of both short-term and long-term complications of diabetes) coincided with improvements in the rates of other applicable ambulatory care measures (e.g., diabetic eye examinations, lipid and blood glucose level testing, and periodic follow-up visits for diabetic beneficiaries).

Medicare payments and providers' costs

In the absence of cost reports for physician and other health professional services, we use certain indirect measures of this sector's financial status. One such measure is the ratio of Medicare's payments to private insurer payments for fee schedule services. As has been the case for more than a decade, the rate for 2010 continues to be about 80 percent. Physician compensation is another indicator. In 2010, compensation was lower for primary care physicians than for most specialists, and the disparity between them was large enough to raise significant concerns about fee schedule pricing and equity. We also consider forecasts of medical inflation, as measured by the Medicare Economic Index (MEI). Revised quarterly, the most recent MEI forecast for 2013 is 1.4 percent. The MEI is adjusted for expected gains in productivity.

Ratio of Medicare to private insurer fees has remained stable

One measure of Medicare payment adequacy examines the trend in Medicare's allowed physician and other health professional fees (including patient cost sharing) relative to private insurer allowed fees.[10] In the early to mid-1990s, Medicare payment rates averaged about two-thirds of commercial payment rates for physician and other health professional services, but since 1999 Medicare rates consistently have been near 80 percent of commercial rates.

For 2010, we find little change from the results reported for 2009. In 2010, Medicare's payments for physician and other health professional services were at 81 percent of commercial rates for PPOs when averaged across all physician services and geographic areas compared with 80 percent in the preceding year. We base this analysis on a data set of paid claims for PPO members of a large national private insurer. More than 70 percent of commercially insured individuals are in PPO arrangements (Kaiser Family Foundation and Health Research & Educational Trust 2011).[11] We are unable to include additional private insurer payments (or penalties) to providers, such as quality incentives and other bonuses, because data on these payments for private insurers are unavailable. In contrast, the Medicare fees in our analysis do include bonuses that Medicare pays as part of the claims, such as the health professional shortage area bonus—in effect since 1991.

Findings on access to care for Medicare beneficiaries relative to the commercially insured population suggest that Medicare's lower average payment rates may have less effect on access than local market factors. Research by the Center for Studying Health System Change cited earlier found that beneficiaries in markets with the widest gaps between Medicare and commercial payment rates reported access problems in proportions similar to those in markets with narrow payment rate differences (Trude and Ginsburg 2005). Moreover, in markets with higher

commercial payment rates relative to Medicare, the commercially insured population did not appear to gain better access than Medicare beneficiaries. These findings suggest that developments in local health systems and markets may strongly influence access for both Medicare beneficiaries and the privately insured.

Compensation is lower for primary care physicians than for specialists

Physician compensation provides another perspective on the relationship between Medicare's fees for the services of physicians and other health professionals and the fees of other payers. Private payers often use a conversion factor—or multiple conversion factors, depending on the type of service—that differs from Medicare's.

For an analysis of the compensation received by physicians—the largest subset of practitioners—the Commission contracted with the Urban Institute, working in collaboration with the MGMA (Berenson et al. 2010). The contractor developed a method for analysis of two measures of compensation: "actual compensation," or actual revenues received by a physician from all payers, and "simulated compensation," or payments a physician would receive if all the services the physician furnished were paid under Medicare's physician fee schedule.[12]

For this report, the contractor used data from MGMA's Physician Compensation and Production Survey to analyze physician compensation in 2010.[13] The analysis showed that—averaged across all specialties—actual physician compensation was about $305,000 per year. Simulated annual compensation for all specialties was about $254,000—17 percent lower.[14]

Within these averages, compensation is much higher for some specialties than others. The specialty groups with the highest compensation were the nonsurgical, procedural group and radiology (Figure 4-4).[15] Their actual levels of compensation were about $445,000 and $460,000, respectively. Compensation at these levels was more than double that of the $207,000 average for primary care specialties.[16,17]

Use of simulated annual compensation instead of actual annual compensation resulted in minimal narrowing of the disparities between primary care physicians and specialists. Simulated, radiologists' average annual compensation was about $408,000, or 2.4 times the $170,000 compensation for primary care physicians. For nonsurgical, procedural physicians, the average simulated compensation was about $398,000, or 2.3 times the $170,000 compensation for primary care physicians.

The Commission is not alone in drawing attention to such disparities in physician compensation. An international comparison of physician fees and earnings has shown that the earnings of U.S. orthopedic surgeons in 2008 were 2.4 times the earnings of their colleagues in primary care (Laugesen and Glied 2011). Comparable multiples for the five other comparison countries in the study—Australia, Canada, France, Germany, and the United Kingdom—were smaller, with a range from 2.0 to 1.5.

The data on physician compensation raise concerns about the equity of some of the compensation levels, especially the compensation some specialists receive. The level of payments to physicians is a function of price and quantity—the fees paid for services and the number of services furnished. Under Medicare's physician fee schedule, fees are tightly controlled. Such a payment system can lead to compensation levels that are skewed in favor of some physicians at the expense of others. These payment inequities stem from two inherent risks.

One risk is mispricing. In our recent recommendations on the SGR, the Commission made recommendations aimed at improving the accuracy of the fee schedule's RVUs (see Appendix B at the end of this report). The concern is that mispricing has contributed to inequities in physician compensation.

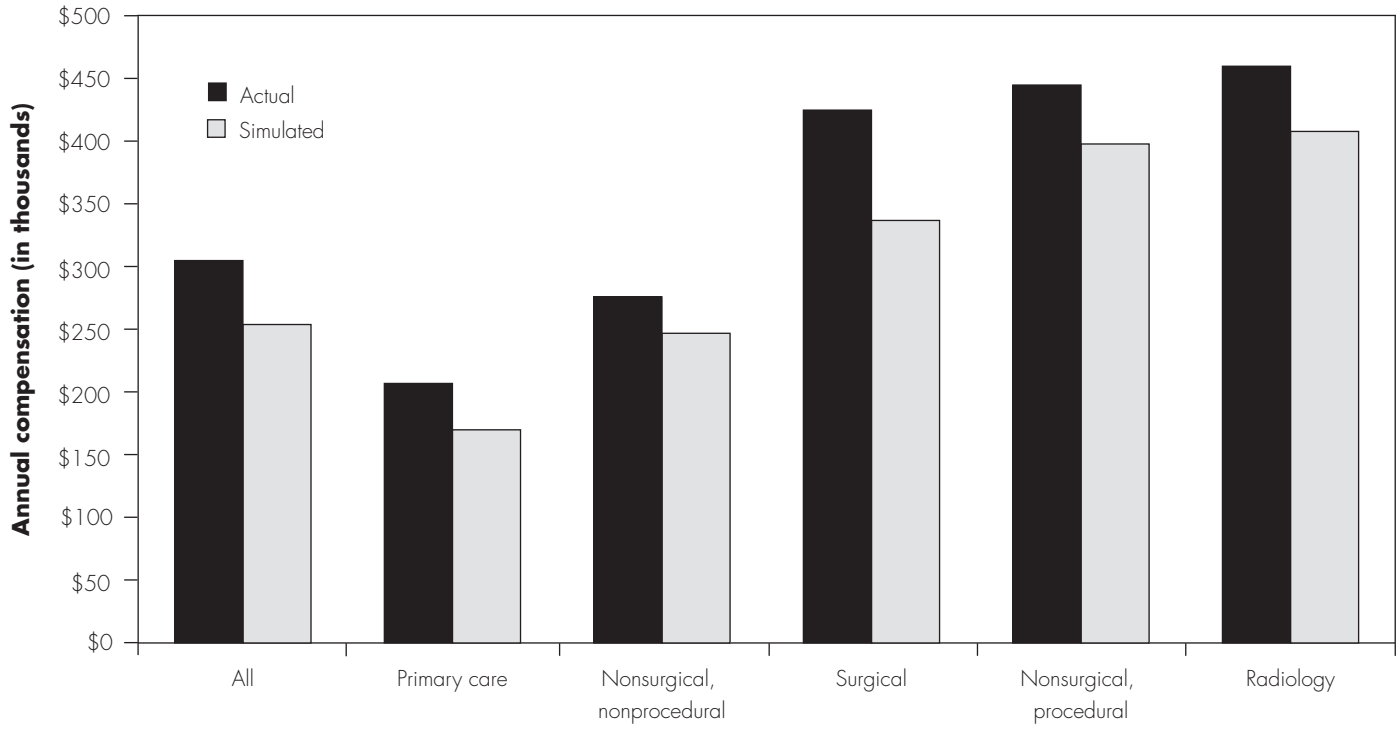
Another risk to the equitable distribution of payments is the ability—or inability—of some practitioners to generate volume. For instance, primary care practitioners who focus on E&M services have limited opportunity to increase the number of services they furnish. The main component of E&M services is face-to-face time spent with patients, making it difficult to fit more visits into a day's schedule. By contrast, imaging, tests, and procedures other than major surgical procedures have all grown at much faster rates than other services. The specialists who furnish these high-growth services are generally the ones at the high end of the compensation scale. This finding is not surprising under a FFS payment system that rewards practitioners for generating volume, regardless of clinical value.

Certain physicians and other health professionals are eligible for Medicare payment bonuses (and penalties)

Across most sectors, we consider provider payments in our analysis of payment adequacy. Apart from the payment reductions scheduled for 2013 under the SGR, the Patient

FIGURE 4–4

Disparities in physician compensation are widest when primary care is compared with nonsurgical proceduralists and radiologists, 2010



Note: Simulated compensation is compensation as if all services were paid under the Medicare physician fee schedule.

Source: Urban Institute and Medical Group Management Association (MGMA) analysis of 2010 data from the MGMA's Physician Compensation and Production Survey.

Protection and Affordable Care Act of 2010 and previous legislation have established bonus payments available to certain physicians and other health professionals. They are listed below:

- Since 1991, physicians and other health professionals who practice in designated health professional shortage areas (HPSAs) automatically receive a 10 percent bonus (relative to the fee schedule amount) on all Medicare services they provide.[18]
- Starting in 2011 and ending in 2016, primary care practitioners who meet certain criteria receive a 10 percent increase in payments for selected fee schedule services, as will general surgeons practicing in HPSAs. For primary care practitioners, this adjustment complements other payment increases that CMS has implemented through regulation, such as increases to the physician work values of the fee schedule in 2007.[19]
- Under the Physician Quality Reporting System (PQRS), qualifying physicians and other health professionals received a 1 percent bonus on all Medicare services they provided in 2011 and will receive a 0.5 percent bonus in 2012 through 2014. Starting in 2015, those who do not satisfactorily report PQRS measures will be subject to a financial penalty starting at 1.5 percent of their Medicare fees.
- The electronic health record (EHR) incentive program provides payments to physicians when they adopt EHRs and demonstrate their use in specified ways to improve quality, safety, and effectiveness of care. Physicians may receive up to $44,000 over five years, starting with $18,000 in 2011. EHR bonuses for physicians in HPSAs are 10 percent higher. Starting in 2015, eligible physicians who do not satisfy the EHR criteria will be subject to a financial penalty starting at 1 percent of their Medicare fees.
- Prescribing physicians and health professionals who do not participate in the EHR incentive program are eligible for an electronic prescribing (eRx) bonus of 1 percent on all their Medicare fees if they use a

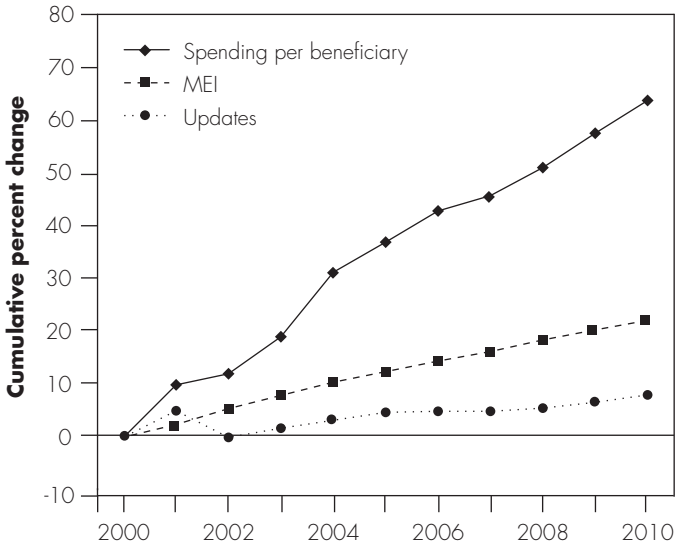
qualified eRx system. This program began in 2009. Starting in 2012, eligible professionals who have not yet satisfied the eRx criteria and cannot demonstrate "hardship" exemptions will be subject to a financial penalty starting at 1 percent of their Medicare fees.

Input costs for physician and other health professional practices are expected to increase in 2012

CMS's 2012 forecast of the MEI—a measure of changes in the market basket of input prices for physician and other health professional services, adjusted for productivity growth in the national economy—is revised quarterly and has ranged from 1.0 percent (most recent) to 0.7 percent. For these forecasts, CMS collects pricing data from various data sets and surveys. Additionally, CMS calculates a weighted average of expected input price changes from survey data for 2006 collected by the AMA in 2007 and 2008. These weights were updated recently in CMS's final rule updating the Medicare physician fee schedule.

Medicare's total payments to physicians and other health professionals have increased faster than both the MEI and updates to the fee schedule's conversion factor (Figure 4-5). From 2000 to 2010, the updates rose 8 percent cumulatively, while the MEI rose 22 percent cumulatively. Over the same period, however, Medicare spending for physician and other health professional services—per beneficiary—increased by 64 percent. Volume growth accounts for the difference between the fee schedule updates and spending growth. Aggregate Medicare payments to practices from this spending growth are a function of volume growth and fee schedule updates. ■

FIGURE 4–5 **Volume growth has caused spending to increase faster than input prices and physician updates, 2000–2010**



Note: MEI (Medicare Economic Index).

Source: 2011 Trustees' report, Global Insight 2010q4 MEI forecast, and Office of the Actuary 2011.

Endnotes

1 See http://www.medpac.gov/documents/MedPAC_Payment_Basics_11_Physician.pdf.

2 The 2011 survey included an oversample of African Americans, Hispanics, and other minorities—including Native Americans, Alaskan Natives, Asian Americans, and Hawaiian and Pacific Islanders. All respondents had the opportunity to take the survey in English or Spanish.

3 Within that population, our survey results do not distinguish Medicare FFS enrollees from those in Medicare Advantage (MA) plans because of the technical difficulty in obtaining reliable self-identification of FFS or MA enrollment from surveyed individuals. Similarly, we do not distinguish by type of private coverage among the non-Medicare population in our survey.

4 The 2012 final rule on the fee schedule also discusses review of the relative value units (RVUs) for primary care services. CMS had proposed that the Relative Value Scale Update Committee review the RVUs for all evaluation and management (E&M) services. The agency has withdrawn this proposal, however, given concerns expressed by commenters about possible inadequacies of the current E&M coding and documentation structure to address evolving chronic care management. Instead, CMS will allow time for consideration of findings of the Comprehensive Primary Care Initiative, research by the Assistant Secretary for Planning and Evaluation on balancing incentives and evaluating payments for primary care, demonstrations the agency has undertaken on care coordination, and other initiatives.

5 When physicians who were in closed practices—practices that no longer accepted any new patients (regardless of insurance type)—were excluded from this calculation, the share of physicians accepting new Medicare patients increased to 96 percent overall, with 94 percent of primary care physicians and 98 percent of specialists accepting new Medicare patients.

6 These percentages include practices with potentially small shares of Medicare patients, such as pediatrics.

7 In 2010, 97 percent of allowed charges were for services provided by participating physicians, and another 2 percent were for services provided by nonparticipating physicians who decided to accept assignment. Only 0.6 percent of allowed charges were for services provided by nonparticipating physicians who did not accept assignment.

8 Participation agreements do not require physicians to accept new Medicare patients.

9 CMS changed the policy on billing for consultations with the rationale that the relaxation of consultation documentation requirements over time had brought the effort involved in consultations to levels comparable to those of visits.

10 Although allowed amounts include patient cost-sharing liabilities, they do not include balance billing amounts that would exceed the fee schedule amounts.

11 Our analysis relies on data from one large national insurer to determine a national average of the relationship between Medicare and private PPO payer rates. While we report a national average, the data show that payment rates vary substantially from one geographic area to another, within geographic areas, across providers within a given market, and by the type of service across and within markets. For E&M services, specifically, the ratio of Medicare to private fees was 87 percent. The ratio for all other services was 80 percent.

12 In simple terms, simulated compensation was calculated in two steps. Step 1 was annual total RVUs for the services furnished by a physician multiplied by the Medicare conversion factor. Step 2 was the result of Step 1 multiplied by a ratio that was the physician's actual compensation divided by collections (revenues) from the physician's professional services and collections from other sources attributable to the physician such as laboratory services and injectable drugs. Further details are in the contractor's report.

13 The 2010 data predate payment of a 10 percent bonus for eligible primary care practitioners and general surgeons (general surgeons practicing in health professional shortage areas) started on January 1, 2011.

14 The 17 percent difference between simulated compensation and actual compensation does not mean that Medicare's payments for physician services are 17 percent lower than private payers' payments for those services. The compensation estimates include compensation attributable to physician services and to services other than physician services, such as laboratory services and injectable drugs. In addition, the comparison is simulated Medicare compensation relative to actual compensation that is attributable to private payers' payments but also some Medicare payments.

15 The nonsurgical, procedural specialties in the analysis are cardiology, dermatology, gastroenterology, and pulmonary medicine.

16 The primary care specialties in the analysis are family medicine, internal medicine, and general pediatrics.

17 To account for differences among specialties in hours worked per week, the contractor's earlier initial analysis for the Commission—with MGMA data for 2007—included comparisons of hourly compensation. The results were similar to those from the analysis of the 2010 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 2010 data because the newer MGMA survey did not include questions about hours worked.

18 This bonus started at 5 percent in 1989 and was limited to rural areas. In 1991, the bonus payment was raised to 10 percent and urban HPSAs were included.

19 See the text box on page 91 in our March 2011 *Report to the Congress: Medicare payment policy* for more examples.

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CHAPTER 5

Ambulatory surgical center services

RECOMMENDATIONS

5-1 The Congress should update the payment rates for ambulatory surgical centers by 0.5 percent for calendar year 2013. The Congress should also require ambulatory surgical centers to submit cost data.

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

5-2 The Congress should direct the Secretary to implement a value-based purchasing program for ambulatory surgical center services no later than 2016.

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

CHAPTER 5

Ambulatory surgical center services

Chapter summary

Ambulatory surgical centers (ASCs) furnish outpatient surgical services to patients not requiring hospitalization and for whom an overnight stay is not expected after surgery. In 2010,

- ASCs served 3.3 million fee-for-service (FFS) Medicare beneficiaries, an increase of 0.9 percent from 2009;
- there were 5,316 Medicare-certified ASCs, an increase of 1.9 percent (99 ASCs) from 2009; and
- Medicare combined program and beneficiary spending on ASC services was $3.4 billion, an increase from 2009 of 2.6 percent per FFS beneficiary.

Assessment of payment adequacy

Our results indicate that beneficiaries' access to ASC services is at least adequate, as most of the available indicators of payment adequacy for ASC services, discussed below, are positive. However, our results also indicate slower growth in the number of ASCs and volume of services in 2010 than in previous years.

***Beneficiaries' access to care*—**Our analysis of facility supply and volume of services indicates that beneficiaries have adequate access to ASC care.

In this chapter

- ***Capacity and supply of providers*—**From 2005 through 2009, the number of Medicare-certified ASCs grew by an average annual rate of 4.6 percent. However, the growth slowed to 1.9 percent in 2010. The relatively slow growth in 2010 may reflect the sluggish recovery from the financial crisis that peaked in 2008 and substantial revisions to the ASC payment system that same year (see online Appendix A from Chapter 2C of our March 2010 report at http://medpac.gov/chapters/Mar10_Ch02C_APPENDIX.pdf). In addition, Medicare payment rates for most ambulatory surgical services have become much higher in hospital outpatient departments (OPDs) than in ASCs—for 2012, Medicare rates are 74 percent higher in OPDs than in ASCs. This payment gap may have influenced some ASC owners to sell their facilities to hospitals.
- ***Volume of services*—**From 2005 through 2009, the volume of services per FFS beneficiary grew by an average annual rate of 7.6 percent; in 2010, volume increased by 1.6 percent.

***Quality of care*—**Although CMS has established a program for ASCs to submit data on quality of care, ASCs will not begin submitting these data until October 2012. Consequently, we do not have data to assess ASCs' quality of care.

***Providers' access to capital*—**ASCs appear to have adequate access to capital, as the number of ASCs has continued to increase.

***Medicare payments and providers' costs*—**From 2005 through 2009, Medicare payments for ACS services per FFS beneficiary increased at an average annual rate of 6.8 percent, but the rate slowed to 2.6 percent in 2010. 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 in other sectors to assist in assessing payment adequacy.

Using quality data from ASCs to reward high-performing and penalize low-performing providers

To improve the quality of care provided to beneficiaries in ASCs, CMS should use ASC quality data to reward high-performing and penalize low-performing providers. CMS should also publicly report quality measurement results to help consumers compare quality among facilities. CMS recently established a Quality Reporting Program for ASCs that requires them to submit quality data beginning in 2012; ASCs that do not submit data would have their annual payment update reduced in 2014. However, Medicare payments to ASCs would not be adjusted based on the provider's actual performance on quality measures. CMS lacks the statutory authority to implement a value-based purchasing (VBP) program for ASCs.

The Commission supports the Quality Reporting Program for ASCs but believes that, eventually, high-performing ASCs should be rewarded and low-performing

facilities should be penalized through the payment system. Consistent with the Commission's overall position on VBP programs in Medicare, a VBP program for ASCs should include a relatively small set of measures that primarily focus on clinical outcomes, with some process, structural, and patient experience measures. Several of these measures will be reported through the ASC Quality Reporting Program, but other measures need to be developed. An ASC VBP program should reward ASCs for improving care and exceeding quality benchmarks. In addition, funding for the VBP incentive payments should come from existing Medicare spending for ASC services. ■

Background

An ambulatory surgical center (ASC) is a distinct entity that furnishes outpatient surgical procedures to patients who do not require an overnight stay after the procedure. Most ASCs are freestanding facilities rather than part of a larger facility, such as a hospital. About one-quarter of ASCs in 2008 were jointly owned by physicians and hospitals (Medical Group Management Association 2009). ASCs are not the only provider of outpatient surgical procedures; they are also provided in hospital outpatient departments (OPDs) and, in some cases, physicians' offices.

Since 1982, Medicare has made payments for surgical procedures provided in ASCs. Physicians who perform procedures in ASCs or in other facilities receive payments for their professional services that are separate from fees the facility receives for the procedures. About 90 percent of ASCs have at least one physician owner (Ambulatory Surgery Center Association 2008). Physicians who perform surgeries in ASCs that they own receive a share of the ASC's facility fees in addition to their professional fees.

To receive payments from Medicare, ASCs must meet Medicare's conditions of coverage for ASCs, which specify standards for administration of anesthesia, quality evaluation, operating and recovery rooms, medical staff, nursing services, and other areas.

Medicare pays ASCs for a bundle of facility services, such as nursing, recovery care, anesthetics, and supplies (a more detailed description of the ASC payment system can be found at http://www.medpac.gov/documents/MedPAC_Payment_Basics_11_ASC.pdf). This payment system underwent substantial revisions in 2008 (see online Appendix A from Chapter 2C of our March 2010 report at http://medpac.gov/chapters/Mar10_Ch02C_APPENDIX.pdf). The most significant changes included a substantial increase in the number of surgical procedures covered under the ASC payment system, allowing ASCs to bill separately for certain ancillary services, and large changes in payment rates for many procedures.

Medicare covers about 3,500 surgical procedures under the ASC payment system. For most covered surgical procedures, the relative weight is based on the procedure's relative weight under the outpatient prospective payment system (OPPS)—the system Medicare uses to set payments for most services furnished in OPDs. This linkage to the OPPS is consistent with a previous Commission recommendation to align the relative weights in the OPPS with the ASC payment system (Medicare Payment Advisory Commission 2004). For most covered surgical procedures, the payment rate is the product of the procedure's relative weight and a conversion factor set at $42.63 in 2012. In contrast, the OPPS conversion factor for 2012 is $70.12, making payment rates lower for ASCs than for OPDs.

The conversion factors for the ASC payment system and the OPPS differ for the following reasons. First, CMS set the initial ASC conversion factor for 2008 so that total ASC payments under the revised payment system would equal what they would have been under the payment system in effect before 2008. By comparison, CMS set the initial OPPS conversion factor for 2000 so that payments under the new prospective payment system would equal what total payments would have been under the prior cost-based payment system for outpatient services in effect before 2000. Second, CMS uses different update factors to account for changes in input prices for ASCs and OPDs. CMS uses the consumer price index for all urban consumers (CPI–U) as the basis for updating the ASC conversion factor and the hospital market basket as the basis for updating the OPPS conversion factor.

Payment rates for procedures that are performed predominantly in physicians' offices and that were first covered under the ASC payment system in 2008 or later are determined by a different method. In ASCs, payment for these "office-based" procedures is the lesser of the amount derived from the OPPS relative weight or the nonfacility practice expense amount from the Medicare physician fee schedule (PFS). 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. 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 one year and on the PFS rate the next year (or vice versa).

Because Medicare pays ASCs less than OPDs for most services, movement of surgical procedures from OPDs to ASCs can reduce aggregate program spending and beneficiary cost sharing. However, reduced Medicare spending due to lower payment rates could be partially offset by a higher overall number of procedures if physician ownership of ASCs leads to higher volume.

It is appropriate to pay OPDs more than ASCs because OPDs treat patients who are more medically complex on average than ASCs, and OPDs on the same campus as the

main hospital are able to offer emergency services and access to onsite specialists if complications arise during a procedure (Medicare Payment Advisory Commission 2003, Medicare Payment Advisory Commission 2004, Wynn et al. 2011) (see the text box). There are likely additional costs associated with treating sicker patients and maintaining emergency standby capacity. By contrast, ASCs treat healthier patients on average and do not maintain the same capacity as hospitals to treat emergencies. These factors, in addition to the specialized staffing and customized surgical environments of ASCs, probably contribute to the shorter time and lower cost of ASC procedures relative to OPD services. RAND Health analyzed time data from the National Survey of Ambulatory Surgery and found that average surgery time in ASCs is nearly 40 percent less than in OPDs (Wynn et al. 2011). A comparison of ASC costs and OPD costs by the Government Accountability Office (GAO) found that ASC costs are, on average, lower than OPD costs (Government Accountability Office 2006).[1] However, we are not able to isolate the impact of various factors on the time and cost differences between settings.

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. Starting in 2008, ASCs have received separate payment for these 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 pass-through and non-pass-through drugs that are paid separately under the OPPS when provided as part of a covered surgical procedure, and
- devices with pass-through status under the OPPS.

The links between the ASC payment system, the OPPS, and the PFS raise broader questions about how Medicare should pay for the same services provided in different settings. Should Medicare pay the same amount regardless of where a service is delivered? If so, how should that amount be determined? Alternatively, should the payment vary based on the cost of efficient providers in each setting, with adjustments for the quality performance of providers, differences in patient severity, and additional costs incurred by hospitals to be available for emergency care 24 hours a day? The current ASC payment system exhibits elements of each approach. Payments for many office-based procedures performed in ASCs are equal to the nonfacility practice expense amount in the PFS, and ASCs and OPDs receive the same amount for pass-through drugs and devices. In contrast, payments for ASC surgical services are less than the comparable payment under the OPPS. The Commission has begun investigating payment rate differences for services delivered in multiple ambulatory settings, such as evaluation and management services provided in OPDs and physicians' offices (see Chapter 3).

Are Medicare payments adequate in 2012?

To address whether payments for 2012 are adequate to cover the costs of efficient providers and how much payments should change in the coming year (2013), we examine several measures of payment adequacy. We assess beneficiaries' access to care by examining the supply of ASC facilities and changes over time in the volume of services furnished, providers' access to capital, and revenue from the Medicare program. Unlike our assessments of other provider types, however, we do not assess quality of care because ASCs do not yet submit data on quality measures, although CMS has established a program for ASCs to submit quality data beginning in October 2012. Also, we do not examine Medicare payments relative to providers' costs because CMS does not require ASCs to submit cost data.[2] Finally, we caution that the effect of Medicare payments on the financial health of ASCs is limited because, on average, Medicare spending accounts for only about 17 percent of an ASC's overall revenue (Medical Group Management Association 2009).[3]

Our results show that beneficiaries have at least adequate access to care in ASCs, although there is some variation among subgroups of beneficiaries (see text box). ASCs have adequate access to capital, and Medicare payments to ASCs have continued to grow. These measures suggest that payment rates were at least adequate through 2010.

Beneficiaries' access to care: Supply of ASCs and volume growth indicate access is adequate

Increases in the number of Medicare-certified facilities and volume of services provided to Medicare beneficiaries suggest growing access to ASCs. This growth can be

Differences in types of patients treated in ambulatory surgical centers and hospital outpatient departments

There is evidence of differences in the patient populations of ambulatory surgical centers (ASCs) and hospital outpatient departments (OPDs). ASCs are less likely than OPDs to serve medically complex patients, Medicaid patients, African Americans, and Medicare beneficiaries who are older or eligible for Medicare because of disability.

Our analysis of Medicare claims from 2010 found that the following groups are less likely to receive care in ASCs than in OPDs: Medicare beneficiaries who also have Medicaid coverage (dual eligibles), African Americans (who are more likely to be dual eligibles), beneficiaries who are eligible because of disability (under age 65), and beneficiaries who are age 85 or older (Table 5-1).[4] The smaller share of disabled, older, and dual-eligible beneficiaries treated in ASCs may reflect the healthier profile of ASC patients relative to OPD patients. The smaller share of African American patients in ASCs relative to OPDs may be linked to differences in the geographic locations of ASCs and hospitals and the fact that African Americans in fee-for-service Medicare are less likely than other beneficiaries to have supplemental coverage. In addition, hospitals receive reimbursement from Medicare for 70 percent of the copayments they are unable to collect from beneficiaries (bad debt). ASCs receive no reimbursement for Medicare beneficiaries' bad debt. This difference in bad debt policy between hospitals and ASCs may contribute to the higher share of African Americans treated in OPDs.

TABLE 5–1

Medicare patients treated in ASCs differ from patients treated in OPDs, 2010

	Percentage of Medicare patients	
Characteristic	**ASC**	**OPD**
Medicaid status		
Not Medicaid	86.0%	76.9%
Medicaid	14.0	23.1
Race/ethnicity		
White	88.1	84.2
African American	6.8	10.4
Other	5.1	5.4
Age (in years)		
Under 65	14.0	21.4
65 to 84	78.6	67.7
85 or older	7.4	10.9
Sex		
Male	42.1	43.5
Female	57.9	56.5

Note: ASC (ambulatory surgical center), OPD (hospital outpatient department). All of the differences between ASC and OPD 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 5 percent carrier and outpatient standard analytic claims files, 2010.

(continued next page)

beneficial to patients and physicians because ASCs can offer them convenience and efficiency relative to OPDs—the sector with the greatest overlap of surgical services with ASCs. For patients, ASCs can offer more convenient locations, shorter waiting times, and easier scheduling relative to OPDs; for physicians, ASCs may offer more control over their work environment and specialized staff. In addition, Medicare has lower payment rates and beneficiaries generally face lower coinsurance in ASCs than in OPDs. However, the prevalence of physician ownership of ASCs may give physicians an incentive to perform more surgical services than they would if they provided outpatient surgical services only in OPDs. Recent studies offer limited evidence that physicians with an ownership stake in an ASC perform a higher volume of certain procedures than nonowning physicians (Hollingsworth et al. 2010, Mitchell 2010, Strope et al. 2009). To the extent that physicians act on this financial incentive, a higher overall number of procedures could offset some of the reductions in program spending and beneficiary cost sharing that result from ASCs' lower payment rates and coinsurance.

Differences in types of patients treated in ambulatory surgical centers and hospital outpatient departments (cont.)

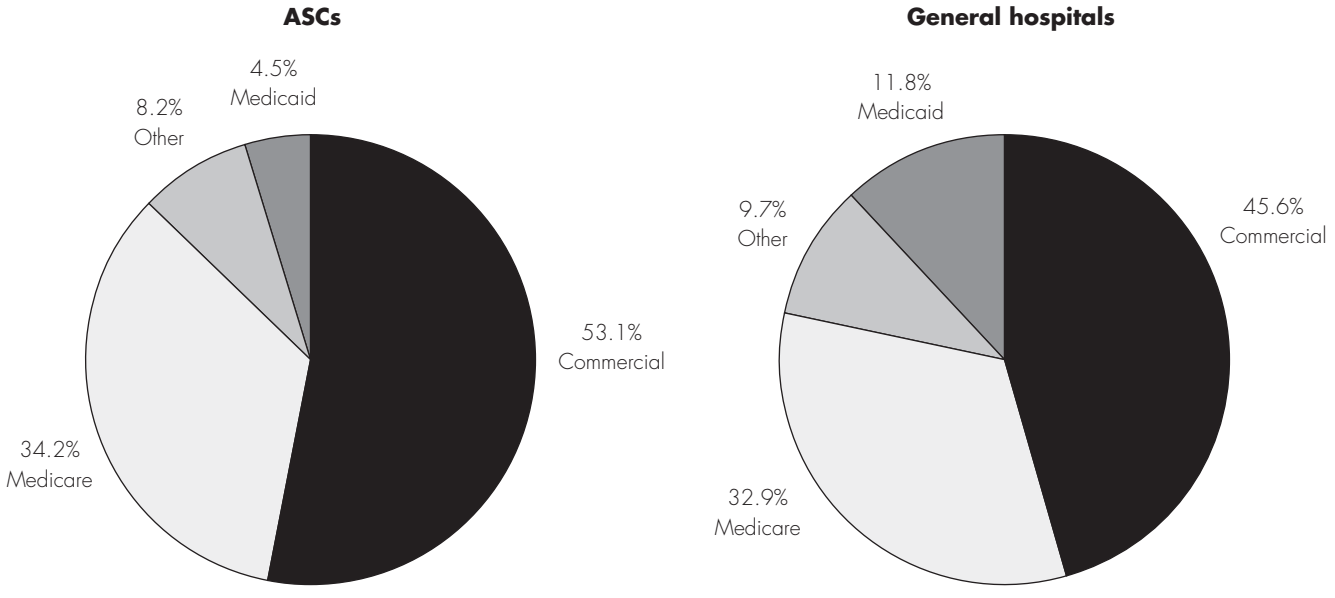
Research by the Commission found that, compared with OPDs, ASCs treat Medicare patients who are less medically complex, as measured by differences in average risk scores (Medicare Payment Advisory Commission 2003). Risk scores represent beneficiaries' expected service use given their health status relative to that of the national average beneficiary.[5] Under a contract with the Commission, RAND Health compared the characteristics of Medicare beneficiaries who had cataract surgery or a colonoscopy in an ASC with beneficiaries who received these procedures in an OPD. RAND found that ASC patients were less likely to have certain comorbidities, such as dementia and chronic obstructive pulmonary disease (Sloss et al. 2006). One explanation for why OPDs treat comparatively sicker patients is that hospitals offer emergency services and access to onsite specialists if complications arise.

According to data from Pennsylvania on Medicare and non-Medicare patients, ASCs are less likely than OPDs to serve Medicaid patients. In 2010, Medicaid patients accounted for 4.5 percent of diagnostic and surgical procedures in ASCs in Pennsylvania, compared with 11.8 percent of procedures in OPDs (Pennsylvania Health Care Cost Containment Council 2011) (Figure 5-1).[6] Commercially insured and Medicare patients represented a higher share of ASC procedures than OPD procedures (87.3 percent vs. 78.5 percent). Although the 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 (CDC), also show that ASCs treat a smaller share of Medicaid patients than hospitals. According to NSAS data compiled for the Commission by CDC, Medicaid patients accounted for 3.9 percent of ambulatory

(continued next page)

FIGURE 5–1

Distribution of outpatient procedures by payer at ASCs and general acute care hospitals in Pennsylvania, fiscal year 2010



Note: ASC (ambulatory surgical center). Outpatient procedures include diagnostic and surgical services. Other payers include auto insurance, workers' compensation, and other government programs.

Source: Pennsylvania Health Care Cost Containment Council 2011.

Differences in types of patients treated in ambulatory surgical centers and hospital outpatient departments (cont.)

surgery visits to freestanding ASCs in 2006 compared with 8.1 percent of these visits to hospital-based surgery centers.[7]

Several factors could explain why ASCs treat a smaller share of Medicaid patients (including dual eligibles) than OPDs. A study by Gabel and colleagues suggests that physicians refer their more lucrative patients to ASCs and the less lucrative ones to hospitals (Gabel et al. 2008). This study examined referral patterns for physicians in Pennsylvania who sent most of their patients to physician-owned ASCs rather than OPDs. They sent more than 90 percent of their commercial and Medicare patients—but only 55 percent of their Medicaid patients—to an ASC instead of a hospital.

ASCs' locations may also result in a smaller share of Medicaid patients; for example, they may choose to locate in areas with a high proportion of commercially insured patients. 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). If states do not pay the cost sharing for ASC services used by dual eligibles, ASCs could be discouraged from treating these patients. In contrast, hospitals in states where Medicaid does not pay Medicare's cost sharing can be compensated for 70 percent of the bad debt incurred by dual-eligible beneficiaries. ■

Capacity and supply of providers: Number of ASCs grew rapidly over past several years, but growth has slowed

The number of Medicare-certified ASCs increased substantially over the past several years, growing by 4.6 percent per year from 2005 through 2009 and by 1.9 percent in 2010. During this period, an average of 279 new facilities entered the program each year, while an average of 71 closed or merged with other facilities (Table 5-2).

From 2005 through 2008, the number of Medicare-certified ASCs increased from 4,362 to 5,095, an average annual increase of 5.3 percent. However, the growth rate decelerated to 2.4 percent in 2009 and 1.9 percent in 2010. This slow growth continued into 2011, as the number of ASCs increased by 1.0 percent to 5,368 during the first three quarters of 2011 (an annual growth rate of 1.3 percent). Several factors might explain the relatively slow growth from 2009 through the first three quarters of 2011:

- The economy is experiencing a sluggish recovery from the financial crisis that peaked in 2008, which has dampened demand for elective services (Johnson et al. 2010, Kaiser Family Foundation 2011).
- The ASC payment system underwent a substantial revision in 2008, and investors may be responding to the large change in payment rates that occurred under that revision.
- Payment rates for most ambulatory surgical services are 74 percent higher in the OPPS than in the ASC payment system, which has led some ASC owners to

TABLE 5–2 **Number of Medicare-certified ASCs has grown by 22 percent, 2005–2010**

	2005	2006	2007	2008	2009	2010
Number of centers	4,362	4,608	4,879	5,095	5,217	5,316
New centers	354	331	344	281	213	152
Exiting centers	59	85	73	65	91	53
Net percent growth in number of centers from previous year	7.3%	5.6%	5.9%	4.4%	2.4%	1.9%

Note: ASC (ambulatory surgical center).

Source: MedPAC analysis of Provider of Services file from CMS, 2010.

TABLE 5–3 **Most Medicare-certified ASCs are urban and for profit**

ASC type	2005	2010
Urban	87%	88%
Rural	13	12
For profit	96	97
Nonprofit	4	3

Note: ASC (ambulatory surgical center).

Source: MedPAC analysis of Provider of Services file from CMS, 2010.

sell their facilities to hospitals and caused some health care systems to expand OPDs rather than establish new ASCs (North Carolina Department of Health and Human Services 2008, State of Connecticut 2011).

- There may be limited opportunities to develop new facilities because most physicians who perform procedures in ASCs are already affiliated with an ASC (Cain Brothers 2011). This factor leads some analysts to predict weak growth in the number of ASCs in the near future.

To provide a more complete picture of capacity in ASCs, we also examined the change in the number of operating rooms. From 2005 through 2010, the mean number of operating rooms per ASC increased slightly from 2.5 to 2.7, although the median number of operating rooms remained the same at 2. This finding indicates that growth in the total number of operating rooms has been similar to growth in the number of ASCs and that new ASCs are roughly the same size as existing ones.

ASCs are concentrated geographically. As of 2010, Maryland had the most ASCs per fee-for-service (FFS) beneficiary, followed by Washington, Idaho, and Georgia, with each state having more than 30 ASCs per 100,000 beneficiaries. Meanwhile, Vermont had the fewest ASCs per FFS beneficiary, followed by West Virginia, New York, and Kentucky, with each state having fewer than 6 ASCs per 100,000 beneficiaries.[8] In addition, in 2010, most Medicare-certified ASCs were for profit and located in urban areas, a pattern that has not changed over time (Table 5-3). Beneficiaries who do not live near an ASC may receive ambulatory surgical services in OPDs and, in some cases, in physicians' offices. In addition, beneficiaries who live in rural areas may travel to urban areas to receive care in ASCs.

Steady growth in the number of Medicare-certified ASCs may indicate that Medicare's payment rates have been at least adequate, despite the fact that there were no positive updates to ASC payment rates from 2004 through 2009. However, Medicare payments are not a substantial source of revenue for ASCs. According to a survey conducted by the Medical Group Management Association, Medicare accounted for only 17 percent of ASC revenue, on average, in 2008 (Medical Group Management Association 2009). Other factors have also likely influenced the 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.
- Medicare began covering colonoscopy for colorectal cancer screening in 1998, increasing beneficiary use of the service in ASCs (and other settings).
- ASCs may offer patients greater convenience than OPDs in terms of better locations, the ability to schedule surgery more quickly, and shorter waiting times.
- For most procedures covered under the ASC payment system, beneficiaries' coinsurance is lower in ASCs than in OPDs.[9]
- Physicians have greater autonomy in ASCs than in OPDs, which enables them to design customized surgical environments and hire specialized staff.
- Physicians who invest in ASCs can increase their revenue by receiving ASC facility payments. The federal anti-self-referral law (also known as the Stark Law) does not apply to surgical services provided in ASCs.
- Because physicians can probably perform more procedures in ASCs than in OPDs in the same amount of time, they can earn more professional fees.

Number of ASC services grew from 2005 to 2010; newly covered services contributed to growth in number of services from 2007 to 2010

We examined growth in the number of ASC surgical services provided per FFS beneficiary.[10] The volume of surgical services per FFS beneficiary increased by an

average of 7.6 percent per year from 2005 through 2009 and by 1.6 percent in 2010 (Table 5-4).

The 2008 revision to the ASC payment system substantially increased the number of covered services, and these newly covered services contributed 39 percent of the overall volume growth from 2007 through 2010. We evaluated the effect of the increased number of covered services by breaking down the growth in service volume from 2009 through 2010 into two parts: the portion attributable to surgical services newly covered after 2007 and the portion attributable to surgical services covered in both 2007 and 2010. Our analysis indicates that services newly covered after 2007 grew by 3.6 percent in 2010 and services covered in both 2007 and 2010 grew by 1.5 percent in 2010 (Table 5-4).[11]

TABLE 5–4 **Volume of ASC services per FFS beneficiary has continued to grow**

Time period	Average annual volume growth per FFS beneficiary
2005 to 2009	7.6%
2009 to 2010	1.6
Services covered in both 2007 and 2010	1.5
Services newly covered after 2007	3.6

Note: ASC (ambulatory surgical center), FFS (fee-for-service).

Source: MedPAC analysis of 5 percent carrier standard analytic claims files, 2005, 2007, 2009, and 2010.

Although newly covered services contributed much of the growth in service volume after 2007, the services that have historically contributed the most to overall volume continued to compose a large share of the total in 2010. For example, cataract removal with intraocular lens insertion had the largest volume in both 2007 and 2010, accounting for 19.9 percent of volume in 2007 and 17.6 percent of volume in 2010. Moreover, 19 of the 20 most frequently provided services in 2007 were among the 20 most frequently provided in 2010 (Table 5-5, p. 126). For these 20 services, volume per FFS beneficiary increased by 1.9 percent per year from 2007 through 2010. However, these 20 services accounted for a smaller share of total volume in 2010 than in 2007: 68.0 percent versus 74.6 percent. The fact that the most frequently provided services made up a smaller share of the total in 2010 than in 2007 indicates that the ASC industry is diversifying the surgical services it provides.

Surgical services have migrated from OPDs to ASCs but rate of migration appears to have slowed

The growth in service volume provided in ASCs may reflect, in part, migration of services from OPDs to ASCs. We compared volume growth of services provided in ASCs with the growth of ASC-covered services provided in OPDs. We limited this analysis to services that were covered in the ASC payment system in 2005, as the inclusion of services covered in the OPPS in 2005 that became covered in the ASC payment system after 2005 would have biased the results. From 2005 through 2009, the number of ASC-covered surgical services per FFS beneficiary grew by 6.1 percent per year in ASCs but was virtually unchanged in OPDs, which suggests that these surgical services may have migrated from OPDs to ASCs during that period (Table 5-6, p. 127). However, the migration from OPDs to ASCs appears to have slowed, as the volume of these services grew at the same rate (1.0 percent) in ASCs and OPDs in 2010. Factors that have likely contributed to narrowing the difference between ASCs and OPDs are higher Medicare payment rates in OPDs relative to ASCs and increased employment of physicians by hospitals, which we discuss in detail in Chapter 3 of this report.

Other data also suggest slowing migration from OPDs to ASCs. In Pennsylvania, ASCs' share of outpatient diagnostic and surgical procedures performed on all patients increased from 10.2 percent in 2000 to 32.5 percent in 2009 but showed only a small increase to 32.6 percent in 2010 (Pennsylvania Health Care Cost Containment Council 2011).

We believe it is desirable to maintain beneficiaries' access to ASCs, as Medicare payment rates for surgical services are lower in ASCs than in OPDs. Our analysis comparing the number of cataract surgeries with intraocular lens insertion provided in ASCs with those in OPDs illustrates this point. We found that, from 2005 through 2010, the proportion of these procedures provided in ASCs increased from 62 percent to 70 percent; the payment rate for these procedures in 2010 was $962 in ASCs compared with $1,633 in OPDs. Moreover, ASCs can offer patients advantages over OPDs such as more convenient locations and shorter waiting times.

TABLE 5–5

Highest volume ASC services in 2007 and 2010

Surgical service	2007 Percent of volume	2007 Rank	2010 Percent of volume	2010 Rank
Cataract surgery w/ IOL insert, 1 stage	19.9%	1	17.6%	1
Upper GI endoscopy, biopsy	7.9	2	8.0	2
Diagnostic colonoscopy	5.9	3	4.2	5
Colonoscopy and biopsy	5.5	4	5.6	3
After cataract laser surgery	5.4	5	4.0	6
Lesion removal colonoscopy, snare technique	4.8	6	4.3	4
Injection spine: lumbar, sacral (caudal)	4.3	7	3.5	8
Injection foramen epidural: lumbar, sacral	3.1	8	3.8	7
Injection paravertebral: lumbar, sacral add on*	2.9	9	1.9	11
Injection paravertebral: lumbar, sacral*	1.9	10	2.1	9
Lesion removal colonoscopy, by biopsy forceps or bipolar cautery	1.7	11	1.1	17
Colon cancer screen, not high-risk individual	1.7	12	1.3	15
Injection foramen epidural add on	1.6	13	2.0	10
Upper GI endoscopy, diagnosis	1.5	14	1.3	16
Colorectal screen, high-risk individual	1.4	15	1.7	12
Cystoscopy	1.3	16	1.1	19
Destruction paravertebral nerve, add on	1.1	17	1.5	13
Revision of upper eyelid	0.9	18	1.0	20
Cataract surgery, complex	0.9	19	1.3	14
Injection spine: cervical or thoracic	0.8	20	0.8	26
Total	74.6		68.0	

Note: ASC (ambulatory surgical center), IOL (intraocular lens), GI (gastrointestinal).
*The description of these services changed in 2010 to include imaging guidance.

Source: MedPAC analysis of 5 percent carrier standard analytic claims files, 2007 and 2010.

However, we must be attentive to the fact that 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 OPDs. This additional volume could partially offset the effect of comparatively lower rates on Medicare spending. Recent studies offer limited evidence that physicians with an ownership stake in an ASC perform a higher volume of certain procedures than nonowning physicians (Hollingsworth et al. 2010, Mitchell 2010, Strope et al. 2009). One study, using a proxy measure of physician ownership of ASCs in Florida, found that physicians who invested in ASCs increased their volume of four common surgical procedures in all settings more rapidly than nonowning physicians (Hollingsworth et al. 2010).[12] Although this study had limitations (it was based on a single state, used a proxy measure of physician ownership, and did not examine whether the additional procedures were inappropriate), it suggests that the growth in ASCs may have resulted in greater overall volume of surgical procedures. Another study that focused on a single state found that the rates of colonoscopy and upper gastrointestinal tract endoscopy in ambulatory settings increased faster in health care markets where an ASC entered than in markets that had no ASC entry (Hollingsworth et al. 2011). Based on these studies, it is plausible that reductions in Medicare spending due to lower payment rates in ASCs could be partially offset by a higher overall number of procedures.

Moreover, there is evidence that physician-owned specialty hospitals are associated with higher volume in a market. The Commission found that the entrance of a cardiac hospital in a market was associated with a

TABLE 5–6

Volume of surgical services grew faster in ASCs than in OPDs from 2005 to 2009, but growth was equal in 2010

	Average annual percent change, 2005–2009		Percent change, 2010	
Measure	**ASCs**	**OPDs**	**ASCs**	**OPDs**
Number of services per FFS beneficiary	6.1%	0.0%	1.0%	1.0%
Number of beneficiaries served	3.8	–1.3	–0.6	0.2
Services per beneficiary served	2.2	1.3	1.6	0.8

Note: ASC (ambulatory surgical center), OPD (hospital outpatient department), FFS (fee-for-service). To ensure comparability across sectors, the services analyzed consist of the same set of ambulatory surgical services. This set consists of services that are payable by Medicare when provided in an ASC. In addition, the surgical services included in the 2010 volume were limited to those that were covered in 2005.

Source: MedPAC analysis of 5 percent carrier and outpatient standard analytic claims files, 2005 and 2010.

greater increase in coronary artery bypass graft surgeries than would be expected (Medicare Payment Advisory Commission 2006). Specialty hospitals and ASCs are different, but the relationship between physician ownership and volume of services in specialty hospitals may be similar for ASCs. Because it is probably easier to generate demand for some of the low-risk procedures typically provided in ASCs than for the higher risk procedures furnished in specialty hospitals, the influence of physician ownership on volume may be stronger in ASCs than in specialty hospitals.

Providers' access to capital: Growth in number of ASCs and ASCs' financial performance suggest 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 indicator available of their ability to obtain capital. The number of ASCs continued to increase in 2010, although at a slower rate than in prior years (Table 5-2, p. 123). This slowing growth rate may reflect the sluggish recovery from the financial crisis that peaked in 2008 and substantial revisions to the ASC payment system that same year, the small number of physicians who are currently unaffiliated with an ASC who can be recruited to a new ASC, and the widening difference between payment rates in the ASC payment system and the OPPS. In 2008, the average payment rate for services provided in ASCs was 62.6 percent of what would have been paid in OPDs. This number fell to 58.2 percent in 2010. However, Medicare accounts for a relatively small share of ASCs' overall revenue, so other factors may have a larger effect on access to capital for this sector.

Data on the financial performance of the only publicly traded ASC chain also provide evidence of the sector's access to capital. Earnings per share of stock for this chain are expected to increase by 2 percent from 2010 to 2011 and by 22 percent from 2011 to 2012, with the large increase in 2012 mostly related to the acquisition of new facilities (Deutsche Bank 2011). The earnings produced by this ASC chain are one source of capital it can use to establish new facilities or expand existing ones. We caution, however, that this chain represents only 4 percent of all Medicare-certified ASCs, so its earnings growth may not be indicative of the entire ASC industry.

Medicare payments: Payments have increased rapidly

In 2010, ASCs received about $3.4 billion in payments from Medicare and beneficiaries' cost sharing (Table 5-7, p. 128). Payments per FFS beneficiary increased by an average of 6.8 percent per year from 2005 through 2009 and by 2.6 percent in 2010. From 2007 through 2010, per capita payments increased by 5.3 percent per year, with services newly covered after 2007 accounting for 1.7 percentage points of that increase; services covered in both 2007 and 2010 accounted for the rest.

Industry observers may be concerned that payment rates for the newly covered services, which accounted for 39 percent of the volume growth from 2007 through 2010, are inadequate. However, the growth in volume and payments in 2010 suggests that ASC payment rates for these newly covered services were at least adequate. It is plausible that ASCs will furnish more of the newly covered services in succeeding years, as more ASCs modify their operations to provide those services.

TABLE 5–7 **Medicare payments to ASCs have grown, 2005–2010**

	2005	2006	2007	2008	2009	2010
Medicare payments (billions of dollars)	$2.7	$2.8	$2.9	$3.1	$3.2	$3.4
Medicare payments per FFS beneficiary						
Payments	$78	$85	$90	$97	$102	$105
Percent change	6.8%	8.5%	5.6%	8.1%	5.2%	2.6%

Note: ASC (ambulatory surgical center), FFS (fee-for-service). Medicare payments include program spending and beneficiary cost sharing for ASC facility services.

Source: CMS, Office of the Actuary.

How should Medicare payments change in 2013?

Our payment adequacy analysis for the period reviewed indicates that the number of Medicare-certified ASCs has increased, beneficiaries' use of ASC services has grown, and access to capital has been adequate. However, our information for assessing payment adequacy is limited because we lack quality-of-care and cost data on ASCs (see discussion below). On the basis of evidence from the available indicators, we conclude that ASC payments are at least adequate.

CMS recently established a Quality Reporting Program for ASCs under which facilities will begin reporting quality data in October 2012. Until such data are collected and publicly released, we will not be able to assess ASCs' quality. The Commission has recommended in several previous reports that ASCs submit cost data to CMS (Medicare Payment Advisory Commission 2004, Medicare Payment Advisory Commission 2009, Medicare Payment Advisory Commission 2010b, Medicare Payment Advisory Commission 2011). Cost data would enable analysts to determine the costs of an efficient provider, which would help inform decisions about the ASC update. Cost data would also help determine whether an alternative input price index would be an appropriate proxy for ASC costs or whether an ASC-specific market basket should be developed. As discussed in the text box (p. 130), the Commission previously expressed concern that the market basket index that CMS uses to update ASC payments (the CPI–U) may not reflect ASCs' cost structure (Medicare Payment Advisory Commission 2010b).

We understand CMS's concern that requiring ASCs to submit cost data may impose a burden on ASCs (Centers for Medicare & Medicaid Services 2011). Although 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, other small providers, such as home health agencies and hospices, submit cost data to CMS. To minimize the burden on CMS and ASCs, CMS should create a streamlined process for ASCs to track and submit cost data. One such mechanism could be annual surveys of a random sample of ASCs (with mandatory response). Another approach would be cost reports from all ASCs that are more streamlined than hospital cost reports but have sufficient information to assess the adequacy of ASC payments and develop an ASC market basket.

CMS increased the ASC conversion factor by 0.2 percent in 2011 and by 1.6 percent in 2012. The update for 2012 was based on a projected 2.7 percent increase in the CPI–U, minus a 1.1 percent deduction for multifactor productivity growth, as mandated by the Patient Protection and Affordable Care Act of 2010 (PPACA). We project that the update for 2013 will be 1.2 percent: the currently projected increase in the CPI–U of 2.1 percent less the currently forecasted multifactor productivity growth of 0.9 percent (IHS Global Insight 2011).

Update recommendation

As the Commission considers an update to the ASC conversion factor for 2013, several goals should be balanced:

- 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 in the ASC sector.
- Keep providers under financial pressure to constrain costs.
- Require ASCs to submit cost data.

In balancing these goals, the Commission concludes that ASCs should receive a modest positive update in 2013 and that the Congress should require them to submit cost data.

RECOMMENDATION 5–1

The Congress should update the payment rates for ambulatory surgical centers by 0.5 percent for calendar year 2013. The Congress should also require ambulatory surgical centers to submit cost data.

RATIONALE 5–1

On the basis of our payment adequacy indicators, the lack of ASC cost data, and our concerns about the potential effect of ASC growth on overall program spending, we believe a moderate update of 0.5 percent is warranted for 2013. The indicators of payment adequacy for which we have information are positive: There has been continued growth in the number of Medicare-certified ASCs and beneficiaries' use of ASC services, and ASCs have adequate access to capital. Therefore, although we lack cost and quality data, the indicators we have suggest that payments have been at least adequate. It is vital that CMS begin collecting cost data from ASCs without further delay. The lack of such data for ASCs is a major reason why our recommended update for ASCs is lower than that for OPDs in Chapter 3 of this report (1.0 percent for 2013). Cost data from ASCs would enable analysts to determine the costs of an efficient provider, which would help inform decisions about the ASC update. Such data are also needed to examine whether an alternative input price index would be an appropriate proxy for ASC costs or whether an ASC-specific market basket should be developed.

IMPLICATIONS 5–1

Spending

- The currently projected ASC update for 2013 is 1.2 percent. However, we recommend that payment rates be increased by 0.5 percent. Therefore, relative to current law, our recommended update for 2013 would decrease federal spending by less than $50 million in the first year and by less than $1 billion over five years. The spending implication of this recommendation is based on Medicare spending projections that were made prior to a sequester, as the recommendation was developed and voted on before the sequester was triggered and became current law. If a Medicare sequester does occur, it will change the spending implication of the recommendation.

Beneficiary and provider

- Because of the growth in the number of Medicare-certified ASCs and the number of beneficiaries treated in ASCs, we do not anticipate that this recommendation will diminish beneficiaries' access to ASC services or providers' willingness or ability to provide those services.
- ASCs will incur some administrative costs to submit cost data.

Using quality data from ASCs to reward high-performing and penalize low-performing providers

To improve the quality of care provided to beneficiaries in ASCs, CMS should use ASC quality data to reward high-performing and penalize low-performing providers. CMS should also publicly report quality measurement results to help consumers compare quality among facilities. CMS recently established a Quality Reporting Program for ASCs that requires them to submit quality data beginning in 2012; ASCs that do not submit data would have their annual payment update reduced in 2014 (Centers for Medicare & Medicaid Services 2011). However, Medicare payments to ASCs would not be adjusted based on the provider's actual performance on quality measures. Although the Secretary recently submitted a plan to the Congress to implement a value-based purchasing program (VBP) for ASCs that would reward high-performing facilities, the agency lacks the statutory authority to establish such a program (Department of Health and Human Services 2011).

The Commission supports the Quality Reporting Program for ASCs but believes that, eventually, high-performing ASCs should be rewarded and low-performing facilities should be penalized through the payment system.

Revisiting the market basket for ambulatory surgical centers

Because of our concerns that the market basket index CMS uses to update ambulatory surgical center (ASC) payments (the consumer price index for all urban consumers (CPI–U)) may not reflect ASCs' cost structure, we examined 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 and found that ASCs' cost structure differs 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 probably does not reflect ASC inputs. The CPI–U is based on a sample of prices for a broad mix of goods and services, including food, housing, apparel, transportation, medical care, recreation, personal care, education, and energy (IHS Global Insight 2011). The weight of each item is based on spending for that item by a sample of urban consumers during the survey period. Although ASCs probably use some of these items, their share of spending on each item is likely very different from the CPI–U weight. For example, housing accounts for 43.4 percent of the entire CPI–U (Bureau of Labor Statistics 2009).

Because CMS currently lacks data on ASCs' input costs, 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, and 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 physicians' offices, such as medical equipment, medical supplies, building-related expenses, clinical staff, administrative staff, and malpractice insurance.

We used 2004 ASC cost data from a 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). (See our March 2010 report for more details on the method (Medicare 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 different cost structure from hospitals and physicians' 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 physicians' offices. ASCs' comparatively larger share of costs for medical supplies and drugs could be related to their high volume of cataract removal and lens insertion procedures. These procedures use intraocular lenses, which are included in the medical supplies category and are relatively expensive. Another factor could be that ASCs furnish primarily surgical procedures, whereas hospitals and physicians provide a significant number of evaluation and management services, which probably have lower supply costs than surgical procedures.

The ASC cost data used in our comparative analysis are eight years old and do not contain information on several types of costs. Therefore, the Congress should require ASCs to submit new cost data to CMS. CMS should use this information 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 structure of ASC costs. ■

The current quality reporting program could lay the foundation for such a VBP program, which was the case for the Medicare hospital inpatient VBP program. Other ambulatory care providers—physicians and OPDs—already have quality reporting programs, and the Commission has recommended that Medicare adopt VBP (also known as pay-for-performance) programs for these sectors (Medicare Payment Advisory Commission 2005, Medicare Payment Advisory Commission 2007a).

Consistent with the Commission's overall position on pay-for-performance programs in Medicare, a VBP program for ASCs should include a relatively small set of measures that primarily focus on clinical outcomes and some process, structural, and patient experience measures. Several of these measures will be reported through the ASC Quality Reporting Program but other measures need to be developed. An ASC VBP program should reward ASCs for improving care and exceeding quality benchmarks. In addition, funding for the VBP incentive payments should come from existing Medicare spending for ASC services.

Criteria for measures

The Commission has outlined the following general criteria for performance measures for any Medicare pay-for-performance program (Medicare Payment Advisory Commission 2005, Medicare Payment Advisory Commission 2007b):

- Measures should be evidence based and accepted by independent quality experts, private and public sector purchasers, providers, and consumer organizations.
- Collecting and analyzing measurement data should not be unduly burdensome for either the provider or the Medicare program.
- Incentives should not discourage providers from accepting riskier or more complex patients.
- Most providers should be able to improve on the available measures. Aspects of care being measured should be within the control of the provider, there should be room for improvement in the quality of care being measured, and the measure set should include measures that apply to all patients, such as safe practices and patient perceptions of care.
- The performance measures selected for all of Medicare's VBP programs should send consistent signals about Medicare's expectations for quality and efficiency across different types of providers and care settings. To that end, quality measures should be aligned across settings such as ASCs, OPDs, and physicians' offices for services that are performed in all those settings.

An ASC VBP program should include a relatively small set of measures to reduce the administrative burden on ASCs and CMS, and the measure set should primarily focus on clinical outcomes, as Medicare's central concern should be improving outcomes across all ASCs and over time. The program should also include some clinical process, structural, and patient experience measures. Because the program should minimize the data collection burden on providers, CMS should avoid or minimize the use of measures that require providers to extract data from a sample of patients' medical charts.

Outcome measures

CMS should consider incorporating the following outcome measures into an ASC VBP program:

- patient fall in the ASC;
- patient burn;
- wrong site, wrong side, wrong patient, wrong procedure, wrong implant;
- hospital transfer or admission after an ASC procedure, whether the patient is transferred directly to the hospital from the ASC or admitted to the hospital after returning home from an ASC procedure; and
- surgical site infection.

The first three outcome measures listed above are patient safety indicators identified by the National Quality Forum (NQF) as "serious reportable events," which are defined as errors in medical care that are clearly identifiable and measurable, are usually preventable, are serious in their consequences for patients, and indicate a problem in a health care facility's safety systems. These indicators do not require risk adjustment because they measure events that are usually preventable and should not be affected by patients' severity of illness or health status. These measures can also apply to multiple types of procedures and ASCs. The ASC versions of these measures were developed by the industry-sponsored ASC Quality Collaboration and have been endorsed for ASC use by the NQF. Given that these measures were developed by a coalition of ASC groups, it should be technically feasible for ASCs to report these indicators without undue administrative burden. Under the new ASC Quality Reporting Program, ASCs will begin reporting these measures on claims in October 2012.

Under this program, ASCs will also begin reporting a claims-based measure tracking whether patients are transferred or admitted directly to a hospital (including a hospital emergency room) upon discharge from an ASC, which can indicate a potentially preventable complication,

serious medical error, or other unplanned negative outcome. An ASC with a high rate of transfers or inpatient admissions may be providing suboptimal care or may be performing procedures on patients who should not be treated in an ambulatory surgical setting. This measure—which was endorsed in its current form by the NQF—should be expanded to include patients who return home after the ASC procedure but who are admitted to a hospital shortly thereafter because of a problem related to the procedure. Including these patients in the measure would enable CMS to more comprehensively track patients who experience serious complications or medical errors related to an ASC procedure. Because some patients are admitted to the hospital after returning home from an ASC, CMS could analyze claims data to look for hospital admissions for adverse events related to an ASC procedure that occur within a certain number of days of a procedure.

Another important outcome measure is the rate of surgical site infections (SSIs) in ASCs. Researchers have found that lapses in infection control practices were common among a sample of ASCs in three states (Schaefer et al. 2010). Problems with infection control could increase the rate of SSIs. Therefore, CMS should develop an SSI measure that applies to common ASC procedures. CMS should consider using the same measures to track infection rates for ambulatory surgeries for both OPDs and ASCs. Measuring SSI rates could be a way to encourage providers to collaborate and better coordinate care for ambulatory surgery patients. Because SSIs often do not appear until after a patient has been discharged from an ASC and because ASCs typically do not have an ongoing relationship with patients, CMS could instruct ASCs to conduct a follow-up phone call with patients, their caregivers, or their physicians within an appropriate time period after the procedure to identify patients who have developed SSIs. ASCs could include this information in the patient's medical record and submit it to CMS.

Although the ASC Quality Reporting Program does not yet include an SSI measure, CMS will consider proposing one in the future after the agency has identified an appropriate set of outpatient procedures for an SSI measure and developed a protocol for facilities to track and report SSIs (Centers for Medicare & Medicaid Services 2011). CMS will also consider including an SSI measure in the hospital outpatient Quality Reporting Program. The hospital inpatient Quality Reporting Program includes an SSI measure that applies primarily to inpatient procedures.

Process measures

In addition to outcome measures, an ASC VBP program should also initially include one or more infection control process measures, given existing concerns about infection control practices in ASCs (Schaefer et al. 2010). CMS should eventually phase out the process measures once the agency adopts an SSI outcome measure that applies to a large number of ASC procedures. One potential process measure is prophylactic intravenous (IV) antibiotic timing, which assesses the rate of ASC patients who received IV antibiotics to prevent an SSI on time (within one or two hours before the incision). Timely administration of IV antibiotics is effective in reducing the risk of developing an SSI. This indicator is part of the ASC Quality Reporting Program and is also used in the Quality Reporting Programs for hospital inpatient and outpatient settings and in the Physician Quality Reporting System (PQRS). Another potential infection control process measure is discontinuation of prophylactic antibiotics, which measures the percent of patients who received a prophylactic antibiotic who had an order for discontinuation of prophylactic antibiotics within 24 hours of surgical end time; this measure is currently used in PQRS. CMS could also consider including a third PQRS process measure related to preventing another type of serious surgical complication: venous thromboembolism (VTE) prophylaxis when indicated in all patients.[13]

Structural and patient experience measures

The ASC VBP program should also include structural and patient experience measures. Structural measures are designed to ensure that a facility is capable of providing high-quality care. The ASC and hospital outpatient Quality Reporting Programs include a structural measure that assesses whether ASCs are using a safe surgery checklist. A safe surgery checklist helps ensure that safe practices are performed before administration of anesthesia, before incision, and before the patient leaves the operating room. The use of such checklists has been associated with significant reductions in surgical complications and mortality (de Vries et al. 2010). Because ASCs will report whether they used a safe surgery checklist to CMS through the QualityNet website, the data reporting burden should be minimal. Hospitals currently report structural measures through QualityNet under the inpatient and outpatient Quality Reporting Programs.

Because measures of patient experience provide information on patients' perceptions of access to care and how well their providers communicate with them,

the Commission supports the development of a survey to measure patients' perceptions of their ASC care. Such a survey could be modeled after the existing Consumer Assessment of Healthcare Providers and Systems (CAHPS®) Clinician and Group Survey and the CAHPS Surgical Care Survey. CMS has indicated that a patient experience measure could be included in the ASC Quality Reporting Program in the future (Centers for Medicare & Medicaid Services 2011). When the Commission recommended a VBP program for physicians, we suggested that a patient experience measure could become part of such a program (Medicare Payment Advisory Commission 2005).

CMS should incorporate quality measures over time that use data from patient registries and electronic health records

We encourage CMS to consider incorporating quality measures that use data from patient registries into the ASC VBP program over time, when it is clinically appropriate and administratively feasible to do so. The Commission has found that claims-based process measures provide important but limited information about quality of care and are the least burdensome approach to collecting quality information. However, patient registries that can aggregate and report more detailed clinical data from a provider's entire patient population also have value for quality improvement. Registries can be used to analyze providers' adherence to evidence-based process measures and track patients' health outcomes over time. We note that PQRS includes two registry-based measures that relate to outcomes of cataract surgery, which is a common ASC service.[14] CMS could consider adapting these registry-based measures for ASCs. Providers can also use registries to track patients who are treated with a particular drug or device, information that could be used for postmarket surveillance of clinical outcomes associated with the use of that product.

The Commission strongly supports the use of electronic health records (EHRs) and other health information technology, such as computerized provider order entry and clinical decision support, as tools that can improve the quality and reduce the cost of care (Medicare Payment Advisory Commission 2005). EHRs may reduce the administrative burden of collecting and reporting clinical data that are not readily available from claims, such as diagnostic test results. As EHRs become more widespread, CMS should consider adding more clinically detailed measures to the ASC VBP program as well as using EHR data to refine risk-adjustment methods for outcome measures that are adjusted for patients' health status.

CMS should address statistical issues related to performance measures that have a small number of cases

Certain ASCs—including those with relatively low volumes of Medicare patients—may report small numbers of cases for the calculation of some performance measures, especially measures of low-frequency and high-cost events, such as serious reportable events and other patient safety incidents. The rates reported for these providers could vary substantially from one observation period to the next based solely on random statistical variation, which in effect would reward or penalize providers for fluctuations in their performance scores that are unrelated to their actual quality of care.

To address these cases, CMS could consider the use of composite measures that would aggregate the rates for several measures of rare events into a single rate, or consider alternative ways to calculate scores on these kinds of measures, such as using performance data from multiple years. The trade-off for the increased statistical reliability in both approaches is that the reported rates become less actionable for providers. In the case of a composite measure, the result is the sum or average of several different measures that may have varying rates of performance, making it hard for a provider to know where to focus quality improvement efforts. In the case of a multiyear measure, the results may capture performance from past years that no longer reflect current practices, making it difficult to show improvement quickly and create momentum for more rapid change. CMS should keep this trade-off in mind as it balances the need for statistically reliable measures that also yield actionable quality information for providers and beneficiaries.

Medicare should reward ASCs for improving care and exceeding quality benchmarks

The goal of a VBP program is to improve care for as many beneficiaries as possible. Thus, it is important to reward providers who attain certain thresholds of quality as well as lower performing providers who improve their quality over time. Consistent with the Commission's design criteria for VBP programs and the inpatient hospital VBP program, ASCs should be rewarded either for attaining high thresholds of quality performance or for significantly improving their own prior year performance (Medicare Payment Advisory Commission 2005, Medicare Payment Advisory Commission 2007b). It is reasonable to expect

that, over time, these thresholds will converge as more facilities raise their performance to the national attainment benchmark.

Funding for VBP program should come from existing ASC spending

Funding for the pool of incentive payments in the VBP program 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. As in the inpatient hospital VBP program, the size of this pool should be expanded gradually as more measures are developed and ASCs become more familiar with the program. Because aggregate ASC payments would be reduced to fund the program, and money from the resulting pool of funds would be distributed to facilities based on their performance, high-performing or consistently improving ASCs would receive higher payments than under current law while low-performing ASCs would receive lower payments. This policy should encourage facilities to improve their performance so they can receive additional payments or avoid payment reductions.

RECOMMENDATION 5-2

The Congress should direct the Secretary to implement a value-based purchasing program for ambulatory surgical center services no later than 2016.

RATIONALE 5-2

To improve the quality of care for beneficiaries in ASCs, Medicare's payment system should reward high-performing facilities and penalize low-performing facilities. The Commission has also recommended that Medicare adopt VBP programs for the other providers of ambulatory surgery—physicians and OPDs. The VBP program for ASCs should include a relatively small set of measures that primarily focus on clinical outcomes and some process, structural, and patient experience measures. Several of these measures will be reported through the ASC Quality Reporting Program but other measures need to be developed. The program should reward ASCs for improving care and exceeding quality benchmarks. In addition, funding for the VBP incentive payments should come from existing Medicare spending for ASC services.

Requiring the VBP program to begin in 2016 would give CMS sufficient time to develop additional quality measures, design a method for scoring measures, and determine whether ASCs attained high thresholds of quality performance or improved their own prior year performance.

IMPLICATIONS 5-2

Spending

- Because funding for the pool of incentive payments in the VBP program should come from existing Medicare spending for ASC services, this recommendation would not increase Medicare spending. The Congress or CMS could design the program to create small savings. For example, penalties for ASCs that have excessive rates of hospital transfers or admissions may be implemented in a non-budget-neutral manner, similar to the policy in PPACA that reduces payments to hospitals with a high rate of readmissions.

Beneficiary and provider

- This recommendation should increase the quality of care provided to beneficiaries in ASCs.
- ASCs will incur some administrative costs to submit quality data. Because aggregate ASC payments would be reduced to fund the program, and money from the resulting pool of funds would be distributed to facilities based on their performance, high-performing or consistently improving ASCs would receive higher payments than under current law while low-performing ASCs would receive lower payments. ■

Endnotes

1 GAO surveyed a random sample of 600 ASCs to obtain cost data from 2004; they received reliable cost data from 290 facilities.

2 The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 eliminated a requirement that the Secretary collect cost data from ASCs every five years.

3 Medicare's share of total ASC revenue varies by type of ASC, ranging from 7 percent for ASCs that specialize in orthopedic procedures to 43 percent for ASCs that specialize in ophthalmology cases (Medical Group Management Association 2009).

4 Because ASCs are disproportionately located in some states (Maryland, Washington, Idaho, and Georgia), we weighted 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 are not payable by Medicare in ASCs.

5 For the 10 categories of procedures with the highest share of Medicare payments to ASCs, patients treated in ASCs in 1999 had somewhat lower average risk scores than OPD patients.

6 These data are based on 266 ASCs and 165 hospitals.

7 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). Thus, at least some of the ASCs in the sample may not be Medicare-certified ASCs.

8 Vermont, West Virginia, New York, and Kentucky all have certificate-of-need laws for ASCs, which may help explain the relatively low number of ASCs in those states.

9 By statute, coinsurance for a service paid under the OPPS cannot exceed the hospital inpatient deductible ($1,156 in 2012). 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.

10 Our analysis excluded radiology services provided in ASCs because the ASC payment system did not pay separately for radiology services before 2008.

11 Our analysis of service volume in 2010 included surgical procedures only, as nearly all these procedures had Current Procedural Terminology codes in the range 10000–69999. Our analysis of 2010 service volume did not include nonsurgical services, such as radiology services, brachytherapy sources, drugs, and pass-through devices. In addition, it did not include services that are packaged in 2010.

12 This study assumed that physicians who performed at least 30 percent of their outpatient surgeries at a given ASC within a year were ASC owners. The four procedures for which there was a significant relationship between ASC ownership and volume in the time-series analysis were carpal tunnel release, cataract excision, colonoscopy, and knee arthroscopy. There was no significant relationship for myringotomy with tube placement.

13 This indicator measures the percent of patients undergoing procedures for which VTE prophylaxis is indicated in all patients and who had an order for low molecular weight heparin, low-dose unfractionated heparin, adjusted-dose warfarin, fondaparinux, or mechanical prophylaxis to be given within 24 hours before incision time or within 24 hours after surgery end time.

14 The first indicator measures the percent of patients who had visual acuity of 20/40 or better within 90 days after the cataract surgery. The second indicator measures the percent of patients who had major complications related to cataract surgery within 30 days after the surgery.

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CHAPTER 6

Outpatient dialysis services

RECOMMENDATION

6 The Congress should update the outpatient dialysis payment rate by 1 percent for calendar year 2013.

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

CHAPTER 6

Outpatient dialysis services

Chapter summary

Outpatient dialysis services are used to treat the majority of individuals with end-stage renal disease (ESRD). In 2010, more than 355,000 ESRD beneficiaries on dialysis were covered under fee-for-service (FFS) Medicare and received dialysis from about 5,500 ESRD facilities. In that year, Medicare expenditures for outpatient dialysis services, including separately billable drugs administered during dialysis, were $9.5 billion, an increase of 4 percent from 2009 spending levels. For most facilities, 2010 is the last year that Medicare paid them a prospective payment for each dialysis treatment furnished and separate payments for furnishing certain drugs during dialysis. The modernized prospective payment system began in 2011 and includes dialysis drugs for which facilities previously received separate payments in the payment bundle.

Assessment of payment adequacy

Our payment adequacy indicators for outpatient dialysis services are generally positive.

***Beneficiaries' access to care*—**Measures include examining the capacity and supply of providers, beneficiaries' ability to obtain care, and changes in the volume of services.

In this chapter

- ***Capacity and supply of providers*—**Dialysis facilities appear to have the capacity to meet demand. Growth in the number of dialysis treatment stations has generally kept pace with growth in the number of dialysis patients.
- ***Volume of services*—**Between 2009 and 2010, the number of FFS dialysis patients and dialysis treatments grew at similar rates (4 percent and 5 percent, respectively). Per capita use of erythropoiesis-stimulating agents, the drug class accounting for three-quarters of dialysis drug spending, declined during this time. This decline is linked to clinical evidence showing that higher use of these drugs is associated with increased risk of cardiovascular events. It also may be linked to facilities' and physicians' modifying their prescribing patterns in anticipation of the new payment method that began in 2011 that no longer pays separately for these drugs.

***Quality of care*—**Dialysis quality has improved over time for some measures, such as use of the recommended type of vascular access—the site on the patient's body where blood is removed and returned during hemodialysis. Other measures, such as rates of rehospitalization within 30 days, suggest that improvements in quality are still needed.

***Providers' access to capital*—**Information from investment analysts suggests that dialysis providers continue to have adequate access to capital. The number of facilities, particularly for-profit facilities, continues to increase.

***Medicare payments and providers' costs*—**In 2010, the Medicare margin for dialysis services and drugs was 2.3 percent for freestanding dialysis facilities. We project the Medicare margin for outpatient dialysis services will be 2.7 percent in 2012. This projection reflects payment updates of 2.5 percent in 2011 and 2.1 percent in 2012; the 2 percent reduction in total spending that the Medicare Improvements for Patients and Providers Act of 2008 mandated in 2011; the 3.1 percent transitional budget-neutrality adjustment in effect between January and March 31, 2011; the estimated 0.2 percent payment reduction due to Medicare's quality incentive program in 2012; and a conservative behavioral offset to account for efficiencies in the use of drugs that are anticipated under the new dialysis payment method. ■

Dialysis treatment choices

Dialysis replaces the filtering function of the kidneys when they fail. The two types of dialysis—peritoneal dialysis and hemodialysis—remove waste products from the bloodstream differently. Peritoneal dialysis uses the lining of the abdomen as a filter to clear wastes and extra fluid and is usually performed independently in the patient's home (or work place) several times a day five to seven days a week.

Hemodialysis uses an artificial membrane encased in a dialyzer to filter the patient's blood. Although hemodialysis is usually provided in dialysis facilities, it can also be done in the patient's home. Most hemodialysis patients receive treatments thrice weekly (three to four hours per treatment) in a dialysis facility. Studies showing reduced mortality have increased interest in two types of more frequent hemodialysis administered five or more times at night weekly (six to eight hours per treatment) or during the day (two to three hours per treatment). Both nocturnal and short daily hemodialysis can be furnished in either a patient's home or a dialysis facility.

Each dialysis method has advantages and disadvantages—no one type of dialysis is best for everyone. People choose one type of dialysis over another for many reasons, including quality of life, patients' awareness of different treatment methods and personal preferences, and physician training and recommendation. Mehrotra and colleagues concluded that many U.S. training programs either do not have an appropriate number of peritoneal dialysis patients or do not allocate appropriate time to ensure the preparedness of fellows in providing independent care for patients undergoing peritoneal dialysis (Mehrotra et al. 2002). Some patients switch from one method to another when their conditions or needs change. ■

Background

End-stage renal disease (ESRD) is the last stage of chronic kidney disease and is characterized by permanent irreversible kidney failure. ESRD patients 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 because of potential patients' suitability for transplantation, 70 percent of ESRD patients undergo dialysis. The text box (above) summarizes the different types of dialysis. 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.

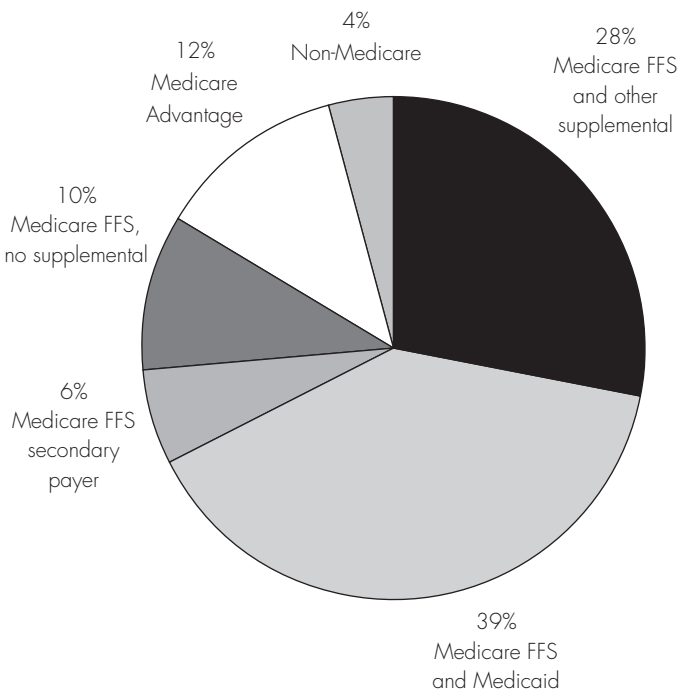
The 1972 amendments to the Social Security Act extended Medicare benefits to people with ESRD who are eligible for Social Security benefits, including those under age 65 years. To qualify for the ESRD program, individuals must be fully or currently insured under the Social Security or Railroad Retirement program, entitled to benefits under the Social Security or Railroad Retirement program, or the spouse or dependent child of an eligible beneficiary.[1] ESRD patients entitled to Medicare due to kidney disease alone have the same benefits as other Medicare patients.

For individuals entitled to benefits due to ESRD alone, 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 those dialyzing at home. About half of new ESRD patients each year are under age 65 and thus are entitled to Medicare because they have chronic renal failure. In 2009, there were about 113,000 new dialysis patients, inclusive of individuals covered by Medicare and those not covered by Medicare.[2] According to the U.S. Renal Data System (USRDS), between 2008 and 2009, the rate of new ESRD cases increased by 1 percent to 355 per million population (United States Renal Data System 2011).

Most dialysis patients—more than 355,000 patients in 2010—are covered by fee-for-service (FFS) Medicare as the primary or secondary payer (Figure 6-1, p. 144). Compared with all Medicare patients, FFS dialysis patients are disproportionately younger and African American (Table 6-1, p. 145). Nearly three-quarters of FFS dialysis patients are less than 75 years old and 36 percent are African American. About 91 percent of FFS

FIGURE 6–1

In 2010, we estimate that Medicare was the primary or secondary payer for most dialysis patients



Note: FFS (fee-for-service). Total may not sum to 100 percent due to rounding.

Source: Source of insurance estimated from USRDS 2011, CMS's 2009 renal facility survey, 2008 Medicare Current Beneficiary Survey, 2010 Medicare denominator file, and 2010 claims submitted by dialysis facilities to CMS.

dialysis patients are enrolled in Part D plans or have other sources of creditable drug coverage.

To help pay for Part A and Part B cost sharing, most FFS dialysis patients have supplemental insurance. About 47 percent of patients are dually eligible for Medicare and Medicaid. According to the 2008 Medicare Current Beneficiary Survey, 11 percent of Medicare ESRD patients lack supplemental insurance. Medicare is the secondary payer (for Part A and Part B) for 7 percent of FFS dialysis patients who are insured by an employer group health plan (EGHP) at the time they are diagnosed with ESRD.[3] If an EGHP covers a beneficiary at the time of ESRD diagnosis, it is the primary payer for the first 33 months of care (as long as the individual maintains the EGHP coverage). EGHPs include health plans that beneficiaries were enrolled in through their own employment or through a spouse's or parent's employment before becoming eligible for Medicare due to ESRD.

Although most dialysis patients who are entitled to Medicare are enrolled in FFS, in recent years, the share of Medicare dialysis patients in Medicare Advantage (MA) plans has increased. In 2009, nearly 13 percent of Medicare dialysis patients were enrolled in MA plans, an increase from 7 percent in 2005 (United States Renal Data System 2011).[4]

According to CMS's renal facility survey, about 96 percent of all patients are covered by Medicare. The share of dialysis patients not covered by Medicare (as either the primary or the secondary payer) between 2004 and 2009 (the most recent five-year period for which data are available) remained relatively steady, ranging between 4 percent and 5 percent.

The two principal providers of dialysis care are the facilities that furnish dialysis treatments and the physicians (often nephrologists, who specialize in the treatment of kidney diseases) who prescribe and manage the provision of dialysis and establish the patient's plan of care. Medicare uses separate methods to pay for these services. Under the new payment method, Medicare pays facilities a prospective payment for each dialysis treatment they furnish. By contrast, physicians and practitioners are paid a monthly rate for outpatient dialysis-related management services. The monthly payment amount varies based on the number of visits provided each month, the age of the beneficiary, and whether the patient is receiving dialysis in a facility or at home. While this chapter focuses on the fee that Medicare pays to facilities, it is important to recognize that facilities and physicians collaborate to care for dialysis patients and only together can they improve quality in the long term.

In 2011, CMS paid most dialysis facilities under a new outpatient dialysis payment policy

In 2011, to improve efficiency, Medicare began to phase in a new prospective payment system (PPS) for dialysis facilities. The Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) updated the outpatient dialysis payment method by broadening the payment bundle in 2011 to include dialysis drugs and laboratory tests that were previously separately billable and implementing a pay-for-performance program in 2012. MIPPA's provisions are consistent with the Commission's long-standing recommendation to modernize the outpatient dialysis payment system (Medicare Payment Advisory Commission 2001). We contended that Medicare could provide incentives for controlling costs and

promoting quality care by broadening the payment bundle to include drugs, laboratory services, and other commonly furnished items that providers formerly billed separately and by linking payment to quality. The new bundled rate is designed to create incentives for facilities to furnish services more efficiently by reducing incentives inherent in the former payment method to overutilize drugs.

Table 6-2 (p. 146) compares features of the new and former payment methods. Like the new method, the previous one pays facilities for a single dialysis treatment by using a prospective payment—often referred to as the composite rate. However, the new payment method differs from the former one in the following ways: (1) it uses a broader payment bundle, (2) it sets payment using a greater number of patient-level payment adjusters, (3) it provides an outlier payment for high-cost patients, (4) it increases the base rate by a low-volume adjustment for certain low-volume facilities, and (5) it links facilities' payments to the quality of care they furnish. The Commission's Payment Basics provides more information about Medicare's former and new methods for paying for outpatient dialysis services (available at http://medpac.gov/documents/MedPAC_Payment_Basics_11_dialysis.pdf).

In 2011, most dialysis facilities (about 87 percent), including the two largest dialysis organizations, elected to be paid under the new PPS instead of the four-year transition (Centers for Medicare & Medicaid Services 2011b). In 2012, under the new PPS, the base prospective payment is $234.81 per treatment, which includes all ESRD-related services, including injectable drugs and selected laboratory services that were previously separately billable. For the 13 percent of all dialysis facilities that are paid under the four-year transition to the new payment method, in 2012, 50 percent of their payment is based on the new payment method and 50 percent of their payment is based on the former payment method. In 2012, under the former method (i.e., basic case-mix adjusted composite rate system), the base composite rate (including the drug add-on payment) is about $162 per treatment.[5] Separately billable dialysis drugs are paid according to the Part B average sales price, and separately billable laboratory tests are paid according to the laboratory fee schedule.

TABLE 6–1

Characteristics of FFS dialysis patients and program eligibility, 2010

	Percent of all FFS dialysis patients
Age	
Under 45 years	12%
45–64 years	37
65–74 years	25
75–84 years	19
85+ years	7
Sex	
Male	54
Female	46
Race	
White	51
African American	36
All others	14
Residence	
Urban county	81
Rural county, micropolitan	11
Rural county, adjacent to urban	5
Rural county, not adjacent to urban	3
Frontier county	1
Medicare as the secondary payer	7*
Prescription drug coverage status	
Enrolled in Part D	74
Coverage through employers that receive RDS	10
Coverage through other creditable sources	12
No creditable coverage	9
LIS	55*
Dually eligible for Medicaid	47

Note: FFS (fee-for-service), RDS (retiree drug subsidy), LIS (low-income subsidy). Urban counties contain a core area with 50,000 or more population, rural micropolitan counties contain at least one cluster of at least 10,000 and less than 50,000 population, rural counties adjacent to urban areas do not have a city of 10,000 people in the county, and rural counties not adjacent to urban areas do not have a city of 10,000 people. Frontier counties are counties with six or fewer people per square mile. Totals may not sum to 100 percent due to rounding.
*2009 estimates

Source: Data compiled by MedPAC from 2010 claims submitted by dialysis facilities to CMS and the CMS denominator file.

Concerns about the new dialysis prospective payment method

We have identified three issues concerning the new payment method that we intend to continue to follow. We anticipate addressing them again in 2012 after we evaluate the first-year experience with the new payment method using 2011 claims and cost report data. These issues are:

- *Lower use of dialysis drugs:* If the trend in the decline in the use of dialysis drugs continues, Medicare might consider using some of the associated savings

TABLE 6–2

New dialysis payment method broadens the payment bundle and includes more beneficiary-level adjustments, a low-volume adjustment, and payment for high-cost outliers

Payment method feature	Composite rate payment method: 1983–2010	New outpatient dialysis PPS: 2011 and beyond
Payment bundle	Composite rate services, which include: nursing, dietary counseling and other clinical services, dialysis equipment and supplies, social services, and certain laboratory tests and drugs	• Composite rate services • Separately billable (Part B) injectable dialysis drugs and their oral equivalents • ESRD-related laboratory tests • Selected renal-related oral-only Part D drugs (in 2014)
Unit of payment	Single dialysis treatment	Single dialysis treatment
Drug add-on payment to the composite rate	Yes	None
Self-dialysis training services adjustment	Yes	Yes
Beneficiary-level adjustments	• For adults: age, body surface area, and body mass • For pediatric beneficiaries: none	• For adults: age, dialysis onset, body surface area, body mass, and 6 comorbidities* • For pediatric patients: age and dialysis method
Facility-level adjustments	• Wage index	• Wage index • Low-volume adjustment
Outlier policy	None	Applies to the portion of the broader payment bundle comprising the drugs and services that were formerly billed separately
Quality incentive program	None	• Begins in 2012, uses 3 measures: percentage of patients with hemoglobin less than 10.0 g/dL, percentage of patients with hemoglobin greater than 12.0 g/dL, percentage of patients with URR greater than 65 percent • In 2013, uses 2 measures: percentage of patients with hemoglobin greater than 12.0 g/dL and percentage of patients with URR greater than 65 percent • In 2014 uses 6 measures: percentage of patients with URR greater than 65 percent, percentage of patients with hemoglobin greater than 12 g/dL, percentage of patients receiving treatment through an AV fistula or catheter, whether the facility reports certain dialysis-related infections to the CDC's National Healthcare Safety Network, whether the facility administers a patient experience of care survey, whether the facility monitors phosphorus and calcium levels on a monthly basis
Update	No statutory provision	Begins in 2012, set at ESRD market basket less productivity adjustment

Note: PPS (prospective payment system), ESRD (end-stage renal disease), URR (urea reduction ratio), AV (arteriovenous), g/dL (grams/deciliter), CDC (Centers for Disease Control and Prevention).
*Payment for adults is not adjusted by dialysis method.

Source: MedPAC analysis of CMS 2011 final ESRD rule.

to pay for other renal-related services, such as the oral-only Part D drugs that CMS intends to include in the payment bundle in 2014 and more frequent hemodialysis.

- *The quality incentive program (QIP):* In 2013 and 2014, the QIP lacks measures that hold providers accountable for undertreatment of anemia and bone disease, two common renal comorbidities.
- *The low-volume adjuster:* This adjuster does not yet consider the distance between a low-volume facility and the next closest facility. Consequently, Medicare may be subsidizing some low-volume facilities, particularly those located in urban and rural micropolitan areas, which are near another facility.

In addition to these three issues, industry representatives of dialysis facilities are concerned that they often lack the necessary documentation to bill Medicare for the six patient-level comorbidity adjustments under the requirements of the new payment method. CMS requires dialysis facilities to provide documentation in the patient's medical record to support any diagnosis recognized for a payment adjustment (Centers for Medicare & Medicaid Services 2010). As a result, they contend that Medicare's payments for dialysis services may be less than what was intended in 2011.

Lower use of dialysis drugs Since 2009, per capita use of certain dialysis drugs, particularly erythropoiesis-stimulating agents (ESAs), which are used to treat anemia, declined. Our analysis of Medicare claims data shows that between 2009 and 2010, the average erythropoietin dose per patient per week declined by 1.4 percent. Between January 2010 and December 2010, our analysis finds that the average dose per patient declined by 7 percent. According to industry data, between January and June 2011, the erythropoietin dose per patient per week fell by an additional 4 percent for the two largest dialysis organizations (Dialysis Outcomes and Practice Patterns Study 2011).

If the trend in lower drug use continues, some of the potential savings might offset some of the cost associated with including the oral-only Part D drugs in the bundle, which CMS intends to do in 2014.[6] (CMS delayed including the oral-only Part D drugs in the bundle in order to complete an evaluation of the drugs' pricing data and address operational concerns.) Some of the savings might also be used to pay for more frequent hemodialysis.

The quality incentive program Under the new payment method, with dialysis drugs in the broader payment bundle, some providers may have an incentive to reduce their use to the extent clinically possible. However, the QIP in 2013 and 2014 does not include measures that hold facilities accountable for the undertreatment of anemia and bone disease.

In 2012, the QIP measures the undertreatment of anemia—expressed as the percentage of patients receiving ESAs with an average hemoglobin less than 10.0 grams per deciliter (g/dL) of blood. CMS is not using this measure in the 2013 and 2014 QIPs because (1) it cannot identify a specific hemoglobin lower bound level that has been proven safe for all patients treated with ESAs and (2) it contends that, based on the revision of the ESA label by the Food and Drug Administration (FDA) in 2011, it would not be appropriate for the QIP to continue encouraging providers to achieve hemoglobin levels above 10 g/dL in all patients. In addition, the QIP does not hold dialysis providers accountable for the outcomes of undertreatment of anemia, such as blood transfusions and hospitalizations. CMS proposed, but did not implement, a standardized hospitalization ratio measure for the 2014 QIP.

In 2014, the QIP will measure whether facilities monitor two clinical outcomes (phosphorus and calcium levels) of bone disease and mineral management. But the QIP will not require that facilities submit data on mineral metabolism levels nor will it hold providers accountable for the outcomes of undertreatment.

The low-volume adjuster Low-volume facilities meeting CMS's definition are paid an 18.9 percent adjustment to the base payment rate to account for the higher costs they incur. CMS defined a low-volume facility as one that furnishes fewer than 4,000 treatments (including those for non-Medicare patients) in each of the three years before the payment year and that has not opened, closed, or received a new provider number due to a change in ownership during the three-year period. Facilities under common ownership and within 25 road miles of each other are treated as if they are one unit when applying the low-volume adjustment; facilities certified for Medicare participation before January 1, 2011, are exempt from this provision.

Our analysis of 2007–2009 cost reports submitted by facilities to CMS found that (1) 25 percent of low-volume facilities were within 1.2 miles of the next facility and (2) low-volume facilities located in urban and rural micropolitan areas were more likely to be in close

TABLE 6–3 **Some low-volume facilities are in close proximity to another facility**

Facility location	Percent of all low-volume facilities	Distance to closest facility (in miles)		
		Mean	Median	25th percentile
All low-volume facilities	100%	18.0	5.4	1.2
Urban county	57	5.9	2.1	0.8
Rural county, micropolitan	17	38.4	11.6	1.5
Rural county, adjacent to urban	17	23.7	23.5	18.1
Rural county, not adjacent to urban	10	43.9	37.4	30.0

Note: Urban counties contain a core area with 50,000 or more population, rural micropolitan counties contain at least one cluster of at least 10,000 and less than 50,000 population, rural counties adjacent to urban areas do not have a city of 10,000 people in the county, and rural counties not adjacent to urban areas do not have a city of 10,000 people.

Source: Data compiled by MedPAC from 2007–2009 cost reports submitted by facilities to CMS.

proximity to another facility (Table 6-3). Medicare and dialysis patients might be better served by an adjuster that targets low-volume facilities that are not in close proximity to another facility.

Industry concerns about patient comorbidity payment adjusters Under the new payment method, CMS has designated three chronic conditions—hereditary hemolytic or sickle cell anemia, myelodysplastic syndromes, and monoclonal gammopathy—and three acute conditions—bacterial pneumonias, gastrointestinal tract bleeding with hemorrhage, and pericarditis—as beneficiary payment adjusters. These adjusters were intended to recognize the increased costs incurred by facilities when treating patients with these conditions. Some industry representatives contend that (1) they lack sufficient documentation (e.g., chest X-ray for bacterial pneumonia) to bill CMS for a comorbidity adjustment, as these conditions are typically diagnosed at other provider sites (e.g., hospital, physician office), and (2) the high labor costs incurred to collect the documentation often offset Medicare's comorbidity payment adjustments.[7]

CMS included these conditions as case-mix adjusters based on regression analyses assessing the relationship between facilities' cost per treatment for composite rate services and facilities' payment per treatment for separately billable drugs and labs. These comorbidities had a statistically significant association with facilities' costs and payments. Once 2011 claims data become available, the Commission intends to analyze the billing patterns of facilities under the new payment method and the prevalence of these conditions across other Part B providers.

Medicare spending on outpatient dialysis services

In 2010, Medicare spending for dialysis services, including dialysis drugs, totaled about $9.5 billion, an increase of 4 percent compared with 2009. Freestanding facilities accounted for 91 percent of the spending total (about $8.7 billion in 2010). Payments for composite rate services accounted for 69 percent of the total, and separately billable dialysis drugs accounted for the remainder. Three drug classes accounted for nearly all (98 percent) dialysis drug spending:

- ESAs accounted for 73 percent of total dialysis drug spending and nearly one-quarter of total dialysis spending.
- Injectable vitamin D agents accounted for 15 percent of dialysis drug spending and 5 percent of total dialysis spending.
- Injectable iron agents accounted for 10 percent of dialysis drug spending and 3 percent of total dialysis spending.

In 2010, total dialysis spending averaged $26,575 per FFS dialysis patient (Figure 6-2), a 0.5 percent decline from 2009. This modest decline in total per capita spending resulted from dialysis drug spending decreasing by nearly 5 percent; by contrast, composite rate per capita spending increased by 1 percent. The decline in per patient spending for dialysis drugs was primarily due to the lower volume of ESAs furnished to patients in 2010.

The decrease in the use of ESAs in 2010 is partly linked to some physicians and facilities phasing in new prescribing protocols for dialysis drugs in anticipation of Medicare's change to a bundled payment method in 2011. However, between 2006 and 2008, on a per patient basis, the mean dose per week of erythropoietin declined (by 3 percent annually) because of new clinical evidence demonstrating an association between higher use of ESAs and increased risk of cardiovascular morbidity and mortality (Food and Drug Administration 2011, United States Renal Data System 2011).

Providers of outpatient dialysis services

In 2011, there were nearly 5,600 dialysis facilities in the United States (Table 6-4, p. 150). Since the late 1980s, for-profit, freestanding facilities have provided the majority of dialysis treatments (Rettig and Levinsky 1991). In 2011, freestanding facilities furnished 91 percent of FFS treatments and for-profit facilities furnished 83 percent. The share of facilities that are for profit and freestanding increased from 66 percent of all facilities in 1996 to nearly 85 percent in 2011.

Although Medicare is the primary payer for the majority of dialysis patients that facilities cared for in 2010 (Figure 6-1, p. 144), information from the two largest dialysis organizations suggests that Medicare revenues accounted for only 53 percent to 63 percent of their revenues (DaVita Inc. 2010, Fresenius Medical Care AG & Co. KGaA 2010). One of the large dialysis organizations states that "although commercial payment rates vary significantly, average commercial payment rates are generally significantly higher than Medicare rates" (DaVita Inc. 2010).

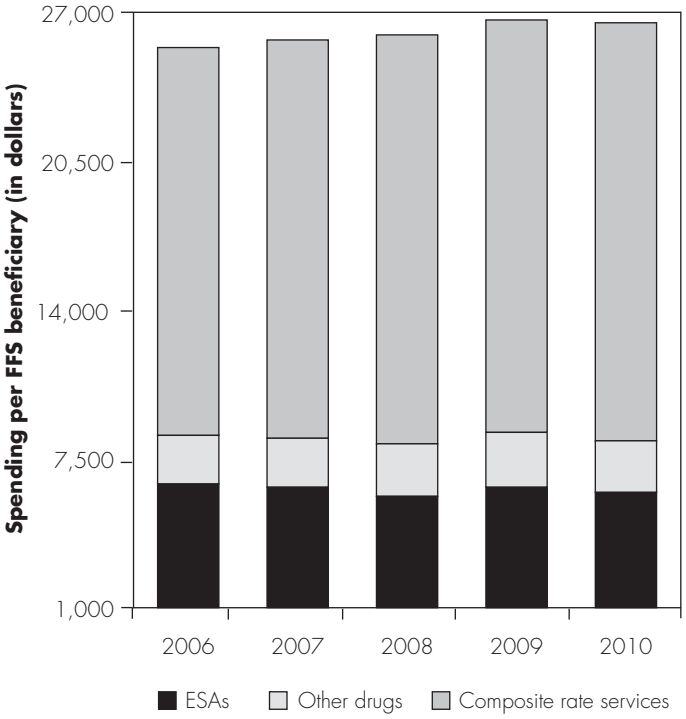
Chain organizations have also dominated this sector, with the first one established in 1970. In 2011, 81 percent of facilities were affiliated with a chain organization (i.e., multifacility enterprise), and chains furnished 86 percent of FFS treatments. In 2011, the two largest dialysis chains (Fresenius Medical Care North America and DaVita) were for profit; each owned more than 1,600 clinics, which accounted for nearly 70 percent of freestanding facilities and 60 percent of all facilities, and they furnished 66 percent of FFS treatments. In 2011, 9 of the 10 largest chains were for profit.

The distribution of facilities located in urban and rural areas is generally consistent with where FFS dialysis patients live (Table 6-1, p. 145):

- 81 percent of FFS dialysis patients reside in and 78 percent of facilities are located in urban areas,
- 11 percent of FFS dialysis patients reside in and 14 percent of facilities are located in rural micropolitan areas,
- 5 percent of FFS dialysis patients reside in and 5 percent of facilities are located in rural counties adjacent to urban areas, and
- 3 percent of FFS dialysis patients reside in and 3 percent of facilities are located in rural counties not adjacent to urban areas.

Not surprisingly, the average number of dialysis treatment stations decreases as the area where facilities are located becomes more rural. On average, urban facilities had 19 treatment stations, facilities in rural micropolitan areas had 16 stations, facilities in rural counties adjacent to urban areas had 13 stations, and facilities in rural counties not adjacent to urban areas had 12 stations.

FIGURE 6–2 **Per capita spending for composite rate services and dialysis drugs, 2006–2010**



Note: ESAs (erythropoiesis-stimulating agents). ESAs include erythropoietin and darbepoetin alpha.

Source: MedPAC analysis of 2006–2010 claims submitted by dialysis facilities to CMS.

TABLE 6–4 **Increasing number and capacity of freestanding, for-profit, and chain organizations**

	2010	2011			Average annual percent change			
					Number of facilities		Number of stations	
	Total number of FFS treatments*	Total number of facilities	Total number of stations*	Mean number of stations	2006–2011	2010–2011	2006–2011	2010–2011
All	40.2	5,560	98.6	18	4%	3%	4%	3%
	Percent of total							
Freestanding	91%	90%	92%	18	5	3	5	4
Hospital based	9	10	8	14	–2	–3	–2	–4
Location								
Urban county	84	78	82	19	4	3	4	3
Rural county, micropolitan	12	14	12	16	3	1	4	3
Rural county, adjacent to urban	3	5	4	13	4	3	5	3
Rural county, not adjacent to urban	2	3	2	12	4	2	4	3
Frontier county	0	1	0.3	10	1	3	3	9
For profit	83	83	84	18	5	4	5	4
Nonprofit	17	17	16	16	–1	–3	0.2	–2
Affiliated with any chain	86	81	83	18	5	4	5	5
Affiliated with one of 2 largest chains	66	62	63	18	4	5	4	5
Not affiliated with any chain	14	19	17	16	0	4	0.2	–4

Note: FFS (fee-for-service). Urban counties contain a core area with 50,000 or more population, rural micropolitan counties contain at least one cluster of at least 10,000 and less than 50,000 population, rural counties adjacent to urban areas do not have a city of 10,000 people in the county, and rural counties not adjacent to urban areas do not have a city of 10,000 people. Frontier counties are counties with six or fewer people per square mile.
*Total number of treatments are in millions. Total number of stations are in thousands.

Source: Compiled by MedPAC from the 2006, 2010, and 2011 Dialysis Compare database from CMS and 2010 claims submitted by dialysis facilities to CMS.

There has been significant industry consolidation in this sector. In 2005 and 2006, the four largest dialysis chains merged into two chains (referred to as the two largest dialysis organizations). Before the mergers (in 2004), the largest two organizations accounted for 37 percent of all facilities; after the mergers (in 2007), the largest two organizations accounted for nearly 60 percent of all facilities.

In addition to operating most dialysis facilities in 2011, the two largest dialysis organizations are vertically integrated. One of the largest dialysis organizations is the leading supplier of dialysis products, such as hemodialysis machines and dialyzers, and develops and distributes renal-related pharmaceutical products (e.g., phosphate binders) (Fresenius Medical Care AG & Co. KGaA 2006). Each of the two largest dialysis organizations (1) operates an ESRD-related laboratory, a pharmacy, and one or more centers that furnish vascular access services; (2) provides ESRD-related disease management services; and (3) operates dialysis facilities internationally.

Although large-chain organizations dominate this sector, an individual dialysis facility is relatively small compared with other institutional providers, such as PPS hospitals. On average, in 2010, a facility provided nearly 10,600 treatments to 75 patients per year. Smaller facilities (in the 25th percentile of all treatments and patients) provided about 5,560 treatments to 40 patients per year, while

larger facilities (in the 75th percentile of all treatments and patients) provided nearly 14,000 treatments to nearly 100 patients per year.

As mentioned earlier, physicians collaborate with facilities to care for dialysis patients. As we describe in the online appendix to this chapter (available at http://www.medpac.gov), in many instances, this collaboration includes physicians having financial or ownership interests in dialysis facilities that chain organizations operate. The statute permits physicians who refer patients to a dialysis facility to have financial and ownership interests in the facility. For example, joint ventures are a common business model in the dialysis sector, in which physicians own a minority stake and chain organizations own a majority stake in a dialysis facility. Physicians with financial and ownership interests share similar incentives with the dialysis chains to be efficient in furnishing services. Such incentives could affect the delivery of services, such as leading to overfurnishing dialysis drugs under the former payment method (when Medicare paid for them on a per unit basis) and underfurnishing them under the new payment method (when Medicare pays for them in the payment bundle). Such incentives may also affect the type of dialysis that is recommended to the patient. Complete data are lacking to assess the specific financial relationships between physicians and dialysis chain organizations. Disclosure of such information, as recommended by the Commission in 2009, would help CMS and other payers determine whether physician ownership might influence the quality of care and overall spending.

Are Medicare payments adequate in 2012?

To address whether payments for 2012 are adequate to cover the costs that efficient providers incur and how much providers' costs should change in the update year (2013), we examine several indicators of payment adequacy. Specifically, we assess patients' access to care by examining the capacity of dialysis providers 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 providers' costs. Most of our payment adequacy indicators for dialysis services are positive: Provider capacity is sufficient, volume growth (the number of dialysis treatments) has kept pace with growth in the number of beneficiaries, some improvements in quality have occurred, and provider access to capital is sufficient. In 2010, we estimate the Medicare margin for composite rate services and dialysis services was 2.3 percent, and we project it will be 2.7 percent in 2012.

Beneficiaries' access to care: Indicators continue to be favorable

Our analysis of access indicators—including the capacity of providers to meet patient demand, changes in patients' ability to obtain different types of dialysis, and changes in the volume of services—shows that patients' access to care remains favorable.

Capacity of facilities that are freestanding, for profit, and affiliated with a chain is growing and has kept pace with patient demand

From 2006 to 2011, the number of facilities and their capacity to furnish care, as measured by dialysis treatment stations, each increased by 4 percent annually (Table 6-4). During this period, the capacity of facilities that were freestanding, for profit, and affiliated with a chain organization grew by 5 percent per year. By contrast, the annual growth in the capacity of facilities that are hospital based, nonprofit, and not affiliated with a chain decreased or remained about the same (–2 percent, 0.2 percent, and 0.2 percent, respectively). Between 2006 and 2011, the capacities of urban and rural facilities grew at similar rates. The capacities of urban facilities grew by 4 percent per year while the capacities of rural facilities grew at an average annual rate of 4 percent to 5 percent. Between 2010 and 2011, the growth in dialysis capacity grew by 3 percent, 1 percentage point slower than the growth in capacity between 2006 and 2011.

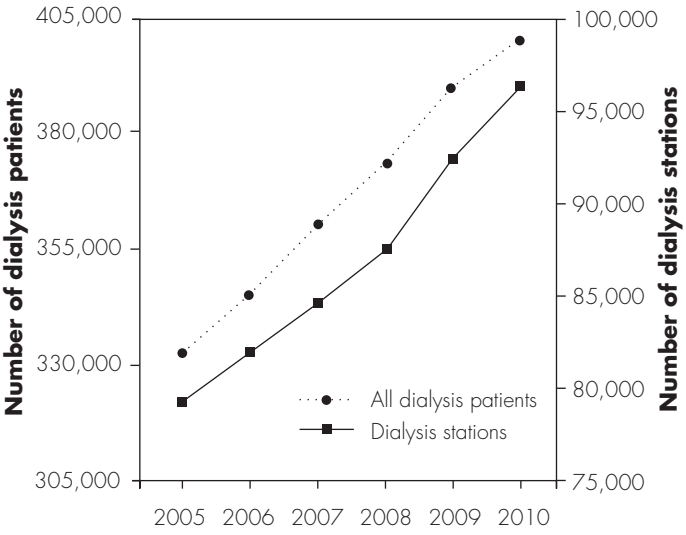
Growth in the numbers of dialysis stations and dialysis patients suggests that provider capacity kept up with demand for care between 2005 and 2010. During this period, the numbers of all dialysis patients (those in FFS Medicare, in MA, and not eligible for Medicare) and dialysis treatment stations increased by 4 percent per year (Figure 6-3, p. 152). Annual growth in the number of treatment stations was faster than the 2 percent annual growth in the number of FFS dialysis beneficiaries.

Most dialysis patients continue to receive thrice weekly in-center hemodialysis, but interest in other dialysis methods continues

During the most recent five-year period for which data are available (2006–2011), at least 96 percent of facilities

FIGURE 6–3

Growth in the number of dialysis stations has kept pace with growth in the number of all dialysis patients



Note: All dialysis patients include those individuals covered by Medicare under the fee-for-service and Medicare Advantage programs and individuals not covered by Medicare.

Source: Compiled by MedPAC from United States Renal Data System 2011, 2011 Elab Project, and 2005–2010 Dialysis Compare.

are certified to offer in-center hemodialysis and 46 percent are certified to offer some type of peritoneal dialysis—continuous cycle peritoneal dialysis or continuous ambulatory peritoneal dialysis (Centers for Medicare & Medicaid Services 2011a). Between 2006 and 2011, the proportion of facilities certified to offer home hemodialysis training increased from 13 percent to 23 percent. According to CMS, since 2006, facilities certified to offer home hemodialysis dialysis training programs grew by 17 percent per year, while facilities offering peritoneal dialysis grew by 4 percent annually.

Industry data examining trends in home hemodialysis suggest greater growth in the number of midsized and large facilities offering more frequent home hemodialysis (five or more times weekly) than conventional home hemodialysis (three times per week) (Home Dialysis Central 2011). Between 2006 and 2011, the number of midsized and large facilities offering nocturnal home hemodialysis, short daily home hemodialysis, and conventional home hemodialysis grew annually by 38 percent, 52 percent, and 21 percent, respectively.

As we describe in the text box (opposite page), interest in the use of more frequent hemodialysis (administered at a patient's home or in a facility) has grown because of studies showing favorable clinical outcomes and quality of life compared with conventional hemodialysis. Nonetheless, relatively few patients receive more frequent hemodialysis. According to CMS, in 2009, about 2,600 patients received hemodialysis more than four times per week. In the coming year, the Commission intends to discuss obstacles in the diffusion of more frequent hemodialysis with clinicians and other dialysis representatives.

There is continued interest in the use of home dialysis methods. Compared with in-center dialysis, studies conclude that home-based dialysis offers patients greater autonomy, improved quality of life, and enhanced satisfaction. Nonetheless, most patients receive dialysis in facilities. In 2009 (the most recent year for which data are available), 92 percent of dialysis patients received hemodialysis in a facility, while 7 percent received peritoneal dialysis (at home), and 1 percent received home hemodialysis (United States Renal Data System 2011). Between 1999 and 2009, the number of patients receiving hemodialysis in a facility increased by 4 percent per year, while the number of patients treated at home grew by 1 percent per year.

Factors contributing to greater use of in-center dialysis include patients' preference for in-center versus home dialysis, availability of caregivers, patients' lack of knowledge about home-based dialysis, and some physicians' lack of familiarity with home modalities, which may make them less likely to discuss this option with their patients. Medicare's former dialysis payment method was also a factor in the decline in home-based methods. The profitability of separately billable dialysis drugs provided an incentive to focus on in-center programs rather than on home-based ones. On average, peritoneal dialysis patients use fewer dialysis drugs than in-center hemodialysis patients. The new payment method might result in increased use of home methods over time. Providers' costs to furnish the most common home-based method—peritoneal dialysis—are less than for in-center hemodialysis. In addition, in 2010, Medicare began to pay for educating pre-ESRD beneficiaries about kidney disease. Researchers report that inadequate education is one of the barriers to increasing the use of home dialysis (Golper et al. 2011).[8]

Use of more frequent hemodialysis by Medicare patients

During the past few years, the use of more frequent hemodialysis (furnished at home or in a center five or more times per week compared with the thrice weekly regimen) has modestly increased. According to CMS, the number of patients receiving hemodialysis more than four times per week increased from 1,700 patients in 2007 to about 2,600 patients in 2009.

Interest in more frequent hemodialysis regimens has grown during the past decade because of studies showing improved outcomes and quality of life. By smoothing out fluctuations in fluid levels and toxins between dialysis sessions, hemodialysis five or more times per week may better approximate the organic kidney than thrice weekly treatment. Until 2007, the body of evidence demonstrating improved clinical outcomes and quality of life associated with more frequent hemodialysis consisted of uncontrolled studies. However, two randomized controlled studies—one conducted between 2004 and 2006 and the other conducted between 2006 and 2010—demonstrated improved clinical outcomes and quality of life associated with more frequent hemodialysis compared with thrice weekly hemodialysis.

The first controlled trial compared outcomes of 52 patients randomized to receive either frequent nocturnal hemodialysis or conventional hemodialysis (Culleton et al. 2007). Compared with conventional hemodialysis, frequent nocturnal hemodialysis improved left ventricular mass, reduced the need for blood pressure medications, improved some measures of mineral metabolism, and improved selected measures of quality of life.

The second controlled trial, funded by the National Institutes of Health (NIH), found that 125 patients randomized to receive short daily hemodialysis (six times per week) had improvements in the coprimary outcomes (which include mortality, left ventricular mass, and self-reported physical health) compared with the 120 patients who received hemodialysis thrice weekly (National Institutes of Health 2010). The more frequent treatments helped avoid excessive phosphate levels in the blood (hyperphosphatemia) and improved control of blood pressure, which are often problems for patients on dialysis. The only downside was that access to blood vessels needed to be adjusted about twice as often in patients who received more treatments.

However, a related NIH-sponsored study reported no differences in the coprimary outcomes among 87 patients randomized to receive either nocturnal hemodialysis six times per week or conventional hemodialysis (Rocco et al. 2011). The researchers found that patients in the nocturnal group had improved control of hyperphosphatemia and hypertension (secondary outcome measures).

Despite these generally favorable findings, relatively few patients receive this type of dialysis. One obstacle in the diffusion of more frequent hemodialysis is CMS's policy of capping payment for dialysis services at a rate of thrice weekly. Medicare's contractors have the discretion to pay for a fourth dialysis treatment if there is sufficient medical justification, such as fluid overload and congestive heart failure.

Finally, researchers might be better able to retrospectively evaluate the outcomes of patients on more frequent hemodialysis using the claims facilities submit for payment if the coding (based on the Healthcare Common Procedure Coding System) is more specific about the dialysis type. Although Medicare uses codes differentiating hemodialysis from peritoneal dialysis, specific codes are lacking to distinguish among patients on nocturnal, short daily, and conventional hemodialysis. ■

Types of facilities that closed and their effect on beneficiaries' access to care

Each year, we assess whether specific groups of patients are disproportionately affected by facility closures. Specifically, we compare the characteristics of dialysis patients treated by facilities that were open in 2009 and 2010, that newly opened in 2010, and that closed in 2009. This analysis uses claims submitted by facilities to CMS and CMS's Dialysis Compare database and the ESRD facility survey.

Compared with facilities that remained open, facilities that closed in 2009 (90 units) were more likely to be

hospital based and nonprofit, which is consistent with long-term trends in supply (as shown in Table 6-4, p. 150). In contrast, facilities that opened in 2010 (260 units) were more likely to be freestanding and for profit, which is also consistent with the long-term trends in supply.

On net, between 2009 and 2010, the number of dialysis treatment stations, a measure of providers' capacity, increased by 4 percent. On average, facilities that closed had less capacity than new facilities and those that remained open in both years. In 2009, closures disproportionately occurred in more rural areas. Of closed facilities, 16 percent were located in rural (micropolitan) counties with a town of 10,000 people or more, 9 percent were located in rural counties adjacent to urban areas, and 6 percent were in rural counties not adjacent to urban counties. By comparison, among facilities that remained open in 2009 and 2010, 14 percent were in rural micropolitan counties, 5 percent were in rural counties adjacent to urban areas, and 3 percent were in rural counties not adjacent to urban counties.

Facility closures in 2009, which affected about 3,600 FFS dialysis patients, did not appear to affect any demographic group disproportionately, including the elderly, females, and patients dually eligible for Medicare and Medicaid. In contrast to last year's findings, this year's analysis does not find that African Americans were disproportionately affected by facility closures. African American patients represented 38 percent of patients treated at facilities that remained in business and 30 percent of patients treated at facilities that closed. About 1,000 FFS dialysis patients were affected by rural facilities that closed in 2009.

Finally, 61 percent of facilities in business in 2009 and 2010 were operated by the two largest dialysis chains; only 29 percent of facilities that closed in 2009 were operated by the two largest organizations. Consistent with our findings from last year's analysis, all demographic groups continued to obtain care from the two largest dialysis organizations that serve the majority of FFS beneficiaries.

Volume of services

To assess changes in the volume of dialysis services, we examined trends in the number of dialysis treatments furnished to beneficiaries and in the use of drugs administered during dialysis between 2009 and 2010.

Between 2009 and 2010, dialysis treatments grew at an average annual rate that kept pace with the growth in the number of FFS dialysis patients. During this period, the number of dialysis treatments grew by 5 percent per year, while the number of FFS dialysis patients grew by 4 percent per year.

Between 2009 and 2010, the mean weekly erythropoietin dose per patient declined by 1.4 percent. The slowdown in the volume of ESAs administered is linked to some physicians and facilities phasing in new prescribing protocols for dialysis drugs in anticipation of Medicare's change to a bundled payment method in 2011. In addition, new clinical evidence that demonstrated an association between higher use of ESAs and increased risk of cardiovascular morbidity and mortality may have contributed to the slowdown, as it did between 2006 and 2008 when the mean dose per patient fell by 3 percent per year (United States Renal Data System 2011).

Our analysis finds that erythropoietin use declined in 2010 across all demographic groups. We examined the subset of FFS dialysis patients who received erythropoietin in January and December 2010. There was an overall 7 percent decline in the units of erythropoietin per patient per month (Table 6-5). The decline was slightly larger for younger patients than for older patients and for African Americans than for whites.

Since 2011, industry data suggest that erythropoietin use continues to decline. Between January and June 2011, the average erythropoietin dose per patient per week furnished by the two largest dialysis chains decreased by 4 percent (Dialysis Outcomes and Practice Patterns Study 2011).

Between 2009 and 2010, the volume of all other dialysis drugs also declined (by 1 percent). For this analysis, we held the drug payment rate constant and looked at the dollar change in the total volume of the products. Rates of volume change differed by drug class. The volume of vitamin D analogs fell by 2 percent, while the volume of iron agents increased by 1 percent. The increase in iron volume is not unexpected, as researchers have shown that its use is associated with reduced average ESA dose (Hasegawa et al. 2010).

Quality of care: Some measures show progress, others need improvement

The Commission assesses quality of care furnished to dialysis patients using a variety of measures (clinical performance measures and beneficiaries' outcomes) and

from different perspectives (trends for all patients and patients according to type of facility).

To assess how facilities meet Medicare's clinical performance measures, we used data from the Elab Project, in which nearly all dialysis facilities provide the ESRD networks with patient-level laboratory data on clinical indicators, such as dialysis adequacy and anemia status.[9] We used data from CMS's quality project, Fistula First, to monitor changes in the types of vascular access hemodialysis patients used. To assess trends in hospitalization, mortality, and renal transplantation overall for all patients and by facility type, we used data from the USRDS. We used industry data from the Dialysis Outcomes and Practice Patterns Study (DOPPS) to assess clinical outcomes under the new payment method (since 2011).

The conclusions of this year's assessment of changes in quality are consistent with those in last year's report. Dialysis adequacy remains high and improvements have been made in the proportion of all patients meeting the FDA's anemia status recommendations and using the type of vascular access recommended by renal clinicians. Between 2003 and 2009, mortality, while high, trended downward and hospitalization rates remained about the same. Rates of kidney transplantation increased for Asian Americans and Native Americans, remained about the same for African Americans, and decreased for whites. Some types of facilities achieved statistically significantly lower rates of standardized hospitalization and mortality rates than others.

TABLE 6–5

Monthly units of erythropoietin declined between January and December 2010

	Change in monthly units between January and December 2010
All FFS patients	–7%
Age	
Under 45 years	–8
45–64 years	–7
65–74 years	–6
75+ years	–6
Sex	
Male	–7
Female	–7
Race	
White	–5
African American	–8
Affiliated with one of 2 largest chains	–6
All other freestanding facilities	–9

Note: FFS (fee-for-service). Analysis includes FFS dialysis patients who received erythropoietin in January and December 2010 at a freestanding dialysis facility.

Source: Compiled by MedPAC from 2010 claims submitted by freestanding dialysis facilities to CMS.

Trends in clinical indicators of dialysis quality

Between 2003 and 2010, the quality of some aspects of dialysis care remained high. The proportion of dialysis patients receiving adequate dialysis (a measure of the effectiveness of the dialysis treatment in removing waste products from the body) remained high (Table 6-6, p. 156). According to this measure, from 93 percent to 95 percent of hemodialysis patients and 88 percent to 90 percent of peritoneal dialysis patients received adequate dialysis.

Also during this period, increasing proportions of dialysis patients had their anemia under control (i.e., with a mean hemoglobin between 10 g/dL and 12 g/dL). Nearly all dialysis patients have anemia because diseased kidneys typically do not produce sufficient amounts of a hormone that stimulates production of red blood cells, leading to the development of anemia. Providers furnish ESAs and injectable iron to treat anemia.

Use of the recommended type of vascular access—an arteriovenous (AV) fistula—also improved during this period. Hemodialysis patients require vascular access—the site on the patient's body where blood is removed and returned during dialysis. The three basic types of vascular access are AV fistulas, AV grafts, and catheters.[10] For most patients, the AV fistula is considered the best long-term vascular access for hemodialysis because it provides adequate blood flow, lasts a long time, and has a lower complication rate than other types of access (National Institute of Diabetes and Digestive and Kidney Diseases 2008). The goal of Fistula First—CMS's quality improvement initiative that promotes use of AV fistulas—is for 66 percent of all hemodialysis patients to have an AV fistula. Factors affecting the use of AV fistulas include certain medical contraindications preventing their use (e.g., small or weak veins) and patients' attitudes

TABLE 6–6

Dialysis clinical indicators and outcomes continue to improve for some measures

Outcome measure	2003	2005	2007	2008	2009	2010
Percent of in-center hemodialysis patients:						
Receiving adequate dialysis	94%	93%	94%	95%	95%	95%
Anemia measures						
Mean hemoglobin 10–12 g/dL	48	44	49	57	62	68
Mean hemoglobin ≥ 13 g/dL*	15	17	14	9	7	5
Mean hemoglobin < 10 g/dL*	6	5	6	6	6	7
Dialyzed with an AV fistula	33	39	47	50	53	56
Nutritional status	37	33	34	35	35	39
Phosphorus and calcium management	39	42	46	45	46	47
Percent of peritoneal dialysis patients:						
Receiving adequate dialysis	N/A	90%	89%	88%	89%	89%
Anemia measures						
Mean hemoglobin 10–12 g/dL	45%	44	48	52	57	58
Mean hemoglobin ≥ 13 g/dL*	21	22	18	14	12	11
Mean hemoglobin < 10 g/dL*	7	7	7	9	10	11
Nutritional status	21	20	20	19	18	20
Phosphorus and calcium management	40	44	46	45	47	47
	2003	**2005**	**2006**	**2007**	**2008**	**2009**
Percent of prevalent dialysis patients wait-listed for a kidney:						
All	15.2%	15.9%	16.3%	16.8%	17.0%	17.3%
White	14.2	14.8	15.2	15.7	15.9	16.2
African American	15.5	16.3	16.7	17.3	17.5	17.7
Native American	14.0	14.2	14.5	15.0	15.5	14.9
Asian American	24.4	25.2	25.2	25.6	25.6	25.7
Renal transplant rate per 100 dialysis patient years:						
All	4.8	4.8	4.8	4.4	4.2	4.1
White	5.9	5.7	5.6	5.1	4.8	4.6
African American	3.1	3.2	3.2	3.0	2.9	2.9
Native American	3.3	3.4	4.6	4.4	4.3	4.9
Asian American	5.3	5.5	6.6	7.5	7.2	7.3
One-year survival for new dialysis patients						
All	78.1%	78.9%	79.6%	79.9%	80.6	N/A
White	77.0	77.7	78.5	78.6	79.3	N/A
African American	79.3	80.3	81.0	81.5	82.6	N/A
Other race	84.2	85.0	85.3	86.1	85.8	N/A
45–64 years	84.6	85.3	85.9	86.0	86.7	N/A
65–74 years	75.5	76.5	77.5	77.5	77.9	N/A
75+ years	64.0	64.7	65.2	65.8	67.2	N/A
Annual mortality rate per 100 dialysis patient years*						
All	21.4	20.5	20.0	19.2	18.5	18.0
White	23.2	22.2	21.6	20.8	20.1	19.6
African American	19.2	18.7	18.1	17.3	16.5	16.0
Other race	16.4	15.4	14.8	14.1	13.7	13.4
45–64 years	17.4	16.6	16.3	15.6	15.0	14.5
65–74 years	28.4	27.4	26.4	25.2	24.4	23.8
75+ years	41.9	41.0	40.3	39.2	38.0	37.0
Inpatient admission rate per dialysis patient*						
All	2.0	2.0	1.9	1.9	1.9	1.8
White	2.0	2.0	1.9	1.9	1.9	1.8
African American	2.0	2.1	2.0	2.0	2.0	1.9
Native American	1.9	1.9	1.8	1.7	1.7	1.8
Asian American	1.4	1.4	1.4	1.4	1.4	1.3
45–64 years	1.9	1.9	1.9	1.8	1.8	1.8
65–74 years	2.0	2.0	1.9	1.9	1.9	1.8
75+ years	2.1	2.2	2.1	2.0	2.1	1.9
Percent of discharges that were rehospitalized within 30 days*						
All	35.8%	36.1%	N/A	35.8%	N/A	35.9%
Cardiovascular (index hospitalization)	37.2	37.7	N/A	37.5	N/A	37.6
Infection (index hospitalization)	33.6	33.9	N/A	33.7	N/A	33.8
Vascular access (index hospitalization)	32.0	31.9	N/A	31.7	N/A	31.1

Note: g/dL (grams/deciliter), N/A (not available), AV (arteriovenous). Other includes Asian Americans and Native Americans. Data on dialysis adequacy, use of fistulas, and anemia management represent percent of patients meeting CMS's clinical performance measures. United States Renal Data System (USRDS) adjusts data by age, gender, race, and primary diagnosis of end-stage renal disease.
* Lower values indicate higher quality.

Source: Compiled by MedPAC from 2009 Elab Project Report, Fistula First 2010, and USRDS 2010.

about using AV fistulas (American Association of Kidney Patients 2011, Xi et al. 2011).

Between 2009 and 2010, there was a modest increase in the proportion of patients achieving the mean albumin level that equals or exceeds the recommendation of the National Kidney Foundation. The level of albumin in the blood has been used by CMS and ESRD networks as a marker of nutritional status for patients. Researchers find a strong inverse correlation between albumin levels and mortality. Inflammation and infection can also affect albumin levels.

Clinical indicators related to the management of bone and mineral disorders, a frequent comorbidity of kidney failure, suggest some improvement between 2003 and 2010. About 47 percent of hemodialysis and peritoneal dialysis patients achieved the recommended range for phosphorus and calcium levels. Since 2007, the percentage of dialysis patients achieving the recommended range for these two measures has remained constant.

Finally, because data from our traditional sources (Elab Project, USRDS) end in 2009 or 2010, we used DOPPS, an industry-sponsored effort that samples, since 2010, representative facilities to obtain clinical outcome data on adequacy of dialysis, management of anemia, and management of bone disease.[11]

According to DOPPS, between January and April 2011:

- Across all patients, dialysis adequacy was unchanged after implementation of the new payment bundle. This finding held when the data were analyzed by race.
- Across all patients, mean hemoglobin measures (an assessment of anemia status) trended slightly down from 11.43 g/dL to 11.39 g/dL. By race, the proportion of patients with hemoglobin levels between 10.0 g/dL and 12.0 g/dL remained steady at between 75 percent and 79 percent for African Americans and at 79 percent for non-African Americans.[12] Among patients who have hemoglobin levels outside of this range, a greater proportion of them have higher levels (greater than 12.0 g/dL) versus lower levels (less than 10.0 g/dL).
- Overall, mean serum calcium values, a measure of bone disease, decreased from 9.07 mg/dL to 9.04 mg/dL. Mean serum calcium values trended down for both African Americans and whites from January through March 2011 and then increased slightly in April 2011.

Trends in outcomes for dialysis patients

In general, trends in outcomes—including mortality, hospitalization, and access to kidney transplantation—suggest that improvements in dialysis quality are still needed.

Between 2003 and 2009, overall adjusted mortality rates decreased but remained high among dialysis patients. By race, dialysis patients included in the "other" category (which includes Asian Americans and Native Americans) had the lowest adjusted mortality rate; this finding is a function of the lower mortality rate among Asian Americans. In contrast to the pattern seen in the general population, adjusted mortality was lower among African American dialysis patients than among white dialysis patients (16.0 vs. 19.6 per 100 patient years, respectively, in 2009) (United States Renal Data System 2011). However, new research has demonstrated an age-based effect in the racial differences in mortality. Kucirka and colleagues found that among patients new to dialysis, African Americans under age 50 years had significantly higher mortality than their white counterparts (Kucirka et al. 2011). The authors suggest that several factors, including the differential access to kidney transplantation and socioeconomic factors, may contribute to the higher mortality rates among young, but not old, African Americans compared with whites.

Mortality rates for dialysis patients increase with age, from 14.5 per 100 patient years at risk for patients between 45 and 64 years to 37.0 per 100 patient years at risk for patients 75 years or older. Similarly, one-year survival decreases with increasing age.

Overall rates of hospitalization remained steady at about two admissions per dialysis patient per year. With the exception of lower rates for Asian Americans, hospitalization rates do not vary substantially by age and race. Between 2003 and 2009, conditions related to ESRD—cardiovascular conditions, infections, and vascular access complications—accounted for the majority of inpatient admissions for dialysis patients. In 2009, among hemodialysis patients: cardiovascular conditions accounted for about 29 percent of admissions, infections accounted for 25 percent, and vascular access complications accounted for 12 percent (United States Renal Data System 2011). According to USRDS, 30-day rates of rehospitalization for dialysis patients remained high and unchanged. For example, between 2003 and 2009, hospital stays with a primary diagnosis of infection had a 30-day rehospitalization rate of about 34 percent.

Trends in kidney transplantation

Kidney transplantation is a lifesaving medical procedure for which the demand far exceeds the transplantable organ supply. Transplantation improves clinical outcomes compared with dialysis. When no living kidney donor is available, end-stage renal disease (ESRD) patients must rely on the limited supply of cadaveric donor organs.

Multiple factors affect access to kidney transplantation: (1) a kidney allocation policy that uses immunologic factors to match kidneys to potential recipients; (2) the rate of kidney transplants from living donors; (3) patients' attitudes and preferences, clinical characteristics, and socioeconomic status; (4) patients' education and referral to a transplant center by the physicians and dialysis facilities who treat dialysis and predialysis patients; and (5) the criteria used by transplant centers that determine placement on the kidney waiting list (such as physical health, mental health, social support, insurance status, and financial support).

Although the principle of equity is emphasized in the distribution of this limited resource, several studies document that kidney transplantation rates differ by patients' demographic and socioeconomic characteristics.

For example, access to kidney transplantation and organ donation rates vary by race. Data from the United States Renal Data System show that in 2009:

- White ESRD patients accounted for 61 percent of ESRD patients and received 64 percent of transplants.
- African Americans accounted for 32 percent of ESRD patients and received 25 percent of transplants.
- Asian Americans and Native Americans together accounted for 7 percent of the ESRD population and accounted for 11 percent of transplant recipients.

Researchers also find differences in access to kidney transplantation based on patients' sex and income. Compared with whites, men, and higher income patients, African Americans, women, and lower income patients were less likely to complete the pretransplant workup (Alexander and Sehgal 1998).

From the patient's perspective, the transplantation process involves a series of steps that include: (1) being educated about transplantation, (2) being interested in transplantation and referred to a transplant center, (3) completing the transplant center's workup and being placed on at least one kidney waiting list, and (4) moving up the waiting list and receiving a transplant. The factors affecting this process are complex. Unequal transplantation rates reflect (1) the matching process that considers the immunologic compatibility of donor kidneys with potential recipients; (2) patient-level factors, including patients' knowledge of renal

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We looked at several measures that examine access to kidney transplantation, because it is widely considered the best treatment option for ESRD patients. Transplantation reduces mortality and improves patients' quality of life (Eggers 1988, Kasiske et al. 2000, Laupacis et al. 1996, Ojo et al. 1994). The proportion of dialysis patients accepted on the kidney transplant waiting list showed little change over time, increasing from 17.0 percent of dialysis patients in 2008 to 17.3 percent in 2009 (Table 6-6, p. 156).

We also examined rates of kidney transplantation from 2003 to 2009. In 2009, the USRDS reported that 17,736 individuals underwent transplantation, which represents about 25 percent of the ESRD patients wait-listed for a kidney in that year. Between 2003 and 2006, rates of kidney transplantation remained relatively steady (Table 6-6) (United States Renal Data System 2011). However, between 2006 and 2009, the rate of kidney transplantation and the total number of procedures declined. Between 2006 and 2009, African Americans and whites experienced a decrease in the rate of kidney transplantation while

Trends in kidney transplantation (cont.)

treatment options, their preferences, and their clinical characteristics; and (3) provider-level factors, including the process by which nephrologists and dialysis facilities educate patients about different treatment opportunities and the evaluation process that transplant centers use to place patients on the kidney waiting list.

Lower rates of renal transplantation, particularly among African Americans, partly reflect the immunologic (including blood type and antibodies in the blood) matching process of donors to recipients. Reducing the number of biological mismatches improves the outcomes of kidney transplantation; as a result, the matching process gives priority to candidates who have fewer mismatches. Researchers report that because of racial and ethnic differences in the frequency of alleles (any one of two or more genes) at a given site on a chromosome, whites are more likely than people in other racial and ethnic groups to find a good match in the cadaver kidney pool (Roberts et al. 2004). This difference, coupled with the matching process, increases the transplantation rate among white candidates and reduces access for candidates with less common blood types and antibodies in the blood, including those who are members of minority groups (Roberts et al. 2004).

A recent study shows the importance of these immunologic factors on access to kidney transplantation. According to Hall and colleagues, a change in the relative priority given to tissue matching in 2003 significantly decreased, but did not eliminate, racial disparity in access to transplantation for individuals on the kidney waiting list (Hall et al. 2011). In 2003, the United Network for Organ Sharing, the private nonprofit organization that manages the U.S. organ transplant system, eliminated giving priority to a specific immunologic factor (HLA-B antigen) in the process that matches cadaver kidneys to potential recipients. These researchers estimate a 23 percent reduction in the disparity for wait-listed African Americans and whites after the policy change in 2003.

Differences in access may also stem from differences in transplants from live donors, which, in 2009, accounted for about 36 percent of all transplant procedures (United States Renal Data System 2011). By race, whites accounted for 73 percent of live donor procedures, compared with 13 percent for African Americans, 11 percent for Asian Americans, and 2 percent for Native Americans. Researchers note that there are fewer living donors among African Americans, increasing the dependence of African American patients on cadaver organs (Young and Gaston 2000). According to some researchers, interventions that attempt to reduce transplant disparities should prioritize the improvement of live donation rates for African Americans (Hall et al. 2011).

Differences in kidney transplantation rates may also reflect patient factors, such as lack of knowledge about transplantation, concerns about surgery and adverse

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Native Americans and Asian Americans experienced a rate increase. During that period, kidney transplants from living donors declined by 4 percent, while transplants from deceased donors declined by 1 percent. The text box summarizes issues related to the distribution of kidney transplantation across the ESRD population.

Dialysis quality varies by type of organization in 2009

According to USRDS, dialysis quality, as measured by standardized hospitalization and mortality ratios, varies across types of dialysis organizations, including large dialysis chains, smaller dialysis chains, independent facilities, and hospital-based facilities (Table 6-7, p. 161).

In 2009, for all patients, small dialysis chains had slightly lower standardized hospitalization and mortality ratios than large dialysis chains; independent (i.e., freestanding nonchain) facilities had higher standardized hospitalization ratios. Although hospital-based facilities had lower hospitalization ratios, they had the highest standardized mortality ratios among the different facility types.

Outcomes by race varied between and within organizations. Some organizations had lower

Trends in kidney transplantation (cont.)

effects of medication, and mistrust of the medical system. In addition, some patients are not able to receive a transplant because of the presence of medical contraindications, such as a recent history of substance abuse, cancer, a serious infection (including from dental disease), and significant cardiovascular disease.

Provider-level factors can also affect access to kidney transplantation. Dialysis facilities and physicians who treat dialysis patients have an important role in educating patients about renal treatment options, including transplantation and home dialysis, and referring patients to a transplant center. The literature on the relationship between the role of the dialysis facility and access to transplantation is mixed. Some researchers have found that patients treated at for-profit facilities are less likely to undergo transplantation, while other researchers have not reached this conclusion. Some dialysis providers contend that the decision about whether patients are included on the transplant wait list and ultimately undergo transplantation is the responsibility of the transplant center. Because these factors are outside of their purview, dialysis providers argue that these measures should not be used to assess their quality.

The process used by transplant centers plays an important role in determining which candidates are placed on the kidney waiting list. For most transplant centers, the process for placing individuals on the waiting list includes evaluating the patient's physical and mental health (American Society of Transplantation 2006, National Institute of Diabetes and Digestive and Kidney Diseases 2008). Other factors that transplant centers consider are the patient's ability to carry out necessary posttransplant treatment plans, patient's education, and patient's financial resources, including insurance covering the transplant procedure and the anti-rejection medicines needed after transplantation (Volk et al. 2011).[13] According to experts in the field, transplant centers' selection committees rule out patients with psychosocial barriers, including lack of or inadequate social support (no spouse, family, or friends).

In the coming year, the Commission intends to review quality improvement initiatives sponsored by the Secretary of Health and Human Services that have focused on reducing racial disparities in kidney transplantation. For example, the Centers for Disease Control and Prevention's Healthy People 2020 initiative includes objectives to increase the proportion of dialysis patients on the kidney wait list (by 10 percent to 18.8 percent) and to increase the proportion of patients with treated chronic kidney disease who receive a kidney transplant (Department of Health and Human Services 2011a). Nonetheless, neither this initiative nor the recent initiative by the Secretary to address racial disparities in minority health includes activities specific to reducing racial disparities in transplantation (Department of Health and Human Services 2011b). The Commission also intends to assess the literature on the effectiveness of public and private campaigns to reduce racial disparities in transplantation. To increase kidney transplantation rates, quality improvement efforts must be multifaceted to address the varied provider and patient factors that affect access. Recently, some researchers concluded that little is known about effective strategies for improving patients' and families' early consideration of live kidney transplantation. ■

hospitalization and mortality ratios for African Americans and higher ones for whites. By contrast, in hospital units, standardized hospitalization ratios were lower for whites and higher for African Americans. In 2009, the largest freestanding nonprofit dialysis chain, DCI, had the lowest standardized hospitalization and mortality ratios for all patients as well as separately for whites and African Americans. These data show the opportunity for quality improvement across different facility types and the role of the QIP in ensuring dialysis quality.

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. Between 2010 and 2011, the large and small dialysis chains showed similar growth rates, which suggests that both small and large providers have adequate access to capital. During this period, the number

TABLE 6–7 **Standardized hospitalization and mortality ratios for 2009 vary by provider type**

	All patients		Whites		African Americans	
Provider	**Hospitalization**	**Mortality**	**Hospitalization**	**Mortality**	**Hospitalization**	**Mortality**
Fresenius	0.99	1.00	1.02	1.00	0.96	0.98
DaVita	1.01	0.97	1.02	0.99	1.01	0.97
DCI	0.91	0.96	0.93	0.97	0.88	0.91
Other freestanding chains	0.99	0.98	1.00	1.00	1.00	0.96
Independent freestanding facilities	1.02	1.00	0.97	0.98	1.07	1.01
Hospital-based facilities	1.01	1.08	0.95	1.04	1.09	1.15

Note: The standardized hospitalization (or mortality) ratio compares the actual number of hospital admissions (or deaths) for the provider and the number of admissions that would be expected if patients under the care of that provider experienced admissions (or deaths) at the national rate for patients with similar characteristics (age, gender, race, and number of years on dialysis). A value of less than 1.0 indicates that a provider's total number of events was less than expected, based on national rates; whereas a value of greater than 1.0 indicates that a provider had a rate of total events higher than the national average. The reference cohorts are all 2009 Medicare hemodialysis patients for the standardized hospitalization ratio and all 2009 hemodialysis patients (Medicare and non-Medicare) for the standardized mortality ratio.

Source: United States Renal Data System 2011.

of hemodialysis stations grew by 5 percent—both for stations operated by the two largest organizations (Fresenius Medical Care North America and DaVita) and for those operated by smaller freestanding chains.

The two largest dialysis organizations as well as other renal companies appeared to have adequate access to capital in 2010 and 2011. For example:

- In September 2011, DaVita completed its acquisition of DSI, a midsized, for-profit, freestanding chain operating 106 clinics in 23 states for roughly $690 million.
- In 2011, DaVita purchased a company that owns two dialysis centers in Germany and manages two others.
- In December 2010, two midsized, for-profit, freestanding chains (Liberty Dialysis and Renal Advantage) merged to create the third largest dialysis chain (with 260 clinics in 32 states). Subsequently, in 2011, Fresenius purchased Liberty Dialysis for $1.7 billion.
- Fresenius purchased American Access Care Holdings, which operates outpatient clinics for procedures such as fistulas and grafts, for $385 million.
- The former chairman of a midsized chain, which was acquired by another midsized chain in 2010, announced that he is partnering with a private equity firm to create a new dialysis company that will acquire and build centers nationally (Nephrology News & Issues 2011).
- In December 2011, Ambulatory Services of America acquired Renal CarePartners. Once the acquisition is complete, Ambulatory Services of America will operate 62 facilities.

In addition to these mergers, a small chain was created as a consequence of DaVita's acquisition of DSI. To preserve competition and proceed with its acquisition of DSI, the Federal Trade Commission required DaVita to sell 30 facilities. Frazier Healthcare and New Enterprise Associates purchased the 30 facilities for $91 million and plans to operate them as one company called DSI.

These current trends in the profit status and consolidation among dialysis providers suggest that the dialysis industry is an attractive business to for-profit providers and that there are efficiencies and economies of scale in providing dialysis care. The attractiveness of these ventures is suggested by the statement from a midsized dialysis chain that new clinics become "EBITDA (earnings before interest, taxes, depreciation, and amortization) positive" within an average of 12 months of opening (American Renal Holdings 2011).

TABLE 6–8 **Medicare margin in 2010 varies by type of freestanding provider**

Provider type	Percent of spending	Medicare margin
All	100%	2.3%
Affiliated with one of the two largest dialysis organizations	69	3.4
All others	31	0.1
Urban	85	3.4
Rural	15	–3.7
More than 10,000 treatments	54	7.7
Less than or equal to 10,000 treatments	46	–2.3

Source: Compiled by MedPAC from 2010 cost report and outpatient claims submitted by facilities to CMS.

Medicare payments and providers' costs

Each year, we assess the relationship between Medicare's provider payments and freestanding providers' costs by considering whether current costs approximate what efficient providers are expected to spend on delivering high-quality care. The latest and most complete data available on freestanding providers' costs are from 2010.

For most facilities, 2010 is the last year that Medicare paid a prospective payment for each dialysis treatment furnished and separate payments for furnishing certain drugs during dialysis. In 2011, nearly 90 percent of all facilities were paid under a new PPS that includes dialysis drugs for which facilities previously received separate payments.

Appropriateness of current costs

Between 2005 and 2010, the cost per treatment for services paid for under the former payment system using the composite rate rose by an average 2.5 percent per year. Variation from this average across freestanding dialysis facilities shows that some facilities were able to hold their cost growth well below that of others. For example, between 2005 and 2010, per treatment costs increased by 0.7 percent per year for facilities in the 25th percentile of cost growth, compared with 4.2 percent for facilities in the 75th percentile.

Differences exist in cost growth trends and adjusted cost per treatment (adjusted for differences in labor costs and patient case mix) between the two largest dialysis organizations and all other freestanding facilities. Between 2005 and 2010, cost per treatment increased by 2.6 percent per year for facilities affiliated with the two largest chains and by 2.0 percent for all other freestanding facilities. In 2010, the cost per treatment for composite rate services standardized for differences in labor costs and patient case mix for the two largest dialysis organizations was 1 percent lower than for all other freestanding facilities.

The growth in cost per treatment between 2005 and 2010 partly stemmed from rising general and administrative costs, which increased by 4 percent per year and accounted for about 27 percent of the total cost per treatment in 2010. General and administrative costs include expenses associated with legal and accounting services, record-keeping and data-processing tasks, telephone and other utilities, home office costs, and malpractice premiums. By contrast, between 2005 and 2010, capital and labor costs (associated with direct patient care) increased by 3 percent and 2 percent per year, respectively; other direct medical costs increased by 0.5 percent per year. In 2010, capital, labor, and other direct medical costs accounted for 22 percent, 40 percent, and 11 percent, respectively, of the total cost per treatment. Cost report data do not permit us to assess which cost elements contributed to the high rate of cost growth within the general and administrative cost category.

Medicare margin for freestanding providers

For 2010, the Commission assessed payments and costs for dialysis services for freestanding dialysis facilities by comparing Medicare's payments for composite rate services and dialysis drugs with providers' Medicare-allowable costs.

For 2010, we estimate that the aggregate Medicare margin for composite rate services and dialysis drugs was 2.3 percent (Table 6-8). The distribution of margins in 2010 shows wide variation in performance among freestanding facilities. One-quarter of facilities had margins at or below –6.7 percent and one-quarter of facilities had Medicare margins of at least 11.9 percent.

In 2008 and 2009, the aggregate Medicare margins were 3.2 percent and 3.1 percent, respectively. The modest decline in the Medicare margin in 2010 is explained by the change in drug payment and cost per treatment. Between 2009 and 2010: (1) drug payment per treatment dropped by about 5 percent and (2) drug cost per treatment declined by 3.5 percent. During this period, the volume of

ESAs and vitamin D analogs declined. As in earlier years, urban facilities had higher margins than rural facilities (3.4 percent and –3.7 percent, respectively), and facilities affiliated with the two largest dialysis organizations tended to have higher margins than other freestanding facilities (3.4 percent and 0.1 percent, respectively). The number of treatments a facility furnishes also affects the Medicare margin; in 2010, the margin for higher volume facilities was 7.7 percent, compared with –2.3 percent for lower volume facilities.

The Commission is concerned that the gap in the Medicare margin widened between urban and rural facilities between 2009 and 2010 (Medicare Payment Advisory Commission 2010). We will continue to monitor the adequacy of Medicare's payments for rural and urban facilities in the coming years. The low-volume adjuster in the new payment method should disproportionately benefit rural facilities. Our analysis of 2007–2009 cost reports finds that while 22 percent of all facilities are rural, 44 percent of facilities meeting CMS's definition of low volume are rural. We are also analyzing changes that would better target the low-volume adjuster to facilities that are both isolated and low volume, which would also benefit rural facilities.

On the basis of 2010 payment and cost data, we project that the 2012 aggregate margin will be 2.7 percent. This estimate reflects:

- the 2 percent reduction in total spending that MIPPA mandated to begin in 2011,
- the 3.1 percent budget-neutrality adjustment in 2011 that CMS applied between January and April 2011,
- the 2011 payment update of 2.5 percent and the 2012 payment update of 2.1 percent,
- the reduction of 0.2 percent of payments due to implementation of the QIP in 2012, and
- a conservative behavioral offset to account for efficiencies anticipated under the new payment method.

The conservative behavioral offset included in the 2011 margin projection is based on industry data that providers have become more efficient in the delivery of drugs under the new payment method (Dialysis Outcomes and Practice Patterns Study 2011). The high rate of facilities opting into the new payment method (nearly 90 percent) suggests that most can operate within the provisions of the new payment method. Published studies also suggest that providers can decrease costs while maintaining quality (Hasegawa et al. 2010, Kaufman et al. 1998, Pizzi et al. 2006). Charytan summarized the following selected strategies to maximize efficiencies in the management of anemia: switching from intravenous to subcutaneous routes, lowering hemoglobin targets and doses in hyporesponsive patients, increasing administration of intravenous iron, increasing use of home dialysis, and optimizing ESA dosing intervals (Charytan 2010).

TABLE 6–9 **Estimated impact of the quality incentive program, 2012–2014**

Estimated reduction in payments due to QIP	2012	2013	2014
Total impact	–0.19%	–0.29%	–0.27%
Percent of facilities, by estimated reduction			
0%	74	82	70
0.5% to 1%	21	5	23
1.5%	4	6	4
2%	1	7	3

Note: QIP (quality improvement program).

Source: CMS 2011 final rules.

How should Medicare payments change in 2013?

The effect of the QIP in 2013 on Medicare's payments to dialysis facilities is not modeled in the Commission's projection of the 2012 aggregate Medicare margin. In 2013, the year of the Commission's update recommendation, CMS predicted that the impact of the QIP would decrease total payments by 0.29 percent (Table 6-9). CMS estimated that reductions would be greater in 2013 and 2014 compared with 2012. In addition, the full impact of the QIP—a reduction of up to 2 percent—will affect more facilities in 2013 than in 2012 and 2014.

Update recommendation

The evidence on payment adequacy suggests that a moderate update of the outpatient dialysis payment rate is in order to ensure continued beneficiary access to outpatient dialysis services. Therefore, the Commission recommends that the Congress update the outpatient dialysis payment rate by 1 percent for calendar year 2013.

RECOMMENDATION 6

The Congress should update the outpatient dialysis payment rate by 1 percent for calendar year 2013.

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. The Medicare margin in 2010 was 2.3 percent, and we project that it will be 2.7 percent in 2012.

IMPLICATIONS 6

Spending

- Under current law, if current projections were used, the payment rate would be updated by the ESRD market basket less a productivity adjustment, an update of 1.9 percent. This recommendation would decrease federal program spending relative to current law by between $50 million and $250 million in 2013 and by less than $1 billion over five years. The spending implication of this recommendation is based on Medicare spending projections that were made prior to a sequester, as the recommendation was developed and voted on before the sequester was triggered and became current law. If a Medicare sequester does occur, it will change the spending implication of the recommendation.

Beneficiary and provider

- We do not anticipate any negative effects on beneficiary access to care. This recommendation is not expected to affect providers' willingness or ability to serve beneficiaries. ■

Endnotes

1 To be eligible for Medicare ESRD benefits: (1) the individual must file an application for Medicare with Social Security; (2) a physician must certify that the individual requires chronic dialysis or a kidney transplant to maintain life; and (3) the individual must be entitled to a monthly benefit under Social Security, be fully or currently insured under Social Security, or be the spouse or dependent child of a person meeting these Social Security requirements. Individuals qualify for Social Security by earning Social Security credits when employed in a job that pays Social Security taxes. Generally, individuals are fully insured under Social Security if they have 40 credits of covered employment. Individuals are currently insured under Social Security if they have a minimum of 6 credits of covered employment in the three years before ESRD diagnosis (http://www.ssa.gov/pubs/10072.html). Individuals who are not eligible for Social Security have not earned a minimum of credits toward retirement under Social Security.

2 New dialysis patients include those who are not eligible for Medicare either because they do not meet the eligibility criteria (explained in Endnote 1) or because they have not yet applied for Medicare coverage.

3 The proportion of all dialysis patients and FFS patients with Medicare as the secondary payer may be underestimated because of the extent to which Medicare's enrollment databases do not identify patients with private insurance.

4 Beneficiaries with ESRD on dialysis cannot join an MA plan unless they developed ESRD while already enrolled in an MA plan. Enrollment in an ESRD special needs plan or the ESRD demonstration program are exceptions to this statutory provision.

5 The base prospective payment under the former payment method of $162 per treatment is inclusive of the drug add-on payment of about $20 per treatment.

6 Some observers are concerned that CMS's proposed approach for updating the base rate per dialysis treatment (by dividing the sum of Part D payments in 2007 by total treatments) may not reflect their cost of furnishing these drugs. They contend that the agency's proposed approach will not cover their costs because the Part D spending data do not reflect the drug use of dialysis FFS patients who are not enrolled in a Part D plan.

7 CMS requires that dialysis facilities provide documentation in the patient's medical record to support any diagnosis recognized for a payment adjustment (Centers for Medicare & Medicaid Services 2010).

8 Medicare pays for a maximum of six kidney disease education sessions for beneficiaries with stage IV chronic kidney disease, the precursor to kidney failure. The statute permits only qualified persons to furnish such education services, such as physicians, physician assistants, nurse practitioners, and clinical nurse specialists. In addition, providers of services (e.g., hospitals, critical access hospitals) in rural areas can furnish kidney disease services. The statute precludes dialysis facilities from providing kidney disease education sessions regardless of the provider's geographic location (Centers for Medicare & Medicaid Services 2009).

9 For 2010, the Elab Project collected laboratory data (for the fourth calendar quarter) from 5,472 facilities for about 97 percent of all dialysis patients in the United States. Facilities submit the first laboratory value of the month for October, November, and December of each year (Renal Network of the Upper Midwest 2011).

10 Physicians create an AV fistula by joining an artery to a vein under the patient's skin (frequently in the forearm). A few months are usually needed to allow the AV fistula to properly develop before it can be used during dialysis. Physicians may implant an AV graft for certain patients (including those with small or weak veins) who are not candidates for an AV fistula. Like AV fistulas, AV grafts are implanted under the skin, usually in the patient's forearm. AV grafts use a soft plastic tube to join an artery and a vein. Compared with AV fistulas, AV grafts can be used sooner after placement, often in two to three weeks. A catheter placed in the patient's neck, chest, or leg is used as a temporary access when a patient needs dialysis immediately and is waiting for an AV fistula or AV graft to mature. A catheter is also used when an AV fistula or AV graft fails.

11 DOPPS is based on a sample of about 145 facilities and is designed to provide results representative nationally and by dialysis organization size, location of facility (rural versus urban), and facility type (freestanding versus hospital based). Laboratory data (e.g., hemoglobin levels) are generally based on a monthly value reported by sampled facilities (Robinson et al. 2011).

12 Since 2011, the FDA no longer recommends a target hemoglobin range for dialysis patients with ESAs. According to the FDA, providers should initiate ESA therapy when a patient's hemoglobin level is less than 10.0 g/dL and reduce or interrupt the ESA dose when a patient's hemoglobin level approaches or exceeds 11.0 g/dL. By contrast, the National Kidney Foundation recommends a target hemoglobin range of 11.0 g/dL to 12.0 g/dL.

13 Medicare covers anti-rejection medicines. However, for beneficiaries under age 65 entitled to Medicare because of ESRD alone, their Medicare entitlement ends 36 months after the month of the transplant.

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CHAPTER 7

Skilled nursing facility services

RECOMMENDATIONS

7-1 The Congress should eliminate the market basket update and direct the Secretary to revise the prospective payment system for skilled nursing facilities for 2013. Rebasing payments should begin in 2014, with an initial reduction of 4 percent and subsequent reductions over an appropriate transition until Medicare's payments are better aligned with providers' costs.

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

7-2 The Congress should direct the Secretary to reduce payments to skilled nursing facilities with relatively high risk-adjusted rates of rehospitalization during Medicare-covered stays and be expanded to include a time period after discharge from the facility.

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

CHAPTER 7

Skilled nursing facility services

Chapter summary

Skilled nursing facilities (SNFs) furnish short-term skilled nursing and rehabilitation services to beneficiaries after a stay in an acute care hospital. In 2010, more than 15,000 SNFs furnished covered care to almost 1.7 million fee-for-service (FFS) beneficiaries. In 2011, Medicare spent almost $32 billion on SNF care.

Assessment of payment adequacy

To examine the adequacy of Medicare's payments, we analyzed access to care (including the supply of providers and volume of services), quality of care, provider access to capital, Medicare payments in relation to costs to treat Medicare beneficiaries, and changes in payments and costs. We also compared the performance of SNFs with relatively high and low Medicare margins and efficient SNFs with other SNFs. Most indicators of payment adequacy for SNFs were positive.

Beneficiaries' access to care—Access to SNF services remains stable for most beneficiaries.

- ***Capacity and supply of providers***—The number of SNFs participating in the Medicare program decreased less than 1 percent between 2010 and 2011. Three-quarters of beneficiaries live in a county with five or more SNFs, and less than 1 percent lives in a county without one. Available

In this chapter

SNF bed days in freestanding facilities remained unchanged between 2009 and 2010, with occupancy rates stable at 88 percent.

- ***Volume of services***—Days and admissions on a per FFS beneficiary basis decreased slightly between 2009 and 2010, reflecting fewer hospital admissions (a prerequisite for Medicare coverage). Still, use rates were higher in 2010 than in 2006.

Quality of care—SNF quality of care in 2009 was basically unchanged from the prior year. Two indicators of quality in SNFs are the rates at which patients are discharged to the community within 100 days of admission and rehospitalization of patients with any one of five potentially avoidable specific conditions.

Providers' access to capital—Because most SNFs are part of a larger nursing home, we examine nursing homes' access to capital. Lending is expected to be slow in 2012. Uncertainties surrounding federal and state budgets and possible rate freezes or reductions have made borrowers and lenders wary. This lending environment reflects the economy in general, not the adequacy of Medicare payments. Medicare remains a preferred payer.

Medicare payments and providers' costs—Increases in payments between 2009 and 2010 outpaced increases in providers' costs, reflecting the continued concentration of days in the highest payment case-mix groups. In 2010, the average Medicare margin for freestanding SNFs was 18.5 percent; it was the 10th year in a row with Medicare margins above 10 percent.

Financial performance continued to vary across freestanding facilities—a function of distortions in the prospective payment system and cost differences of providers. Compared with SNFs with relatively low Medicare margins, SNFs with the highest Medicare margins had greater shares of days in intensive rehabilitation case-mix groups and smaller shares of days in medically complex groups. SNFs with high Medicare margins also had standardized costs per day (adjusted for differences in wages and case mix) that were 30 percent below SNFs with low Medicare margins. Our analysis of relatively efficient SNFs found that it is possible to have below-average costs, above-average quality, and more than adequate Medicare margins.

Several pieces of evidence indicate that Medicare could rebase its payments to more closely match provider costs:

- high and sustained Medicare margins,
- widely varying costs unrelated to case mix and wages,
- cost growth well above the market basket that reflects little fiscal pressure from the Medicare program,

- the ability of many SNFs (more than 900) to have consistently below-average costs and above-average quality of care,
- the continued ability of the industry to maintain high margins despite changing policies, and
- in some cases Medicare Advantage payments to SNFs that are considerably lower than the program's FFS payments.

We project the Medicare margin to be 14.6 percent in fiscal year 2012.

A rehospitalization policy

SNF patients who are rehospitalized raise Medicare spending and are exposed to hospital-acquired infections and disruptive care transitions. Beginning in October 2012, a readmission policy will penalize hospitals with high readmission rates for certain conditions. A rehospitalization policy for SNFs would create comparable policies for SNFs and hospitals, thereby encouraging providers in both settings to work together to better manage the transitions between them. By aligning provider incentives across sectors, a rehospitalization policy represents a step toward payments for larger bundles of services.

Risk-adjusted rehospitalization rates for patients with potentially avoidable conditions vary almost threefold across facilities and notable differences exist by facility type and ownership. This variation indicates considerable room for improvement for many facilities. A rehospitalization policy that penalizes facilities with high risk-adjusted rates over multiple years would target providers with aberrant patterns of rehospitalizations, recognize that some rehospitalizations are appropriate, and reduce the incentive to selectively admit beneficiaries with specific characteristics.

Medicaid trends

As required by the Patient Protection and Affordable Care Act of 2010, we report on Medicaid utilization, spending, and non-Medicare (private pay and Medicaid) margins. Medicaid finances mostly long-term care services provided in nursing homes but also covers copayments for dual-eligible beneficiaries who stay 21 or more days in a SNF. The number of Medicaid-certified facilities decreased slightly between 2010 and 2011. Between 2009 and 2010, Medicaid-covered days increased slightly, while spending decreased slightly. Non-Medicare margins improved between 2008 and 2010 but remained slightly negative (–1.2 percent), while total margins for all payers and all lines of business improved to 3.6 percent in 2010. ■

TABLE 7–1

A growing share of Medicare stays and payments go to freestanding SNFs and for-profit SNFs

	Facilities		Medicare-covered stays		Medicare payments	
Type of SNF	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**
Total number	15,178	15,207	2,454,263	2,418,442	$19.5 billion	$26.2 billion
Freestanding	92%	94%	89%	93%	94%	96%
Hospital based	8	6	11	7	6	4
Urban	67	70	79	81	81	83
Rural	33	30	21	19	19	17
For profit	68	70	67	70	73	74
Nonprofit	26	25	29	25	24	22
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.

Source: MedPAC analysis of the Provider of Services, Medicare Provider Analysis and Review files, and Certification and Survey Provider Enhanced Reporting on CMS's Survey and Certification Providing Data Quickly system for 2006–2010.

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. Of the beneficiaries who use post-acute care (defined as home health care, inpatient rehabilitation, long-term care hospital, or SNF services after a hospitalization), 29 percent use SNF services. Almost 1.7 million fee-for-service (FFS) beneficiaries (4.3 percent) used SNF services at least once in 2010 and program spending was almost $32 billion in fiscal year 2011.

Medicare covers up to 100 days of SNF care per spell of illness after a medically necessary inpatient hospital stay of at least three days.[1] For beneficiaries who qualify for a covered stay, Medicare pays 100 percent of the payment rate for the first 20 days of care. Beginning with day 21, beneficiaries are responsible for copayments. For calendar year 2012, the copayment is $144.50 per day.

Most SNFs are part of a nursing home that treats patients who generally require less intensive, long-term care services than the skilled services required for Medicare coverage. The term "skilled nursing facility" refers to a provider that meets Medicare requirements for Part A coverage.[2] Most SNFs (more than 90 percent) are dually certified as a SNF and as a nursing home. Thus, a facility that provides skilled care often also furnishes long-term care services that Medicare does not cover. Medicaid is the predominant payer in nursing homes, accounting for 63 percent of days.

The mix of facilities and the facility type where beneficiaries seek care continue to shift toward freestanding and for-profit facilities (Table 7-1). Between 2006 and 2010, freestanding facilities and for-profit facilities accounted for growing shares of Medicare stays and spending. In 2010, 70 percent of SNFs were for profit; they treated about 70 percent of stays but accounted for almost three-quarters of Medicare payments.

Medicare-covered SNF patients are typically a small share of a facility's total patient population but a larger share of the facility's payments. At the median in 2010, Medicare-covered SNF days made up 12 percent of total patient days in freestanding facilities but 23 percent of facility revenue. The most frequent hospital conditions referred to SNFs for post-acute care were joint replacement, septicemia, kidney and urinary tract infections, hip and femur procedures except major joint replacement, and heart failure and shock. The top 10 conditions were the same for hospital-based, freestanding, nonprofit, and for-profit facilities.

TABLE 7–2 **Broad case-mix groups used in Commission analyses**

Group used in Commission analyses	Description
Medically complex	Includes days classified into two broad categories: clinically complex and special care groups. Clinically complex groups are used to classify patients who have burns, septicemia, or pneumonia; or who receive chemotherapy, oxygen therapy, intravenous medications or transfusions while a 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, foot infections; who receive radiation therapy or dialysis while a resident; or require parenteral/intravenous feedings, or respiratory therapy for 7 days.
Intensive rehabilitation	Includes ultra high and very high rehabilitation case-mix groups. Rehabilitation groups are based on minutes of rehabilitation furnished per week. Ultra high is for those patients who received over 720 minutes per week; very high includes patients who received 500 to 719 minutes per week.

SNF prospective payment system and its shortcomings

Medicare uses a prospective payment system (PPS) to pay for each day of service.[3] 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 by the services SNFs furnish to a patient (such as the amount and type of 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 to perform activities of daily living (such as eating and toileting). Medicare's payments for SNF services are described in Medicare Basics, available on the Commission's website (http://www.medpac.gov/documents/MedPAC_Payment_Basics_11_SNF.pdf).

Almost since its inception, the SNF PPS has been criticized for not accurately targeting payments for nontherapy ancillary (NTA) services, such as drugs, and for encouraging the provision of unnecessary therapy services. Payments for NTA services are included in the nursing component even though NTA costs are much more variable than nursing care and are not correlated with it. The PPS encourages the provision of therapy because its payments are not proportional to costs—rather, as therapy costs increase, therapy payments rise even faster (Garrett and Wissoker 2008, Medicare Payment Advisory Commission 2008). In 2008, the Commission recommended that the PPS be revised to base therapy payments on patient characteristics (not service provision), establish separate payments for NTA services, and implement an outlier policy (Medicare Payment Advisory Commission 2008). A revised PPS would raise payments for medically complex care (and the SNFs that treat them) (see Table 7-2 for definition of medically complex) and lower payments for high-intensity therapy (and the SNFs that treat them) (Wissoker and Garrett 2010). As a result, payments would be more equitable across facilities.

Since its first efforts, the Commission has updated its PPS design work in two ways. First, it explored designs for the NTA component that met the criteria CMS laid out for this component (Centers for Medicare & Medicaid Services 2009). These designs retained most of their ability to predict NTA costs and considerably improved the accuracy of payments for NTA services, while meeting CMS's criteria (Wissoker and Garrett 2010). Second, after comparing an alternative PPS design with current (2012) policy, the Commission found that a revised design would improve the predicted costs per day and would redistribute payments from SNFs with high shares of therapy stays to SNFs with high shares of medically complex stays (Wissoker and Zuckerman 2012). For example, we estimate that payments would increase 16 percent for SNFs with low shares of rehabilitation days and decrease 7 percent for SNFs with the highest shares (Table 7-3). For SNFs with the highest shares of intensive therapy days, payments would decrease 10 percent, while payments to SNFs with the lowest shares

would increase 26 percent. SNFs with high shares of special care and clinically complex days would increase 17 percent and 18 percent, respectively.

The effects of a revised payment design would vary considerably across SNFs by type and ownership, reflecting differences in patient mixes and therapy practices. Aggregate payments would increase for hospital-based facilities and nonprofit facilities and decrease slightly for freestanding facilities and for-profit facilities. Payments would increase slightly (less than 2 percent) for rural facilities. However, effects on individual facilities would vary substantially from these aggregates, depending on their patient mix and therapy practices. For example, more than three-quarters of hospital-based SNFs would see their payments increase by at least 10 percent, but payments would decline for a small share of them. Four of 10 nonprofit facilities would see their payments increase by at least 10 percent, but payments would decrease by the same amount to a small share (5 percent) of facilities. Estimated impacts on for-profit facilities would be more evenly distributed. Payments would increase by at least 10 percent for 17 percent of for-profit facilities, while 12 percent of for-profit facilities would see their payments decrease by the same amount.

TABLE 7–3 **A revised PPS would redistribute payments across SNFs**

SNF group	Percent change in payments relative to current (2012) policy
Rehabilitation days	
High share	–7%
Low share	16
Intensive therapy days	
High share	–10
Low share	26
Special care days	
High share	17
Low share	–7
Clinically complex days	
High share	18
Low share	–4
Freestanding	–1
Hospital-based	27
Nonprofit	8
For profit	–2
Rural	2
Urban	0

Note: PPS (prospective payment system), SNF (skilled nursing facility). High share is the top 10th percentile of the distribution of shares of cases. Low share includes facilities in the bottom 10th percentile except for the clinically complex subgroup, where it includes the bottom 25th percentile. Intensive therapy includes days classified into ultra high and very high rehabilitation case-mix groups. Special care cases include cases that classify into special care case-mix groups, such as patients with chronic obstructive pulmonary disease or Parkinson's disease, or who require parenteral/intravenous feedings. Clinically complex cases include cases that classify into clinically complex case-mix group, such as patients with pneumonia or septicemia, or who require intravenous medications.

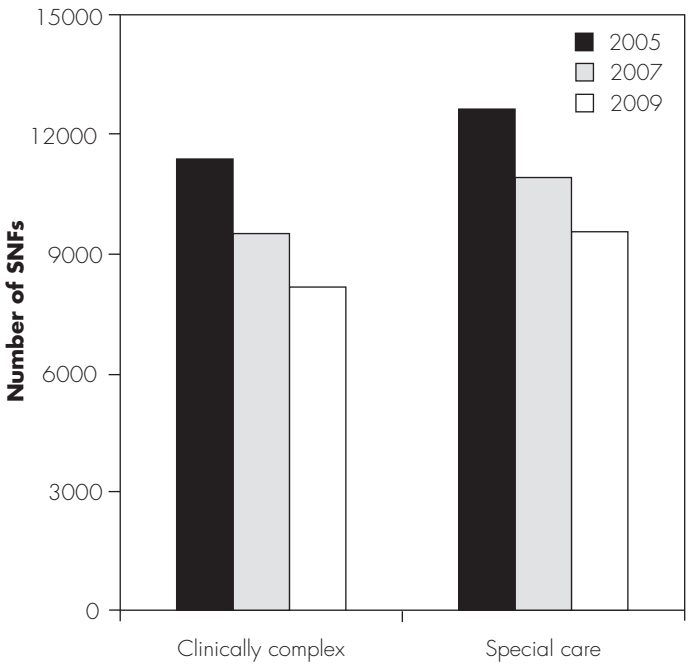
Source: Wissoker and Zuckerman 2012.

CMS's revisions to the SNF PPS

CMS has taken steps to enhance payments for medically complex care but more work remains. In 2010, CMS revised the case-mix classification system (to RUG version IV) by revising the definitions of the groups and adding 13 case-mix groups for medically complex patients (see Table 7-2). At the same time, CMS shifted program dollars away from therapy care and toward medically complex care (Centers for Medicare & Medicaid Services 2009, Centers for Medicare and Medicaid Services 2011).[4] While these changes may make treating medically complex patients more financially attractive, payments for NTA services still do not match a patient's NTA care needs because payments for them continue to be tied to the nursing component. Nursing payments vary 5-fold but NTA costs vary more than 10-fold. CMS has curbed therapy payments but they are unlikely to be sufficient to undercut the incentive to generate therapy volume.

CMS implemented policies to more accurately pay for rehabilitation therapy furnished in groups or concurrently. It also now requires new patient assessments to be conducted when the amount of therapy changes or stops, which will more closely match payments to services provided. The impact of these policy changes will vary considerably by facility and its practices before the policy changes. Although CMS does not have the statutory authority to revise the base rates, it has shifted money from the therapy component to the nursing component by revising the relative weights associated with case-mix groups. While this change lowered therapy payments, it was done in a budget-neutral way so that aggregate payments to SNFs were kept at the same level. As a result, overall payments are likely to remain very high relative to SNFs' aggregate costs.

FIGURE 7–1 **The number of SNFs that admitted clinically complex and special care cases decreased between 2005 and 2009**



Note: SNF (skilled nursing facility). Category based on admitting case-mix group assignment. The clinically complex category includes patients who are comatose; have burns, septicemia, pneumonia, internal bleeding, or dehydration; or receive dialysis or chemotherapy. The special care category includes patients with multiple sclerosis or cerebral palsy, those who receive respiratory services seven days per week, or patients who are aphasic or tube-fed.

Source: MedPAC analysis of 2010 Q2 DataPro data from CMS.

Even with these important revisions, CMS has not modified the basic incentive to furnish therapy to qualify patients into higher payment case-mix groups. The industry has shown it is adept at modifying its practices in response to changes in policy, varying the mix and amount of therapy provided, and it will most likely continue to do so. For example, in 2010 when CMS payments were lowered by 1.1 percent, total spending increased almost 5 percent from 2009. The industry achieved this increase in part by shifting more days into the highest payment case-mix groups. Between 2009 and 2010, the share of rehabilitation days classified into intensive therapy increased 5 percentage points (to 76 percent). Similar responsiveness to rule changes was observed when CMS began to more accurately pay for concurrent therapy.[5] Before the rule change, 28 percent of therapy was furnished concurrently; after the rule change, less than 2 percent was.

Are Medicare payments adequate in 2012?

To examine the adequacy of Medicare's payments, we analyzed access to care (including the supply of providers and volume of services), the 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 compared the performance of SNFs with relatively high and low Medicare margins and efficient SNFs with other SNFs.

Beneficiaries' access to care: Access is stable for most beneficiaries

We do not have direct measures of access. Instead, we consider the supply and capacity of providers and evaluate changes in volume. We also examine the mix of SNF days to assess the shortcomings of the PPS that can result in delayed admission for certain types of patients.

Capacity and supply of providers: Supply remains stable

Since 2001, the number of SNFs participating in the Medicare program decreased less than 1 percent, to 15,161 in 2011. Between 2010 and 2011, there were 46 fewer SNFs, even though 70 facilities began participating in the program. Most of these new participants were for profit and freestanding.[6] Five hospital-based units began participating in the Medicare program in 2011, but many more stopped, so there were 37 fewer hospital-based facilities by the end of 2011. Most terminations were voluntary. The ownership mix has been fairly stable, with for-profit facilities composing 70 percent of the industry. Most SNFs are freestanding (96 percent).

Most beneficiaries live in counties with multiple SNFs. Three-quarters of beneficiaries live in counties with 5 or more SNFs and the majority of beneficiaries (59 percent) live in counties with 10 or more. Few beneficiaries (less than 1 percent) live in a county without a SNF.

Other measures of capacity include the number of SNF beds available during the year and occupancy rates. SNF bed days available (days available for occupancy after adjusting for beds temporarily out of service due to, e.g., renovation or patient isolation) were unchanged between 2009 and 2010 in freestanding facilities. Since 2001, the increase in bed days available averaged 6 percent a year. In 2010, the median occupancy rates were 88 percent in

TABLE 7–4 **Small decline in SNF volume between 2009 and 2010, but still above 2006 levels**

					Percent change	
	2006	2008	2009	2010	2006–2010	2009–2010
Volume per 1,000 fee-for-service beneficiaries						
Covered admissions	72	73	72	71	–1.4%	–1.4%
Covered days (in thousands)	1,892	1,977	1,963	1,938	2.4	–1.3
Covered days per admission	26.3	27.0	27.3	27.1	3.0	–0.7

Note: SNF (skilled nursing facility). Data include 50 states and the District of Columbia.

Source: Calendar year data from CMS, Office of Research, Development, and Information.

freestanding facilities and 81 percent in hospital-based units, indicating capacity to admit beneficiaries seeking SNF care.

The Commission is concerned that the number of SNFs admitting medically complex patients (for definitions, see Table 7-2, p. 176) declined between 2005 and 2009 (Figure 7-1). Medically complex admissions were more concentrated in fewer SNFs compared with rehabilitation admissions.[7] The decline is likely to reflect the relative attractiveness of the patients for rehabilitation case-mix groups, which encourages some facilities to furnish enough therapy to medically complex patients so they qualify for higher payment rehabilitation case-mix groups. In addition, some medically complex patients (such as those requiring ventilator, tracheostomy, or wound care) require specific facility and staffing capabilities that may not be available at all SNFs.

This concentration is more likely to affect minority beneficiaries because they made up a disproportionate share of medically complex admissions. In 2009, minorities made up 20 percent of medically complex admissions, even though they made up 14 percent of all SNF admissions. Rural facilities (in particular those located in the least populated areas), nonprofit SNFs, and hospital-based units were disproportionately represented in the group of SNFs with the highest shares (top 10th percentile) of medically complex patients. We also examined whether the number of medically complex admissions was related to the presence of long-term care hospitals (LTCH) in a market. We found that the mix of medically complex days at facilities was only weakly related to whether there was an LTCH in the same market. Facilities located in counties with high and low numbers of LTCH beds per capita had almost identical shares of medically complex days, while facilities in markets without an LTCH had higher shares (8 percent higher).

Although policy changes and the new case-mix groups implemented by CMS may increase the willingness of SNFs to admit medically complex patients, our analysis indicates that revisions to the PPS are still needed to improve the accuracy of payments. Changes implemented by CMS increased payments for a patient with moderate care dependencies and requiring ventilator care from $361 a day in 2010 to $528 in 2012. However, the PPS continues to disadvantage SNFs that admit high shares of medically complex cases. A revised PPS would increase payments substantially for these patients and mitigate the financial disincentive for SNFs to admit them (Table 7-3, p. 177).

Volume of services: After a steady increase, small declines between 2009 and 2010

In 2010, about 4 percent of FFS beneficiaries used SNF services. We examine utilization on a FFS beneficiary basis because the counts of users, days, and admissions do not include service use by beneficiaries enrolled in Medicare Advantage (MA) plans. Because MA enrollment continues to increase, changes in reported utilization could reflect a declining number of FFS beneficiaries rather than reductions in service use.

SNF volume per FFS beneficiary declined between 2009 and 2010: Admissions went down 1.4 percent, covered days were 1.3 percent lower, and covered days per admission decreased 0.7 percent (Table 7-4). The small decline in admissions is expected because inpatient hospital stays, which are required for Medicare coverage

of SNF services, also declined (a little more than 1 percent). Despite the reduction, covered days and covered days per admission were higher in 2010 than in 2006.

SNF use is uneven among beneficiaries of different races. In 2010, admissions per 1,000 FFS beneficiaries were 14 percent higher for whites than for beneficiaries of other races. Although admission rates were lower for other races, their lengths of stay were longer than those for white beneficiaries, perhaps reflecting differences in case mix. Other studies have found that racial differences in SNF use have narrowed over time, which may in part be explained by increased use of assisted living facilities by whites (Konetzka and Werner 2009). In addition, racial minorities are more likely than white beneficiaries to use home health care and informal home care. Other research found that personal resources and preferences also shape the use of long-term care (Jenkins 2001).

Intensification of rehabilitation services unexplained by health status factors

Between 2001 and 2010, the share of days classified in rehabilitation case-mix groups increased from 75 percent to 91 percent. Within the rehabilitation case-mix groups, intensive therapy days (those classified in the ultra high and very high case-mix groups) made up more than three-quarters of the days in 2010. Facilities differed in the amount of intensive therapy they furnished. Freestanding SNFs with the largest growth (top quartile) in daily Medicare revenues between 1999 and 2009 had almost double the share of days classified into intensive rehabilitation case-mix groups (77 percent) compared with SNFs with low revenue growth (40 percent), even though they treated similar mixes of shares of dual-eligible, minority, and very old beneficiaries and their case-mix indexes varied by only 3 percent.

Patient frailty has increased but is nowhere near the levels of change in therapy provision. Between 2005 and 2009, patients' ability to perform activities of daily living (as measured by the Barthel score) and their cognitive function (as measured by the cognitive performance scale) declined 7 percent and 4 percent, respectively. For an overlapping period, between 2006 and 2008, the Office of Inspector General (OIG) found that SNFs increasingly billed for higher payment RUGs, even though the ages and diagnoses of beneficiaries were largely unchanged (Office of Inspector General 2011). For each age group (65–70 years old, 70–75 years old, etc.) and for the most frequent admitting diagnoses, billing for the highest rehabilitation case-mix groups increased by at least 10 percentage points. The OIG concluded that beneficiary characteristics did not explain the patterns of case-mix groups or lengths of stay.

Two factors could explain the growth in intensive therapy days during this period. First, facilities increasingly provided therapy concurrently rather than in one-on-one sessions because the facility was paid as if one-on-one therapy had been furnished even when two patients were treated at the same time. When the base rates were established, almost all therapy was furnished in one-on-one therapy sessions. Since then, the provision of concurrent therapy grew to make up 28 percent of therapy provision in 2006 (Centers for Medicare & Medicaid Services 2009).[8] In October 2009, CMS changed the counting of concurrent therapy minutes to more accurately reflect the resources used to furnish them. As a result, the use of this modality declined (Centers for Medicare & Medicaid Services 2011). Despite the change in policy, the share of days classified into the highest rehabilitation case-mix groups continued to increase between 2009 and 2010.

Second, Medicare's rules allowed SNFs to bill for therapy that was not provided. Under the SNF PPS, payments are determined by assessing each patient during a limited window of time, but this assessment is used to establish payments over a longer period of time. Until recently, Medicare rules did not require facilities to reassess patients when their therapy care needs changed and the program did not reconcile payments with the actual amount of therapy provided. Providers could furnish a high level of therapy during the assessment window so that the days were assigned to high-payment case-mix groups and, after the assessment period, providers could lower their provision until the next assessment window began. In addition, providers may have become more efficient at scheduling therapy so that more therapy can be furnished with the same number of staff (LeadingAge 2011).

While shorter hospital stays could have shifted some therapy provision from the hospital to the SNF sector, growth in therapy days far outpaced this shift. For example, for the five highest volume diagnosis related groups discharged to SNFs, hospital lengths of stay decreased 1 percent to 6 percent between 2007 and 2009. In contrast, total therapy days increased 15 percent and the most intensive therapy days rose 36 percent during this period.

Some of the shift in rehabilitation days may be explained by a shift in site of service from inpatient rehabilitation facilities (IRFs) to SNFs, as IRFs comply with a rule

requiring that at least 60 percent of IRF patients have 1 of 13 specified conditions. Under this rule, only a subset of patients recovering from major joint replacement, the largest category of IRF admissions in 2004, count toward the threshold. Of the top 10 diagnosis related groups with discharges to IRFs in 2010, major joint replacement had the highest volume of patients who were discharged to SNFs. Between 2004 and 2010, the share of beneficiaries who were discharged from a hospital to a SNF with this condition increased by 5 percentage points (from 33 percent to 38 percent), the share discharged to home health care increased by 11 percentage points (from 21 percent to 32 percent), and the share discharged to an IRF decreased by 16 percentage points (from 28 percent to 12 percent).

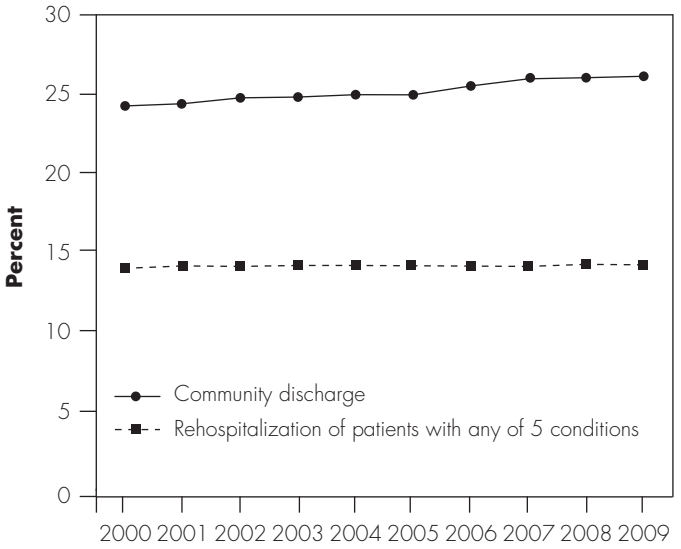
Quality of care: SNF quality virtually unchanged from prior year

The quality of care furnished to patients during a Medicare-covered SNF stay continues to show mixed results (Figure 7-2). Since 2000, one outcome measure (the risk-adjusted rate of discharge to the community) showed slight improvement and the other (the risk-adjusted rate of rehospitalization of patients with any of five care-sensitive conditions) exhibited almost no change. Both measures showed almost no change between 2008 and 2009.[9]

In 2009, the most recent year for which data are available, the risk-adjusted rate at which SNFs discharged patients to the community within 100 days—26 percent—was essentially the same as in the prior year. Since 2000, the rate has increased less than 2 percentage points, indicating very slightly improved quality. Nonprofit facilities and hospital-based facilities had higher risk-adjusted community discharge rates than other SNFs, and urban facilities had slightly higher community discharge rates than rural facilities.

In 2009, the risk-adjusted rate at which Medicare-covered SNF patients with any of five potentially avoidable conditions (congestive heart failure, respiratory infection, urinary tract infection, sepsis, and electrolyte imbalance) were rehospitalized was 14.2 percent, almost the same as in 2000. The lack of improvement in the rates likely reflects the financial incentive to rehospitalize patients and suggests the need to create counterincentives to minimize unnecessary transfers of patients back to the hospital. Once beneficiaries' characteristics—such as ability to perform activities of daily living, cognitive function, and comorbidities—were accounted for, the outcome differences by racial group were not statistically significant.

FIGURE 7–2 **Risk-adjusted SNF quality measures show little improvement since 2000**



Note: SNF (skilled nursing facility). Increases in rates of discharge to community indicate improved quality. The five conditions include congestive heart failure, respiratory infection, urinary tract infection, sepsis, and electrolyte imbalance. Increases in rehospitalization rates indicate worsening quality. Rates are calculated for all facilities with 25 or more stays.

Source: Rates calculated by MedPAC based on a risk adjustment model developed by the Division of Health Care Policy and Research, University of Colorado at Denver and Health Sciences Center (Min et al. 2011).

Providers' access to capital: Slow lending environment in 2012

A vast majority of SNFs operate within nursing homes; therefore, in assessing SNFs' access to capital we look at access for nursing homes. Most operators make their bottom line using Medicare profits and lenders and owners use Medicare patient mix as one metric of a facility's financial health. Well-run facilities, especially those with a high Medicare patient mix and in markets close to hospitals, remain a steady investment.

Lending by the Department of Housing and Urban Development (HUD) continues to be an important source of funds. Since 2008, HUD's lending dramatically increased as a result of an overhaul of its federally insured mortgage program for nursing homes under Section 232/222.[10] Between 2010 and 2011, the number of HUD-financed projects increased 14 percent (to 421 projects), with insured amounts totaling $3.4 billion in 2011 (Department of Housing and Urban Development 2011). HUD is expected to maintain the same level of activity for 2012, but projects may be smaller (Moore 2011).

Nursing home bankruptcies in the early 2000s

Studies of the bankruptcies in this sector concluded that the prospective payment system (PPS) was not responsible for poor financial performance of some skilled nursing facilities. A Government Accountability Office study of the bankruptcies of nursing home chains in the early 2000s found that the bankruptcies were the result of decisions companies made regarding their expansion and subsequent contraction of their ancillary service businesses, the way they structured their facilities' capital costs, and accounting adjustments made to recognize lower-than-expected revenue streams (Government Accountability Office 2000). Another study found that nursing home closures were the result of many factors, most of which are not related to Medicare's PPS (Castle et al. 2009, Zinn et al. 2009). These factors include the number of survey deficiencies, change in ownership, measures of efficiency, high Medicaid share, implementation of case-mix-based payments for Medicaid, low Medicaid payments, being hospital based or part of a chain, and location in markets with many other facilities. ■

HUD underwriting considers the known and anticipated reductions in Medicare and Medicaid payments, a facility's past performance on inspections, and other quality metrics in evaluating loan applicants.

While capital has been available this year, market analysts and lenders we spoke with thought little borrowing will occur in 2012, given uncertainties about the effects of the Medicare policy changes implemented by CMS and possible future reductions to Medicare and Medicaid payments. Reductions in payment rates are relatively easy to evaluate, but the effects of changes to the therapy rules are more difficult to project. Lenders and borrowers are assessing the impact of these changes and are likely to wait until midyear 2012 before considering new projects. The impact on individual operators will vary by the amount of Medicare business, their rehabilitation business model, their capital structure, their geographic diversity, and the mitigation strategies (see p. 191) operators employ (Doctrow and Bernstein 2011). Analysts we spoke with believe operators will be able to mitigate the effects of the payment reductions and policy changes but vary considerably in their assessment of how much. Some companies will diversify their portfolios and increase their private pay mix (Gerace 2011). Some analysts have concluded that most operators should remain profitable and continue to be good investments (Ecker 2011, Pruitt 2011).

Recent interviews with market analysts noted that the industry is not as highly leveraged as it was in the late 1990s, and many operators have more cash on hand. It is unlikely that any of the medium and larger companies will face bankruptcy as a result of recent changes to Medicare and Medicaid policies. Analysts do not expect a replay of the bankruptcies in the early 2000s (see text box) (Pruitt 2011).

Medicare payments and providers' costs: Medicare margins continue to increase

Between 2009 and 2010, Medicare payments increased faster than Medicare costs, resulting in an aggregate 2010 Medicare margin of 18.5 percent. Medicare margins continued to vary more than twofold. Examining the range in financial performance, we found that high-margin SNFs had considerably lower costs and, to a smaller extent, higher payments (and more intensive therapy) than low-margin SNFs. The variation in Medicare margins and cost per day were not attributable to differences in patient mix. One group of SNFs consistently furnished relatively low-cost, high-quality care and had substantial Medicare margins. Some MA plans' payments were considerably lower than Medicare's FFS payments.

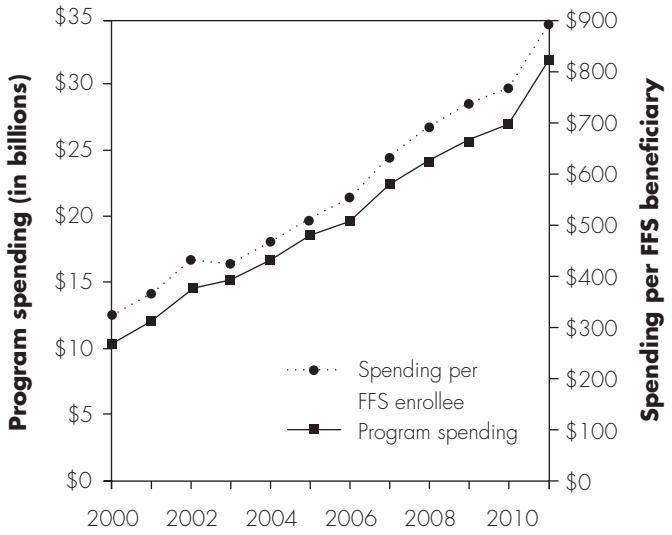
Trends in spending and cost growth

In fiscal year 2011, program spending for SNF services increased to almost $32 billion, up more than 17 percent from 2010 (Figure 7-3). This spike in spending reflects overpayments prompted by implementation of the new case-mix groups in fiscal year 2011. On a per FFS beneficiary basis, estimated spending increased to $891.

Between 1999 and 2010, the cumulative increase in payments (75 percent) far exceeded increases in costs (Figure 7-4). Costs per day rose 45 percent between 1999 and 2010, with larger increases for therapy and NTA costs and slower increases for routine costs. Cost increases have consistently outpaced market basket updates.

FIGURE 7–3

Overpayments in 2011 increased program spending on SNFs



Note: SNF (skilled nursing facility), FFS (fee-for-service). Years are fiscal years.

Source: CMS, Office of the Actuary, 2011.

In the early years of the PPS, the Congress raised SNF payments through legislation effective 2000 and 2001 by an estimated 18 percent and 8 percent, respectively (Centers for Medicare & Medicaid Services 2000, Centers for Medicare & Medicaid Services 2001). These provisions allowed facilities to transition immediately to full PPS rates (instead of a three-year blend of facility-specific and federal rates) and included across-the-board increases and increases for select case-mix groups and rate components.[11]

The mix of hospital-based and freestanding facilities included in the base year differs from the mix of facilities today. Hospital-based facilities have costs per day that are about double those of freestanding facilities. Although CMS included only part of the cost difference in establishing the base year (1995), the share of hospital-based facilities was higher, so their costs contributed more to the base than they would today.[12] In 2000, hospital-based facilities made up 12 percent of SNFs; by 2011, they were 6 percent but made up just 4 percent of SNF revenues.

SNF Medicare margins continue to grow

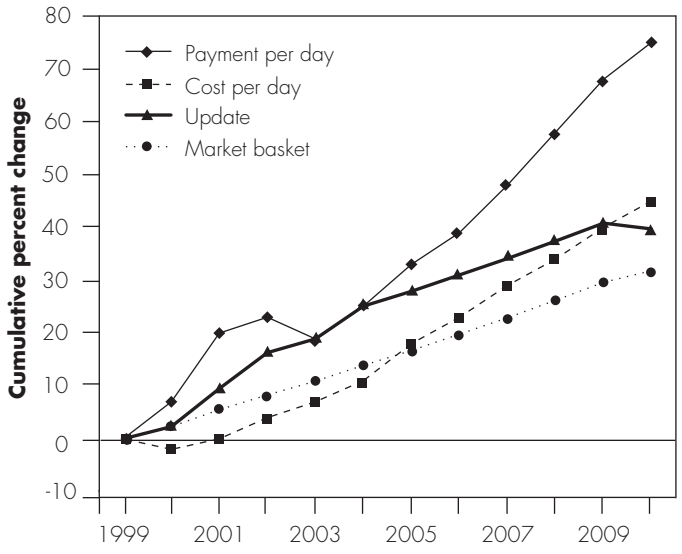
The Medicare margin is a key measure of the adequacy of the program's payments because it compares Medicare's payments with the costs to treat beneficiaries. A total margin, in contrast, reflects the financial performance of the entire facility across all lines of business (such as ancillary and therapy services, hospice, and home health care) and all payers. Total margins are presented as context for the Commission's update recommendation.

SNF aggregate Medicare margins have steadily increased since 2005 (Table 7-5, p. 184). The revised case-mix groups implemented in 2006 led to even higher Medicare margins, reflecting the continued concentration of days in the highest paying case-mix groups. In 2010, the aggregate Medicare margin for freestanding SNFs was 18.5 percent, the 10th consecutive year with average margins above 10 percent. Since 2006, Medicare payments per day have increased faster than costs per day, resulting in growing SNF margins. From 2009 to 2010, aggregate Medicare payments per day grew 4.2 percent, while Medicare costs per day grew 3.6 percent.

Medicare margins have also become less variable. In 2006, there was a fivefold difference between the margin at the 25th and 75th percentiles; in 2010, there was a threefold difference. In 2010, one-half of freestanding SNFs had Medicare margins of 18.9 percent or more, while one-quarter of them had Medicare margins at or below 9

FIGURE 7–4

Cumulative change in payments and cost per day, payment updates and the market basket update, 1999–2010



Source: MedPAC analysis of freestanding skilled nursing facility Medicare cost reports from 1999 to 2009 and *Federal Register* final rules for fiscal years 1999 to 2010.

TABLE 7–5

Freestanding SNF Medicare margins continue to increase

	2003	2004	2005	2006	2007	2008*	2009	2010
Facility count	10,941	11,252	11,301	11,379	11,622	12,557	12,954	12,836
Margin, by group								
All SNFs	10.9%	13.7%	13.1%	13.3%	14.7%	16.6%	18.0%	18.5%
Intensive therapy								
High share	13.0	16.6	16.3	17.1	18.7	19.9	21.0	21.6
Low share	5.0	7.8	5.9	4.4	4.2	8.5	10.2	10.3
Medically complex								
High share	11.0	12.3	11.5	10.4	10.6	13.5	15.1	15.5
Low share	10.0	12.7	12.6	14.0	15.4	17.0	18.1	18.4
Dual eligible								
High share	8.6	11.0	10.6	10.1	10.6	12.3	14.0	14.5
Low share	10.5	14.3	13.4	14.4	16.2	19.1	19.5	20.2
Urban	10.3	13.2	12.6	13.1	14.5	16.3	17.9	18.5
Rural	13.8	16.1	15.2	14.3	15.5	18.0	18.7	18.4
For profit	13.3	16.1	15.2	15.7	17.2	19.1	20.2	20.7
Nonprofit	1.4	3.5	4.5	3.5	4.1	6.9	9.6	9.5
Government**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: SNF (skilled nursing facility), N/A (not available). High and low refers to the top and bottom quartile of the distribution of shares of days.
*CMS reported an increased number of SNFs filed cost reports attributed to the consolidation of audit operations at Medicare contractors. Because more "low utilization" facilities filed cost reports, more SNFs met the Commission's data screens to be included in the analysis.
**Government-owned providers operate in a different context from other providers, so their margins are not necessarily comparable.

Source: MedPAC analysis of freestanding SNF cost reports, 2003–2010.

percent, and one-quarter had Medicare margins of 26.9 percent or higher.

There has been a large decline in the number of SNFs with negative Medicare margins and the size of their losses. In 1999, 51 percent of freestanding SNFs had negative Medicare margins and their median margin was –19 percent. In 2010, 13 percent of freestanding SNFs had negative margins and their median Medicare margin was –10 percent. Seven percent of SNFs had negative Medicare margins three years in a row and the majority of them (63 percent) were located in counties where there were at least six other SNFs.

The widely varying financial performance of freestanding SNFs indicates that the PPS needs to be revised to more closely match payments to patient characteristics and not to the services furnished. Facilities with high shares of intensive rehabilitation therapy had considerably higher Medicare margins than facilities with low shares. Facilities with high shares of medically complex days and dual-eligible days had somewhat lower margins than facilities with low shares of these days. The disparity between for-profit and nonprofit facilities is considerable and reflects differences in their patient mix, service provision, and cost differences. The for-profit SNFs' aggregate Medicare margin was 20.7 percent, compared with 9.5 percent for nonprofit facilities. Until 2010, rural facilities had higher margins than urban facilities, especially in the early years of the PPS. This year, the margins are comparable.

Hospital-based facilities (6 percent of facilities) continued to have negative Medicare margins (–67 percent), in large part reflecting their higher daily costs and shorter stays (they average less than half the length of stay in freestanding facilities). Their higher costs are a function of higher staffing levels and a mix more heavily weighted toward professional staff. They also have higher ancillary

TABLE 7–6 **Freestanding SNF Medicare financial performance in 2010 by location**

Measure	Urban	Rural			
		Micropolitan	Adjacent to urban	Nonadjacent to urban	Frontier
Medicare margin	18.5%	18.6%	18.4%	18.0%	15.2%
Cost per day	$385	$336	$322	$315	$316
Payment per day	472	413	395	384	373

Note: SNF (skilled nursing facility). Micropolitan counties are rural counties that include a city of 10,000 to 50,000 people. Frontier counties have six or fewer people per square mile.

Source: MedPAC analysis of freestanding SNF cost reports for 2010.

costs, which may indicate that physicians view SNF stays as an extension of the inpatient stay and may not fully adjust their practice to the fact that the patient has moved into a lower intensity, post-acute care setting. Our recommended changes to the SNF PPS would increase payments to hospital-based facilities by an estimated 27 percent.

The Commission has examined hospital-based SNFs and their impact on the hospital's financial performance. Administrators consider the SNF units in the context of the hospital's overall business model and the SNF's impact on the inpatient margin, inpatient length of stay, and inpatient capacity to treat additional acute care patients. Our analysis of 2010 hospital cost reports found that SNF services contributed to the bottom line financial performance of the hospitals. Hospitals with SNFs had lower inpatient costs per case and higher inpatient Medicare margins than hospitals without SNFs.

The aggregate total (all payer, all lines of business) margin for freestanding SNFs in 2010 was 3.6 percent, with one-quarter of facilities having total margins at or below –1.3 percent and one-quarter with total margins equal to or greater than 8.2 percent. Total margins are driven in large part by low Medicaid payments. This industry's overall financial health is shaped 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). There are many reasons why using Medicare payments to cross-subsidize Medicaid payments is ill-advised (see text box, p. 186). Additional factors in a facility's total financial performance are the share of revenues from private payers (generally considered favorable), their other lines of business (such as ancillary, home health, and hospice services), and nonpatient sources of income (such as investment income).

Medicare SNF margins for freestanding rural and urban facilities

In 2010, aggregate freestanding rural and urban Medicare margins were similar except for frontier locations, where the margins were lower though still high (Table 7-6). Unlike in other sectors, total facility volume did not have a strong relationship to Medicare margin (Table 7-7). Though the lowest volume facilities had lower Medicare

TABLE 7–7 **Freestanding SNF Medicare margins in 2010 by total facility volume**

	Margin by quintile of total facility days				
	Lowest	2nd	3rd	4th	5th
Urban	9.0%	17.4%	20.8%	19.7%	18.7%
Rural	16.4	18.3	20.6	18.9	16.6

Note: SNF (skilled nursing facility).

Source: MedPAC analysis of freestanding SNF cost reports for 2010.

Medicare's skilled nursing facility payments should not subsidize payments from Medicaid or other payers

Industry representatives contend that Medicare payments should subsidize payments from other payers—namely, Medicaid. However, the Commission believes such cross-subsidization is not advisable for several reasons. First, using Medicare rates to supplement low Medicaid payments results in poorly targeted subsidies. Facilities with high shares of Medicare payments—presumably the facilities that need revenues the least—would receive the most in subsidies from the higher Medicare payments, while facilities with low Medicare shares—presumably the facilities with the greatest need—would receive the smallest subsidies. Medicare and Medicaid shares vary widely across facilities (Table 7-8). 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 between states with relatively high and low payments. In 2009, Medicaid payments to nursing homes varied twofold, yet Medicare's high payments subsidize facilities even in states with relatively high Medicaid rates. 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 current overpayments 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 7–8 **Distributions of Medicare and Medicaid share of freestanding facility days in 2010**

	Percentile of facility days				
	10th	25th	Median	75th	90th
Medicare share	5%	8%	12%	17%	25%
Medicaid share	0	45	63	74	82

Source: MedPAC analysis of freestanding skilled nursing facility cost reports for 2010.

margins than other facilities, the highest volume facilities did not have higher Medicare margins than others. Current SNF policy includes separate rural and urban base rates for each component. These analyses suggest that no other rural adjusters are needed.

Financial performance is not related to patient characteristics but is related to RUG assignment

To help evaluate the range in SNF margins, we compared the characteristics of freestanding facilities with the highest and lowest Medicare margins (those in the bottom and top 25th percentiles of Medicare margins). We found that lower daily costs and higher payments associated with the high therapy case-mix groups and not patient characteristics (other than case-mix group assignment) contributed to the differences in financial performance between SNFs with the lowest and highest Medicare margins (Table 7-9).

High-margin SNFs had costs per day 30 percent below those of low-margin SNFs, after adjusting for differences in wage levels and case mix. The lower daily costs of

TABLE 7–9

Cost and payment differences, not patient characteristics, explain variation in Medicare margins for freestanding SNFs in 2010

Characteristic	Top margin quartile	Bottom margin quartile	Ratio of bottom to top quartile
Cost measures			
Standardized cost per day	$269	$366	0.7
Standardized ancillary cost per day	$121	$154	0.8
Standardized routine cost per day	$150	$206	0.7
Average daily census (patients)	89	71	1.3
Facility occupancy rate	88%	89%	1.0
Revenue measures			
Medicare payment per day	$453	$409	1.1
Share of days in intensive therapy	75%	61%	1.2
Medicare share of facility revenue	27%	15%	1.8
Share of medically complex days	3%	5%	0.6
Patient mix			
Case-mix index	1.16	1.16	1.0
Dual-eligible share of beneficiaries	40%	27%	1.5
Percent minority beneficiaries	10%	4%	2.5
Percent very old beneficiaries (over 85 years old)	33%	38%	0.9
Medicaid share of days	64%	62%	1.0
Facility mix			
Percent for profit	91%	59%	N/A
Percent urban	75%	72%	N/A

Note: SNF (skilled nursing facility), N/A (not available). Values shown are medians for the quartile. Top margin quartile SNFs were in the top 25 percent of the distribution of Medicare margins. Bottom margin quartile SNFs 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. The number of freestanding SNFs in each quartile is 3,164.

Source: MedPAC analysis of 2010 freestanding SNF cost reports.

the high-margin SNFs are partly explained by their higher average daily census (and greater economies of scale). Differences in patient characteristics (shares of beneficiaries who are dual eligible, minority, or very old) do not explain the cost differences across facilities. Facilities with high margins had identical case-mix indexes—as measured by the relative weights associated with the nursing component of the case-mix groups. 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 found similar differences between SNFs with and without negative margins.

On the revenue side, high-margin SNFs had average Medicare payments per day that were 10 percent higher than low-margin SNFs. Their higher payments reflect larger shares of ultra high and very high rehabilitation case-mix groups. Low-margin SNFs either did not treat patients with extensive rehabilitation care needs or they furnished fewer services to them. High-margin SNFs also had fewer medically complex days than low-margin SNFs. By tying payments to patient characteristics, the PPS design recommended by the Commission would redistribute Medicare payments to SNFs based on their mix of patients, not the amount of therapy furnished, and improve the financial performance of SNFs with low shares of rehabilitation days (see p. 177).

Identifying relatively efficient skilled nursing facilities

We defined relatively efficient skilled nursing facilities (SNFs) as those with relatively low costs per day and reasonably good quality care between 2006 and 2008. The cost per day 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 rehospitalization for patients with any of five conditions (congestive heart failure, respiratory infection, urinary tract infection, sepsis, and electrolyte imbalance) within 100 days of hospital discharge. Quality measures were calculated for all facilities with at least 25 stays.

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 one "bad" year. In addition, we separated a SNF's assignment to a group from examination of the group's performance to avoid having a facility's poor data affect both its own categorization and the assessment of the group's performance. Performance over three years (2006 through 2008) was used to categorize SNFs into relatively efficient and other groups; once the groups were defined, we evaluated their performance in 2009 and 2010. Thus, a SNF's erroneous data could result in inaccurate assignment of the SNF 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.

The mix of efficient providers was fairly comparable to the mix of all freestanding SNFs. Efficient SNFs were slightly more likely to be rural (rural SNFs made up 31 percent of efficient SNFs compared with their 29 percent share of freestanding SNFs) and slightly more likely to be nonprofit (nonprofits were 25 percent of efficient SNFs compared with their 23 percent share of freestanding facilities). ■

Ownership of low-margin and high-margin facilities did not mirror their industry mix. Although for-profit facilities make up two-thirds of SNFs, they composed a smaller share (59 percent) of the low-margin facilities and 91 percent of the high-margin group.

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. We examined the financial performance of freestanding SNFs with consistent cost and quality performance (see text box for definitions). 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 rehospitalizations. To be included in the group of relatively efficient SNFs, a SNF had to be in the best third of the distribution of one measure and not in the bottom third on any measure for three consecutive years (2006 through 2008). According to this definition, 10 percent of SNFs provided relatively low-cost, high-quality care.

Our analyses found that SNFs can have relatively low costs and provide good quality care while maintaining high margins (Table 7-10). Compared with the average, relatively efficient SNFs had community discharge rates that were 38 percent higher, rehospitalization rates that were 17 percent lower, and costs per day that were 10 percent lower.

Compared with other SNFs, efficient SNFs had patients of higher complexity as measured by their nursing component case-mix index and the share of days classified in medically complex case-mix groups. Although the two groups of SNFs have comparable shares of therapy days, efficient SNFs furnished less intensive therapy. We did not find differences between relatively efficient and other SNFs in terms of their occupancy rates or size of facility. In growth trends since 2000, relatively efficient facilities were slightly more likely to have experienced low cost growth (in the bottom third of the distribution of growth in cost per day) and less likely to have experienced high revenue growth (in the top third of the distribution of growth in revenue per day) than other facilities.

We recognize that a SNF may appear to be efficient in providing its own care but may not be when considering a patient's entire episode of care. For example, SNFs that discharge patients to other post-acute care services may keep their own costs low but shift costs to other settings and thus raise total program spending. In this scenario, a SNF would appear to be low cost but in terms of the entire episode of care it may not be.

In the future, we plan to examine the total costs of the episode of care to assess the SNFs' practice patterns in a broader context. Rehospitalization makes up a large portion of an episode's costs and therefore it may be a reasonable proxy for episodes with high costs. However, the measure will not capture differences in "downstream" post-acute care use. In addition, as patient assessment data at discharge become available, we may consider expanding the analysis to include measures of improvement in functional status.

Variation in costs per day for freestanding SNFs not related to patient demographics or facility characteristics

Costs per day varied by more than 60 percent across all freestanding providers after differences in wages and case mix were taken into account (Table 7-11, p. 190). Within each subgroup, standardized costs varied consistently by 20 percent to 30 percent between the 25th and 75th percentiles, with larger differences between the 10th and 90th percentiles. Across the subgroups, median standardized cost per day varied 7 percent, from $263 to $282 per day. The relatively small differences in standardized cost per day across the subgroups indicate that most of the variation is not related to location, case mix, ownership, or beneficiary demographics.

Fee-for-service payments are considerably higher than some Medicare Advantage payments

Another indicator that Medicare's payments are too high is the comparison of MA and FFS payments. We compared Medicare FFS and MA payments at five large nursing home companies where such information is publicly available. These companies report managed care payments and note that MA is the majority of this business. Medicare's FFS payments ranged from 19 percent to 68 percent higher than MA rates in 2010 (Table 7-12, p. 191). FFS and MA rates were even further apart for 2011 (ranging from 12 percent to 75 percent) because of the FFS overpayments associated with implementation of the new case-mix groups.[13] It is unlikely that these large differences in payments are due solely to the comorbidities of the enrollees in FFS and MA. However, until encounter level data are available, we cannot compare the patient severity of MA and FFS enrollees who use SNFs.

TABLE 7–10 **Relatively efficient SNFs maintained high Medicare margins**

Measure	Relatively efficient SNFs	Other SNFs
Percent of SNFs	10%	90%
Performance in 2009		
Relative*:		
Community discharge rate	1.38	0.95
Rehospitalization rate	0.83	1.02
Cost per day	0.9	1.02
Median:		
Medicare margin	22.0%	18.2%
Performance in 2010		
Relative* cost per day	0.92	1.01
Median:		
Medicare margin	22.0%	18.9%
Facility case-mix index	1.23	1.17
Share therapy days	92%	93%
Share intensive therapy days	68%	72%
Share medically complex days	5%	4%
Total margin	5.1%	3.8%
Medicaid share of facility days	59%	63%
Trends in performance, 2001–2009		
Percent with low cost growth	14%	86%
Percent with high revenue growth	12	88

Note: SNF (skilled nursing facility). Efficient SNFs were defined by their cost per day and two quality measures (community discharge and rehospitalization rates) for 2006 through 2008. Efficient SNFs were those in the lowest third of the distribution of one measure and not in the bottom third on 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 rehospitalization of patients with any of five conditions (congestive heart failure, respiratory infection, urinary tract infection, sepsis, and electrolyte imbalance) within 100 days of hospital discharge. Quality measures were calculated for all facilities with at least 25 stays. Intensive therapy days include days classified into the ultra high and very high case-mix groups. Low cost growth included facilities in the lowest third of the distribution of cost growth between 2001 and 2010. High revenue growth included facilities in the highest third of the distribution of revenue growth between 2001 and 2010. The number of facilities included in the analysis was 9,011.
*Measures are relative to the national average.

Source: MedPAC analysis of quality measures for 2005–2009 and Medicare cost report data for 2005–2010.

TABLE 7–11 **Variation in freestanding SNFs' standardized costs per day, 2009**

Group of SNFs	Median	Within-group variation: Ratio of 90th to 10th percentile	Within-group variation: Ratio of 75th to 25th percentile
All freestanding	$270	1.6	1.3
Location			
Rural	263	1.6	1.3
Urban	272	1.5	1.2
Ownership			
Nonprofit	280	1.7	1.3
For profit	266	1.7	1.3
Share of dual-eligible beneficiaries			
Low share	282	1.6	1.3
High share	263	1.6	1.3
Minority share			
Low share	267	1.6	1.3
High share	265	1.6	1.3
Very old beneficiaries (over 85 years old)			
Low share	270	1.5	1.2
High share	274	1.7	1.3

Note: SNF (skilled nursing facility).

Source: MedPAC analysis of freestanding skilled nursing facility Medicare cost reports from 2009 and Medicare denominator file.

Payments and costs for 2012

In assessing the payment update for 2013, the Commission considers the estimated relationship between SNF costs and Medicare payments in fiscal year 2012. Our modeling of costs assumes a middle point between historical cost growth and the market basket for 2011 and the market basket increase for 2012.

To estimate 2012 payments, the Commission considers policy changes that went into effect in 2011 and 2012 and the legislated SNF market basket increases. Our modeling of payments in 2011 and 2012 includes:

- The market basket updates for each year.
- A forecast error correction of –0.6 percent in fiscal year 2011. CMS makes corrections when forecast errors are larger than 0.5 percent in either direction. In this case, the error was –0.6 percent and CMS lowered the update in fiscal year 2011 by 0.6 percent.
- A market basket update in fiscal year 2012 that is offset by the productivity adjustment of 1.0 percent, as required by the Patient Protection and Affordable Care Act of 2010 (PPACA).
- Estimates of overpayments in fiscal year 2011 and reductions to payments in fiscal year 2012. When changes to a case-mix classification system are introduced, CMS uses the best available data to make across-the-board adjustments so that payments under the "new" classification system are the same as under the "old" system. Although intended to be budget neutral, the new classification generated $4.47 billion in additional payments in fiscal year 2011. To reestablish budget neutrality between the old and new systems, CMS corrected the overpayment by lowering payments in fiscal year 2012 by $4.47 billion (about an 11 percent reduction to payments after considering the market basket update and the productivity adjustment).

TABLE 7–12

Comparison of Medicare fee-for-service and Medicare Advantage daily payments in 2010 for five companies

	Payment		
Company	**FFS**	**MA**	**Ratio of FFS to MA payment**
Ensign Group	$578	$345	1.68
Extendicare	471	422	1.12
Kindred	485	409	1.19
Skilled Healthcare Group	515	379	1.45
Sun HealthCare	476	374	1.27
Average ratio			1.34

Note: FFS (fee-for-service), MA (Medicare Advantage). The MA payments are listed in the reports as managed care payments. Some companies' notes state that MA makes up the majority of these rates.

Source: Securities and Exchange Commission 10-K annual reports for 2010 filed by Extendicare, Kindred, Skilled Healthcare Group, and Sun HealthCare Group. Ensign Group data are from its third-quarter 2011 results report.

In modeling revenue for 2012, we did not include industry responses to the policy and payment changes CMS made in fiscal year 2012. In prior years, the industry as a whole has been adept at modifying their practices to mitigate the impact of policy changes, shifting the amount and modalities of therapy to their advantage. This responsiveness is likely to continue, although market analysts and company reports vary considerably in their assessment of the combined impact of the policy changes. The fiscal pressure exerted by changes to the patient assessments and payments for concurrent and group therapy will vary by operator and their past practices but generally will increase facilities' attention to controlling their costs.

Market analysts we spoke with and publicly traded companies report a variety of strategies to dampen the impact of the changes and note that some mitigation strategies will take time to implement. Mitigation strategies include lowering administrative and supply expenses, examining the terms of contracts with therapy providers and compensation packages, reducing the use of overtime and contract labor, and expanding the company's mix of private pay patients (Ensign Group 2011, Kindred Healthcare 2011). Providers may evaluate their patient assessment practices and their use of concurrent and group therapy to maximize assignment of days in case-mix groups (Field and Augustine 2011). Although changes to the assessment requirements may increase some providers' costs, they may also yield higher payments. One analyst we spoke with said that before CMS's policy changes, payments were sufficiently high that operators did not have to focus on the efficiency of their provision of therapy and asserted that now they will. Two publicly traded companies said they could provide the same quality of care with lower costs and continue to grow (Kindred Healthcare 2011, Sun Healthcare 2011).

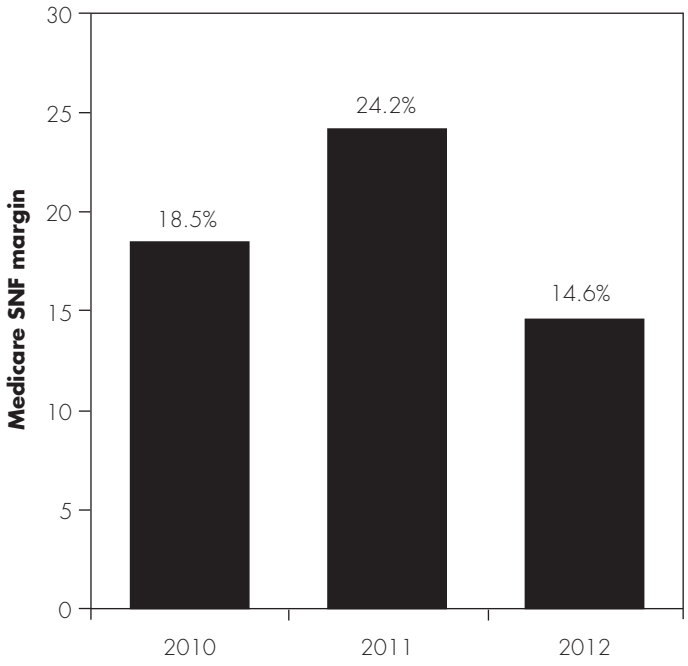
Based on estimates of the changes in revenues and costs between 2010 and 2012, the projected aggregate Medicare SNF margin is 14.6 percent. The industry has emphasized the 11 percent cut to payments in fiscal year 2012, but the reduction was taken from a level that included the overpayments (Figure 7-5, p. 192). We estimate that margins in fiscal year 2011 were 24 percent. Despite the reductions, payment rates in fiscal year 2012 are 3.7 percent higher than they were in fiscal year 2010.

How should Medicare payments change in 2013?

Last year, in its discussion of the update recommendation for SNFs, the Commission noted that it would examine whether Medicare's payments to SNFs need to be rebased

FIGURE 7–5

SNF Medicare margins projected to remain high even after payment reductions in 2012



Note: SNF (skilled nursing facility). Margin for 2010 is actual; margins for 2011 and 2012 are projected.

Source: MedPAC analysis.

(Medicare Payment Advisory Commission 2011). In considering rebasing, the Commission found:

- Aggregate Medicare margins for SNFs have been above 10 percent since 2000 and the distribution has narrowed over time.
- Variation in Medicare margins are not related to differences in patient characteristics.
- Cost differences are unrelated to wage levels, case-mix, and beneficiary demographics.
- Relatively efficient SNFs, with relatively low costs and high quality, indicate that payments could be lowered without adversely affecting the quality of care.
- FFS payments to some SNFs were considerably higher than some MA payments.
- The industry has responded to the level of Medicare's payments in two ways: Medicare's cost growth has consistently been above the SNF market basket since 2001 and revenues increased even when payment rates were lowered in 2010.

These factors show that the PPS has exerted too little fiscal pressure on providers. Moreover, Medicare payments, which are financed by taxpayer contributions to the trust fund, currently subsidize payments from Medicaid and private payers. If the Congress wishes to help nursing facilities with high Medicaid payer mix, a better targeted and separately financed program could be established to do so. Finally, the shortcomings of the PPS design result in large disparities in performance across facilities.

In 2013, there are no policy changes known at this time aside from the required update and productivity adjustment. The payment update in current law for fiscal year 2013 is the forecasted change in input prices as measured by the SNF market basket minus a productivity factor. The market basket for SNFs in 2013 is projected to be 2.7 percent and the productivity adjustment is estimated to be 0.9 percent, but CMS will update both before establishing the payment rates for 2013.

To estimate the impact of revising the PPS design and rebasing the level of payments, we modeled payments assuming the PPS is revised in 2013 (and payments were kept at 2012 levels) and the rebasing of payments begins in 2014 with a 4 percent reduction in payments. Under a revised and rebased PPS, there would continue to be a disparity in Medicare financial performance among SNFs but the differences would be smaller. As previously discussed, the current payment system favors facilities that select rehabilitation patients over medically complex patients. The Commission's work with the Urban Institute identified changes in the SNF PPS that would produce greater equity in payments across types of patients and, as a result, redistribute payments from SNFs that focus on rehabilitation to those that focus on medically complex patients (Medicare Payment Advisory Commission 2008, Wissoker and Zuckerman 2012). The revised design would have the effect of moving payments from SNFs with high Medicare margins to SNFs with lower Medicare margins. A revised PPS would increase payments for nonprofit, rural, and hospital-based facilities and facilities that treat high shares of dual-eligible beneficiaries and minority beneficiaries.

The Commission estimated 2014 Medicare margins with a revised PPS and, as an initial step toward rebasing, payments were lowered by 4 percent. The industry-wide Medicare margin would be roughly 7 percent. Facilities with high shares of medically complex, dual-eligible, minority, or very old patients would have positive margins. Although differences would be narrower, nonprofit SNFs

are expected to continue to have lower margins than for-profit facilities because nonprofit facilities have higher costs.

RECOMMENDATION 7-1

The Congress should eliminate the market basket update and direct the Secretary to revise the prospective payment system for skilled nursing facilities for 2013. Rebasing payments should begin in 2014, with an initial reduction of 4 percent and subsequent reductions over an appropriate transition until Medicare's payments are better aligned with providers' costs.

RATIONALE 7-1

Under this update recommendation, payments would not be updated for 2013. The evidence indicates that Medicare beneficiaries continue to have access to SNF services, and Medicare payments far exceed Medicare costs. Under policies in law for 2011 and 2012, we project the Medicare margin for freestanding SNFs to exceed 14 percent in 2012. SNF payments appear more than adequate to accommodate cost growth without an update in 2013.

The recommendation considers the distribution of payments and variability in financial performance under Medicare that result from shortcomings in the PPS. It requires the Secretary of Health and Human Services to revise the PPS in fiscal year 2013—and these revisions would be done in a budget-neutral fashion. By redistributing payments, the revisions would level the playing field between providers before the rebasing of payments would begin in fiscal year 2014. A revised design would redistribute payments away from intensive therapy care that is unrelated to patient care needs (while still establishing high payments for patients with high care needs) and 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 but would not, and should not, address disparities that result from inefficiencies.

The recommendation also considers the level of Medicare payments. CMS should begin the process of rebasing payments in 2014 by lowering payments by 4 percent and continuing with a transition over an appropriate period of time until payments are better aligned with provider costs. An example of a transition period and an end point for rebasing payments is to lower payments over three years until the base payment equals the 95th percentile of standardized costs per day for efficient providers. Setting base payments at the 95th percentile of efficient providers has the advantage of considering cost and quality in establishing base rates while maintaining some fiscal pressure. Using standardized costs to establish the base rate sets aside differences in providers' costs related to wages and case mix but puts providers at risk for their inefficiencies. Other benchmarks, such as a point on the distribution of cost per day for all providers, are also possible.

The Commission recognizes the need to proceed cautiously but deliberately to help ensure there are no unintended disruptions caused by rebasing, including key elements that reflect this prudence. The recommendation notes that the PPS should be revised first (in 2013) so that payments are redistributed before reductions occur. Reductions would not begin until 2014. It also includes a transition: Reductions would be taken incrementally, with the lowering of payments in 2014 as the first step in aligning payments with costs.

The Commission is focused on ensuring beneficiaries' access to SNF care. Some of the variation in financial performance reflects patient selection and service provision that are unrelated to patient characteristics. The recommended changes should not impair beneficiary access to care; 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 industry should be able to furnish services while having positive Medicare margins, including facilities with higher concentrations of medically complex, dual-eligible, minority, or very old beneficiaries. The Commission will continue to monitor beneficiary access, quality of care, and financial performance and may consider future recommendations based on industry performance.

IMPLICATIONS 7-1

Spending

- The spending implications of this recommendation are that it would lower program spending relative to current law by between $250 million and $750 million for fiscal year 2013 and between $5 billion and $10 billion over five years. Savings occur in 2013 because current law requires a market basket increase (estimated to be 2.7 percent) and, as required by PPACA, a productivity adjustment (which would lower payments by an estimated 0.9 percent). The spending implication of this recommendation is based on Medicare spending projections that were

TABLE 7–13 **Variation in risk-adjusted rehospitalization rates from SNFs in 2009**

Group of SNFs	Number of facilities	Percent of beneficiaries rehospitalized		
		25th percentile	Median	75th percentile
All	14,062	13.4%	17.7%	21.8%
Freestanding	13,146	14.4	18.1	22.0
Hospital based	916	6.2	9.5	14.3
Urban	9,848	14.1	18.0	21.7
Rural	4,214	11.7	16.9	21.9
For profit	10,089	14.9	18.7	22.5
Nonprofit	3,289	10.3	14.8	19.1

Note: SNF (skilled nursing facility). The rehospitalization rate is for patients with any of five conditions (congestive heart failure, respiratory infection, urinary tract infection, sepsis, and electrolyte imbalance) within 100 days of hospital discharge while the beneficiary is still in the SNF. The rate includes facilities with at least 25 stays.

Source: MedPAC analysis of DataPro data for 2009.

made prior to a sequester, as the recommendation was developed and voted on before the sequester was triggered and became current law. If a Medicare sequester does occur, it will change the spending implication of the recommendation.

Beneficiary and provider

- We do not expect an adverse impact on beneficiary access. Revising the PPS will result in fairer payments across all types of care, making providers more likely to admit and treat beneficiaries with complex care needs. We do not expect the recommendation to affect providers' willingness or ability to care for Medicare beneficiaries. Provider payments will be lower but the differences in Medicare margins will be smaller. Impacts on individual providers will be a function of their mix of patients and current practice patterns. The recommendation will not eliminate all the differences in Medicare margins between providers because there are large differences in providers' costs.

Discouraging avoidable rehospitalizations from SNFs

Avoidable rehospitalizations of SNF patients expose beneficiaries to hospital-acquired infections and poor care transitions (such as medication errors). At the same time, they unnecessarily raise spending for Medicare. Among dual-eligible beneficiaries, researchers found that SNFs were the most likely source of potentially avoidable hospitalizations compared with Medicaid nursing facilities, patients receiving home and community-based services, and other community services. Rehospitalizations from SNFs accounted for more than $700 million in hospital stays in 2005, with hospitalizations originating in a nursing home contributing an additional $1.9 billion (Walsh et al. 2010).

Last year, the Commission stated that it would examine a rehospitalization policy for SNFs as one way to improve care for beneficiaries and lower Medicare spending. Beginning in October 2012, a readmission policy will penalize hospitals with high readmission rates for certain conditions. A rehospitalization policy for SNFs would create comparable policies for SNFs and hospitals, thereby encouraging providers in both settings to manage the transitions between them to avoid penalties. SNFs would have a financial incentive to furnish the care necessary to avoid rehospitalizations for conditions that are potentially avoidable, such as pneumonia and dehydration. Under current policy, SNFs have an incentive to rehospitalize high-cost patients as a way to shift costs they would otherwise incur onto hospitals.

Many factors influence rehospitalization rates

Rehospitalizations occur for many reasons (Mor et al. 2010). Some of these factors are within a SNF's control;

others are not. Influences at least partly within a facility's control include:

- staffing level, skill mix, and frequency of staff turnover (Grabowski et al. 2008, Kane et al. 2003, Konetzka et al. 2008a, Konetzka et al. 2008b);
- drug mismanagement (such as inappropriate drug choices or dosing) (Lau et al. 2005, Mustard and Mayer 1997);
- transition care—such as discharge counseling, medication reconciliation, patient education regarding self-care, and communication among providers, staff, and the patient's family; and
- hospice use and the presence of advance directives (Grabowski et al. 2008, Mor and Grabowski 2008).

Other important factors not within a facility's control include premature discharges from the hospital (that are undetected until after admission to the SNF), worsening of a patient's condition that requires medical attention typically not available in a SNF, and physician preferences and concerns about malpractice (Grabowski et al. 2008, Perry et al. 2010).

Given this complexity, a rehospitalization policy needs to create incentives for providers to improve while accommodating the variation across patients and the fact that some rehospitalizations are appropriate. Any condition, even a potentially avoidable one, is not always preventable and some conditions are best treated in a hospital. That said, a rehospitalization policy would prompt facilities to change their staffing, ensure good care transitions, improve their medication management, and educate families about advance directives and hospice services so that unnecessary hospitalizations do not occur.

Because a rehospitalization policy would align the incentives of providers across sectors, it represents a stepping stone toward paying for larger bundles of services. Entities contemplating the development of an accountable care organization or bundled payments for a larger package of services would gain experience in managing care across settings so that rehospitalizations are minimized. A hospital may be encouraged to retain its SNF or to devote underused space to one because it facilitates better care coordination and helps manage the risk associated with larger payment bundles.

Rehospitalization rates vary by type of SNF and ownership

The Commission reports the rate of risk-adjusted rates of rehospitalization for beneficiaries with any of five conditions (respiratory infections, congestive heart failure, kidney and urinary tract infections, electrolyte imbalance, and sepsis). These conditions are considered potentially avoidable because, with high-quality nursing care and monitoring, facilities could treat many of these patients in-house rather than rehospitalizing them. Patients with any of these five conditions account for three-quarters of rehospitalizations from SNFs (Kramer et al. 2007).

In 2009, there was considerable variation in risk-adjusted rehospitalization rates, suggesting room for improvement for many SNFs. Rates were about 13 percent at the 25th percentile (the best quartile) and about 22 percent at the 75th (the worst) quartile (Table 7-13). At the extremes, there was almost a threefold difference between the 10th percentile and the 90th percentile (not shown). The median rate for freestanding facilities was almost double that for hospital-based facilities. Hospital-based facilities have lower rates in part because they have ready access to ancillary services and there is an increased presence of physicians and registered nurses who can diagnose and treat emerging conditions more rapidly, obviating the need for a readmission to the hospital. Some hospital-based facilities are also selective about the SNF patients they admit, referring two-thirds of SNF-bound patients to other SNFs (Medicare Payment Advisory Commission 2007). Rural facilities had lower median rates than urban facilities, in part because more of them are hospital based. The lowest rural facility rates were more than 2 percentage points lower than urban rates (11.7 percent compared with 14.1 percent at the 25th percentile).

There was also considerable variation by ownership, with for-profit facilities having risk-adjusted rates higher than those for nonprofits (18.7 percent versus 14.8 percent). Findings by ownership reflect the differences between hospital-based and freestanding facilities because most for-profit facilities are freestanding. These ownership results are consistent with the findings from studies of hospitalization rates of nursing home residents. Compared with nonprofit facilities, for-profit nursing homes had almost twice the rehospitalization rate for suspected pneumonia cases (Konetzka et al. 2004). Another study found that chain-affiliated homes had twice as many hospitalizations for infections as independent and nonprofit nursing homes, and for-profit homes had three times as many (Zimmerman et al. 2002).

TABLE 7–14 **Comparison of SNFs with the best and worst risk-adjusted rehospitalization rates in 2009**

SNF characteristic	Best (bottom 25th percentile)	Worst (top 25th percentile)
Rehospitalization rate (median)	9.9%	24.5%
Percent:		
For profit	52	83
Hospital based	19	2
Medicare margin (2009)	15.6%	20.1%
Median share of:		
Medically complex days	4%	4%
Dual-eligible beneficiaries	29	38

Note: SNF (skilled nursing facility). The rehospitalization rate is for patients with any of five conditions (congestive heart failure, respiratory infection, urinary tract infection, sepsis, and electrolyte imbalance) within 100 days of hospital discharge while the beneficiary is still in the SNF. The rate includes facilities with at least 25 stays.

Source: MedPAC analysis of DataPro data for 2009.

SNFs with the best rates (bottom quartile) had rehospitalization rates less than half those of SNFs with the worst rates (top quartile; Table 7-14). SNFs with the worst rehospitalization rates were much more likely to be for profit (they made up 83 of this quartile compared with their two-thirds share of the industry) and had higher Medicare margins. The two groups had the same shares of medically complex days.

SNFs with the highest rehospitalization rates treated more dual-eligible beneficiaries, which may reflect that some facilities rehospitalize beneficiaries with long-term stays so they requalify for Part A–covered stays. Previous Commission work found that SNFs with high rates of repeat rehospitalizations (users with at least four SNF stays in two years) had high Medicaid shares, had high Medicare margins, and were disproportionately for profit. Repeat users were more likely to be dual eligible and had higher hierarchical condition category risk scores than other SNF users. Other researchers report 30-day (all cause) rehospitalization rates were more than a third higher for individuals who had previously been in a nursing home compared with those who had resided in the community (26.8 percent vs. 19.4 percent) (Mor et al. 2010).

Some facilities have consistently high and low risk-adjusted rehospitalization rates (Table 7-15). Among the worst performers, more than 900 facilities were consistently in the worst quartile 3 years in a row, and almost 200 were in the worst 10th percentile in each of 3 years. Among facilities with the best rates, 326 facilities were in the best 10th percentile in each of 3 years and 732 were in this best decile for 2 of 3 years.

Examples of efforts to lower hospitalizations

Some facilities have partnered with insurers and health systems to lower their hospitalization rates. Aetna recently announced a performance-based contract with Genesis HealthCare, a nursing home chain (Anderson 2011). The program will be implemented in the firm's facilities in four states and aim to lower hospitalizations by 10 percent to 20 percent. Interventions include expanding the hours RNs and physicians are available in facilities, improved discharge planning, and adherence to treatment plans. Geisinger and its partner providers have implemented care coordination strategies to improve the transition between nursing facilities and hospitals. Strategies focus on medication reconciliation, early detection of worsening conditions, prevention of falls and skin deterioration, and enhanced communication within the care team (Davis 2010). Early results show between 13 percent and 67 percent fewer rehospitalizations in six participating homes.

In a quality improvement effort funded by the Commonwealth Fund, 25 facilities undertook early detection of potential problems (such as dehydration), in-facility treatment of select conditions (such as respiratory and urinary tract infections), and improved end-of-life care strategies (such as advance care planning and palliative care). The preliminary results of this study suggest that the savings (from fewer self-reported hospitalizations) range from 17 percent to 24 percent, depending on how engaged the facility was, and the savings could fund the hiring of a full-time advance practice nurse or physician assistant (Ouslander et al. 2011).

CMS began a voluntary value-based purchasing demonstration in 2009, involving about 200 facilities in 3 states (New York, Wisconsin, and Arizona). The demonstration awards bonuses to facilities with good performance, if there are estimated savings at the state level. Performance in four domains is measured, including hospitalization rates for a facility's long-stay and short-stay residents. CMS is in the process of evaluating the demonstration's first-year results.

Defining the rehospitalization measure

The rehospitalization policy needs to establish which types of cases to include in the measure. One ready-to-use measure is the risk-adjusted rate of rehospitalization of patients with five conditions considered to be potentially avoidable (respiratory infections, congestive heart failure, urinary tract infections, electrolyte imbalance, and sepsis). A measure that considers these conditions would put facilities at risk for conditions they could often treat and would give providers a focus on the care processes that need improvement. For example, providers would begin to focus attention on appropriate staff competencies, mix, and level; adequate medical staff backup on nights and weekends; clear delineation of appropriate versus inappropriate hospitalizations; adoption of clinical guidelines and best practices for potentially avoidable conditions; and increased staff, resident, and family attention to advance directives and hospice care (Ouslander and Berenson 2011). A policy aimed at improving the related nursing care and care processes is likely to affect other stays, not just Medicare-covered ones. One disadvantage of basing a policy on specific conditions, however, is that providers might be encouraged to change their coding of these conditions to avoid a penalty. In addition, providers may focus narrowly on improving the care for select conditions rather than on raising quality across the board. Because patients with the five conditions capture a large share of rehospitalizations, the selectivity of this measure is less of an issue than a more narrowly defined measure.

Broader definitions of rehospitalization could also be considered and would give the policy more heft. An all-cause measure reflects the belief that all rehospitalizations should be avoided and puts facilities at more risk. This definition would avoid the potential problem that providers might change their coding practices to circumvent the cases counted in the rehospitalization measure. Another way to expand the measure would be to include hospitalizations from both SNF and long-term care stays of dual-eligible beneficiaries. Even if Medicare does not pay for the stay, it pays for the Part B services furnished to dual-eligible beneficiaries receiving long-term care.

Defining the time period covered by the measure

A rehospitalization policy also needs to define the time period captured by the measure. The Commission supports a measure that covers the entire Medicare-covered SNF stay—that is, it would vary up to 100 days. There are two reasons to design a measure that covers the entire length of the stay. First, if a SNF policy considered rehospitalizations within a time shorter than the benefit period, it would miss a significant share of rehospitalizations (Figure 7-6, p. 198). For example, one-third of SNF stays exceed 30 days. Second, a measure that does not cover the duration of the stay would not hold the SNF accountable for the care it furnishes throughout the stay and it might encourage SNFs to delay rehospitalizations until the measurement period was over to avoid having the stay count toward a rehospitalization penalty.

The measure should eventually be extended to a period beyond the SNF stay, which would help ensure effective transitions between the SNF and the home or the next post-acute care provider. The extension would put hospitals and SNFs at similar risks for rehospitalizations that occur within a defined period after the beneficiary is discharged from their immediate care.

Because the periods covered by the hospital and SNF readmission policies are likely to differ, the hospitals' and SNFs' incentives would often, but not always, be aligned (Figure 7-7, p. 199). In the future, with 30-day windows after discharge for hospitals and SNFs, both sectors would have an incentive to promote successful care transitions from one provider to the next and, in the case of patients going home, the coordination of follow-up

TABLE 7–15 **Number of SNFs with consistently the highest (worst) and lowest (best) rehospitalization rates**

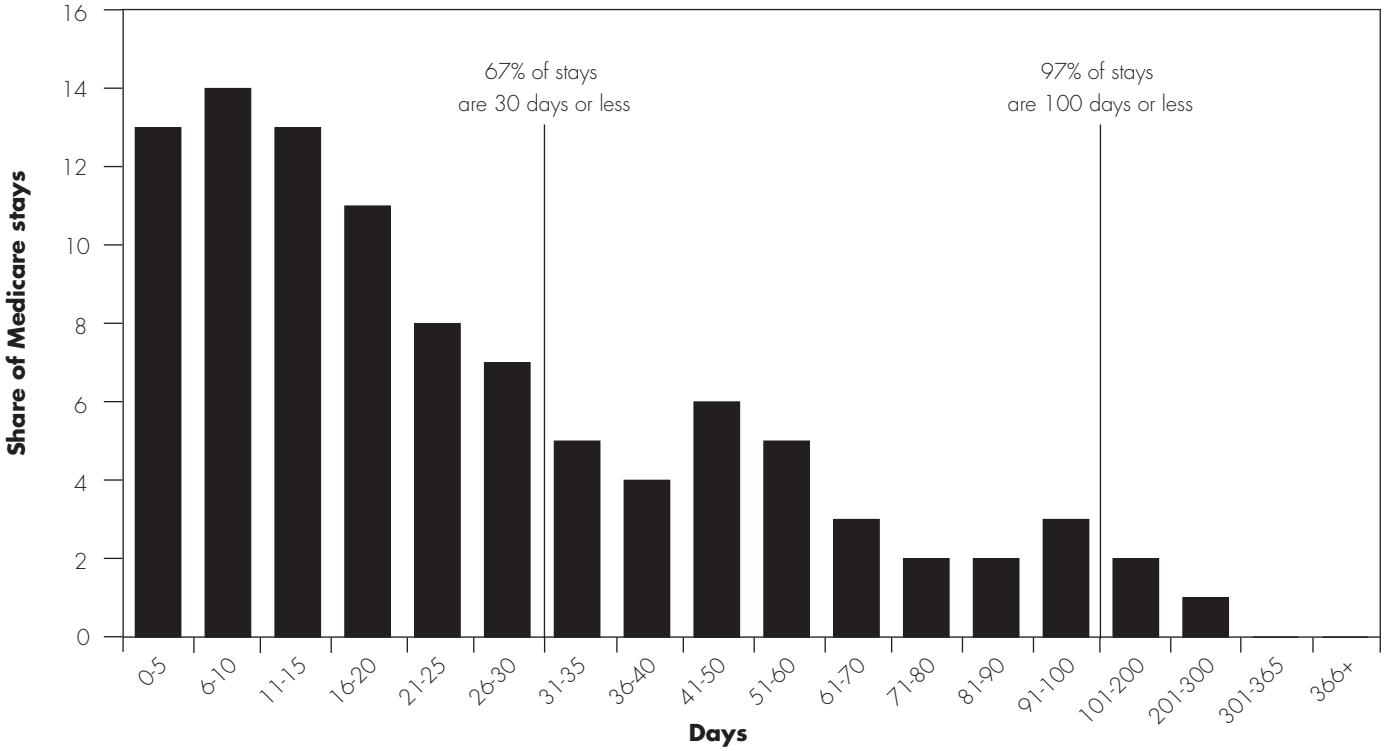
Definition of performance	Number of SNFs
In worst group (top 10th percentile)	
3 years in a row	198
2 out of 3 years	675
In best group (bottom 10th percentile)	
3 years in a row	326
2 out of 3 years	732

Note: SNF (skilled nursing facility). The rehospitalization rate is for patients with any of five conditions (congestive heart failure, respiratory infection, urinary tract infection, sepsis, and electrolyte imbalance) within 100 days of hospital discharge while the beneficiary is still in the SNF. The rate includes facilities with at least 25 stays.

Source: MedPAC analysis of 2009 DataPro data.

FIGURE 7–6

Distribution of Medicare length of stay in SNFs, 2009



Note: SNF (skilled nursing facility).

Source: MedPAC analysis of Data Pro data 2009.

care. If a patient is rehospitalized from the SNF within 30 days of discharge from the hospital, the stay would count in both the SNF and the hospital measures. The hospital would have an incentive to avoid prematurely discharging the patient, and the SNF would have an incentive to manage the care it furnishes to avoid unnecessary rehospitalizations. If a rehospitalization occurred more than 30 days from hospital discharge but while the beneficiary was still in the SNF, the rehospitalization would count for the SNF but not for the hospital. This asymmetry is reasonable because a rehospitalization this far into a SNF stay is more likely to reflect the quality of care received at the SNF than a premature discharge from or the care received at the hospital. A rehospitalization that occurred within 30 days of discharge from the SNF would count in the SNF measure (including discharges to its own long-term care beds) and it would count in the hospital measure if it occurred within 30 days of the hospital discharge. Because other post-acute care providers (such as home health agencies) do not have rehospitalization policies, a SNF could be penalized even though a subsequent post-acute care provider would not be. In the future, the Commission will evaluate the role other post-acute care providers play in rehospitalizations.

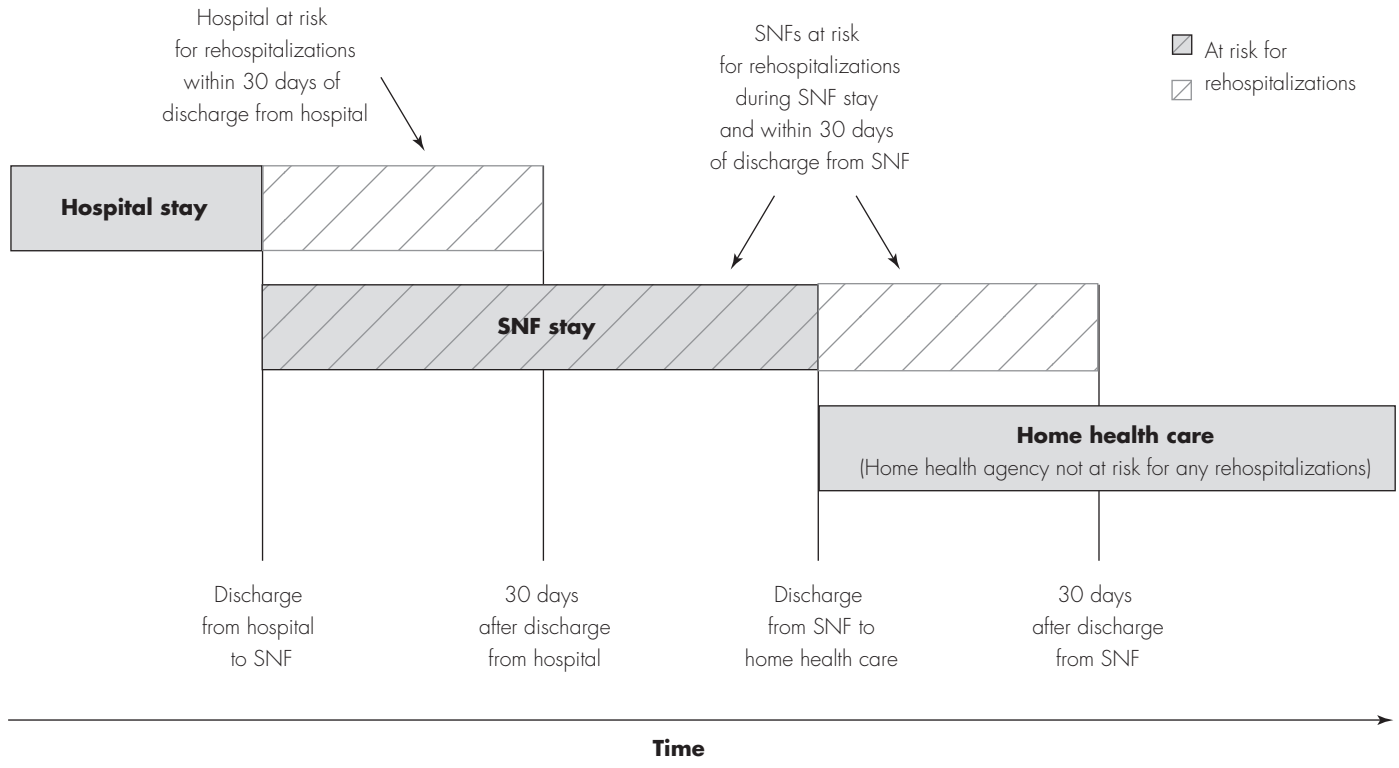
Rehospitalizations during the post-discharge window could be reported separately from the stay-based measure or included in a combined measure. Because the processes and actors are likely to differ from those related to the stay-based care, a separate measure might give the SNF more actionable information. For example, a high rehospitalization rate for patients after discharge from the SNF could point to shortcomings in the community-based care or limitations in the patient's and family's ability to manage the patient's conditions at home. In contrast, a high rate of rehospitalizations of patients still in the SNF would point to the care processes in the facility.

Penalties associated with a policy

To align the SNF rehospitalization policy design with the hospital readmission policy, the SNF penalty would target facilities with above-average rates over multiple

FIGURE 7–7

Providers at risk with a SNF rehospitalization policy



Note: SNF (skilled nursing facility). Chart illustrates a policy that includes a 30-day window after discharge from the SNF.

years. Relative performance has the key advantage of not assuming every hospitalization was avoidable or penalizing a provider for rehospitalizing any specific beneficiary. Using multiple years' experience avoids penalizing providers for one "bad" year. For consistency with the hospital policy, a penalty could range up to a 3 percent reduction in payments. The facility-specific rates should be publicly reported so that providers can gauge their relative performance and beneficiaries may use this information in selecting a post-acute care provider.

RECOMMENDATION 7-2

The Congress should direct the Secretary to reduce payments to skilled nursing facilities with relatively high risk-adjusted rates of rehospitalization during Medicare-covered stays and be expanded to include a time period after discharge from the facility.

RATIONALE 7-2

A rehospitalization policy for SNFs will counter the financial incentive they have to rehospitalize beneficiaries and will better align hospitals' and SNFs' incentives to lower unnecessary rehospitalizations. The Secretary should be given the flexibility to align the rehospitalization policy with the hospital readmission policy. The Secretary could start with a risk-adjusted measure for five conditions, since a risk-adjustment method is available and would facilitate implementation. The SNF penalty would target facilities with above-average rates over multiple years and not examine how individual cases were handled. Because the measure focuses on rates and consistently poor performance, it accommodates the lack of a perfect risk adjustment method yet encourages quality improvement.

Once a risk-adjusted measure has been established, the measure should be expanded to cover 30 days after discharge so that facilities would be encouraged to ensure effective care transitions for patients going home. Because the relevant actors and care processes shaping rehospitalizations during a SNF stay and after discharge are different, the Secretary may elect to report these measures separately. In the future, the rehospitalization

TABLE 7–16

Number of nursing homes treating Medicaid enrollees declined slightly between 2001 and 2011

	2001	2003	2005	2007	2009	2010	2011	Percent change 2001–2011
Number of facilities	16,070	15,857	15,466	15,238	15,093	15,084	14,999	–6.7%

Source: Certification and Survey Provider Enhanced Reporting on CMS's Survey and Certification Providing Data Quickly system, 2001–2011.

rate could also be expanded to include rehospitalizations for all causes.

A phased approach would allow CMS to move forward with a policy and begin to lower rates while a risk-adjusted measure that includes 30 days after discharge is developed. It would also give providers time to fully understand the policy and its potential impacts and to develop the infrastructure necessary to lower rehospitalization rates. CMS may also use the phase-in to develop resources to assist providers in understanding their rehospitalization rates. Regardless of the measure, adequate risk adjustment is key to making fair comparisons across providers and for holding providers accountable for their behavior. CMS will need to monitor provider behavior after the measurement window to ensure providers are not shifting care to beyond the window.

IMPLICATIONS 7-2

Spending

- Savings from a SNF rehospitalization policy would depend on what share of rehospitalizations were included in the measure and the parameters of the penalty. To estimate savings, we assumed a policy design that penalizes SNFs with above-average rates and penalties phased in to a maximum of 3 percent. This recommendation would lower program spending relative to current law by between $50 million and $250 million for fiscal year 2013 and by $250 to $750 million over five years. We assumed no behavioral change from providers, so we did not include any hospital savings in our estimate. The spending implication of this recommendation is based on Medicare spending projections that were made prior to a sequester, as the recommendation was developed and voted on before the sequester was triggered and became current law. If a Medicare sequester does occur, it will change the spending implication of the recommendation.

Beneficiary and provider

- Beneficiary care should improve as SNFs focus on care processes and better communication between providers that lower their rehospitalization rates. Transition care between hospitals and SNFs should improve, thus increasing the quality of care for beneficiaries. The recommendation should not adversely affect beneficiary access or affect providers' willingness or ability to care for Medicare beneficiaries. Payments would be lowered for providers with consistently high rates of rehospitalizations.

TABLE 7–17

Medicaid-covered nursing facility days increased, 2001–2010

	2001	2003	2005	2007	2009	2010	Percent change, 2001–2010
Number of days	214,355	216,824	222,542	226,112	245,969	252,091	17.6%

Note: Nursing facility days include skilled and nursing facility levels of care. Days are in thousands of days.

Source: Medicare skilled nursing facility cost reports from 2001–2010.

Medicaid trends

Section 2801 of PPACA requires the Commission to examine spending, utilization, and financial performance trends under the Medicaid program for providers with a significant portion of revenues or services associated with the Medicaid program. We report nursing home spending and utilization trends for Medicaid and the financial performance for non-Medicare payers. Medicaid revenues and costs are not reported in the Medicare cost reports.

Medicaid covers nursing home (long-term care) and skilled nursing care furnished 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.

Utilization

There were more than 1.6 million users of Medicaid-financed nursing home services in 2008, a 5 percent decline from 2001 (Centers for Medicare & Medicaid Services 2010). Fewer users reflect many states' efforts to divert nursing home admissions to community-based services.

The number of nursing homes certified as Medicaid providers declined slightly between 2010 and 2011 (about half a percent) and almost 7 percent between 2001 and 2011 (Table 7-16). The vast majority of nursing homes are certified as Medicare and Medicaid providers.

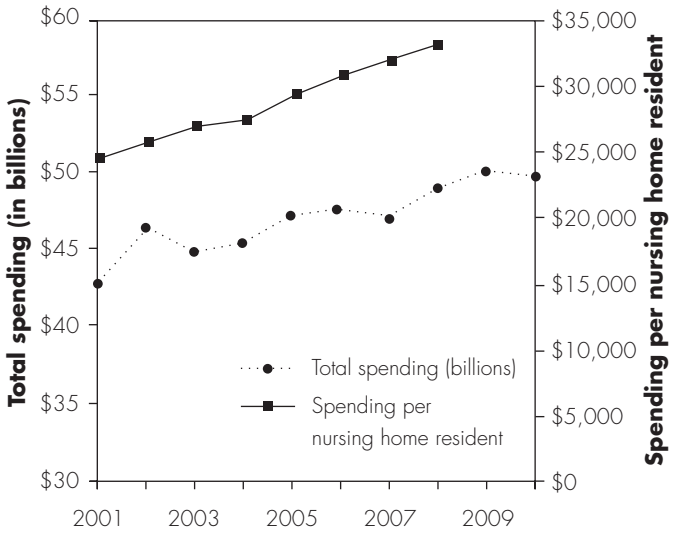
During the same period, Medicaid-covered days (both nursing home level and SNF level) increased 17.6 percent (Table 7-17). More recently, between 2009 and 2010, Medicaid-covered days increased (2.4 percent). Medicaid days made up an average of 63 percent of nursing facility days in 2010.

Spending

In 2010, Medicaid spent just under $50 billion (combined state and federal funds) on nursing homes (Figure 7-8). Spending increases averaged 1.7 percent annually between 2002 and 2010, for a total of 16 percent over the period. Year-to-year changes in spending were variable, increasing in some years and decreasing in others. Between 2009 and 2010, spending decreased 0.8 percent.

FIGURE 7–8

Total and per user Medicaid spending on nursing homes



Note: Data for 2009 and 2010 spending per nursing home resident are not available.

Source: Total spending data come from CMS, Office of the Actuary. Per user spending come from Health Care Financing Review 2010 Statistical Supplement available at https://www.cms.gov/MedicareMedicaidStatSupp.

On a per user basis, spending per nursing home resident averaged $33,097 in 2008, a 29 percent increase from 2001.

In 2009, Medicaid payments for a day of nursing home care varied twofold across states (Table 7-18, p. 202). Twelve states' average payments were 10 percent or more below the national average ($160 per day), while 11 states' average payments were 10 percent or more above it. However, these payment levels look different after adjusting for local wage rates. For example, payments in Arkansas are 12 percent below average (0.88), but after adjusting for the wage levels in the state its payments are above average (1.03). Conversely, payments in New Jersey appear to be above average (1.07) until its relatively high wage level is considered; then, its payments fall to below average (0.89). The relative payments of several states decline substantially after adjusting for wage levels. For example, Connecticut's payments were 33 percent above average without wage adjustment but are only 10 percent higher once wage rates are considered.

TABLE 7–18

State Medicaid payments to nursing homes in 2009 vary twofold

State	Average payment		Wage-adjusted average payment	
	Daily rate	Payment relative to national average	Wage-adjusted daily Medicaid rate	Payment relative to national average
Alabama	$166	1.02	$193	1.15
Arkansas	144	0.88	173	1.03
Colorado	175	1.07	172	1.02
Connecticut	217	1.33	185	1.10
Delaware	211	1.29	193	1.15
Idaho	178	1.09	187	1.11
Illinois	117	0.72	117	0.69
Indiana	151	0.93	164	0.98
Iowa	126	0.77	149	0.89
Kansas	135	0.83	157	0.94
Kentucky	144	0.88	163	0.97
Louisiana	134	0.82	155	0.92
Massachusetts	197	1.21	169	1.00
Michigan	162	1.00	163	0.97
Minnesota	162	1.00	153	0.91
Mississippi	180	1.10	211	1.25
Missouri	126	0.77	141	0.84
Montana	159	0.98	179	1.06
Nebraska	120	0.74	140	0.83
Nevada	181	1.11	164	0.98
New Hampshire	195	1.20	188	1.12
New Jersey	174	1.07	150	0.89
New York	229	1.40	198	1.18
North Carolina	157	0.96	172	1.02
North Dakota	181	1.11	212	1.26
Ohio	167	1.03	176	1.05
Oklahoma	129	0.79	158	0.94
Oregon	211	1.30	191	1.14
Pennsylvania	189	1.16	193	1.15
Rhode Island	186	1.15	160	0.95
South Carolina	148	0.91	162	0.96
South Dakota	114	0.70	138	0.82
Tennessee	148	0.91	166	0.99
Texas	122	0.75	134	0.80
Utah	150	0.92	168	1.00
Vermont	182	1.12	177	1.05
Virginia	150	0.92	161	0.96
Washington	165	1.01	148	0.88
Wisconsin	163	1.00	163	0.97
Wyoming	166	1.02	182	1.08
Average	163		168	

Note: States are missing because they did not respond to the survey. Average payments reflect differences in case mix accounted for by each state's case-mix system. Each state's average wage-adjusted payment was calculated by weighting each county's area wage index by the Medicaid days in each county.

Source: Unadjusted data were collected by Brown University. 2011. Shaping Long Term Care in America Project. Project funded in part by the National Institute on Aging (1P01AG027296) and MedPAC.

TABLE 7–19 **Nursing home non-Medicare margins were negative but total margins were positive**

Type of margin	2000	2002	2004	2006	2008	2009	2010
Non-Medicare margin	–0.7%	–2.8%	–1.3%	–0.9%	–2.6%	–1.2%	–1.2%
Total margin	0.9	1.1	1.7	2.2	2.1	3.4	3.6

Note: Non-Medicare margins include the revenues and costs associated with non-Medicare payers (Medicaid and private payers). Total margins include the revenues and costs associated with all payers and all lines of business, including nursing facility, hospice, and rehabilitation therapy services and nonpatient revenues such as investment income.

Source: MedPAC analysis of freestanding 2000–2010 skilled nursing facility cost reports

The differences between Medicaid's and Medicare's payments are sometimes compared. Although Medicare's payments are much higher than Medicaid's, the acuity of the average Medicare beneficiary is considerably higher, as reflected in the average nursing case-mix index for Medicaid and Medicare patients. In 2008, the average Medicare nursing case-mix index was 36 percent higher than that for Medicaid residents. Differences in the therapy case-mix indexes were even larger. The therapy case-mix index of Medicare beneficiaries was almost 13 times that for Medicaid patients (Plotzke and White 2009). Medicare's payments for the average Medicaid resident would have been $212, compared with $380 for the average Medicare patient.

Although states' revenues have begun to rebound since 2010, their Medicaid spending and enrollment outpaced this growth. As a result, most states project budget gaps for fiscal year 2012 (National Conference of State Legislatures 2011). Funds from the American Recovery and Reinvestment Act of 2009, which temporarily increased federal funding match rates in fiscal years 2009 and 2010, are nearly exhausted and states' shares of Medicaid spending will increase in fiscal year 2012. States expect their financial situation to continue to slowly improve—the number of states with deficits and the sizes of the deficits are expected to decline in fiscal year 2013 (National Conference of State Legislatures 2011). Medicaid costs are expected to make up an increasing share of states' budgets and outpace state revenue collections, resulting in a tight fiscal environment for states (National Governors Association and the National Association of State Budget Officers 2011).

To control their Medicaid spending, states have pursued four strategies: freeze or reduce payments to providers, increase enrollment in managed care, raise copayments (particularly on prescription drugs), and expand the use of home and community-based services. Industry-sponsored research found that Medicaid shortfalls as a share of payments increased from 9 percent in 2009 to a projected 10 percent in 2011 (Eljay LLC 2011). The majority of states did not lower payments to nursing homes in fiscal years 2011 (6 states) and 2012 (14 states) (Smith et al. 2011). More frequently, Medicaid payments to nursing homes were frozen (24 states in fiscal year 2011 and 17 states in fiscal year 2012). About 20 states each year raised their payments.

States have also increasingly used provider taxes to raise federal matching funds. In fiscal year 2012, 41 states had provider taxes on nursing homes, up from 35 states in fiscal year 2009 (Smith et al. 2011). In the future, states' ability to use this vehicle may be limited. Several federal deficit reduction proposals include caps on provider taxes (currently at 6 percent) that states can use to make up their share of Medicaid spending (Smith et al. 2011).

Non-Medicare and total margins in nursing homes

In 2010, non-Medicare margins (i.e., for Medicaid and private payers) were slightly negative and total margins (reflecting services to all patients across all lines of business and including revenue sources) were positive (Table 7-19). The aggregate non-Medicare margin was –1.2 percent in 2010. Total margins have steadily increased since 2000 and were 3.6 percent in 2010.

Non-Medicare margins were slightly more variable than total margins and centered on a much lower median (–1.8 percent compared with the median total margin 3.3 percent). About one-quarter of facilities had non-

TABLE 7–20 **Distribution of non-Medicare and total margins in nursing homes in 2010**

	Percentile				
Type of margin	**10th**	**25th**	**50th**	**75th**	**90th**
Non-Medicare	–16.7%	–8.3%	–1.8%	4.0%	9.8%
Total	–7.3	–1.3	3.3	8.2	13.0

Note: Non-Medicare margins include the revenues and costs associated with non-Medicare payers (Medicaid and private payers). Total margins include the revenues and costs associated with all payers and all lines of business, including nursing facility, hospice, and rehabilitation therapy services and nonpatient revenues such as investment income.

Source: MedPAC analysis of freestanding 2010 skilled nursing facility cost reports

Medicare margins equal to or less than –8.3 percent, while one-quarter had non-Medicare margins that equaled or exceeded 4.0 percent (Table 7-20). One-quarter of facilities had total margins at or below –1.3 percent, while one-quarter of facilities had margins at or above 8.2 percent. ■

Endnotes

1 A spell of illness begins when a beneficiary has not had a hospital or SNF stay for 60 consecutive days.

2 For services to be covered, the SNF must meet Medicare's conditions of participation (COPs) and agree to accept Medicare's payment rates. Medicare's COPs 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 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.

3 The program pays separately for some services, including certain chemotherapy drugs, customized orthotics and prosthetics, ambulance services, dialysis, outpatient and emergency services furnished in a hospital, computed tomography, MRI, radiation therapy, and cardiac catheterizations.

4 In 2010, CMS raised nursing component payments by an estimated 21 percent and lowered therapy component payments by 41 percent. As a result of this shift, the nursing component for patients in the highest extensive services case-mix groups will increase more than 90 percent and payments for patients in the highest special care case-mix group (such as patients with chronic obstructive pulmonary disease) will increase almost 80 percent.

5 Concurrent therapy is the practice of treating multiple patients, who are engaged in different therapy activities, at the same time. Group therapy is the practice of treating multiple patients, who are engaged in the same therapy activities, at the same time. In concurrent therapy, CMS limits Medicare coverage to two patients being treated by a therapist at the same time, thus halving the per capita cost of this modality because the therapist's time is allocated over the two patients. In group therapy, CMS requires that no more than four patients can be treated at the same time by a therapist and this modality cannot comprise more than one-quarter of the patient's total therapy time.

6 A facility may begin to participate in the program but may not be "new." For example, a facility could have a change in ownership (and be assigned a new provider number) or in its certification status from Medicaid-only to dually certified for the Medicaid and Medicare programs. We use the number of SNFs that terminated their participation in the Medicare program as a proxy for the facilities that closed.

7 In 2009, SNFs with the highest shares of medically complex admissions (the top quartile) treated 57 percent of all these patients whereas in 2005, they treated 47 percent of these patients. The distribution of rehabilitation shares was more even across facilities. In 2009, SNFs with the highest rehabilitation shares (the top quartile) treated 33 percent of all rehabilitation admissions).

8 In fiscal years 2011 and 2012, CMS changed the policies that resulted in Medicare paying for concurrent and group therapy as if they were being furnished in one-on-one sessions.

9 The risk-adjusted rates were calculated slightly differently this year to more accurately reflect the changes in each facility's mix of patients over time relative to the average facility rate in a base year, 2000. Last year, we adjusted each year's measures for the mix of cases treated by SNFs in that year and compared it with the average patient rate in a base year. This year, the base-year comparison is with the average facility rate, a more appropriate benchmark. While this affects the levels reported, the trends are identical to those previously reported.

10 The HUD Section 232 program finances new or substantial reconstruction of nursing homes. The Section 232/222(f) program finances the refinancing or purchase of existing facilities.

11 The Medicare, Medicaid, and SCHIP Balanced Budget Refinement Act increased payments by 20 percent for 15 case-mix groups, allowed facilities to transition immediately to the full federal rate (instead of taking 3 years to transition from a blend of facility-based and fully federal rates), and increased the federal portion of the payments across the board by 4 percent for all groups. Combined, these policies added about 18 percent to payments (Centers for Medicare & Medicaid Services 2000). The Benefits Improvement and Protection Act raised payments for the nursing component by 16.66 percent and replaced the 20 percent increase for the 15 groups with a 6.7 percent increase for all rehabilitation case-mix groups, while leaving in place the 20 percent adjustment for nonrehabilitation case-mix groups. These provisions raised payments by 8 percent (Centers for Medicare & Medicaid Services 2001).

12 CMS set the base rates equal to the weighted average of freestanding costs plus half the difference between the freestanding mean and a weighted mean of all SNFs (hospital based and freestanding).

13 The differences for Extendicare are smaller than for other companies because almost half of its contracts with managed care companies are based on the FFS system.

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CHAPTER 8

Home health care services

RECOMMENDATIONS

(For previous recommendations on improving the home health payment system, see text box on pp. 216–217.)

CHAPTER 8

Home health care services

Chapter summary

Home health agencies provide services to beneficiaries who are homebound and need skilled care (nursing or therapy). In 2011, about 3.4 million Medicare beneficiaries received home health services from almost 11,900 home health agencies. Preliminary data for 2010 indicate that Medicare spent about $19.4 billion on home health services.[1]

Assessment of payment adequacy

The indicators of payment adequacy for home health care are generally positive. Because these indicators are similar to those for last year, the Commission is repeating our recommendations from the March 2011 report for a rebasing of the episode rate commencing in 2013. This policy would lower payments beginning in 2013 and would result in no market basket increase for that year.

Beneficiaries' access to care—Access to home health care is generally adequate: 99 percent of beneficiaries live in a ZIP code where a Medicare home health agency operates, and 98 percent live in an area with two or more agencies.

- ***Capacity and supply of providers—***The number of agencies continues to increase, with more than 420 new agencies and almost 11,900 total agencies in 2011. Most new agencies are concentrated in a few states (Texas, California, Florida, Illinois). Most of the growth has been in for-profit agencies.

In this chapter

- ***Volume of services*—**The volume of services continues to rise. About 3.4 million beneficiaries used home health care in 2010, a 4 percent increase. The share of fee-for-service beneficiaries using home health care increased to 9.6 percent in 2010.

***Quality of care*—**Most patients who were not hospitalized at the conclusion of their home health care stay showed some improvement in function (walking, transferring, or bathing) in 2011. The risk-adjusted rate of hospitalization for patients from home health agencies declined slightly between 2006 and 2008.

***Providers' access to capital*—**According to capital market analysts, the major publicly traded for-profit home health companies have sufficient access to capital markets for their credit needs, although it is not as favorable as in prior years. For smaller agencies, the entry of over 400 new agencies in 2011 suggests that they have access to the capital necessary for start-up.

***Medicare payments and providers' costs*—**In prior years, payments consistently and substantially exceeded costs in the home health prospective payment system (PPS). For 2010, costs declined slightly while payments increased. Medicare margins for freestanding providers in 2010 were 19.4 percent, which is above the average of 17.5 percent in 2001–2009. Two factors have contributed to payments exceeding costs: Fewer services are delivered than is assumed in Medicare's rates, and cost growth has been lower than what is assumed in the market basket. The Medicare margin for home health agencies in 2012 is estimated to equal 13.7 percent.

Because these indicators of payment adequacy are similar to last year's indicators, the Commission is reiterating its recommendation from last year, which called for a rebasing of home health payments (with no update for payment rates) commencing in 2013.

Ensuring the efficient and effective use of the home health benefit

The home health benefit faces several challenges: incentives that may encourage patient selection, fraud and abuse, and incentives in the PPS that encourage volume. The Commission made several recommendations to address these concerns in our March 2011 report. The Commission recommended changes to the home health case-mix system that would base payments for therapy services on patient characteristics and would reduce incentives for selection among certain types of patients. To address the volume-rewarding aspects of the PPS, the Commission recommended that the Congress implement a copay for certain home health episodes. Finally, to address fraud and abuse, we recommended that the Secretary of Health and Human Services use her authority to investigate and stop fraud and abuse in areas with aberrant patterns of utilization. ■

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 hospital stay to qualify for home health care. The mix of episodes has gradually shifted to those not preceded by a hospitalization. The share of episodes not preceded by a hospitalization or other post-acute care facility increased from 52 percent in 2001 to 65 percent in 2009. Unlike most services, Medicare does not require copayments or a deductible for home health services.

Medicare pays for home health care in 60-day episodes. Payments for an episode are adjusted for patient severity by a case-mix index that is based on patients' clinical and functional characteristics and some of the services they use. If they 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. An overview of the home health prospective payment system is available at http://medpac.gov/documents/MedPAC_Payment_Basics_11_HHA.pdf. Additional episodes generally have the same requirements (e.g., beneficiary must be homebound, need skilled care) as the initial episode.

Use and growth of the 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 prospective payment system (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 from $3.7 billion in 1990 to $15.4 billion in 1995. 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 inappropriate or improper. For example, in one analysis of 1995–1996 data 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, with most of these errors due to the services not meeting Medicare's standards for a reasonable and necessary service, the patient not meeting the homebound coverage requirement, or the medical record not documenting that a billed service was provided (Office of Inspector General 1997).

The trends of the early 1990s prompted increased program integrity actions, refinements to eligibility standards, temporary spending caps through an interim payment system (IPS) and replacement of the cost-based payment system with a PPS in 2000.[2] 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). 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. Since implementation of the PPS, the number of home health episodes increased from 3.9 million in 2001 to 6.8 million in 2010. The number of agencies in 2011 is almost 11,900, about 1,000 more agencies than at the earlier peak of spending in 1997. Almost all the new agencies since implementation of the PPS have been for-profit providers.

The steep declines in services under the IPS do 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. 2003, McCall et al. 2004). An analysis of all the changes in the Balanced Budget Act of 1997 (BBA) related to post-acute care, including the home health IPS and changes for other post-acute care sectors, concluded that the rate of adverse events generally improved or did not worsen when the IPS was in effect. A study by the Commission also concluded that the quality of care had not declined between the IPS and 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 BBA led agencies to reduce costs without compromising patient care.

TABLE 8–1 **Changes in supply and utilization of home health care, 1997–2010**

				Percent change	
	1997	2000*	2010	1997–2000	2000–2010
Agencies	10,917	7,528	11,815	–31%	57%
Total spending (in billions)	$17.7	$8.5	$19.4	–52	129
Users (in millions)	3.6	2.5	3.4	–31	37
Number of visits (in millions)	258.2	90.6	123.8	–65	37
Visit type (percent of total)					
Skilled nursing	41%	49%	52%	20	6
Home health aide	48	31	16	–37	–48
Therapy	10	19	33	101	72
Medical social services	1	1	1	1	–2
Number of visits per user	72.6	36.8	36.2	–49	–2
Percent of FFS beneficiaries who used home health services	10.5%	7.4%	9.6%	–30	30

Note: FFS (fee-for-service).
*Note: Medicare did not pay on a per episode basis before October 2000.

Source: Home health standard analytical file; Health Care Financing Review, Medicare and Medicaid Statistical Supplement, 2002; and Office of the Actuary, CMS.

Home health margins since the PPS was implemented have been very high, as Medicare margins averaged 17.5 percent between 2001 and 2009. The high overpayments have led the Commission to recommend that home health rates be lowered to a level equal to costs (see text box, pp. 216–217).These high margins likely encouraged the entry of new home health agencies (HHAs), as the total number of agencies participating in Medicare has increased by about 575 agencies a year since 2002.

The Patient Protection and Affordable Care Act of 2010 (PPACA) includes several reductions intended to bring payments more in line with costs:

- 2011: The standard 60-day episode rate was reduced by 2.5 percent.
- 2012 and 2013: The market basket update was reduced by 1 percent.
- 2014–2016: A phased rebasing was implemented to lower payments to a level to reflect changes in average visits per episode and other factors that may have changed since the rate was originally set. The Secretary of Health and Human Services may lower payments by no more than 3.5 percent a year, for a cumulative reduction to payments of 14 percent by 2016. These reductions will be offset by the payment update for each year (adjusted by productivity as indicated below).
- 2015 and following years: The market basket was reduced by multifactor productivity for each year.

While these reductions will affect home health payments, experience suggests that many agencies will be able to adjust their operations to maintain positive financial performance. The experience of 2003, when Medicare implemented a 5 percent reduction to the home health base rate, is illustrative. The effect of this cut was offset by an increase in case-mix values and low annual cost growth of less than 1 percent. With these two factors to offset the reduction in the base rate, average Medicare margins fell by less than 3 percentage points to 15 percent. While the payment changes in PPACA are significant, experience with prior adjustments indicates that many agencies will likely be able to offset at least a portion of these reductions.

Ensuring the 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 too

narrow a 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 requirements provide limited guidance.

As wide swings in past Medicare spending for home health illustrate, ensuring appropriate use of the benefit has been a challenge. The broad coverage criteria permit beneficiaries to receive services in the home even when a beneficiary is capable of leaving the home for medical care, which most beneficiaries do (Office of Inspector General 2001). Medicare does not provide any incentives for beneficiaries or providers to consider alternatives to home health care, and beneficiaries, once they qualify, can receive an unlimited number of home health episodes. 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). 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 home health care. The intent of the skilled services requirement is that the home health benefit serve a clear medical purpose and not be an unskilled personal care benefit. However, Medicare's coverage standards do not require that skilled visits constitute the majority of the home health services a patient receives. For about 11 percent of episodes in 2008, most services provided are visits from unskilled home health aides. 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.

The variation in following program standards may be one factor driving the geographic variation in spending on home health care. For example, from 2006 through 2008, the core-based statistical area (CBSA) at the 25th percentile of the distribution of total price- and health status–adjusted Medicare spending had home health expenditures of $25 per beneficiary, while the CBSA at the 75th percentile equaled $49 per beneficiary. Though differences in practice patterns likely explain some of this regional variation in home health spending, the extent of the variation was so stark and so concentrated in certain CBSAs that it raised concerns about the integrity of home health services in these areas. The Commission made two recommendations to curb wasteful or fraudulent home health services (see text box, pp. 216–217).

In 2011, Medicare implemented two major changes to strengthen program integrity for Medicare home health services. In April 2011, CMS implemented a PPACA requirement for a face-to-face encounter with a physician or nurse practitioner when home health care is ordered. Office visits or telehealth encounters with a physician or nurse practitioner up to 90 days before or 30 days after the beginning of home health care qualify toward the requirement. The change was intended to ensure that beneficiaries receive a complete evaluation when home health care is ordered and ensure that physicians do not rely solely on information provided by HHAs when deciding about patient care. The lengthy period permitted for the encounter may make the requirement more flexible, but it does not ensure that beneficiaries receive an examination in a timely manner before home health care is delivered.

In 2011, CMS also implemented a new requirement for tighter supervision of therapy services provided under the home health benefit. Under the new requirement, patients need to be assessed by a qualified therapist at the 13th and 19th therapy visits. In these assessments, the therapist reviews the patient's progress and determines whether the patient will benefit from additional therapy visits. Medicare targeted these visit intervals because, under the current PPS, the payments increase substantially for episodes at the 14th and 20th therapy visits. The additional review is intended to serve as a safeguard against manipulation of therapy visits to garner increased payment.

Some progress has occurred in Medicare's efforts to reduce the vulnerability of home health outlier payments to fraud and abuse. In prior years, suspicious billing patterns suggested that some providers, particularly those in Florida's Miami–Dade county, were exploiting loopholes in the outlier payment policy. More than 56 percent of the county's claims in 2009 were outliers, much higher than the national average. In 2010, Medicare capped outlier payments to respond to concerns about abuse, limiting outlier payments to no more than 10 percent of an agency's Medicare revenue. Although issues with claims data prevent the Commission from fully analyzing the change in outliers in 2010, preliminary data suggest some progress. The number of outlier episodes in Miami–Dade has dropped by 50 percent. However, the aggregate number of episodes in the county does not appear to have dropped and may have increased. Even with the outlier cap in place, Miami–Dade remains one of the counties with the highest utilization of home health care in the nation.

Strengthening incentives for effective and efficient use of the home health benefit

The Commission's analysis has demonstrated several troubling patterns of utilization and agency profitability that suggest the need for significant change to Medicare's policies. The extraordinarily high utilization of home health care in certain counties suggests that fraud or abuse may be a significant factor driving spending in some areas. The high profitability of Medicare home health agencies, averaging more than 17 percent since 2001, indicates that Medicare overpays for home health services. The trends in therapy provision and agency profitability suggest that the financial incentives of the prospective payment system (PPS) may be influencing care. Finally, the lack of cost sharing may result in Medicare paying for home health services that are of limited or no value to the beneficiary or the program. The Commission made four recommendations to address these challenges in its March 2011 report.

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.

The Patient Protection and Affordable Care Act of 2010 (PPACA) expanded Medicare's authority to stop payment for fraudulent or suspect services, and last year the Commission recommended that the Secretary exercise this new authority to curb fraud in home health care. So far, it does not appear that the Secretary has used this authority in any broad capacity. Last year the Commission published a list of counties with extremely high utilization of home health care, and an updated list of these counties (see the table on p. 222) suggests that in 2010 many of the same areas still warrant further review. As the Commission recommended in its March 2011 report, these counties would be appropriate areas for the Secretary to exercise new PPACA authorities for investigating and interdicting home health fraud.

Implications 8-1

Spending

- The Congressional Budget Office has already scored savings from the PPACA provision, so its baseline already assumes savings for the new authorities. Implementing this authority would lower home health spending if fraud were discovered. CMS and the Office of Inspector General would incur some administrative expenses.

Beneficiary and provider

- Appropriately targeted reviews would not affect beneficiary access to care or provider willingness to serve beneficiaries.

Recommendation 8-2, March 2011 report

The Congress should direct the Secretary to begin a two-year rebasing of home health rates in 2013 and eliminate the market basket update for 2012.

PPACA has legislated that a limited rebasing begin in 2014, but such a delay appears unnecessary given the current indicators for the home health sector. The Commission believes that rebasing should be implemented faster, as another year of high overpayments would represent another lost opportunity for reform. The rebasing should be phased in over a short period of time that allows for an appropriate transition to the lower level of payments (e.g., no more than three years). In addition, the Commission believes that our recommendation from last year, to eliminate the use of therapy thresholds in the PPS, should be implemented along with the rebasing. This change would ensure that under rebasing the distribution of payments among providers more accurately reflects patient severity.

Implications 8-2

Spending

- This recommendation would reduce Medicare spending $250 million to $750 million in 2013 and $5 billion to $10 billion over 5 years. The spending implication of this recommendation is based on Medicare spending projections that were made prior to a sequester, as the recommendation was developed and voted on before the sequester was triggered and became current law. If a Medicare sequester does occur, it will change the spending implication of the recommendation.

(continued next page)

Strengthening incentives for effective and efficient use of the home health benefit

Beneficiary and provider

- Some reduction in provider supply is likely, particularly in areas that have experienced rapid growth in the number of providers. Access to appropriate care is likely to remain adequate, even if the supply of agencies declines.

Recommendation 8-3, March 2011 report

The Secretary should revise the home health case-mix system to rely on patient characteristics to set payment for therapy and nontherapy services and should no longer use the number of therapy visits as a payment factor.

The Commission is concerned that Medicare's home health PPS encourages providers to base therapy regimens on financial incentives and not patient characteristics. The PPS uses the number of therapy visits provided in an episode as a payment factor: the more visits a provider delivers, the higher the payment. The higher payments obtained by meeting the visit thresholds have led providers to favor patients who need therapy over patients who do not and have encouraged providers to deliver services that are of marginal value to a beneficiary. Last year, the Commission recommended that Medicare eliminate the use of therapy visits provided as a payment factor in the PPS (Medicare Payment Advisory Commission 2011). We recommended that Medicare use patient characteristics to set payment for therapy, the same approach it uses for setting payment for all other services covered in the home health PPS.

Implications 8-3

Spending

- The approaches could be implemented in a budget-neutral manner and should not have an overall impact on spending.

Beneficiary and provider

- This recommendation would increase payments for hospital-based agencies, rural agencies, and small agencies. Patients who need therapy may see some decline in access, but these services would be available on an outpatient basis after the home health episode ended.

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.

The 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 PPS 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.

To encourage appropriate utilization, the Commission recommended that Medicare add an episode copayment for services not preceded by a hospitalization or other use of post-acute care.[3] The high rate of volume growth for these types of episodes, which have more than doubled since 2001, suggests there is significant potential overuse. The addition of a copayment would allow for beneficiary cost consciousness to counterbalance the permissiveness 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 $250 million to $750 million in 2013 and $1 billion to $5 billion over five years. Expenditures for services would decrease because some beneficiaries who would otherwise use home health services might decline them. Since many of these services are funded by Part B, decreases in spending growth would reduce Part B premiums.

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. ■

TABLE 8–2

Number of home health agencies continues to rise, 2002–2010

	2002	2004	2006	2008	2009	2010	Average annual percent change 2002–2010	Average annual percent change 2009–2010
Number of agencies	7,057	7,804	8,955	10,040	10,973	11,654	6.5%	9.3%
Agencies that opened	399	656	828	780	1,100	831	9.6	–24.5
Agencies that closed	277	183	176	167	150	181	–5.2	20.7
Number of agencies per 10,000 beneficiaries	2.0	2.1	2.5	2.8	3.1	3.3	6.2	6.4

Note: Agencies' census includes all agencies operating during a year, including agencies that closed or opened.

Source: CMS's Providing Data Quickly database and 2011 trustees' report.

Are Medicare payments adequate in 2012?

To address whether payments for 2012 are adequate to cover the costs efficient providers incur and how much providers' costs should change in the coming year (2013), we examine several indicators of payment adequacy. 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 2010, almost all beneficiaries (99 percent) live in a ZIP code served by at least one HHA, 98 percent live in a ZIP code served by two or more HHAs, and about 60 percent live in a ZIP code served by nine or more agencies.

Our measure of access is based on data collected and maintained as part of CMS's Home Health Compare database as of November 2011. 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 willing to serve a ZIP code did not receive a request in the previous 12 months. The analysis excludes beneficiaries with unknown or missing ZIP codes.

Capacity and supply of providers: Agency supply increases to record levels

In 2010, HHAs numbered 11,654, with a net increase of about 650 agencies. Most of the new agencies in 2010 were for-profit agencies. The number of agencies exceeded the previous record in the 1990s when supply exceeded 10,900 agencies. The high rate of growth is a particular concern because the new agencies appear to be concentrated in areas where fraud is a concern: California, Texas, and Florida. These states, like most, do not have state certificate-of-need laws for home health care, which can limit the entry of new providers.[4]

Since 2004, when 99 percent of beneficiaries lived in an area served by an HHA, the number of agencies per 10,000 fee-for-service (FFS) beneficiaries has risen 57 percent from 2.1 to 3.3 (Table 8-2). Some of this growth is due to a decrease in the number of FFS beneficiaries as more have enrolled in Medicare Advantage, but even when these beneficiaries are included, the number of agencies has increased by about 28 percent since 2004. Supply can vary significantly among states. In 2010, Texas averaged 9.6 agencies per 10,000 beneficiaries, whereas New Jersey averaged 0.4 agency per 10,000 beneficiaries. Some of this variation in supply is likely due to certificate-of-need laws, as New Jersey does have this requirement while Texas does not. The extreme variation demonstrates that the number of providers is a limited measure of capacity, as agencies can vary in size and capability. 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 to meet their patients' needs.

TABLE 8–3 **Share of beneficiaries using home health services continues to rise, 2002–2010**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average annual percent change 2002–2010	Average annual percent change 2009–2010
FFS beneficiaries (in millions)	35.0	35.9	36.5	36.8	36.2	35.6	35.4	35.4	35.7	0.3%	0.9%
Home health users (in millions)	2.5	2.7	2.8	3.0	3.0	3.1	3.2	3.3	3.4	3.9	4.1
Share of beneficiaries using home health care	7.2%	7.5%	7.8%	8.1%	8.4%	8.7%	8.9%	9.3%	9.6%	3.6	3.2
Episodes (in millions):	4.1	4.5	4.8	5.2	5.5	5.8	6.1	6.6	6.8	6.6	3.7
Per home health user	1.6	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.0	2.6	–0.4
Per FFS beneficiary	0.12	0.12	0.13	0.14	0.15	0.16	0.17	0.19	0.19	6.3	2.8
Payments (in millions)	$9.6	10.1	11.4	12.8	14.0	15.6	16.9	18.8	19.4	9.2	3.3
Per home health user	$3,803	$3,770	$4,039	$4,316	$4,606	$5,055	$5,359	$5,722	$5,679	5.1	–0.7
Per FFS beneficiary	$274	$281	$313	$348	$387	$439	$479	$530	$543	8.9	2.4

Note: FFS (fee-for-service).

Source: MedPAC analysis of home health standard analytical file 2010; expenditure data for 2010 are preliminary.

Episode volume continues to increase

The total volume of home health services, including the number of episodes and the share of beneficiaries using the services, increased in 2010, similar to the trend observed in prior years (Table 8-3). Episodes increased to 6.8 million in 2010, the share of beneficiaries using home health care increased to 9.6 percent, and the total number of users reached 3.4 million. The number of episodes per beneficiary increased slightly in 2010, indicating that volume continues to grow faster than the increase in FFS beneficiaries.

The number of episodes per user did not change significantly in 2010, but this metric is more than 20 percent higher than in 2002. Recent years—2002 to 2009—have seen a rapid increase in the number of episodes per user, from 1.6 episodes to 2.0. This rise in episodes per user suggests that, for some beneficiaries with high numbers of consecutive episodes, the benefit may be serving more as a long-term care benefit. This concern is similar to those in the mid-1990s that led to major program integrity activities and payment reductions. Notably, the rise in these episodes coincides with Medicare's PPS incentives encouraging additional volume: The per episode payment rewards additional episodes of service and increased payments for subsequent episodes in a consecutive spell of episodes.

The rise in episodes per user also coincides with a decrease in the share of episodes preceded by a hospitalization or stay in post-acute care (Table 8-4, p. 220). In 2001, about 47 percent of all episodes were preceded by a hospitalization or stay in post-acute care, but by 2009 the share had declined to 35 percent. A corresponding increase occurred between 2001 and 2009 in episodes not preceded by a hospitalization or stay in post-acute care, rising from 53 percent to 65 percent.

Changes in therapy volume consistent with prior years

CMS has periodically modified the therapy payment amounts in an attempt to reduce the incentives for manipulation. However, each modification has retained the number of visits as a payment factor, and changes in volume have generally followed the changes in payment.

For example, from 2001 to 2007, CMS had a single payment adjustment for therapy that increased payment for episodes with 10 or more therapy visits. In this period, the growth rate for episodes that just met the threshold

TABLE 8–4 **Increase in home health episodes by timing and source of episode, 2001–2009**

	Number of episodes (in millions)		Percent change	Percent of episodes	
	2001	2009	2001–2009	2001	2009
Episodes preceded by a hospitalization or PAC stay:					
First	1.6	1.8	15%	40%	27%
Subsequent	0.3	0.5	57	8	7
Subtotal	1.9	2.3	21	47	35
Episodes not preceded by a hospitalization or PAC stay (community-admitted episodes):					
First	0.8	1.2	56	20	19
Subsequent	1.3	3.1	141	32	47
Subtotal	2.1	4.3	108	53	65
Total	3.9	6.6	67	100	100

Note: PAC (post-acute care). "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 hospitalization (including long-term care hospitals), skilled nursing facility, or inpatient rehabilitation facility stay. "Episodes not preceded by a hospitalization or PAC stay" (community-admitted episodes) indicates that there was no hospitalization or PAC stay in the 15 days before episode start. Numbers may not add due to rounding.

Source: 2010 Datalink file.

was almost double the growth for all other home health episodes. This trend led to concerns that providers were deliberately targeting the 10-visit threshold.

The results of the Commission's review of cost and utilization trends for therapy episodes illustrate how the visit thresholds have driven provider behavior. For example, the Commission found that agencies with higher Medicare profit margins in 2007 generally provided more episodes that qualified for extra therapy payments. The relationship between profit and amount of therapy provided suggests these services may be overvalued relative to nontherapy services.

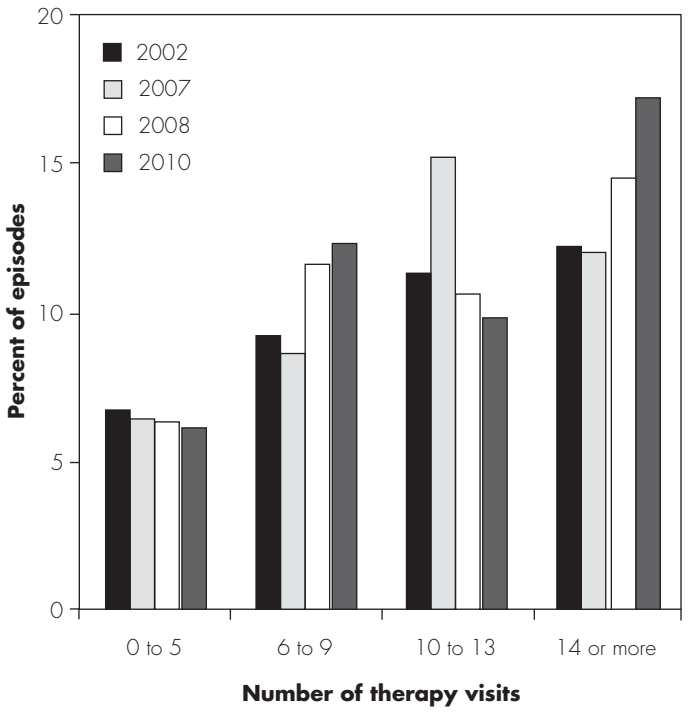
In response to the concern about the 10-visit threshold, CMS implemented changes in 2008 that lowered payments for episodes with 10 to 13 therapy visits and increased payment for episodes in the 6 to 9 and 14 or more therapy visit ranges. The changes in therapy utilization reflected the new incentives: Episodes with 10 to 13 therapy visits decreased 27 percent, while those with 6 to 9 therapy visits and 14 or more visits increased 43 percent and 27 percent, respectively (Figure 8-1). This change was the largest one-year shift in therapy volume since the PPS was implemented. Since 2008, the growth in episodes has followed this pattern, with episodes consisting of 14 or more visits growing significantly.

In October 2011, the Senate Finance Committee completed an investigation into therapy practices of some of the largest home health care companies. The review concluded that the therapy practices found at some of these firms "at best represent abuses of the Medicare home health program. At worst, they may be examples of for-profit companies defrauding the Medicare home health program at the expense of taxpayers." (U.S. Senate 2011). The report concludes that Medicare needed to initiate changes that remove therapy as a PPS payment factor.

In 2011, CMS recognized that the refinements implemented in 2008 continued to include financial incentives to provide therapy and implemented several changes to reduce the potential for manipulation—namely, the requirement for agencies to review the need for additional therapy at certain points in an episode and changes to the case-mix index. CMS also raised the payment relative weights for nontherapy episodes and lowered them for therapy episodes, but the changes were smaller than would have occurred if Medicare had adopted the changes to therapy payments recommended by the

FIGURE 8–1

Growth in episodes by year and number of home health therapy visits, 2002–2010



Source: MedPAC analysis of home health standard analytical file.

Commission. For example, the Commission found that payments for nontherapy episodes would have increased by 29 percent under one approach to using patient characteristics, compared with the 7 percent payment increase under the CMS 2012 refinements. Moreover, basing payments solely on patient characteristics would have reduced payment for therapy episodes by 11 percent, compared with the 3 percent drop under CMS's 2012 revisions. However, because the CMS refinements left the therapy visit thresholds in place, it is likely that providers will continue to favor therapy patients over nontherapy patients and that financial incentives will continue to drive the amount of therapy a patient receives.

The need for the continual changes to the therapy thresholds demonstrates the distortions created by including therapy visits as a payment factor. The 2012 changes will reduce the incentive to provide more therapy, but agencies will still be able to gain higher payments by providing more services. For example, increasing from five to six therapy visits increases payment by $344 for certain episodes. For this reason, we maintain that Medicare should use patient characteristics for setting therapy payments to remove the financial incentives that remain in the program's home health payment policies (see text box, pp. 216–217).

Most urban and rural areas have comparable total utilization

Ensuring adequate access to care for all Medicare beneficiaries is a policy goal of the Commission and the Medicare program. In the past, some policymakers have been concerned about access in rural areas. Medicare currently pays a 3 percent add-on for episodes provided in rural areas, even though utilization does not differ significantly. Rural counties averaged 15 episodes per 100 beneficiaries in 2009, compared with 16 episodes per 100 beneficiaries for urban counties (Table 8-5).

Home health utilization tends to vary more among different regions of the nation than between urban and rural areas within regions or states. Regions or states with utilization that is high relative to the national average typically have above average utilization in both rural and urban counties, and states or regions with utilization below the national average generally have below average utilization in both urban and rural areas. For example, rural areas in Minnesota average 5 episodes per 100 beneficiaries, compared with 2 episodes per 100 beneficiaries in the urban area of LaCrosse, Wisconsin. Both LaCrosse and the rural areas of Minnesota are well below the national average. In contrast, the rural areas of Texas average 41 episodes per 100 beneficiaries, and the

TABLE 8–5 **Utilization by type of county, 2009**

Type of county	Number of home health episodes per 100 beneficiaries
Urban	15.8
Rural, by subcategory	
Micropolitan	14.4
Rural, adjacent to metropolitan	15.8
Rural, nonadjacent to metropolitan	14.8
All rural	14.8
National (all counties)	15.6

Note: An urban county includes a city that has a population of more than 50,000. A micropolitan county has a population of 10,000 to 50,000.

Source: MedPAC analysis of home health Datalink file and 2009 beneficiary annual summary file.

TABLE 8–6

Counties with high rates of home health care use

State	County	Share of FFS beneficiaries using home health	Episodes per user	Episodes per 100 FFS beneficiaries
TX	Brooks	37.5%	4.0	150.4
TX	Duval	36.4	4.3	155.4
TX	Starr	35.5	4.2	149.8
TX	Jim Hogg	35.3	4.0	140.6
TX	Jim Wells	30.9	4.0	123.0
TX	Willacy	30.8	3.8	116.3
TX	Hidalgo	30.1	3.9	116.9
MS	Claiborne	29.3	2.9	85.4
FL	Miami–Dade	28.5	2.6	75.3
TX	Zapata	27.5	4.3	118.4
LA	Madison	26.9	4.5	121.2
OK	Choctaw	26.2	4.2	109.5
TX	Cameron	25.7	3.5	88.7
TX	Webb	25.2	3.8	95.3
OK	McCurtain	24.9	4.4	109.6
MS	Sharkey	24.6	4.0	99.1
OK	Pushmataha	24.3	4.0	98.1
LA	Avoyelles	24.0	4.2	99.8
LA	East Carroll	23.6	4.4	104.8
TX	Red River	23.4	4.2	98.2
OK	Latimer	23.0	4.6	105.7
MS	Jefferson	22.6	3.7	84.2
TN	Hancock	22.5	3.6	80.5
LA	Washington	22.3	3.8	83.8
LA	St. Helena	22.3	3.8	84.4

Note: FFS (fee-for-service). Counties with fewer than 100 home health users have been excluded.

Source: MedPAC analysis of the 2010 home health standard analytical file; 2010 Medicare denominator file.

urban area of Dallas–Fort Worth averages 38 episodes per beneficiary. Texas is a state with above-average utilization in both urban and rural areas. The variation between these states is generally greater than the variation within them.

Table 8-6 reports the 25 counties with the highest utilization of home health care. Many of these counties are in states with high rates of Medicare utilization in general (Texas, Florida, and Louisiana), and many of these counties are rural, suggesting that Medicare's add-on payments based solely on rural designation are not as well targeted as they could be.

Access is not significantly different among subclasses of rural counties, and more populous rural areas do not always have higher utilization than less populous rural areas. Rural micropolitan counties (with a town of greater than 10,000) averaged 14.4 episodes per 100 beneficiaries in 2009, while remote rural areas (fewer than 10,000 residents and not adjacent to a metropolitan or micropolitan area) averaged about 14.8 episodes per 100 beneficiaries.

Utilization in sparsely populated counties appears to be lower than in other rural areas, though there is significant variation within this category. Frontier counties—with six or fewer people per square mile—average about 9.4 episodes per 100 beneficiaries. While this number is lower than the average for other rural areas, it is not clear that it indicates an access issue. Many nonfrontier rural areas have utilization that reaches levels the Commission has suggested need to be investigated, so the average

TABLE 8–7 **Quality measures for 2011**

Functional measures	2004	2005	2006	2007	2008	2009	2010	2011
Improvements in:								
Transferring	50%	51%	52%	53%	53%	54%	54%	53%
Bathing	59	61	62	63	64	64	65	64
Walking								55
Medication management								46
Pain management								66

Note: The measures for walking, medication management, and pain management changed in 2011 and are not comparable to data from prior years.

Source: MedPAC analysis of CMS Home Health Compare data.

utilization for nonfrontier areas may be artificially high because of aberrant utilization patterns (see text box, pp. 216–217). In other words, the higher average utilization for nonfrontier counties may reflect inefficient use of the benefit, which would not be surprising given the payment system's high margins and volume-rewarding aspects. Also, patient preference and clinical needs may differ in frontier and nonfrontier counties. Because of these factors, the average utilization for nonfrontier counties may not represent an appropriate benchmark for assessing the lower utilization in frontier counties.

Mix of services varies for urban and rural beneficiaries

Though the overall number of episodes per beneficiary does not differ significantly in urban and rural areas, the mix of therapy and nontherapy episodes varies for urban and rural counties. About 37 percent of episodes in urban counties are therapy episodes, compared with about 30 percent of episodes in rural counties. For nontherapy episodes, the relationship is reversed: In rural counties, 70 percent of episodes are nontherapy, compared with about 63 percent of episodes in urban counties. The mix of services differs more between urban and rural areas than the level of utilization. Given the financial incentives to provide more therapy in the home health PPS, it is possible that some of the higher utilization in urban areas is a result of the design of the PPS. It is also possible that the different mix of services for rural areas reflects differences in patient acuity or preferences.

Payments in rural areas would increase if the Commission's recommendation to remove the therapy thresholds were introduced. Removing the therapy thresholds would increase payments for nontherapy episodes and decrease them for therapy episodes. As a result, rural areas, which have more nontherapy episodes, would see a significant boost in payment from the refinement. Areas with the lowest rates of therapy provision, such as frontier areas, would see higher payment increases than other areas. This increase, however, would be because of the greater frequency of nontherapy services in rural areas and not because the case-mix index deliberately targeted areas for higher payments on the basis of their rural character.

Quality of care: Quality measures generally held steady

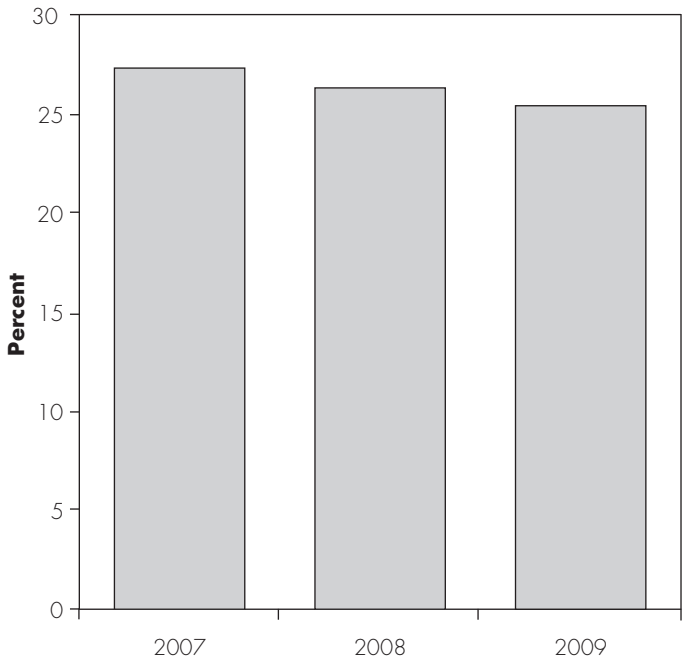
Quality measures appear to be steady for home health care on most measures. The Commission uses two sources of quality data for assessing home health care. Measures from Medicare's Outcome-Based Quality Monitoring (OBQM) data set provide measures of adverse event and functional improvement. The Commission has concerns that some aspects of the OBQM measures may be prone to manipulation, so we developed an alternative approach to measuring adverse events (hospitalizations).

OBQM measures with comparable data are steady for 2011

In 2011, CMS implemented changes for three of the five OBQM functional measures the Commission typically reports (walking, medication management, and pain management). The scale for these items was changed in 2011, so the measures of performance for these functions are not comparable to the data in prior years. For the two functional measures that were unchanged by CMS—transferring and bathing—the rates of patients reporting improvement were comparable for each year since 2007 (Table 8-7).

FIGURE 8–2

Thirty-day risk-adjusted hospitalization for home health patients declined, 2007–2009



Source: MedPAC analysis of University of Colorado data.

The measures indicating improvement in function may not reflect the experience of all patients because these data are collected only for patients who do not have their episode terminated by a hospitalization. This limitation is imposed for both policy and practical reasons. Hospitalizations are generally unplanned so there is no opportunity to assess patients' functionality before their episode ends. Also, Medicare's payment rules terminate a home health episode when a patient is hospitalized, so the patient is no longer in the care of the health agency. As a result, the functional measures report quality only for patients who were not hospitalized during their home health episode, and these patients are probably more healthy and more likely to have good outcomes.

Alternative measure of hospitalization

Though the OBQM measures provide a useful snapshot of the quality of home health care, the Commission has been concerned that the measures offer an incomplete analysis of quality. The OBQM measures rely on self-reported data from the home health care Outcome and Assessment Information Set (OASIS), and it is difficult for Medicare to independently validate many of the outcomes collected. In addition, there has been concern that the OASIS measures may not be directly linked to the reason for referral to home health care. For example, Medicare collects information on the improvement in walking for all patients, not just those referred to home health care for a functional debility. To address these concerns, the Commission contracted with the University of Colorado to develop more clinically focused measures of the quality of home health care. Hospitalization was selected because this measure matters to both the program and the beneficiary, and data for the outcome could be validated through Medicare inpatient hospital claims data.

The Commission convened a technical panel to consider what conditions and period of time an alternative measure of hospitalizations should include.[5] The consensus of the panel was that hospitalization was a key outcome for most categories of patients and that focusing a measure on a few categories of patients could encourage patient selection. On the basis of this input, the Commission selected an all-cause hospitalization measure with a limited set of exclusions related to conditions in which hospitalization might be expected as a part of the normal course of treatment (e.g., cancer treatment and organ transplant complications). In addition, the measure included hospitalizations that occur up to 30 days after discharge from home health care.

Figure 8-2 depicts the risk-adjusted rate of hospitalization under the alternative measure. The trend shows that, after adjusting for changes in patient risk, the rate of hospitalization has been declining. Data underlying this calculation indicate that the improvement in hospitalization rates is attributable to a slight rise in the severity of the patient population, and across these years the actual rate of hospitalization has been steady at about 28 percent each year. Since the actual rate of hospitalization has been steady even as the risk of hospitalization has increased, the risk-adjusted rate of hospitalization shows improvement.

Providers' access to capital: Adequate access to capital for expansion

Few HHAs access capital through publicly traded shares or public debt, like 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 companies provides some

TABLE 8–8 **Medicare margins for freestanding home health agencies, 2009 and 2010**

	2009	2010	Percent of agencies, 2010	Percent of episodes, 2010
All	18.2%	19.4%	100%	100%
Geography				
Majority urban	18.5	19.4	86	91
Majority rural	17.0	19.7	14	9
Type of control				
For profit	19.8	20.7	87	79
Nonprofit	13.6	15.3	13	21
Government*	N/A	N/A	N/A	N/A
Volume quintile				
Lowest	8.9	9.9	20	3
Second	10.2	11.6	20	7
Third	14.9	13.9	20	11
Fourth	18.1	18.2	20	20
Highest	20.3	22.1	20	60

Note: N/A (not available).
*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.

insight into their access to capital but has limitations. Publicly traded companies may have businesses 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.

Analysis of the for-profit companies indicates that they have adequate access to capital, though on terms less favorable than in previous years. The PPACA changes in home health policy in the 2011 and 2012 PPS regulations have trimmed revenues for the home health industry. In addition, several federal investigations have been launched into the therapy billing practices of some of the publicly held home health companies. These factors have weakened investor outlook on these firms and made lenders more cautious in the terms they offer home health firms seeking capital, but for-profit HHAs appear to still have access to capital for their operating needs.

For smaller or nonpublic entities, the entry of new providers indicates that access to capital for privately held agencies is adequate. In 2010, about 830 new HHAs entered Medicare; most of them are for-profit agencies.

Medicare payments and providers' costs: Payments increased by more than costs in 2010

In 2010, the average payment for a full home health episode of care increased by 4.5 percent. (This amount does not include payments for outlier episodes or episodes paid under the low utilization payment adjustment rates.) The rise in payments did not reflect a commensurate increase in costs. Costs per episode in 2010 declined by less than 1 percent compared with the prior year. This slight decline in costs contrasts sharply with the inflation indicated by the home health market basket, which increased by 1.7 percent in 2011. The annual trends for 2010, low or no growth for costs and relatively high growth for payments, are consistent with trends in the PPS since its inception in 2000. The ability of HHAs to consistently keep costs low while increasing revenue has contributed to the high margins HHAs have garnered under the PPS.

Medicare margins increased in 2010

In 2010, HHA margins in aggregate were 19.4 percent for freestanding agencies, up from the previous year (Table 8-8). Financial performance varied from 3 percent for the

TABLE 8–9 **Margins by volume and urban/rural classification, 2010**

Volume quintile	Majority urban	Majority rural
Lowest	10.5%	6.4%
Second	11.1	12.0
Third	14.2	12.5
Fourth	18.6	15.6
Highest	22.0	23.0

Source: MedPAC analysis of 2010 home health cost reports and standard analytic file.

agencies at the 25th percentile of the margin distribution to 27 percent for the agencies at the 75th percentile. We focus on freestanding agencies because they are 90 percent of providers and because their costs do not reflect an allocation of overhead costs, as with hospital-based agencies. Margins for hospital-based agencies in 2010 were –4.7 percent.

Since an individual HHA can serve a mix of urban and rural patients, we determine an agency's rural or urban designation according to where most of its episodes are provided. In 2010, rural providers had slightly higher margins than urban providers, but that is not surprising, as PPACA included a 3 percent add-on for episodes delivered in rural counties beginning in March 2010. In addition, the largest rural agencies, those in the top quintile, had significantly higher margins than other rural agencies.

Agency size is related to financial performance, with larger agencies having higher margins. Within each size quintile, urban agencies generally had higher margins than rural agencies (Table 8-9). However, this trend likely reflects the difference in the mix of services provided by HHAs and not necessarily a difference in cost among rural and urban areas. Rural agencies delivered more nontherapy episodes, which are not as profitable as therapy services. Conversely, urban providers delivered more therapy episodes. Implementing the revisions to the case-mix index that the Commission recommended would raise payments for rural agencies and lower them for urban providers.

Historically, Medicare margins have varied widely among HHAs. To better understand the factors driving this variation, the Commission examined in a prior analysis the characteristics of high-margin and low-margin agencies in 2007. Our analysis of margins by provider, beneficiary, and episode characteristics suggests that providers can deliver quality care and earn significant profits under current payment levels and that those with the lowest costs and the highest case mix have the best financial performance (Medicare Payment Advisory Commission 2010).

The most salient difference between high-margin and low-margin agencies was in cost per episode and agency size. High-margin agencies had lower costs and higher episode volume. The cost per episode of high-margin agencies was about 40 percent lower than that for low-margin agencies, driven primarily by a lower cost per visit. The lower costs were likely related to the larger average size of high-margin agencies, as higher volume permits them to achieve economies of scale that result in lower costs and better financial performance. The analysis of the case mix of high-margin and low-margin agencies suggested that Medicare overpays for episodes with high case-mix values, as high-margin agencies had case-mix values that were 7 percent higher than those for low-margin agencies. The higher case-mix values were attributable to high-margin agencies providing more therapy episodes (which have higher payment weights) and nontherapy episodes with high case-mix values.

Margins for subcategories of rural providers are high

The Commission separated rural providers into subcategories based on the urban influence codes to examine the possibility that the type of rural counties agencies served influenced financial performance. The analysis (Table 8-10), which classifies agencies based on the type of county where most episodes are provided, indicates that margins did not differ significantly on this basis.

Though there is a concern that agencies in more remote areas may have worse financial performance, these data indicate that margins increase as agencies move from serving more populated areas to less populated areas. Margins for agencies serving mostly micropolitan counties equaled 18.7 percent, while they were 20.9 percent for agencies predominantly serving the least populated rural counties. Agencies in more rural areas had better financial performance than other categories of rural counties.

Projecting margins for 2012

In modeling 2012 payments and costs, we incorporate policy changes that will go into effect between the year of

our most recent data, 2010, and the year for which we are making margin predictions. The major changes are:

- payment updates in 2011 and 2012, equal to market basket minus 1 percent (per PPACA) for each year;
- a reduction of 2.5 percent to the standard 60-day episode rate;
- a reduction of 3.79 percent to account for coding improvement in 2010 and 2011;
- a case-mix increase of 1 percent a year (due to an increase in patient severity, coding improvement, and utilization changes); and
- assumed episode growth of 0.5 percent a year for 2011 and 2012, higher than the trend for 2011.

On the basis of these factors, we project a margin of 13.7 percent in 2012.

Medicare continues to overpay for home health services

The high margins for home health care in 2011 reflect that payments substantially exceed costs and that the PPACA reductions and administrative adjustments by CMS have not significantly reduced payments. These findings are consistent with those of previous years; Medicare home health margins have averaged 17.5 percent since 2001. These high profits occur despite numerous legislative and administrative reductions. In every year but one, 2007, the payment update has been reduced through legislative changes, administrative action, or both. However, average payments have increased each year, in part because HHAs have increased the number of episodes that qualify for additional therapy payments. The combination of low cost increases and rising average payments has resulted in overpayments that are inconsistent with paying at a level to support the efficient provider and that contribute to Medicare's long-run sustainability challenges. Since home health care is financed through Part A and Part B, the higher payments contribute to the insolvency of the Hospital Insurance trust fund and to the cost of the Part B premium paid by beneficiaries. High payments may also encourage the entry of marginal or fraudulent providers who are disproportionately motivated by the financial returns offered by excessive payments.

These overpayments likely originated when Medicare established the initial PPS payment rates. The Balanced Budget Act required that the PPS base rate for a home health episode be budget neutral so that aggregate spending would equal the spending that would have occurred if IPS had remained in effect. However, between 1998 and 2001, the average number of home health visits per episode dropped from 31.6 to 21.4 and remained at about this level through 2009. Even though some reductions were made to the initial base rate, these adjustments did not anticipate the magnitude by which HHA costs would fall. HHAs had average Medicare profits of more than 23 percent in 2001, the first year the base rate was in effect. Because providers delivered fewer visits than was assumed, payments under PPS have been consistently greater than providers' costs. Medicare rates started out too high, and since then the cost increases have not kept pace with the annual payment update, permitting HHAs to maintain high margins.

TABLE 8–10 **Financial performance by type of agency, 2010**

Type of agency	Medicare margin	Cost per case	Payment per case
Urban	19.4%	$2,560	$3,179
All rural	19.7	2,097	2,615
Micropolitan	18.7	2,220	2,731
Rural, adjacent to urban	19.9	2,051	2,560
Rural, nonadjacent to urban	20.9	2,021	2,555

Note: Agencies are classified based on the county type where most of their episodes are provided.

Source: MedPAC analysis of 2010 home health cost report files and home health standard analytic file.

The need to reset the base rate in Medicare is particularly acute because the high margins exist across the range of agency types. Urban, rural, for-profit, and nonprofit agencies have margins in excess of 15 percent. While some agencies have margins significantly lower than average, the Commission's review found that these differences are primarily due to their higher costs. These higher costs do not appear to be related to patient severity as, for most measures, low-margin agencies did not serve more severe patients.

Low-margin agencies provided fewer episodes that qualified for additional therapy payments. Refining the case-mix adjuster, as discussed earlier, to eliminate the

therapy threshold would redistribute funds to lower margin agencies. It would still be necessary to lower the base rate to ensure that high margins do not continue, as changes in the case-mix adjusters affect only the distribution of payments among providers and not the total amount of spending.

How should Medicare payments change in 2013?

Our review of the Medicare home health benefit indicates that access is more than adequate in most areas and that aggregate Medicare payments are well in excess of costs. Because they are similar to last year's indicators, the Commission is standing by our recommendation from last year, which called for a rebasing of home health payments commencing in 2013. This policy would lower payments beginning in 2013 and would also result in no market basket increase for that year (see text box, pp. 216–217, for a summary of the recommendations from last year's report). ■

Endnotes

1 The spending totals for home health care in 2010 may change because of a payment error related to outlier episodes. The Commission will update its spending totals for 2010 when corrected data become available.

2 The IPS was created as a temporary measure to lower payments while a home health PPS was developed. From 1997 to 2000, the IPS implemented more stringent spending caps for the cost-based system that was in effect before PPS. In addition, the IPS included an agency level per beneficiary spending limit; this limit was calculated as a blend of an agency's per beneficiary utilization and the comparable regional average.

3 The recommendation applies only to full episodes, which include five or more visits.

4 Certificate-of-need laws vary from state to state, and not all states have them. In general, the laws require that an area have a demonstrated need for additional health care services before a new provider is permitted to enter the market.

5 The panel included health service researchers, representatives from Medicare HHAs, and physicians with experience in home health care.

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CHAPTER 9

Inpatient rehabilitation facility services

RECOMMENDATION

9 The Congress should eliminate the update to the Medicare payment rates for inpatient rehabilitation facilities in fiscal year 2013.

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

CHAPTER 9

Inpatient rehabilitation facility services

Chapter summary

Inpatient rehabilitation facilities (IRFs) provide intensive rehabilitation services to patients after an injury, illness, or surgery. Rehabilitation programs at IRFs are supervised by rehabilitation physicians and include services such as physical and occupational therapy, rehabilitation nursing, prosthetic and orthotic services, and speech–language pathology. In 2010, almost 360,000 Medicare fee-for-service (FFS) beneficiaries received care in IRFs. Between 2009 and 2010, Medicare FFS expenditures for IRFs increased from $6.03 billion to $6.32 billion, largely due to a 2.25 percent update to the base payment rates in 2010, a 4.4 percent increase in outlier payments, and an increase in patient severity.

Assessment of payment adequacy

Our indicators of Medicare payment adequacy for IRFs, discussed below, are generally positive.

Beneficiaries' access to care—Our measures of access to care suggest that beneficiaries maintained access to IRF services in 2010.

- ***Capacity and supply of providers***—The aggregate supply of IRFs remained relatively stable in 2010. IRF occupancy rates and the number of rehabilitation beds declined slightly, by 0.5 percent and 0.9 percent, respectively. The relative stability in provider supply and the number of

In this chapter

available rehabilitation beds suggest that capacity remains adequate to meet demand. IRFs are not the sole provider of rehabilitation services in communities. The number of some types of patients treated in IRFs has declined, but data suggest that skilled nursing facilities (SNFs) and home health agencies have been able to fill in for IRFs and provide these beneficiaries with rehabilitation care.

- ***Volume of services***—The volume of Medicare FFS beneficiaries treated in IRFs—as a measure of resources, or services, used—remained relatively stable in 2010. Our assessment of hospital discharge patterns to post-acute care settings suggests that beneficiaries who were not admitted to IRFs as a result of renewed enforcement of CMS's compliance threshold beginning in 2004 were able to obtain rehabilitation care in other settings, such as SNFs and home health agencies.

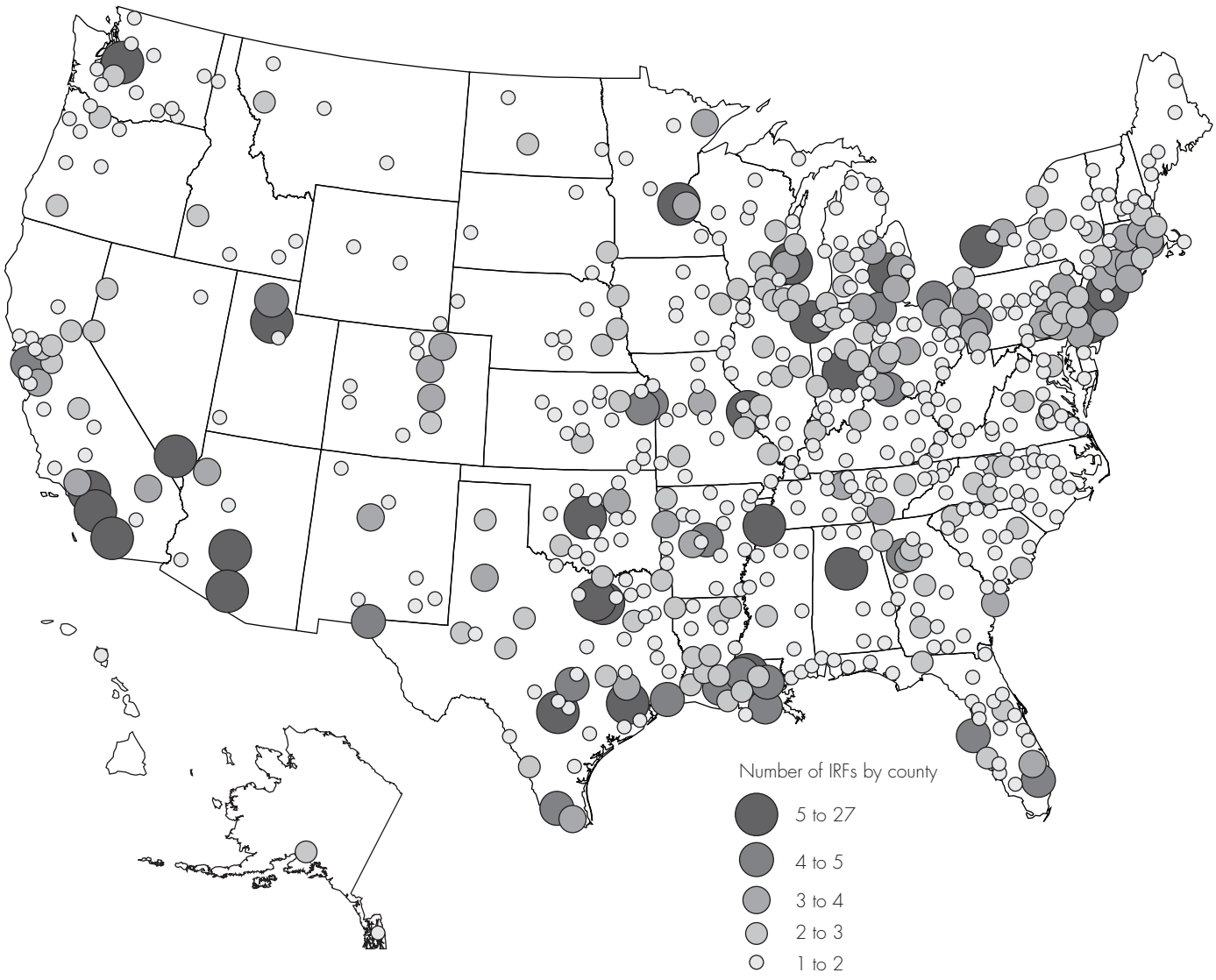
Quality of care—In previous Commission reports, we observed increases since 2004 in the scores used to measure improvement in patients' functional ability between the time of IRF admission and discharge. However, we could not conclude that the observed higher scores represented true improvements in quality of care for Medicare IRF patients without controlling for the changes in patient mix that occurred concurrently due to renewed enforcement of the IRF compliance threshold beginning in 2004. To overcome this limitation, we contracted with researchers at RAND to develop risk-adjusted quality measures that would take into account the changes in IRF patient mix. The preliminary results of that analysis indicate that, from 2004 through 2009, some amount of real improvement occurred in IRF patients' quality of care, as measured by functional improvement between admission and discharge; rates of discharge to the community; rates of discharge from an IRF directly to an acute care hospital; admission to an acute care hospital within 30 days of discharge to the community; and admission to a SNF within 30 days of discharge to the community. However, the results also indicate that quality of IRF care can be improved further. Ongoing refinements to the risk adjustment for these measures may produce different results.

Providers' access to capital—Hospital-based IRF units have adequate access to capital through their parent institutions. One major freestanding IRF chain that accounts for about 50 percent of freestanding IRF revenues and 21 percent of revenues for the entire IRF industry also appears to have adequate access to capital. We were not able to determine the ability of independent freestanding facilities to raise capital.

Medicare payments and providers' costs—Total Medicare payments to IRFs grew slightly faster than aggregate costs in 2010 due, in part, to an update to the 2010 base payment rates for IRFs. The aggregate Medicare margin for IRFs in 2010 was 8.8 percent. We project that the 2012 IRF Medicare margin will be 8.0 percent. ■

FIGURE 9–1

Geographic distribution of IRFs, 2010



Note: IRF (inpatient rehabilitation facility).

Source: MedPAC analysis of 2010 Provider of Service files from CMS.

Background

After an illness, injury, or surgery, some patients enter intensive rehabilitation programs at an inpatient rehabilitation facility (IRF) and receive services such as physical and occupational therapy and rehabilitation nursing in a coordinated, multidisciplinary manner. For these services to qualify for Medicare coverage, the care for IRF patients must be supervised by a rehabilitation physician, use an interdisciplinary approach to care, and address a documented clinical need for therapy in at least two disciplines. IRFs may be specialized units within an acute care hospital or specialized freestanding hospitals, which tend to be larger. Approximately 80 percent of IRFs are hospital-based units; the remaining 20 percent are freestanding facilities. Hospital-based units accounted for almost 60 percent of Medicare payments to IRFs in 2010.

In 2010, there were about 1,180 IRFs in the United States, with at least one in every state and the District of Columbia (Figure 9-1). In general, IRFs are

concentrated in highly populated states that have large Medicare populations. 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. Given the number and distribution of these other types of rehabilitation therapy providers, it is unlikely that many areas exist where IRFs are the only provider of rehabilitation therapy services available to Medicare beneficiaries.

Almost 360,000 Medicare fee-for-service (FFS) beneficiaries received care in IRFs in 2010 (Table 9-1, p. 238). Relatively few Medicare beneficiaries use IRF services because, to qualify for Medicare coverage, IRF patients must be able to tolerate and benefit from intensive rehabilitation therapy, which typically consists of at least three hours of therapy a day for at least five days a week. Nevertheless, Medicare is the principal payer for IRF services, accounting for 60 percent of total IRF discharges in 2010. Almost all IRF patients (95 percent) were admitted to an IRF directly from an acute care hospital in 2010. A small percentage of patients, 2.5 percent, were admitted from a community setting, and the rest were admitted from other health care facilities, such as SNFs. Patients admitted to an IRF directly from the community must pay the Part A inpatient hospital deductible, which is $1,156 in 2012. With respect to patient demographics, most Medicare FFS IRF patients in 2010 were white (81 percent) and female (59 percent), 10 percent were African American, and 5 percent were Hispanic.

Medicare facility requirements and coverage criteria

To qualify as an IRF for Medicare payment, facilities first 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 furnish—through qualified personnel—rehabilitation nursing, physical therapy and occupational therapy, and, as needed, speech–language pathology, social services, psychological (including neuropsychological) services, and orthotic and prosthetic devices;
- have a medical director of rehabilitation, with training or experience in rehabilitating patients, who provides services in the facility on a full-time basis for freestanding facilities or at least 20 hours per week for hospital-based rehabilitation 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 treating the patient; and
- meet the compliance threshold, which specifies that no fewer than 60 percent of all patients admitted to the IRF must have at least 1 of 13 conditions specified by CMS as a primary diagnosis or comorbidity.[1]

The compliance threshold mandates that a certain proportion of patients in each IRF must have specific diagnoses identified by CMS as typically requiring intensive inpatient rehabilitation. The intent of the compliance threshold is to distinguish IRFs from acute care hospitals. From 1984 through 2004, the compliance threshold required that 75 percent of an IRF's cases have 1 of 10 diagnoses. In 2002, CMS suspended enforcement of the rule because of inconsistent enforcement patterns among Medicare's fiscal intermediaries. In 2004, CMS revised the compliance threshold policy and enforcement: first, by increasing the number of conditions that count toward the threshold to 13 (by redefining the arthritis conditions that counted);[2] second, by clarifying that only a subset of patients with major joint replacement—a condition that was commonly treated in IRFs—would count toward the compliance threshold; and third, by consistently enforcing IRFs' compliance with the threshold. The combination of not allowing most major joint replacement patients to count toward the threshold and renewed enforcement of the threshold resulted in a substantial decline in the volume of Medicare patients treated in IRFs after 2004. As volume declined, occupancy rates and the number of rehabilitation beds fell as well. Case-mix severity increased, however, as the IRF patient population shifted from less severe hip and knee patients to patients with more severe disorders who counted toward the threshold. Growth in cost per case increased as well—a function of greater patient severity (i.e., higher case-mix weight) and because IRFs' fixed costs were spread across fewer patients. The compliance threshold, originally set at 75 percent, was permanently capped at 60 percent in 2007 by the Medicare, Medicaid, and SCHIP Extension Act of 2007 (MMSEA). At that point, the industry was largely

operating at 60 percent compliance, and the industry supported MMSEA permanently capping the threshold at 60 percent. Since then, the industry has begun to stabilize in response to the compliance threshold and for the past several years all IRFs have met the compliance threshold.

Medicare applies additional criteria that govern whether IRF services are covered for an individual Medicare beneficiary. Revised coverage criteria, which became effective in January 2010, are clearer about which patients are appropriate to be treated in an IRF, when therapy must begin, and how and when beneficiaries are evaluated but are not major shifts or changes from the former requirements. Specifically:

- The patient requires therapy in at least two modalities, one of which must be physical or occupational therapy.
- The patient generally requires and can reasonably be expected to benefit from intensive rehabilitation therapy that most typically consists of at least three hours of therapy a day at least five days a week.
- An IRF admission for the purpose of assessing whether a patient is appropriate for IRF care is no longer covered and therapy must begin within 36 hours from midnight of the day of admission.
- The patient is sufficiently medically stable at the time of the IRF admission to be able to actively participate in intensive therapy.
- 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.

Revised process and documentation requirements were also effective January 2010. They include the following: a qualified clinician designated by a rehabilitation physician must conduct a preadmission screening generally within 48 hours before admission to the IRF; a rehabilitation physician must conduct a postadmission evaluation within 24 hours of admission; within 4 days of admission, an individualized care plan must be developed by a rehabilitation physician for each patient; the interdisciplinary team must meet once a week, in contrast to the prior requirement of once every two weeks; and a rehabilitation physician is required to approve the results of the preadmission screening, conduct the postadmission evaluation, and lead the interdisciplinary team.

FFS Medicare spending trends for IRFs

Before January 2002, IRFs were paid on the basis of their average costs per discharge, up to an annually adjusted facility-specific limit. Pursuant to the Balanced Budget Act of 1997, IRFs began to be paid in 2002 under a prospective payment system (PPS) based on per discharge rates that vary according to rehabilitation needs, area wages, and certain facility characteristics. As of fiscal year 2004, all IRFs were paid under the IRF PPS.

Aggregate expenditures for IRF services in the Medicare FFS program grew after implementation of the PPS in 2002, when these expenditures totaled nearly $5.7 billion; they grew at an annual rate of 6.7 percent to about $6.4 billion in 2004 (Table 9-1, p. 238). Between 2005 and 2008, however, aggregate FFS expenditures for IRFs fell, as more beneficiaries enrolled in Medicare Advantage plans and as facilities adjusted to meet the compliance threshold that CMS reinstated in 2004. FFS expenditures also fell when CMS reduced IRF payments by 1.9 percent in 2006 and by 2.6 percent in 2007 to adjust for changes in IRF coding practices that CMS analyses determined did not reflect real changes in IRF patients' acuity. In 2009, aggregate FFS expenditures for IRF services began to increase. In 2010, FFS spending on IRFs increased by almost 5 percent to $6.32 billion, the highest level since 2006 (not shown in table).

Are Medicare payments adequate in 2012?

To address whether payments for fiscal year 2012 are adequate to cover the costs that efficient providers incur or how much payments should change in fiscal year 2013, we examine several indicators of payment adequacy. Specifically, we assess beneficiaries' access to care by examining the supply and capacity of IRF providers and changes over time in the volume of services provided, quality of care, provider access to capital, and the aggregate relationship between Medicare's payments and IRF providers' costs. Our analysis this year found that the Medicare payment adequacy indicators for IRFs are relatively positive.

Beneficiaries' access to care: IRF supply and volume are relatively stable

We have no direct indicator of beneficiaries' access to care because no surveys exist that are specific to this

TABLE 9–1

Medicare FFS spending, volume, and utilization for IRFs, 2002–2010

						Average annual change		Annual change	
	2002	2004	2008	2009	2010	2002–2004	2004–2008	2008–2009	2009–2010
Medicare spending (in billions)	$5.65	$6.43	$5.95	$6.03	$6.32	6.7%	–1.9%	1.3%	4.8%
Number of cases	446,000	495,000	356,000	364,000	359,000	5.3	–7.9	2.2	–1.3
Unique patients per 10,000 FFS beneficiaries	115.7	123.0	91.5	93.0	91.1	3.1	–7.1	1.6	–2.1
Payment per case	$11,127	$13,290	$16,646	$16,552	$17,085	9.3	5.8	–0.6	3.2
ALOS (in days)	13.2	12.7	13.3	13.1	13.1	–2.3	1.3	–1.4	0.0

Note: FFS (fee-for-service), IRF (inpatient rehabilitation facility), ALOS (average length of stay). With respect to unique FFS patients in a particular year, each IRF FFS patient is counted only once during that year, regardless of whether the patient had multiple IRF admissions in that year. Data on spending are from the Office of the Actuary and the rest of the data are from MedPAR files. Data from the MedPAR files differ from the March 2011 report due to a refinement in the methodology used to analyze the MedPAR files. However, the trends in IRF volume described in previous reports—that volume declined after 2004, stabilized in 2008, and remained stable in 2009—are still consistent.

Source: MedPAC analysis of MedPAR data from CMS and data on aggregate Medicare spending for IRF services are from December 2011 estimates from the CMS Office of the Actuary.

small portion of the Medicare population. We also are not able to determine directly the necessity that rehabilitation services be provided in an IRF versus another post-acute care setting. However, our analyses of facility supply, occupancy rates, total number of IRF beds, and volume of services suggest that beneficiaries have sufficient access to IRF care.

Capacity and supply: Number of IRFs, occupancy rates, and number of rehabilitation beds remain relatively stable

The supply of IRFs increased slightly after implementation of the IRF PPS in 2002 and peaked at 1,235 facilities in 2005 (Table 9-2). The supply of IRFs has been declining since 2005 and decreased by 17 facilities between 2009 and 2010. However, the number of freestanding IRFs increased an average of 0.9 percent each year between 2005 and 2009 and increased by 3.6 percent between 2009 and 2010. The number of nonprofit IRFs declined by three between 2009 and 2010—the net result of a loss of four hospital-based IRFs and a gain of one freestanding IRF. Similarly, the number of for-profit IRFs fell by 1 between 2009 and 2010—the net result of a loss of 10 hospital-based for-profit IRFs and a gain of 9 freestanding for-profit IRFs. While changes in the number of IRFs vary by category, the overall picture suggests that the supply of IRFs is relatively stable under the PPS.

Occupancy rates provide another view of IRFs' capacity to serve patients, and they indicate that capacity is adequate to handle current demand and can likely accommodate future increases (Table 9-3). Occupancy rates fell from 2002 through 2007 and the decline accelerated in 2004 due to renewed enforcement of the compliance threshold. In 2008, overall occupancy rates increased to above 62 percent and continued to increase in 2009. Occupancy rates fell slightly, by half a percent, in 2010 but remained above 62 percent. In 2010, occupancy rates were higher for freestanding IRFs (67.2 percent) than for hospital-based IRFs (59.4 percent) and higher for IRFs in urban areas than in rural areas (63.6 percent and 49.7 percent, respectively). Occupancy rates in most states ranged from 42 percent to 79 percent.

The total number of rehabilitation beds nationwide is another measure of IRF capacity. After increasing between 2002 and 2003, the number of IRF beds declined after 2004, as the industry adjusted to a decrease in the volume of cases due to renewed enforcement of the compliance threshold (Table 9-4, p. 240). Between 2004 and 2008, the number of beds declined by an average of 1.1 percent each

TABLE 9–2

Supply of freestanding IRFs continued to increase in 2010, while total supply continued to decline modestly

	PPS						Average annual change	Annual change
Type of IRF	2004	2005	2006	2008	2009	2010	2005–2009	2009–2010
All IRFs	1,221	1,235	1,225	1,202	1,196	1,179	–0.8%	–1.4%
Urban	1,024	1,027	1,018	1,001	992	981	–0.9	–1.1
Rural	197	208	207	201	204	198	–0.5	–2.9
Freestanding	217	217	217	221	225	233	0.9	3.6
Hospital based	1,004	1,018	1,008	981	971	946	–1.2	–2.6
Nonprofit	768	768	758	738	732	729	–1.2	–0.4
For profit	292	305	299	291	295	294	–0.8	–0.3
Government	161	162	168	173	169	156	1.1	–7.7

Note: IRF (inpatient rehabilitation facility), PPS (prospective payment system). For all years, the rural/urban breakdown is by core-based statistical area definition.

Source: MedPAC analysis of 2010 Provider of Service files from CMS.

year. After remaining nearly stable between 2008 and 2009, the total number of IRF beds declined by almost 1 percent in 2010. The decline in IRF beds in 2010 is the result of a 1.6 percent decrease in hospital-based IRF beds and a 0.2 percent increase in freestanding IRF beds from 2009.

Volume of services: Volume of FFS patients in IRFs declined slightly in 2010

We measure patient volume as the total number of FFS IRF cases and the number of FFS IRF patients per 10,000 FFS beneficiaries. The latter measure removes the effect

TABLE 9–3

IRF occupancy rates remained relatively stable in 2010

						Percentage point change		
Occupancy rates	2004	2006	2008	2009	2010	2004–2008	2008–2009	2009–2010
All IRFs	67.8%	61.9%	62.1%	62.9%	62.4%	–5.7	0.7	–0.5
Hospital based	65.7	60.4	59.8	60.2	59.4	–5.9	0.4	–0.8
Freestanding	71.9	64.7	66.1	67.3	67.2	–5.7	1.2	–0.1
Urban	69.0	63.0	63.4	64.0	63.6	–5.6	0.6	–0.4
Rural	56.1	50.7	49.4	50.9	49.7	–6.8	1.5	–1.2
Number of beds								
1 to 10	55.2	49.5	51.6	49.6	49.9	–3.6	–2.0	0.2
11 to 21	63.2	58.7	57.5	57.5	56.3	–5.7	0.0	–1.2
22 to 59	68.1	61.5	61.2	62.7	62.8	–6.9	1.4	0.1
60 or more	71.1	65.4	66.8	67.3	66.6	–4.3	0.4	–0.7

Note: IRF (inpatient rehabilitation facility). Occupancy rate calculated based on total patient days divided by bed days available during the hospitals' cost reporting period. Column figures may not sum to 100 due to rounding.

Source: MedPAC analysis of Medicare hospital cost report data from CMS.

TABLE 9–4

Number of IRF beds remained relatively stable in 2010

Type of bed	2004	2006	2008	2009	2010	Average annual change 2004–2008	Annual change 2008–2009	Annual change 2009–2010
All IRFs	37,393	36,638	35,762	35,767	35,440	–1.1%	0.0%	–0.9%
Hospital based	23,742	23,778	22,670	22,267	21,907	–1.1	–1.8	–1.6
Freestanding	13,650	12,861	13,092	13,500	13,533	–1.0	3.1	0.2

Note: IRF (inpatient rehabilitation facility). Counts exclude data from Maryland, non-U.S. hospitals, and outliers. Number of beds is calculated by taking the total number of available bed days for all patients (not specific to Medicare) divided by the total number of days in the cost reporting period.

Source: MedPAC analysis of hospital cost report data from CMS.

of changes in Medicare Advantage enrollment and allows us to examine the prevalence of IRF use among Medicare FFS enrollees. Between 2002 and 2004, the number of cases and the number of patients per 10,000 FFS beneficiaries grew, with the number of cases increasing by an annual average of 5.3 percent (Table 9-1). However, volume declined substantially after 2004, as providers adjusted to renewed enforcement of the compliance threshold. From 2004 through 2008, the number of cases declined by an average of 7.9 percent each year; during the same period, the number of unique FFS patients per 10,000 FFS beneficiaries declined by an annual average of 7.1 percent. In 2008, the volume decline began to level off, coinciding with actions taken by the Congress in late 2007 to permanently cap the compliance threshold at 60 percent. In 2009, volume remained relatively stable, with the number of cases increasing by 2.2 percent and the number of unique patients per 10,000 FFS beneficiaries increasing by 1.6 percent.

In 2010, the number of Medicare FFS IRF patients declined slightly. The number of cases decreased by 1.3 percent between 2009 and 2010, and the number of unique patients per 10,000 FFS beneficiaries decreased by 2.1 percent. This slight decline in the number of cases may in part be due to the revised coverage criteria that went into effect in January 2010. The revised coverage criteria did not change but more clearly delineated which Medicare beneficiaries are appropriate for IRFs. Therefore, some patients that IRFs would have admitted previously might not have met the more specific coverage criteria in 2010.

The mix of patients treated by IRFs has changed since 2004, as IRFs admitted a higher percentage of patients with diagnoses that met the revised compliance threshold. The percentage of IRF cases with 1 of the 13 specified conditions has increased, according to our analysis of proprietary data for a sample of IRFs (Table 9-5).[3] In the first three years of renewed enforcement of the revised compliance threshold (2004–2006), the aggregate percentage of Medicare cases meeting the threshold increased rapidly from 45.1 percent to 60.5 percent. However, when MMSEA capped the compliance threshold permanently at 60 percent in 2007, the increase in the

TABLE 9–5

Compliance rate of Medicare IRF cases remained above 60 percent in 2011

	2004	2005	2006	2008	2010	2011
Estimated compliance rate of Medicare IRF cases	45.1%	55.6%	60.5%	61.4%	61.6%	61.2%

Note: IRF (inpatient rehabilitation facility). The data for 2011 are limited to discharges that occurred between January and June 2010. The compliance rate is the aggregate percent of IRF cases that fall into 1 of 13 CMS specified diagnoses. As of July 2007, 60 percent of a facility's cases must fall into one of these diagnoses for the facility to be paid as an IRF.

Source MedPAC analysis of 2004 to 2011 data from eRehabData®.

TABLE 9–6

IRF patient mix has changed, 2004–2011

Type of case	Percent of IRF Medicare FFS cases					Percentage point change, 2004–2011
	2004	2006	2008	2010	2011*	
Stroke	16.6%	20.4%	20.4%	20.1%	19.8%	3.2
Fracture of the lower extremity	13.1	16.1	16.0	14.3	13.9	0.8
Major joint replacement of the lower extremity	24.0	17.8	13.1	11.5	10.5	–13.6
Debility	6.1	6.2	9.1	10.0	10.4	4.3
Neurological disorders	5.2	7.0	8.0	9.8	10.3	5.1
Brain injury	3.9	6.0	7.0	7.3	7.5	3.6
Other orthopedic conditions	5.1	5.2	6.1	6.7	7.0	1.8
Cardiac conditions	5.3	4.0	4.7	4.9	5.1	–0.2
Spinal cord injury	4.2	4.6	4.3	4.3	4.3	0.1
Other	16.4	12.8	11.3	11.1	11.1	–5.3

Note: IRF (inpatient rehabilitation facility). FFS (fee-for-service). "Other" includes conditions such as amputations, major multiple trauma, and pain syndrome. Numbers may not sum to 100 percent due to rounding.
*Data are for the first six months of 2011.

Source: MedPAC analysis of inpatient rehabilitation facility patient assessment instruments from CMS for 2004–2010, and January 1 through June 30, 2011.

compliance rate leveled off and the rate remained about 61 percent through 2011.

Since 2004, the average case mix of IRF patients increased in severity, both for patients who met the compliance threshold and for those who did not. As expected, the cases that did not count toward the compliance threshold (noncompliant cases) were less complex than those that did (compliant cases), according to our analysis of proprietary data from eRehabData.com. In that analysis, all the cases treated by IRFs between 2004 and the first six months of 2011 were measured by the IRF PPS relative payment weights. In 2004, the average relative payment weight for compliant cases was about 1.28, compared with about 0.90 for noncompliant cases. In 2011, the average relative payment weight for compliant cases was 1.37, compared with 1.09 for noncompliant cases. The increase in the case mix of compliant cases leveled off after 2009, while the case mix of noncompliant cases continued to increase. The average relative payment weight for compliant cases dropped slightly from 1.38 in 2009 to 1.37 in 2010 and remained at 1.37 for the first six months of 2011. In contrast, the average relative payment weight for noncompliant cases increased from 1.07 to 1.08 and continued to increase to 1.09 in the first six months of 2011.

As IRFs have adjusted their patient admission patterns to meet the revised compliance threshold, the average case-mix severity of the Medicare FFS IRF population has increased, with the largest increases in case mix occurring during the first three years of renewed enforcement of the revised compliance threshold. The average case-mix severity of Medicare patients increased by 3.3 percent in 2005, 6.5 percent in 2006, and 2.5 percent in 2007.[4] After the compliance threshold was capped at 60 percent in 2007, the increase in patient severity slowed and case mix increased by almost 2 percent in 2008 and 2009. The increase in patient severity slowed even further after 2009, with average case mix increasing 0.4 percent in 2010 and 0.3 percent in 2011. These data are consistent with the stability in the average relative payment weight of compliant cases in 2010 and 2011, the slight increase in the payment weight for noncompliant cases for the same time period, and the compliance rate remaining at about 61 percent. In addition, between 2009 and 2010, the average length of stay for Medicare FFS IRF patients (Table 9-1) remained the same. The stability in the average length of stay may reflect IRFs' increasing experience with managing their current patient mix.

The change in case mix over time is also reflected in the shifting pattern of diagnoses admitted to IRFs among IRF FFS cases since 2004 (Table 9-6). The share of major joint replacements of the lower extremity fell by 13.6 percentage points between 2004 and the first half of 2011, consistent with the more limited definition of joint replacement patients that count toward the revised

TABLE 9–7

Top 10 types of cases in hospital-based and freestanding IRFs, 2010

Type of case	Type of IRF: Hospital based	Type of IRF: Freestanding
Stroke	22%	16%
Fracture of the lower extremity	15	12
Miscellaneous	12	12
Major joint replacement of the lower extremity	11	11
Brain injury	7	6
Neurological disorders	7	12
Other orthopedic conditions	5	9
Spinal cord injury	5	4
Cardiac conditions	4	5
Short-stay patients*	4	4

Note: IRF (inpatient rehabilitation facility).
*The short-stay category includes patients who expired while in the IRF.

Source: MedPAC analysis of 2010 Medicare claims data.

compliance threshold implemented in 2004. During the same period, the percentage of IRF patients with conditions included in the compliance threshold—such as stroke, brain injury, and neurological disorders — increased. Between 2010 and the first half of 2011, the share of brain injury cases increased by 0.2 percentage point and the share of neurological disorders increased by 0.5 percentage point; however, the share of strokes declined by 0.3 percentage point. The shares of debility cases and other orthopedic conditions have increased by 4.3 percentage points and 1.8 percentage points, respectively, since 2004. The growth in debility cases and other orthopedic conditions is more surprising, because neither is among the 13 conditions included in the compliance threshold.

Hospital-based and freestanding IRFs have relatively similar patient populations, according to our analysis of Medicare claims data (Table 9-7). In 2010, the top 10 types of cases were the same for both types of IRFs, and they accounted for 92 percent and 91 percent of cases in hospital-based IRFs and freestanding IRFs, respectively. Half of these conditions do not count toward the compliance threshold (miscellaneous, major joint replacement of the lower extremity, other orthopedic conditions, cardiac conditions, and short-stay patients). Although the 10 most common conditions were the same for hospital-based IRFs and freestanding IRFs, the distribution of those cases differed. Stroke patients constituted a higher share of hospital-based IRF cases than of freestanding IRF cases (22 percent compared with 16 percent), while patients with neurological disorders constituted a higher share of freestanding IRF cases (12 percent compared with 7 percent). Other orthopedic conditions, which do not count toward the compliance threshold, also accounted for a higher share of total cases in freestanding IRFs than in hospital-based IRFs (9 percent compared with 5 percent).

Under the IRF Medicare payment system, IRF patients are classified into 92 case-mix groups (CMGs). In 87 of these CMGs, patients are further categorized into 1 of 4 tiers based on the presence of certain comorbidities that have been found to increase the cost of care relative to the cost of caring for an average beneficiary in that CMG. Each tier has a specific payment that reflects the costliness of patients in that tier relative to the other tiers in a CMG.[5] For the 87 CMGs categorized into tiers, tier 1 reflects the costliest patients (i.e., it has the highest relative weight), tier 2 reflects the second costliest patients, tier 3 reflects the third costliest patients, and tier 4 reflects the least costly patients, who do not have any of the comorbidities that have been found to increase the cost of care. The distribution of Medicare IRF cases by tier is fairly consistent for hospital-based IRFs and freestanding IRFs (Table 9-8). More than 60 percent of cases in both hospital-based IRFs and freestanding IRFs are in tier 4 and

TABLE 9–8

Distribution of IRF cases by case-mix group tier, 2010

Tier	Type of IRF: Hospital based	Type of IRF: Freestanding
1	4%	4%
2	7	9
3	25	26
4 (no comorbidities)	63	61

Note: IRF (inpatient rehabilitation facility). IRF patients are classified into 92 case-mix groups and within 87 of these groups, patients are further categorized into one of four tiers based on the presence of certain comorbidities.

Source: MedPAC analysis of 2010 Medicare claims data.

TABLE 9–9

Share of hospital discharges to IRFs continues to decline for hip and knee replacements but remains stable for stroke

Condition	Discharge destination	Percent of hospital discharges					Percentage point change in share of hospital discharges	
		2004	2006	2008	2009	2010	2004–2009	2009–2010
Major joint replacement/ hip and knee replacement	IRF	28%	20%	14%	13%	12%	–15%	–1%
	SNF/swing bed	33	35	36	37	38	4	1
	Home health	21	27	30	31	32	10	1
	All other settings	18	18	19	19	18	1	–1
Stroke	IRF	18	19	19	19	19	1	0
	SNF/swing bed	27	26	25	26	26	–1	0
	Home health	11	12	12	12	12	1	0
	All other settings	45	44	44	43	43	–2	0

Note: IRF (inpatient rehabilitation facility), SNF (skilled nursing facility). "All other settings" include outpatient care, other inpatient facilities, and home. Discharge destination totals may not equal 100 percent due to rounding.

Source: MedPAC analysis of 2004 through 2010 hospital inpatient Medicare claims data from CMS.

do not have a specific comorbidity identified as increasing the cost of care, although hospital-based IRFs have a slightly larger share of tier 4 cases (63 percent compared with 61 percent for freestanding IRFs). Both types of IRFs have the same distribution of tier 1 cases, and freestanding IRFs have a slightly higher share of tier 2 and tier 3 cases.

The decline in IRF FFS volume coinciding with renewed enforcement of the compliance threshold has raised questions about the impact of the compliance threshold on beneficiaries' access to care. If patients who needed intensive rehabilitation services were able to obtain appropriate care in other settings, the reduction in IRF patient volume over the past few years may not have constituted an access problem. Because we cannot identify beneficiaries who would have received care in an IRF if not for the compliance threshold, we analyzed changes in posthospital discharge destinations for patients likely to need rehabilitation from 2004 through 2010. We found that among stroke cases the share of hospital patients discharged to IRFs and other settings remained largely unchanged (Table 9-9). In contrast, for hip and knee replacement cases, a condition for which CMS has limited the types of cases that count toward the compliance threshold, the relative share of hospital patients discharged to IRFs declined by more than half between 2004 and 2010. Over the same period, however, the share of patients with hip and knee replacements discharged to SNFs and home health agencies increased, suggesting that these beneficiaries were able to obtain rehabilitation care in other settings. CMS addressed the impact of the compliance threshold on beneficiaries' access to care in a 2010 report to the Congress mandated by MMSEA on the classification criteria for IRFs (Gage et al. 2010). The report, prepared for CMS by RTI, was unable to conclude definitively whether the compliance threshold has affected beneficiaries' access to rehabilitation services.

It is difficult to assess whether the rehabilitation care that patients receive is comparable across different post-acute settings in terms of quality, outcomes, and costliness (see Chapter 2 for a discussion of the challenges in making comparisons across settings of care). Overall, research studies do not conclusively identify one post-acute care setting as having better outcomes for rehabilitation patients. The 2010 RTI report for CMS analyzed peer-reviewed research on the effectiveness of IRFs compared with other post-acute care settings and concluded that the studies comparing outcomes in IRFs with outcomes in other post-acute care settings are limited because they do not adequately control for selection bias. The report also stated that the results from research comparing outcomes for lower extremity joint replacement patients and hip fracture patients in IRFs and SNFs are not consistent

across studies. In addition, a 2005 analysis prepared for the Commission found that, after controlling for patient selection, lower extremity joint replacement patients in IRFs and SNFs were more likely to be institutionalized (readmitted to a hospital or living in a nursing home) than patients who were discharged home after an acute care stay. However, differences in mortality rates across the settings were not statistically significant (Beeuwkes Buntin et al. 2005). The RTI report for CMS suggested that the standardized data from the Continuity Assessment Record and Evaluation (CARE) tool—a uniform post-acute care assessment tool being tested through the Medicare Post-Acute Care Payment Reform demonstration—can help CMS compare outcomes for rehabilitation care across settings. The report on the results of that demonstration is undergoing clearance. When it is released, the report may include CMS's plans for future use of the CARE tool.

Quality of care: Preliminary risk-adjusted measures show improved quality of care in IRFs but quality can still be improved

Our preliminary analysis of risk-adjusted quality measures shows that, relative to unadjusted measures, quality of care across the IRF industry improved between 2004 and 2009 (Table 9-10). However, these results are preliminary and future refinements or changes to the risk-adjustment methodology could produce different results. In previous Commission reports, we reported increases in Functional Independence Measure™ (FIM™) gain since 2004 (Medicare Payment Advisory Commission 2011). FIM gain is the difference between admission scores and discharge scores for the FIM item on the IRF–Patient Assessment Instrument (IRF–PAI).[6] However, we could not conclude that the observed improvements in FIM gain represented true quality-of-care improvements without controlling, through risk adjustment, for the changes in patient mix over the same time period.

To overcome this limitation, we contracted with researchers at RAND to develop risk-adjusted quality measures for IRFs at the facility level and to report on aggregate trends in IRF quality. We measured IRF quality through the following metrics: FIM gain, rates of discharge to the community, rates of discharge from an IRF to an acute care hospital (for any reason, not limited to preventable readmissions), admission to a SNF within 30 days of discharge to the community, and admission to an acute care hospital for any reason within 30 days of discharge to the community. The latter two measures are restricted to beneficiaries who were initially discharged home and then admitted to a SNF or readmitted to an acute care hospital. Our selection of the quality measures was informed by an expert panel meeting on IRF quality that we convened in 2010; researchers have used many of these measures to evaluate quality in IRFs or in other post-acute care settings.

The adjusted rates for the quality indicators were developed through fixed-effects risk-adjustment models using data for 2004 through 2009. These models are new and may be refined in the future. The main data source was the IRF–PAI, and researchers also used data from the Medicare Provider Analysis and Review (MedPAR) file to record comorbidities from the prior year and complications from the preceding acute stay, the Medicare Denominator file for patient demographic information, and the Provider of Services file for provider characteristics. The risk-adjustment models controlled for patient demographics (age, race, ethnicity, marital status, dual-eligible status, and disability status); patients' Impairment Group Code at admission (indicates a patient's medical condition); prior admission to an IRF; admission to the IRF from the community; certain comorbidities that have been shown in the literature to be predictive of hospital charges, length of stay, and patient health outcomes;[7] and certain complications present at admission to an acute care hospital that have a continued effect and could influence post-acute care outcomes.[8]

Unadjusted results for 2004 through 2009 showed improved FIM gain but poorer performance over time for the other four measures (Table 9-10). Unadjusted FIM gain increased from 25.3 in 2004 to 27.1 in 2009—an increase of 1.8—while rates of discharge to the community decreased and rates of acute care hospital discharge, hospital readmission, and SNF admission within 30 days of discharge increased. However, the preliminary models suggest that changes in the patient population—specifically, the increase in patient severity since 2004 due to renewed enforcement of the compliance threshold—affected IRFs' performance on these quality measures. After an adjustment was made for patient severity, the preliminary results suggest that performance on all the quality measures improved between 2004 and 2009. However, quality might not have improved or it might have improved less than our results suggest if the changes in patient severity since 2004 were due to changes in coding rather than actual changes in patient severity. In addition, future refinements to the model could produce different results.

TABLE 9–10

Preliminary results indicate that IRF quality of care improved across five risk-adjusted quality measures relative to the unadjusted rates, 2004–2009

	2004	2005	2006	2007	2008	2009
FIM™ gain						
Raw	25.3	25.8	25.9	26.2	26.5	27.1
Adjusted*	25.3	25.9	26.3	26.8	27.2	27.9
Discharge to community						
Raw	77.8%	75.4%	73.2%	72.1%	71.3%	71.0%
Adjusted*	77.8%	77.9%	78.1%	78.5%	78.4%	78.9%
Discharge to acute care hospital						
Raw	8.7%	9.1%	9.4%	9.9%	10.1%	10.2%
Adjusted*	8.7%	8.1%	7.6%	7.6%	7.6%	7.2%
Hospital readmission within 30 days after discharge to community						
Raw	10.8%	10.5%	11.0%	11.4%	11.4%	11.6%
Adjusted*	10.8%	9.8%	9.7%	9.6%	9.4%	9.3%
SNF admission within 30 days after discharge to community						
Raw	3.1%	3.2%	3.3%	3.5%	3.6%	3.7%
Adjusted*	3.1%	3.0%	2.9%	2.9%	2.9%	2.9%

Note: IRF (inpatient rehabilitation facility), SNF (skilled nursing facility), FIM™ (Functional Independence Measure™). FIM gain is the difference between the Functional Independence Measure on the IRF–Patient Assessment Instrument between admission and discharge. Adjusted rates were developed from risk-adjustment models and hold the 2004 Medicare IRF patient cohort constant through 2009.
*Adjusted rates are preliminary and the risk-adjustment models may be further refined in the future.

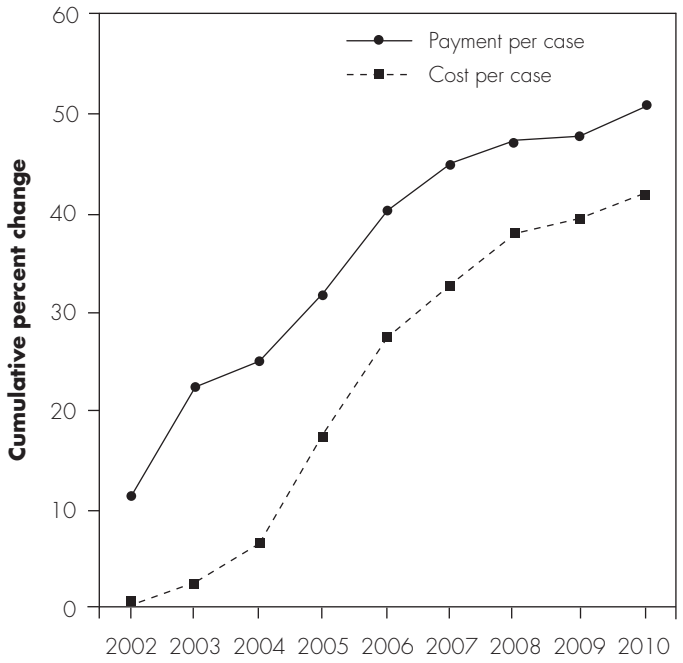
Source: RAND analysis of the IRF–Patient Assessment Instrument (IRF–PAI), MedPAR, denominator file, and provider of services file.

Table 9-10 shows the preliminary adjusted results for each quality measure. These adjusted rates were developed by holding the 2004 cohort of Medicare patients constant and modeling that cohort through the 2004 through 2009 year-specific risk-adjustment models. This methodology identifies what quality of care would have been in 2005 through 2009 had patient mix not changed since 2004. The adjusted FIM gain was higher than the raw FIM gain each year from 2005 through 2009, and the adjusted increase in FIM gain between 2004 and 2009 was higher than the unadjusted difference (2.6 and 1.8, respectively). While unadjusted rates of discharge to the community declined by 6.8 percentage points between 2004 and 2009, the adjusted rates of discharge to the community increased by 1.1 percentage points. For the remaining three quality measures, the unadjusted hospital or SNF admission rates increased between 2004 and 2009; however, after patient mix was held constant, rates of discharge to acute care hospitals declined from 2004 through 2009 by 1.5 percentage points, rates of hospital admission within 30 days after discharge to the community declined by 1.5 percentage points, and rates of SNF admissions within 30 days after discharge to the community decreased by 0.2 percentage point.

Although risk-adjusted quality of IRF care has improved since 2004, there is still room for improvement. After controlling for patient characteristics, 7.2 percent of IRF patients are readmitted to an acute care hospital directly upon discharge from an IRF, an additional 9.3 percent of IRF patients are readmitted to an acute care hospital within 30 days after they were discharged home from an IRF, and 2.9 percent of patients are admitted to a SNF within 30 days after they were discharged home. While we do not

FIGURE 9–2

Under the PPS, IRFs' payments per case have consistently risen faster than costs, 2002–2010



Note: PPS (prospective payment system), IRF (inpatient rehabilitation facility). Data are from consistent two-year cohorts of IRFs. Costs are not adjusted for changes in case mix.

Source: MedPAC analysis of Medicare cost report data from CMS.

expect IRF patients to never be readmitted to a hospital or admitted to a SNF, these results suggest areas for improvement in the quality of care IRFs provide.

Providers' access to capital: IRFs appear to have adequate access to capital

Eighty percent of IRFs are hospital-based units that have access to capital through their parent institution. As described in Chapter 3 of this report, inpatient hospitals' access to capital appears adequate. Levels of hospital bond issuances and spending on hospital construction moderated somewhat in 2010 but remain high. Further, compared with previous years, in 2010 the number of hospital merger and acquisition transactions increased and the degree of hospital consolidation increased.

As for freestanding IRFs, an analysis of one major national chain found that they are able to access capital markets because they have positive revenue growth. However, the cost to the chain of accessing that capital under the equity and debt capital markets increased in 2011 because of proposed policies specific to IRFs that were discussed, but not implemented, as part of congressional deliberations on deficit reduction and job creation toward the end of 2011. Besides this chain, most other freestanding facilities are independent or local chains with only a few providers (for profit or nonprofit). The extent to which these providers have access to capital is less clear.

Medicare payments and providers' costs: Payments to IRFs have grown faster than costs since 2002 PPS implementation

Overall, Medicare's payments per case to IRFs have grown faster than IRFs' costs per case since implementation of the PPS in 2002, even though costs per case have grown faster than payments since 2004 (Figure 9-2). Costs per case grew rapidly between 2004 and 2006, reaching a high of 11.1 percent growth in 2005. During that time, IRFs' fixed costs were being spread over fewer cases because of a decline in the volume of cases, while patient severity increased consistent with the revisions to and renewed enforcement of the compliance threshold. Cost growth slowed after 2006 as patient volume steadied; in 2010, payments grew faster than costs at 2.9 percent for payments compared with 2.5 percent for costs.

The average Medicare FFS payment per case has increased since 2002 (Table 9-1). Payments per case grew by an annual average of 9.3 percent during the first two years of the PPS (2002–2004) and by an annual average of 5.8 percent between 2004 and 2008 when patient severity increased as IRFs responded to renewed enforcement of the compliance threshold. The average payment per case declined between 2008 and 2009 because of a zero payment update in 2009, as required by MMSEA, and CMS's adjustment of the 2009 outlier threshold. MMSEA also required no update for the second half of 2008; therefore, payments for 2009 in effect were held at 2007 levels. Between 2009 and 2010, the average payment per case increased by 3.2 percent, although the number of cases fell by 1.3 percent over that time period. The increase in average payment per case was due to a 0.4 percent increase in case-mix severity, a 2010 update to the base rates of 2.25 percent, and a 4.4 percent increase in outlier payments.

Standardized IRF costs reflect economies of scale

Adjusting IRF costs per discharge for differences in wages, case mix, and outlier payments permits a standardized comparison of costs across different types

TABLE 9–11

Mean adjusted costs per discharge are lower for freestanding IRFs and larger facilities, 2010

Type of IRF	Mean adjusted cost per discharge
All IRFs	$15,205
Hospital based	15,940
Freestanding	12,050
Urban	14,573
Rural	18,338
Number of beds	
1 to 10	18,285
11 to 21	16,089
22 to 59	14,486
60 or more	12,243

Note: IRF (inpatient rehabilitation facility). Cost per discharge is standardized for the wage index, case mix, and outliers.

Source: MedPAC analysis of 2010 standard analytical file and Medicare cost report data from CMS.

of IRFs. The mean adjusted cost per discharge for all IRFs in 2010 was $15,205 (Table 9-11). On average, after adjustment, costs per discharge in freestanding IRFs were about $3,890 (24 percent) lower than in hospital-based IRFs, and costs per discharge in urban IRFs were approximately $3,766 (21 percent) lower than in rural IRFs. Average costs per discharge also declined as a facility's number of beds increased. In 2010, costs per discharge were $6,042 (33 percent) lower in facilities with more than 60 beds than in facilities in the 1- to 10-bed range. The differences in costs by number of beds suggest that larger facilities have economies of scale that result in lower costs per discharge.

We stratified IRFs into quartiles of standardized costs to compare the characteristics of facilities in the low-cost and high-cost quartiles (Table 9-12). In 2010, the mix of hospital-based and freestanding IRFs changed across quartiles, with the low-cost quartile having the highest percentage of freestanding IRFs and the top quartile consisting of nearly all hospital-based facilities. IRFs in the low-cost quartile also tended to be larger facilities. The median number of beds in the low-cost quartile was 40 compared with the high-cost quartile's median of 17 beds. Higher occupancy was another characteristic of IRFs in the low-cost quartile. The median occupancy rate for IRFs in the low-cost quartile was 70 percent while the rate in the high-cost quartile was 49 percent. Case mix did not vary much across quartiles, suggesting that number of beds and occupancy rates rather than case mix accounted for lower costs per discharge. The median Medicare margins reflect the differences in adjusted costs. The median margin for IRFs in the low-cost quartile of costs was 22.8 percent compared with –25.5 percent for IRFs in the top quartile.

IRF Medicare margins increased in 2010

Average IRF Medicare margins increased between 2009 and 2010. During the first two years of the IRF PPS, margins rose rapidly, reaching 17.8 percent in 2003 with all IRF provider types experiencing solid gains (Table 9-13, p. 248). After this rapid buildup, margins declined moderately each year but remained at a healthy 8.8 percent in 2010. The decline in margins over this period was mostly due to large drops in patient volume and fixed costs spread over fewer patients. The drop in margins from 2007 to 2009, however, was due to a zero update to the base rates for half of 2008 and for all of 2009 that resulted in

TABLE 9–12

Higher number of beds, occupancy rates, and case-mix index are characteristics of IRFs in the low-cost quartile of standardized costs, 2010

	Quartile	
Characteristic	Low cost	High cost
Number of IRFs	272	272
Percent:		
Hospital based	51.5%	95.6%
Freestanding	48.5	4.4
Urban	93.8	63.6
Rural	6.3	36.4
Median:		
Medicare margin	22.8%	–25.5%
Number of beds	40	17
Occupancy rate	70%	49%
Case-mix index	1.23	1.18

Note: IRF (inpatient rehabilitation facility). Costs per discharge are standardized for the wage index, case mix, and outliers.

Source: MedPAC analysis of 2010 standard analytical file and Medicare cost report data from CMS.

TABLE 9–13

IRFs' Medicare margins rose in 2010 but vary by type of facility

	PPS								
Type of IRF	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
All IRFs	10.8%	17.8%	16.7%	13.4%	12.4%	11.9%	9.5%	8.4%	8.8%
Urban	11.3	18.2	16.9	13.5	12.6	12.1	9.7	8.6	9.1
Rural	5.9	12.5	13.9	11.8	10.6	10.0	7.6	6.3	5.5
Freestanding	18.5	22.9	24.7	20.7	17.5	18.5	18.2	20.3	21.4
Hospital based	6.1	14.8	12.2	9.3	9.7	8.1	4.1	0.4	–0.2
Nonprofit	6.5	14.7	12.8	10.3	10.7	9.7	5.6	2.3	2.0
For profit	18.5	23.7	24.4	19.7	16.3	16.8	16.7	19.0	19.8
Government	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of beds									
1 to 10	1.6	3.7	3.4	–2.8	–3.9	–2.9	–5.0	–11.6	–10.9
11 to 21	3.3	11.2	9.6	6.1	7.0	5.4	0.7	–2.6	–3.2
22 to 59	10.0	17.9	16.1	13.4	12.4	11.2	8.5	6.6	7.0
60 or more	16.4	22.2	22.5	19.0	17.5	18.0	17.1	18.3	18.5

Note: IRF (inpatient rehabilitation facility), PPS (prospective payment system), N/A (not available). Government-owned providers 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.

Medicare payment rates remaining at 2007 levels. In 2010, IRFs received a 2.25 percent update to the base rates and aggregate IRF margins increased from 8.4 percent in 2009 to 8.8 percent in 2010.

As in other Medicare sectors, margins vary substantially across providers. Freestanding and for-profit IRFs—which had the highest margins in 2004 (greater than 24 percent)—continued to exhibit the best financial performance. Margins in 2010 for freestanding and for-profit IRFs were 21.4 percent and 19.8 percent, respectively. (Freestanding and for-profit IRFs are dominated by one provider chain that accounts for about 50 percent of freestanding and for-profit revenues and 21 percent of revenues for the industry.) In comparison, hospital-based and nonprofit IRFs had lower margins, at –0.2 percent and 2.0 percent, respectively. Total (all payer) margins for freestanding facilities were 7.6 percent in 2009 and increased to 10.2 percent in 2010.[9]

The difference between the 21.4 percent margins for freestanding facilities and the –0.2 percent margins for hospital-based units in 2010 was likely due to volume and the ability to constrain cost growth. Hospital-based units in general have lower occupancy rates than freestanding facilities and tend to be smaller facilities—more than half of hospital-based IRFs (58 percent) have fewer than 21 beds, whereas 50 percent of freestanding IRFs are facilities with 60 beds or more. In addition, hospital-based IRFs have higher direct and indirect costs than freestanding IRFs. In 2010, hospital-based IRFs had 30.2 percent higher direct costs per case, 33.9 percent higher direct costs per diem, 10.8 percent higher indirect costs per case, and 15.6 percent higher indirect costs per diem (Table 9-14). Although hospital-based IRFs had higher indirect costs per case and per diem, indirect costs were a larger share of freestanding IRFs' aggregate costs (40.3 percent) compared with those of hospital-based IRFs (34.6 percent). This finding suggests that freestanding IRFs were better than hospital-based IRFs at managing their costs, because, despite their larger share of indirect costs, they had lower indirect costs per case and per diem.

In addition, although hospital-based IRFs had –0.2 percent margins, on aggregate they were still able to cover their direct costs. The direct cost margin (calculated as payments minus direct costs, divided by payments) for

TABLE 9–14

Freestanding IRFs have a higher share of indirect costs but lower indirect costs per case and per diem, 2010

	Type of IRF		
	Hospital based	Freestanding	Percent difference
Direct cost			
Per case	$11,311	$7,889	30.2%
Per diem	886	586	33.9
Indirect cost			
Per case	5,981	5,334	10.8
Per diem	469	396	15.6
			Percentage point change
Indirect cost share	34.6%	40.3%	–5.7
Direct cost margin	34.4	53.1	–18.7

Note: IRF (inpatient rehabilitation facility).

Source: MedPAC analysis of cost report data from CMS.

hospital-based IRFs was 34.4 percent, which demonstrates that Medicare payments for hospital-based IRFs were sufficient for the units to cover their direct costs. Further, hospital margins were better for hospitals that had IRF units. Medicare margins for inpatient hospitals with IRF units were –3.6 percent compared with –5.2 percent for hospitals without an IRF unit, which suggests that IRF units were able to make positive financial contributions to their parent hospitals.

Medicare margins for urban and rural IRFs

To further assess the differences in Medicare payments to IRFs in urban and rural areas, we analyzed Medicare cost per case, payment per case, and margins for IRFs located in urban areas and in three types of rural areas: micropolitan, adjacent to an urban area, and nonadjacent to an urban area. All IRFs in rural areas receive a payment adjustment for rural status. Since fiscal year 2010, CMS has set the adjustment at 18.4 percent.

Medicare margins in 2010 were highest and cost per case was lowest for IRFs in rural areas nonadjacent to urban areas (Table 9-15). These IRFs had aggregate Medicare margins of 16.1 percent compared with 9.0 percent for urban IRFs and 4.3 percent for IRFs in micropolitan areas. Rural IRFs in areas adjacent to urban areas had the lowest

TABLE 9–15

Medicare margins, cost and payment per case for IRFs in rural and urban areas, 2010

		Rural		
	Urban	Micropolitan	Adjacent to urban	Nonadjacent to urban
Medicare margin	9.0%	4.3%	–5.6%	16.1%
Cost per case	$15,517	$16,098	$21,963	$14,630
Payment per case	$17,046	$16,828	$20,801	$17,445

Note: IRF (inpatient rehabilitation facility). Cost and payment per case are unadjusted for wages, case mix, and outliers.

Source: MedPAC analysis of cost report data from CMS.

margins at –5.6 percent, the highest cost per case, and the highest payment per case. These data suggest that the rural adjustment is not having a uniform impact on all IRFs in rural areas. However, the averages for the rural adjacent and nonadjacent categories are more affected by individual facility variation because of the small number of facilities in those categories.

We also assessed the relationship between all payer, or total, volume and Medicare margins and whether this relationship differs for IRFs in urban and rural areas. For urban and rural IRFs, margins increased as total volume increased (Table 9-16). Urban and rural IRFs in the lowest and second lowest quintiles of volume had negative margins. Margins for urban and rural IRFs in the fourth volume quintile were healthy, while margins were in the double digits for IRFs with the highest volume. These results are consistent with those of our standardized cost analysis, which shows that IRFs with large margins tended to have economies of scale.

These data suggest that the rural adjustment for IRFs is not well targeted. It appears that low volume, rather than rural status alone, affects an IRF's ability to operate with a healthy Medicare margin. Table 9-16 demonstrates that volume is a strong determinant of whether an IRF operates with a positive or negative margin and of the magnitude of the Medicare margin. This trend was consistent for urban and rural IRFs.

TABLE 9–16

Medicare margins for urban and rural IRFs by total volume, 2010

	Median Medicare margin	
Total (all payer) volume	**Urban**	**Rural**
Lowest quintile	–16.1%	–28.7%
Second quintile	–5.4	–8.8
Third quintile	1.4	–3.4
Fourth quintile	9.3	2.4
Fifth quintile	18.6	16.0

Note: IRF (inpatient rehabilitation facility).

Source: MedPAC analysis of cost report data from CMS.

Medicare margins for 2012

To project the aggregate Medicare margin for 2012, we model the policy changes that will go into effect in 2011 and 2012. These policies include:

- increasing payment rates for fiscal year (FY) 2011 by 2.16 percent, the net result of a 2.5 percent market basket update, a 0.25 percent market basket reduction per the Patient Protection and Affordable Care Act of 2010 (PPACA), and an estimated 0.09 percent payment decrease due to lower outlier payments;[10] and
- increasing payment rates for FY 2012 by 2.2 percent, the net result of a 2.9 percent market basket update, a 0.1 percent market basket reduction per PPACA, a –1.0 percent market basket reduction for productivity per PPACA, and an estimated 0.4 percent payment increase due to changes in the outlier threshold.[11]

We project that aggregate Medicare margins in 2012 will decline from 8.8 percent in 2010 to about 8.0 percent in 2012. The projected decrease in the margin is largely the result of the PPACA provision that reduces the market basket update by 0.25 percent in 2011 and by 0.1 percent in 2012 and the PPACA provision to reduce IRF payments in 2012 to reflect productivity gains. The margin projection for 2012 assumes that costs will increase by the market basket and does not assume increased cost control efforts by IRFs in response to the market basket reductions or the economy. To the extent that IRFs restrain their cost growth in response to economic pressures, the projected 2012 margin could be higher than we have estimated.

How should Medicare payments change in 2013?

Our indicators of Medicare payment adequacy for IRFs are positive. FFS payments to IRFs increased in 2010, supply and capacity are relatively stable and adequate to meet demand, and volume is relatively stable as well. Risk-adjusted quality measures indicate that quality of care improved between 2004 and 2009, although further improvements in quality can be made. Access to credit appears adequate for hospital-based and freestanding IRFs. Finally, we calculate a margin of 8.8 percent in 2010 and project a margin of 8.0 percent for 2012. On the basis of our assessment of the indicators of payment adequacy, we conclude that IRFs should be able to accommodate cost changes in fiscal year 2013 with payments held at 2012 levels.

RECOMMENDATION 9

The Congress should eliminate the update to the Medicare payment rates for inpatient rehabilitation facilities in fiscal year 2013.

RATIONALE 9

Our indicators of Medicare payment adequacy are positive. Capacity remains adequate to meet demand. Although IRFs' efforts to meet the compliance threshold since 2004 had a significant impact on IRF volume, this decline was consistent with the underlying reason for the compliance threshold—to direct the most clinically appropriate types of cases to this intensive, costly setting. With the compliance threshold permanently set at 60 percent, Medicare FFS IRFs remained relatively stable in 2010 and FFS spending on IRFs increased by 4.8 percent. Our projected 2012 aggregate Medicare margin is about 8.0 percent, down slightly from an estimated 8.8 percent in 2010. To the extent that IRFs restrain their cost growth in response to fiscal pressure from PPACA's market basket reductions and productivity adjustment or the economic downturn, the projected 2012 margin could be higher than we have estimated. On the basis of these analyses, we believe that IRFs could absorb cost increases and continue to provide care to clinically appropriate Medicare cases with no update to payments in 2013. We will closely monitor our payment update indicators and will be able to reassess our recommendation for the IRF payment update in the next fiscal year.

IMPLICATIONS 9

Spending

- The payment update for IRFs under current law in FY 2013 consists of a forecasted 2.9 percent market basket update for rehabilitation, psychiatric, and long-term care hospitals; a forecasted 0.9 percent productivity adjustment descrease off the market basket update; and a 0.1 percent market basket reduction per PPACA.[12] This recommendation would decrease federal program spending relative to current law by between $50 million and $250 million in 2013 and by less than $1 billion over five years. The spending implication of this recommendation is based on Medicare spending projections that were made prior to a sequester, as the recommendation was developed and voted on before the sequester was triggered and became current law. If a Medicare sequester does occur, it will change the spending implication of the recommendation.

Beneficiary and provider

- We do not expect this recommendation to have adverse impacts 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 a minimal effect on providers' willingness and ability to care for Medicare beneficiaries is expected. ■

Endnotes

1 This rule does not take the place of Medicare's general medical necessity requirements.

2 The 13 conditions are stroke; spinal cord injury; congenital deformity; amputation; major multiple trauma; hip fracture; brain injury; neurological disorders (e.g., multiple sclerosis, Parkinson's disease); burns; three arthritis conditions for which appropriate, aggressive, and sustained outpatient therapy has failed; and hip or knee replacement when bilateral, body mass index ≥ 50, or age 85 or older. These conditions may count toward an IRF meeting the compliance threshold if they are being actively treated in conjunction with the condition that is the primary cause for admission. For more information on Medicare's IRF payment system, see the Commission's payment basics document at http://www.medpac.gov/documents/MedPAC_Payment_Basics_11_IRF.pdf.

3 The proprietary data come from eRehabdata.com, which has data on a subset of IRFs that subscribe to their inpatient rehabilitation outcomes system. eRehabdata.com has developed a protocol to assess whether a case satisfies the compliance threshold.

4 Source: MedPAC analysis of the Inpatient Rehabilitation Facility–Patient Assessment Instrument. Annual percent changes in average case mix are for the first half of one year to the first half of the following year.

5 The other five CMGs are for short-stay patients or patients who expire while in the IRF and payment for those CMGs does not differ across tiers.

6 Scores for each of the 18 FIM items range from 1 (complete dependence) to 7 (independence). The scores on the 18 measures are summed to calculate a total score.

7 These comorbidities were identified by Elixhauser and colleagues (1998) and include congestive heart failure, valvular disease, pulmonary circulation disorders, peripheral vascular disorders, hypertension, paralysis, other neurological disorders, chronic pulmonary disease, diabetes (uncomplicated), diabetes (complicated), hypothyroidism, renal failure, liver disease, peptic ulcer disease excluding bleeding, AIDS, lymphoma, metastatic cancer, rheumatoid arthritis/collagen vascular diseases, coagulopathy, obesity, weight loss, fluid and electrolyte disorders, blood loss anemia, deficiency anemia, alcohol abuse, drug abuse, psychoses, and depression.

8 These conditions were identified by Iezzoni and colleagues (1994) and include postoperative pulmonary compromise; postoperative gastrointestinal hemorrhage; cellulitis or decubitus ulcer; septicemia; pneumonia; mechanical complications due to a device, implant, or graft; shock or arrest in the hospital; postoperative acute myocardial infarction (AMI); postoperative cardiac abnormalities other than AMI; venous thrombosis and pulmonary embolism; procedure-related perforation or laceration; acute renal failure; delirium; and miscellaneous complications.

9 Total margins for hospital-based units also reflect the total margins for the entire hospital rather than for the IRF unit. For that reason, we do not present total margins for hospital-based units, as they do not reflect the total margin on IRF services.

10 In the fiscal year 2011 IRF final rule, CMS projected that actual outlier payments in fiscal year 2010 would be 3.1 percent of total payments. Consequently, CMS adjusted the outlier threshold for fiscal year 2011 to achieve the standard target of outlier payments equaling 3.0 percent of total payments for fiscal year 2011. This adjustment is projected to result in a 0.09 percent decrease in total IRF payments in 2011 relative to 2010.

11 In the fiscal year 2012 IRF final rule, CMS projected that actual outlier payments in fiscal year 2010 would be 2.6 percent of total payments. Consequently, CMS adjusted the outlier threshold for fiscal year 2011 to achieve the standard target of outlier payments equaling 3.0 percent of total payments for fiscal year 2011. This adjustment is projected to result in a 0.4 percent increase in total IRF payments in 2012 relative to 2011.

12 This market basket forecast and productivity adjustment were made in the fourth quarter of 2011. CMS will use the most recent forecast available when setting updates, which may differ from the number we report here.

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CHAPTER 10

Long-term care hospital services

RECOMMENDATION

10 The Secretary should eliminate the update to the payment rates for long-term care hospitals for fiscal year 2013.

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

CHAPTER 10

Long-term care hospital services

Chapter summary

Long-term care hospitals (LTCHs) furnish care to patients with medically complex problems—such as prolonged mechanical ventilation or multiple organ failure—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 have an average length of stay greater than 25 days for its Medicare patients. Medicare is the predominant payer for most LTCHs, accounting for about two-thirds of LTCH discharges. In 2010, Medicare spent $5.2 billion on care furnished in roughly 412 LTCHs nationwide. About 118,300 beneficiaries had almost 134,700 LTCH stays.

Assessment of payment adequacy

***Beneficiaries' access to care*—**We have no direct measures of beneficiaries' access to LTCH services. Instead, we consider the capacity and supply of LTCH providers and changes over time in the volume of services furnished.

- ***Capacity and supply of providers*—**In spite of the moratorium imposed by the Medicare, Medicaid, and SCHIP Extension Act of 2007 and subsequent amendments, the number of LTCHs filing Medicare cost reports increased 6.1 percent between 2008 and 2010. Almost all of this growth took place in 2009. As expected, the entry of new LTCHs into the

In this chapter

market slowed significantly during the later years of the moratorium. Only one new LTCH filed a Medicare cost report in 2010.

- ***Volume of services*—**Controlling for the number of fee-for-service beneficiaries, we found that the number of LTCH stays rose 3.5 percent between 2009 and 2010, suggesting that access to care is not a problem.

***Quality of care*—**Unlike most other health care facilities, LTCHs currently do not submit quality data to CMS. Using claims data, we found stable or declining rates of readmission, death in the LTCH, and death within 30 days of discharge for most of the top 25 diagnoses in 2010.

***Providers' access to capital*—**The moratorium on new beds and facilities reduces the need for capital in the industry by eliminating opportunities for LTCH expansion. However, in 2011 the two major LTCH chains, which together own slightly more than half of all LTCHs, acquired the capital needed to purchase other LTCHs as well as other post-acute care providers. Smaller LTCH chains and nonchain LTCHs likely do not have the same access to capital.

***Medicare payments and providers' costs*—**Between 2005 and 2008, growth in cost per case outpaced that for payments, as regulatory changes to Medicare's payment policies for LTCHs slowed growth in payment per case to an average of 1.4 percent per year. However, between 2008 and 2009, growth in payments per case accelerated to 5.3 percent, about twice as much as the growth in costs. This surge was due in part to congressional actions that halted or rolled back implementation of CMS regulations designed to reduce total payments to LTCHs. Between 2009 and 2010, payment growth slowed to 2 percent, while cost growth was held under 1 percent. The 2010 Medicare margin for LTCHs was 6.4 percent. We expect growth in costs to be modest, albeit somewhat greater than the current pace—roughly similar to the latest forecast of the market basket for 2012 of 2.3 percent. As a result, we estimate LTCHs' aggregate Medicare margin will be 4.8 percent in 2012.

Issues in Medicare payment for LTCH services

Research by the Commission and others has been unable to clearly distinguish LTCH patients from the medically complex patients receiving care in acute care hospitals and some skilled nursing facilities. Such research has also consistently found that the cost of treatment for many medically complex cases is higher for beneficiaries who are admitted to LTCHs than for those who are not and has shown that outcomes for most medically complex beneficiaries who receive care in LTCHs are comparable to those observed in acute care hospitals.

If LTCHs are to continue to be recognized as a distinct entity for purposes of Medicare payment, then it is crucial that providers be able to distinguish medically complex patients in need of hospital-level care from those who can be appropriately treated in post-acute settings. Further, if medically complex cases in LTCHs are, in essence, indistinguishable from medically complex cases in acute care hospitals, then Medicare must ensure that its payments for the same set of services are equitable, regardless of where the services are provided. Finally, policymakers must consider whether certain models of care will best serve the needs of medically complex patients. These steps will help ensure that Medicare beneficiaries receive appropriate, high-quality care in the least costly setting consistent with their clinical conditions. ■

Background

Patients with medically complex problems—such as prolonged mechanical ventilation or multiple organ failure—may need hospital-level care for relatively extended periods. Some are treated in long-term care hospitals (LTCHs). These facilities can be freestanding or colocated with other hospitals as hospitals within hospitals or satellites. To qualify as an LTCH for Medicare payment, a facility must meet Medicare's conditions of participation for acute care hospitals and have an average length of stay greater than 25 days for its Medicare patients. (By comparison, the average Medicare length of stay in acute care hospitals is about five days.) There are no other criteria defining LTCHs, the level of care they furnish, or the patients they treat.[1] Because of the relatively long stays and the level of care provided, care in LTCHs is expensive. Medicare is the predominant payer for most LTCHs, accounting for about two-thirds of LTCH discharges. In 2010, Medicare spent $5.2 billion on care furnished in an estimated 412 LTCHs nationwide. About 118,300 beneficiaries had almost 134,700 LTCH stays.

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 based primarily on diagnoses and procedures. MS–LTC–DRGs are the same groups used in the acute inpatient PPS but have relative weights specific to LTCH patients, reflecting the average relative costliness of cases in the group compared with that for the average LTCH case. The LTCH PPS has outlier payments for patients who are extraordinarily costly. The PPS pays differently for short-stay outlier cases (patients with shorter than average lengths of stay), reflecting CMS's contention that Medicare should pay adjusted rates for patients with relatively short lengths of stay to reflect the reduced costs of caring for them.[3]

LTCH discharges are concentrated in a relatively small number of diagnosis groups. In fiscal year 2010, the top 25 LTCH diagnoses made up 62 percent of all LTCH discharges (Table 10-1, p. 262). The most frequently occurring diagnosis was MS–LTC–DRG 207, respiratory diagnosis with ventilator support for 96 or more hours. Nine of the top 25 diagnoses, representing 33 percent of LTCH patients, were respiratory conditions.

The past few years have seen significant growth in the number of cases admitted to LTCHs with infections. Between 2008 and 2010, the number of beneficiaries admitted with osteomyelitis with major comorbidities or complications grew 27 percent, nine times as fast as the number of all LTCH admissions. Over the same period, the number of beneficiaries admitted with postoperative or post-traumatic infections with major comorbidities or complications climbed 22 percent, while the number of beneficiaries admitted with sepsis and cellulitis increased 20 percent and 19 percent, respectively. At the same time, the number of beneficiaries admitted to LTCHs with skin ulcers fell 21 percent.

Over the past decade, there has been marked growth in the number and the share of critically ill patients transferred from acute care hospitals to LTCHs. Kahn and colleagues found that, though the overall number of Medicare admissions to acute care hospital intensive care units (ICUs) fell 14 percent between 1997 and 2006, the number of Medicare ICU patients discharged to LTCHs almost tripled. As a result, the share of all critical care hospitalizations ending in transfer to an LTCH climbed from 0.7 percent in 1997 to 2.5 percent in 2006 (Kahn et al. 2010).[4]

The number of LTCHs has grown in concert. But many LTCHs that have entered the Medicare program are located in markets where LTCHs already existed instead of in new markets with few or no LTCHs.[5] This practice is somewhat counterintuitive, because these facilities are supposed to be serving unusually sick patients, and one would expect such patients to be relatively rare. Indeed, the Commission's analysis of LTCH claims from 2010 found that average case mix for LTCH admissions is lower in communities with the highest use of LTCHs compared with communities with the lowest use of LTCHs.[6] This finding suggests that an oversupply of LTCH beds in a market may result in admissions to LTCHs of less complex cases that could appropriately be treated in less costly settings.

LTCHs are not distributed evenly across the nation (Figure 10-1, p. 263). Some areas have many LTCHs; others have none. The absence of LTCHs in many areas of the country underscores the fact that medically complex patients can be treated appropriately in other settings. One recent analysis found that among all Medicare ICU patients receiving mechanical ventilation in 2006, only 16 percent of patients discharged alive were discharged to LTCHs, while 46 percent were discharged to skilled nursing

TABLE 10–1 **The top 25 MS–LTC–DRGs made up two-thirds of LTCH discharges in 2010**

MS–LTC–DRG	Description	Discharges	Percentage	Change 2008–2010
207	Respiratory system diagnosis with ventilator support 96+ hours	16,024	11.9%	6.9%
189	Pulmonary edema and respiratory failure	11,148	8.3	27.5
871	Septicemia or severe sepsis without ventilator support 96+ hours with MCC	7,474	5.5	15.3
177	Respiratory infections and inflammations with MCC	5,067	3.8	16.8
592	Skin ulcers with MCC	3,568	2.6	–10.9
949	Aftercare with CC/MCC	3,046	2.3	–18.8
208	Respiratory system diagnosis with ventilator support <96 hours	2,851	2.1	14.7
193	Simple pneumonia and pleurisy with MCC	2,847	2.1	5.6
190	Chronic obstructive pulmonary disease with MCC	2,654	2.0	3.8
539	Osteomyelitis with MCC	2,415	1.8	26.9
573	Skin graft and/or debridement for skin ulcer or cellulitis with MCC	2,059	1.5	7.7
862	Postoperative and post-traumatic infections with MCC	2,033	1.5	21.6
314	Other circulatory system diagnosis with MCC	1,983	1.5	33.4
919	Complications of treatment with MCC	1,950	1.4	17.5
682	Renal failure with MCC	1,937	1.4	11.4
166	Other respiratory system OR procedures with MCC	1,911	1.4	12.9
559	Aftercare, musculoskeletal system and connective tissue with MCC	1,877	1.4	–3.4
291	Heart failure and shock with MCC	1,821	1.4	7.9
4	Tracheostomy with ventilator support 96+ hours or primary diagnosis except face, mouth, and neck without major OR	1,656	1.2	17.1
593	Skin ulcers with CC	1,646	1.2	–36.4
178	Respiratory infections and inflammations with CC	1,644	1.2	–16.3
602	Cellulitis with MCC	1,593	1.2	40.0
870	Septicemia or severe sepsis with ventilator support 96+ hours	1,592	1.2	47.7
603	Cellulitis without MCC	1,432	1.1	2.3
194	Simple pneumonia and pleurisy with CC	1,285	1.0	–22.3
	Top 25 MS–LTC–DRGs	83,513	62.0	8.5
	Total	134,683	100.0	2.9

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 LTCHs. Columns may not sum due to rounding.

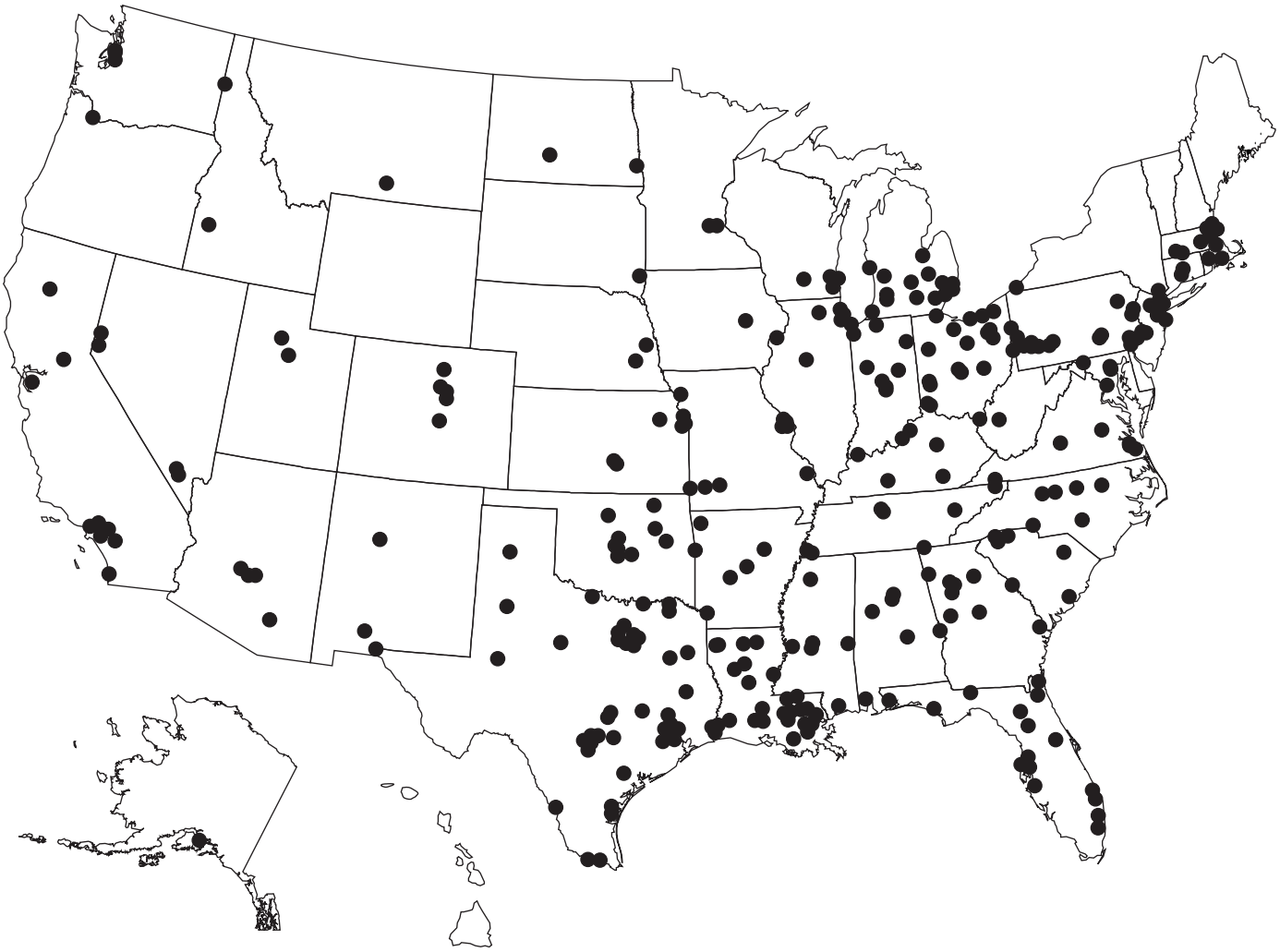
Source: MedPAC analysis of MedPAR data from CMS.

facilities (SNFs) or inpatient rehabilitation facilities (IRFs) (Kahn et al. 2010).[7] In market areas without LTCHs, the very sickest patients may stay longer in an acute care hospital before being discharged to a lower level of care.

LTCH care may have value for very sick patients. Numerous studies have looked at the differences in Medicare payments for patients with similar conditions and levels of acuity who are referred to LTCHs and those who are not. Previous Commission research found that Medicare pays more for patients using LTCHs than for similar patients in other settings; however, the payment differences were not statistically significant when LTCH care was targeted to the most severely ill patients (Medicare Payment Advisory Commission 2004).[8] CMS-funded research by RTI International and a study funded by an industry association found similar results (Gage et al. 2007, Kandilov and Dalton 2011, National Association of Long Term Care Hospitals 2010, RTI International 2007). (See text box, p. 264–265.)

But not all cases in LTCHs are high severity. In 2010, about 13 percent of LTCH cases were of minor or moderate severity, as measured by all patient refined

FIGURE 10–1 **Long-term care hospitals are not distributed evenly across the nation, 2010**



Source: MedPAC analysis of cost report data from CMS.

DRGs. Lower severity cases tend to be concentrated in some LTCHs. LTCHs with the smallest shares of high-severity patients are far more likely than those with higher shares to be located in rural areas (20 percent vs. 5 percent of all LTCHs) and are somewhat more likely to be not for profit (28 percent vs. 19 percent for all LTCHs). The Commission previously suggested that Medicare develop criteria to define the type of long-term acutely ill patient who is appropriate for admission to an LTCH as well as to other similar settings, such as a step-down unit of an acute care hospital, a specialized SNF, or a specialized IRF.[9] Such criteria would help determine whether LTCH care—or other medically complex care—is appropriate for individual beneficiaries. Those who can be appropriately treated in settings of lower acuity should not be admitted to LTCHs, because the cost of care in LTCHs is so high.

Are Medicare payments adequate in 2012?

To address whether payments for 2012 are adequate to cover the costs providers incur and how much providers' costs should change in the coming year (2013), 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

CMS-sponsored research on long-term care hospitals and the beneficiaries who use them

Beginning in 2005, CMS has contracted with RTI International to conduct research on the efficiency and effectiveness of care in long-term care hospitals (LTCHs) and to assess the feasibility of developing patient and facility criteria that could be used to define LTCHs (Gage et al. 2005, Gage et al. 2007). As outlined below, this research has been unable to clearly distinguish LTCH patients from the medically complex patients receiving care in acute care hospitals and some skilled nursing facilities (SNFs). In addition, RTI's work has confirmed the Commission's finding that the cost of treatment for many medically complex cases is higher for beneficiaries who are admitted to LTCHs than for those who are not. RTI has also shown that outcomes for most medically complex beneficiaries who receive care in LTCHs are no better than those for similar patients who do not have an LTCH stay.

In one analysis, RTI looked at episodes of care only for Medicare beneficiaries assigned to ventilator-related diagnosis related groups during an initial acute care admission and compared average outcomes across patients living in metropolitan areas that had access to LTCH beds with average outcomes for clinically similar patients living in matched metropolitan areas that had no LTCHs. This area-level analysis found no systemic differences in mortality and readmissions between episodes in areas that have LTCHs and those that do not. The analysis also found strong evidence that for beneficiaries with a high likelihood of using LTCHs (such as those with prolonged ventilator support, tracheotomies, or a high use of intensive care unit resources), LTCHs substituted primarily for extended stays in acute care facilities, while for the less complex ventilator cases LTCHs substituted for care at a SNF or an inpatient rehabilitation facility.

RTI used the same ventilator-related episodes to examine episode-level differences in outcomes (rather than average area-level differences) only for beneficiaries in Texas, Louisiana, and Oklahoma—states with a history of high LTCH use. RTI found that for cases that were most likely to be referred to LTCHs (almost exclusively episodes with long-term ventilator dependency and tracheotomy in the acute care hospital), Medicare payments were the same or lower, mortality was lower, and the chance of being discharged home was higher for those referred to LTCHs relative to those who remained in acute care settings for the duration of their episode. But among the least likely referral groups (the least complex ventilator cases), those referred to LTCHs had higher Medicare payments, longer hospital stays, and similar or worse outcomes. Further, the analysis found that, in those three states, only about a third of LTCH admissions with prolonged mechanical ventilation could be classified in the referral groups where the most benefit was observed, while one-fifth were classified in the groups where the least benefit was observed. As these states were chosen for analysis because of their unusually large supply of LTCH beds, the admission patterns cannot be considered representative of those in other areas.

(continued next page)

time in the volume of services furnished, quality of care, providers' access to capital, and the relationship between Medicare payments and providers' costs.

Beneficiaries' access to care: Increase in volume indicates favorable access

We have no direct measures of beneficiaries' access to LTCH services. Instead, we consider the capacity and supply of LTCH providers and changes over time in the volume of services they furnish.

Capacity and supply of providers: Number of LTCHs stable in 2010

The Medicare, Medicaid, and SCHIP Extension Act of 2007 (MMSEA) and subsequent amendments imposed a limited moratorium on new LTCHs and new beds in existing LTCHs from December 29, 2007, to December 28, 2012 (text box, p. 268). We examined Medicare cost report data to assess the number of LTCHs and found that, in spite of the moratorium, the number of LTCHs filing Medicare cost reports increased 6.1 percent between 2008

CMS-sponsored research on long-term care hospitals and the beneficiaries who use them (cont.)

RTI's most recent study created episodes of care from 2007 claims and identified 74 acute care hospital Medicare severity–diagnosis related groups (MS–DRGs) in which LTCH referral is more common (Kandilov and Dalton 2011). The 74 MS–DRGs were collapsed into 7 condition groups: ventilator; infection; aftercare, wound, and skin care; complex rehabilitation; pneumonia; heart failure; and chronic obstructive pulmonary disease and other respiratory failure. Episodes in each of these condition groups were compared with episodes for clinically similar patients who did not use LTCHs. Once again, this analysis found that, for all seven condition groups, patients transferred to LTCHs had longer stays, higher total payments, and higher provider costs than clinically similar patients who did not use LTCHs, with the smallest proportional differences seen for patients in the ventilator condition group.

RTI also simulated aggregate average Medicare margins for the full episodes of care, modeling all patients as if they were LTCH users and then all patients as if they remained in the acute care hospital. This analysis included only those patients within each condition group with clinical characteristics that made them most likely to use LTCHs. Only payments and costs for hospital-level care (whether furnished in an acute care hospital or an LTCH) were included. (Calculated margins are an average across different sites of care and therefore are not representative of the profitability of any one care setting.) Margins for episodes in the ventilator group were 1.3 percentage points lower for the LTCH referral episodes than for non-LTCH episodes, but in all other condition groups the margins for the full episode of care were higher if all patients were referred to LTCHs than if all patients were not. Higher margins for the full episode of care for LTCH users indicate that LTCH margins are higher than acute care hospital margins, suggesting a payment parity problem between acute care hospitals and LTCHs for at least some MS–DRGs. With the exception of the ventilator group, all the aggregate simulated margins for the episodes of care—whether all patients remained in acute care hospitals or were transferred to LTCHs—were negative.

One important limitation in this study and others is the absence of payments and costs for SNF and other post-acute care services used during a medically complex episode. As Kandilov and Dalton pointed out, if LTCH stays are substituting, even in part, for high-level SNF care, then their models will overstate the episode payment and cost differentials attributable to LTCH use. To explore the effects of this limitation, RTI looked at episodes that included SNF days and found that, on the basis of days of care, there was little evidence of a substitution effect between SNFs and LTCHs. Overall, 41.2 percent of LTCH cases and 42.7 percent of matched non-LTCH controls had a SNF stay within the episode.

Although RTI went to great lengths to control for selection bias, the ability to compare cases that use LTCHs with similar cases that do not is somewhat hampered by the lack of patient assessment data. Even after careful patient matching, it is possible that some unmeasured differences remain. For this reason, current research projects contracted by CMS involve primary data collection to better distinguish patients who are appropriate for LTCH care. ■

and 2010. Almost all of this growth took place in 2009 (Table 10-2, p. 266). New LTCHs were able to enter the Medicare program because they met specific exceptions to the moratorium. Most of the new LTCHs filing cost reports were for-profit facilities, and almost all of them were freestanding. As expected, entry of new LTCHs into the market slowed significantly during the later years of the moratorium.

Other measures of capacity include the number of beds and occupancy rates. Nationwide, the number of LTCH beds remained steady, declining 0.3 percent between 2009 and 2010. As mentioned above, LTCHs are not distributed evenly across the nation, so some areas have many LTCH beds, while others have none. In areas without LTCH beds, medically complex patients receive care in other settings. In 2010, the average occupancy rate was 67 percent.

Volume of services: Use of LTCHs by fee-for-service beneficiaries suggests access has increased

Beneficiaries' use of services suggests that access has not been a problem. Controlling for the number of fee-for-

TABLE 10–2

Growth in the number of LTCHs slowed in 2010

Type of LTCH	2003	2004	2005	2006	2007	2008	2009	2010	Average annual change 2003–2005	Average annual change 2005–2009	Average annual change 2009–2010
All	277	315	366	373	382	388	411	412	14.9%	2.9%	0.2%
Urban	264	299	342	348	358	362	388	385	13.8	3.2	–0.8
Rural	13	16	24	25	24	26	23	27	35.9	–1.1	17.4
Freestanding	182	195	221	225	226	230	252	254	10.2	3.3	0.8
Hospital within hospital	95	120	145	148	156	158	159	158	23.5	2.3	–0.6
Nonprofit	57	67	78	76	76	77	79	79	17.0	0.3	0.0
For profit	202	229	265	274	283	291	313	313	14.5	4.2	0.0
Government	18	19	23	23	23	20	19	20	13.0	–4.7	5.3

Note: LTCH (long-term care hospital).

Source: MedPAC analysis of Medicare cost report files from CMS.

service beneficiaries, we found that the number of LTCH cases rose 3.5 percent between 2009 and 2010, suggesting that access to care increased during this period (Table 10-3).

Compared with all Medicare beneficiaries, those admitted to LTCHs are disproportionately under age 65, over age 85, disabled, and 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 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 given that they are less likely to choose withdrawal from mechanical ventilation in the ICU and to have do-not-resuscitate orders (Borum et al. 2000, Diringer et al. 2001). The concentration of LTCHs in urban areas also may be a contributing factor (Kahn et al. 2010). Further, as noted, a disproportionate number of Medicare beneficiaries who use LTCHs are under age 65, a subgroup that is more likely to be African American.

Quality of care: Meaningful measures not currently available while gross indicators show stability

Unlike most other health care facilities, LTCHs do not submit quality data to CMS (see text box, p. 270). As we discussed in the Commission's March 2010 report, adopting existing acute care hospital quality indicators would not be appropriate or reliable for LTCHs, and LTCH-specific quality measures need to be developed (Medicare Payment Advisory Commission 2010). The Patient Protection and Affordable Care Act of 2010 requires CMS to collect data on quality in LTCHs and implement a pay-for-reporting program by 2014 (see text box, p. 270). Until new quality measures are available, the Commission instead uses aggregate trends in rates of in-facility mortality, mortality within 30 days of discharge, and readmissions from LTCHs to acute care hospitals. Although we use risk-adjusted measures to assess changes in quality in other health care settings, we do not risk-adjust measures of LTCH quality because the available data are not adequate for this purpose. Medicare does not collect assessment data for LTCH patients. Claims data, which are used to risk-adjust acute care hospital measures of quality, do not provide the level of detail needed to adequately adjust for differences in risk across LTCH patients, because the variation in patient severity and complexity in LTCHs is small compared with that in other health care settings. LTCH cases are highly concentrated in a few MS–DRGs; in addition, the vast majority of LTCH patients have multiple diagnoses and comorbidities. Participants in a Commission panel on LTCH quality measures agreed that risk adjustment was unnecessary for some proposed LTCH quality measures (Medicare Payment Advisory Commission 2011).

We focus on examining trends in readmissions, rather than levels, because levels can include planned

TABLE 10–3

Medicare LTCH spending per FFS beneficiary continues to rise

	2003	2004	2005	2006	2007	2008	2009	2010	Average annual change 2003–2005	2005–2009	2009–2010
Cases	110,396	121,955	134,003	130,164	129,202	130,869	131,446	134,683	10.2%	–0.5%	2.5%
Cases per 10,000 FFS beneficiaries	30.8	33.4	36.4	36.0	36.3	37.0	37.1	38.4	8.8	0.5	3.5
Spending (in billions)	$2.7	$3.7	$4.5	$4.5	$4.5	$4.6	$4.9	$5.2	29.1	2.2	6.0
Spending per FFS beneficiary	$75.2	$101.3	$122.2	$124.3	$126.5	$130.2	$138.3	$148.1	27.5	3.1	7.1
Payment per case	$24,758	$30,059	$33,658	$34,859	$34,769	$35,200	$37,465	$38,582	16.6	2.7	3.0
Average length of stay (in days)	28.8	28.5	28.2	27.9	26.9	26.7	26.4	26.6	–1.0	–1.6	0.8

Note: LTCH (long-term care hospital), FFS (fee-for-service).

Source: MedPAC analysis of MedPAR data from CMS.

readmissions as well as unplanned incidents and can be skewed by coding practices. We considered mortality and readmission trends for the top 25 LTCH diagnoses in 2010 (Table 10-1, p. 262). For most of these diagnoses, we found stable or declining rates of readmission, death in the LTCH, and death within 30 days of discharge. The exceptions were simple pneumonia and pleurisy with major complications or comorbidities (MCCs), renal failure with MCCs, and heart failure and shock with MCCs, all of which experienced increases in readmissions disproportionate to their volume growth.

The highest rates of in-LTCH death in 2010 (27 percent) occurred in patients receiving mechanical ventilation (MS–LTC–DRGs 208, 207, and 4). An additional 15 percent of patients with these diagnoses died within 30 days of discharge from the LTCH. A multicenter study in 2002 of 1,419 patients admitted to 23 LTCHs offering weaning from prolonged mechanical ventilation found that 52 percent died within 12 months of the LTCH admission (Scheinhorn et al. 2007). Kahn and colleagues (2010) reported that in 2006, 69 percent of Medicare beneficiaries transferred to LTCHs needing mechanical ventilation after treatment for critical illness in an acute care hospital died within a year of discharge. These death rates speak to the frailty of many LTCH patients and the complexity of their conditions.

Providers' access to capital: Moratorium on growth restricts opportunities for expansion

Access to capital allows LTCHs to maintain and modernize 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, at the present time, the availability of capital says more about regulations and legislation governing LTCHs than it does about current reimbursement rates. The moratorium on new beds and facilities imposed by the MMSEA and subsequent amendments reduces opportunities in the near future for expansion and the need for capital. However, the two major LTCH chains, which together own slightly more than half of all LTCHs, continued in 2011 to acquire other LTCHs as well as other post-acute care providers. As reported on 10-K and 10-Q forms filed with the Securities and Exchange Commission, both chains have access to capital that was tapped to finance these acquisitions.

Provisions of recent legislation for long-term care hospitals

The Medicare, Medicaid, and SCHIP Extension Act of 2007 (MMSEA) included several provisions related to long-term care hospitals (LTCHs), including a moratorium on new LTCHs, changes to the 25 percent rule, and changes to the short-stay outlier policy. Subsequent amendments in the American Recovery and Reinvestment Act of 2009 (ARRA) and the Patient Protection and Affordable Care Act of 2010 (PPACA) revised some of the MMSEA provisions and added new ones.

Moratorium on new LTCHs

The MMSEA, as amended by ARRA and PPACA, imposes moratoria on new facilities and new beds in existing facilities until December 29, 2012. Exceptions include: (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 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) existing LTCHs that are located in a state with only one other LTCH and that seek to increase beds after the closure or decrease in the number of beds of the state's other LTCH.

The 25 percent rule

The MMSEA as amended by ARRA and PPACA rolls back the phased-in implementation of the 25 percent rule for hospitals within hospitals (HWHs) and satellites, limiting the proportion of Medicare patients who can be admitted from an HWH's or a satellite's host hospital during a cost-reporting period to not more than 50 percent and holding it at this level until October 1, 2012 (July 1, 2012, for certain satellites). (The applicable threshold for HWHs and satellites in rural and urban areas with a single or dominant acute care hospital is 75 percent.)[10] In addition, the Secretary is prohibited from applying the 25 percent rule to freestanding LTCHs (and certain HWHs) before cost-reporting periods beginning July 1, 2012.

Short-stay outliers

The MMSEA as amended by ARRA and PPACA prohibits the Secretary from further reducing payments for LTCH cases with the shortest lengths of stay (so-called "very short-stay outliers") until December 29, 2012.

Budget neutrality

When the LTCH prospective payment system (PPS) was implemented in fiscal year 2003, CMS set payments at a level calculated to be equal to the estimated aggregate payments that would have been made if the LTCH PPS had not been implemented. This budget-neutrality adjustment was required by statute. CMS cautioned, however, that when data were available on actual payments made in the first year of the PPS, an additional adjustment to the LTCH PPS rates might be necessary so that the effect of any significant differences between actual payments and estimated payments for the first year of the PPS would not be perpetuated for future years, and the agency provided for the possibility of this adjustment by July 1, 2008 (Centers for Medicare & Medicaid Services 2008). The MMSEA as amended by ARRA and PPACA prohibits the Secretary from applying any budget-neutrality adjustment until December 29, 2012.

Pay for reporting

PPACA requires CMS to implement a pay-for-reporting program for LTCHs by 2014. The program will require LTCHs to report a specified list of quality measures—as discussed in the text box (p. 270)—each year in order to receive a full update to Medicare payment rates in the ensuing year.

Reductions in payment

PPACA specifies that any annual update to the LTCH standard rate shall be reduced by a quarter of a percentage point in 2010 and by half of a percentage point in 2011. For rate years 2012 through 2019, any update shall be reduced by the specified productivity adjustment. ■

Smaller LTCH chains and nonchain LTCHs likely do not have the same access to capital.

LTCH companies are increasingly diversified, vertically as well as horizontally. Both major chains operate IRFs and outpatient rehabilitation clinics in addition to LTCHs. One also has a significant business providing contract rehabilitation services to a wide variety of health care providers. The other is pursuing a strategy whereby the company owns SNFs and home health agencies, as well as LTCHs, within a single market in order to position itself as an integrated provider of post-acute care. These strategies are intended to improve the chains' ability to control costs and limit the impact of payment policy changes.

Medicare payments and providers' costs: Growth in per case payments leads to increased margins

Between 2009 and 2010, Medicare payments increased faster than costs, resulting in an aggregate 2010 Medicare margin of 6.4 percent. Medicare margins increased for all types of LTCHs except nonprofits. Examining the range in financial performance, we found that high-margin LTCHs had considerably lower costs than low-margin LTCHs. We also found that they served more patients overall and had a higher aggregate occupancy rate, which suggests that economies of scale may be important.

Program spending has doubled since 2002

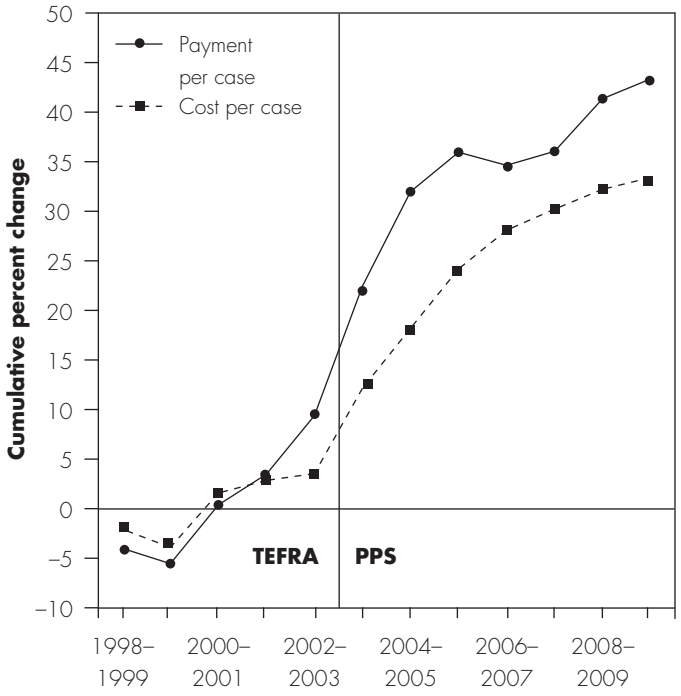
In the first three years of the LTCH PPS, Medicare spending for LTCH services grew rapidly, climbing an average of 29 percent per year. Subsequent changes in payment policies and growth in the number of beneficiaries enrolling in Medicare Advantage plans slowed growth in fee-for-service spending between 2005 and 2009 to about 2 percent per year (Table 10-3, p. 267). Between 2009 and 2010, however, spending jumped more than 6 percent. CMS estimates that total Medicare spending for LTCH services was $5.4 billion in fiscal year 2011, more than twice the level of spending in 2002. CMS estimates that LTCH spending will reach $6.6 billion by 2015 (Bean 2011).

Per case payments continue to exceed costs in 2010

In the first years of the PPS, LTCHs appeared to be responsive to changes in payment, adjusting their costs per case when payments per case changed. Payment per case increased rapidly after the PPS was implemented, climbing an average 16.6 percent per year between 2003 and 2005. Cost per case also increased rapidly during this period, albeit at a somewhat slower pace (Figure 10-2). Between 2005 and 2008, however, growth in cost per case outpaced that for payments, as regulatory changes to Medicare's payment policies for LTCHs slowed growth in payment per case to an average of 1.4 percent per year.

FIGURE 10–2

LTCHs' per case payments rose more quickly than costs in 2010



Note: LTCH (long-term care hospital), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system). Percent changes are calculated based on consistent two-year cohorts of LTCHs.

Source: MedPAC analysis of Medicare cost report data from CMS.

Between 2008 and 2009, growth in payments per case accelerated to 5.3 percent, about twice as much as the growth in costs. This surge was due in part to congressional actions that halted or rolled back the implementation of CMS regulations designed to reduce total payments to LTCHs. Another factor was growth in the reported patient case-mix index, which measures the expected costliness of a facility's patients (Centers for Medicare & Medicaid Services 2006, Centers for Medicare & Medicaid Services 2007, Centers for Medicare & Medicaid Services 2008, Centers for Medicare & Medicaid Services 2009, Centers for Medicare & Medicaid Services 2010). Refinements to the LTCH case-mix classification system, implemented in October 2007, likely led to more complete documentation

Developing quality measures for long-term care hospitals

The Commission has long been concerned about the lack of reliable quality measures for long-term care hospitals (LTCHs) and has urged CMS to collect the data necessary to compare quality and outcomes in LTCHs and across the post-acute care spectrum. The Patient Protection and Affordable Care Act of 2010 calls on CMS to design and implement a pay-for-reporting program for LTCHs by 2014.[11] In August 2011, CMS finalized its decision to initiate the pay-for-reporting program by collecting data on three measures:

- urinary catheter-associated urinary tract infections,
- central line catheter-associated bloodstream infections, and
- new or worsened pressure ulcers.

Data on urinary tract infections and central line infections will be collected through the National Healthcare Safety Network, an Internet-based surveillance system maintained by the Centers for Disease Control and Prevention. The data elements necessary to calculate the pressure ulcer measure are identical to those collected through the Minimum Data Set, the reporting instrument used in nursing homes. LTCHs will use a subset of the instrument relevant only to pressure ulcers. Data collection will begin October 1, 2012. CMS has stated that it will propose additional measures in the future. These measures could include rates of other health care–acquired infections, such as ventilator-associated pneumonia and surgical-site infections; avoidable adverse events such as unplanned acute care hospitalizations, injuries secondary to polypharmacy, and air embolisms; and nursing care measures, such as rate of restraint use, rate of falls with injury, and skill mix.

The Commission does not support pay-for-reporting programs but rather supports pay-for-performance programs that base a portion of the provider's payment on performance on quality and outcomes measure scores. As soon as possible, the Congress should change the incentives of the LTCH payment system by mandating such a program. Linking a portion of payment to performance will create stronger incentives for LTCH providers to improve care delivery.

Quality measures will initially provide information about processes and outcomes across LTCHs. Results from CMS's post-acute care demonstration, which tested the use of a uniform assessment tool in different post-acute care settings, should provide much needed information about the extent to which consistent quality and outcome measures can be used in different settings. Ultimately, policymakers must be able to compare quality of care and patient outcomes across the post-acute care spectrum to measure the value Medicare gets from the money it spends and to help ensure that beneficiaries receive appropriate, high-quality care in the least costly setting consistent with their clinical conditions. CMS's demonstration report to the Congress is forthcoming. ■

and coding of the diagnoses, procedures, services, comorbidities, and complications that are associated with payment, thus raising the average case-mix index 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' case-mix index 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 2009, Centers for Medicare & Medicaid Services 2010). Those improvements contributed to growth in payments to providers.[12] Between 2009 and 2010, payment growth slowed to 2 percent, while cost growth was held under 1 percent.

High margins reflect economies of scale

After the LTCH PPS was implemented in 2003, margins rose rapidly for all LTCH provider types, climbing to 11.9 percent in 2005 (Table 10-4). At that point, margins began to fall, as growth in payments per case leveled off. However, in 2009, LTCH margins began to climb again,

TABLE 10–4 **Aggregate average LTCH Medicare margin rose in 2010**

Type of LTCH	Share of discharges	2003	2004	2005	2006	2007	2008	2009	2010
All	100%	5.2%	9.0%	11.9%	9.8%	4.8%	3.5%	5.6%	6.4%
Urban	96	5.2	9.2	11.9	10.0	5.1	3.8	5.9	6.7
Rural	5	4.5	2.6	10.1	4.9	–0.7	–3.3	–2.8	–0.5
Freestanding	70	5.6	8.4	11.3	9.3	4.4	3.1	4.7	5.6
Hospital within hospital	30	4.2	10.6	13.1	10.8	5.8	4.4	7.6	8.1
Nonprofit	16	1.7	6.9	9.1	6.4	1.3	–2.5	–0.6	–1.2
For profit	83	6.3	10.0	13.1	10.9	5.9	5.1	7.2	8.0
Government	2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: LTCH (long-term care hospital), N/A (not applicable). Share of discharges column groupings may not sum to 100 percent due to rounding or missing data. 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.

consistent with the growth in payments described above. In 2010, the aggregate LTCH margin was 6.4 percent.

Financial performance in 2010 varied across LTCHs. Margins increased between 2009 and 2010 for all types of LTCHs except nonprofits, whose margins fell from –0.6 percent to –1.2 percent. The aggregate Medicare margin for for-profit LTCHs (which account for 76 percent of all LTCHs) in 2010 was 8.0 percent. The aggregate margin for rural LTCHs—which are 7 percent of all LTCHs—was –0.5 percent, compared with 6.7 percent for their urban counterparts. Rural LTCHs tend to be much smaller than urban LTCHs, caring for a smaller volume of patients on average and benefiting less from economies of scale.

We looked closely at the characteristics of established LTCHs with the highest and lowest margins.[13] As with SNFs and home health agencies, lower unit costs—rather than higher payments—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, p. 272). Low-margin LTCHs had standardized costs per discharge that were 36 percent higher than high-margin LTCHs ($36,251 vs. $26,660). The average Medicare length of stay was one day longer in low-margin than in high-margin facilities. After controlling for the number of short-stay outliers, high-margin LTCHs had a higher case-mix index, indicating a sicker patient population.

High-cost outlier payments per discharge for low-margin LTCHs were almost four times those of high-margin LTCHs ($5,005 vs. $1,316).[14] At the same time, short-stay outliers made up a larger share of low-margin LTCHs' cases (34 percent vs. 26 percent). Low-margin LTCHs thus cared for disproportionate shares of patients who were both high-cost outliers and patients who had shorter stays.

High-margin LTCHs were much more likely to be for profit than were their low-margin counterparts (Table 10-5, p. 272). They tended to have slightly higher Medicare and Medicaid shares. They also served more patients overall (an average of 576 in 2010 compared with 444 for low-margin LTCHs) and had a higher average occupancy rate (74 percent vs. 62 percent). Low-margin LTCHs therefore benefit less from economies of scale.

How should Medicare payments change in 2013?

To estimate 2012 payments, costs, and margins with 2010 data, the Commission considered policy changes effective in 2011 and 2012. Those that affect our estimate of the 2012 Medicare margin include:

- a market basket increase of 2.5 percent for 2011, offset by an adjustment of 2.5 percent for past coding improvements and, as required by PPACA, a 0.50

TABLE 10–5

LTCHs in the top quartile of Medicare margins in 2010 had much lower costs

Characteristics	High-margin quartile	Low-margin quartile
Mean Medicare margin	20.9%	–11.3%
Mean total discharges (all payers)	576	444
Medicare patient share	68%	64%
Medicaid patient share	8	5
Occupancy rate	74	62
Average length of stay (in days)	26	27
Adjusted CMI	0.9743	0.8981
Mean per discharge:		
Standardized costs	$26,660	$36,251
Total Medicare payment*	$38,557	$38,157
High-cost outlier payments	$1,316	$5,005
Share of:		
Cases that are SSOs	26%	34%
Medicare cases from primary-referring ACH	35	41
LTCHs that are for profit	90	64

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 2009 and 2010. Top margin quartile LTCHs were in the top 25 percent of the distribution of Medicare margins. Bottom 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. Adjusted case-mix indexes have been adjusted for differences in SSOs across facilities. Average primary referring ACH referral share indicates the mean share of patients referred to LTCHs in the quartile from the ACH that refers the most patients to the LTCH. Government providers were excluded.
*Includes outlier payments.

Source: MedPAC analysis of LTCH cost reports and MedPAR data from CMS.

percentage point reduction, for a net update of –0.49 percent;[15]

- a market basket increase of 2.9 percent for 2012, offset by a 1.1 percent reduction, as required by PPACA, for a net update of 1.8 percent; and
- adjustments to outlier payments in 2011 and 2012, which increase payments.

We estimate that LTCHs' aggregate Medicare margin will be 4.8 percent in 2012.

The Secretary has the discretion to update payments for LTCHs; there is no congressionally mandated update. In anticipation of the expiration of temporary legislative relief from some of CMS's payment regulations, LTCHs are likely to continue to constrain their cost growth. We expect growth in costs to be modest, albeit somewhat greater than the current pace—roughly similar to the latest forecast of the market basket for 2012 of 2.3 percent.

Update recommendation

On the basis of our review of payment adequacy for LTCHs, the Commission recommends that the Secretary eliminate the update to the LTCH payment rates.

RECOMMENDATION 10

The Secretary should eliminate the update to the payment rates for long-term care hospitals for fiscal year 2013.

RATIONALE 10

In sum, the supply of facilities and beds remained stable in 2010, and the number of cases per fee-for-service beneficiary increased, suggesting that access to care has been maintained. The limited quality trends we measure appear stable. LTCHs appear to have adequate access to capital, although the moratorium on LTCH growth limits opportunities for expansion. Margins for 2010 were positive, and we expect they will remain so. These trends suggest that LTCHs are able to operate within current payment rates. We will closely monitor our payment update indicators and will be able to reassess our recommendation for the LTCH payment update in the next fiscal year.

IMPLICATIONS 10

Spending

- Because CMS typically uses 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. The spending implication of this recommendation is based on Medicare spending projections that were made prior to a sequester, as the recommendation was developed and voted on before the sequester was triggered and became current law. If a Medicare sequester does occur, it will change the spending implication of the recommendation.

Beneficiary and provider

- This recommendation is not expected to affect Medicare beneficiaries' access to care or providers' ability to furnish care.

Issues in Medicare payment for LTCH services

Previous research by the Commission found that the types of patients LTCHs treat are often cared for in alternative settings, such as acute care hospitals and SNFs (Medicare Payment Advisory Commission 2004). The Commission found that Medicare pays more for patients using LTCHs than for similar patients using other settings; however, the payment differences narrowed considerably if LTCH care was targeted to the most severely ill patients (Medicare Payment Advisory Commission 2004). On the basis of these findings, the Commission recommended that CMS develop patient and facility criteria that could be used to define LTCHs and ensure that patients admitted to such facilities were medically complex and had a good chance of improvement.

But developing criteria to identify those patients who could most benefit from admission to LTCHs has proven more difficult than anticipated. Following the Commission's recommendation, CMS contracted with RTI International to conduct further research on the efficiency and effectiveness of LTCH care and to assess the feasibility of developing patient and facility criteria that could be used to define LTCHs. As discussed in the text box (pp. 264–265), this research has been unable to clearly distinguish LTCH patients from the medically complex patients receiving care in acute care hospitals and some SNFs. In addition, RTI's work has confirmed the Commission's finding that the cost of treatment for many medically complex cases is higher for beneficiaries who are admitted to LTCHs than for those who are not and has shown that outcomes for most medically complex beneficiaries who receive care in LTCHs are comparable to those observed in acute care hospitals.

That similar patients are treated in these different settings seems increasingly clear. This development led the Commission to suggest that any criteria developed by CMS should define the level of care typically furnished not only in LTCHs but also in other settings that provide similar services, such as step-down units of acute care hospitals and some specialized SNFs (Medicare Payment Advisory Commission 2008a). If LTCHs are to continue to be recognized as a distinct entity for purposes of Medicare payment, then it is crucial that providers be able to distinguish medically complex patients in need of hospital-level care from those who can be appropriately treated in post-acute settings. Further, if medically complex cases in LTCHs are, in essence, indistinguishable from medically complex cases in acute care hospitals, then Medicare must ensure that its payments for the same set of services are equitable, regardless of where the services are provided. Finally, policymakers must consider whether certain models of care will best serve the needs of medically complex patients. These steps will help ensure that Medicare beneficiaries receive appropriate, high-quality care in the least costly setting consistent with their clinical conditions.

Ensuring that appropriate patients are treated in long-term care hospitals

In 2004, the Commission recommended that the Secretary develop patient criteria, such as clinical characteristics and required treatment modalities, to ensure that patients admitted to LTCHs are medically complex and have a good chance of improving.[16] In a comment letter to CMS on its rate year 2009 proposed rule on the LTCH prospective payment system, the Commission noted that, because the types of cases treated by LTCHs are also treated in other settings, CMS should seek to define the level of care appropriately furnished in LTCHs as well as in step-down units of many acute care hospitals and some specialized SNFs and IRFs (Medicare Payment Advisory Commission 2008a). Defining these types of cases will be the first step in evaluating costs, quality, and outcomes across different types of providers.

Developing patient criteria with available data, however, has proven to be more difficult than anticipated. Data to compare types of patients, payments and costs, quality of care, and outcomes across the different types of providers that furnish medically complex care are needed. However, researchers have suggested some definitions of medically complex patients that may prove to be useful. In a report prepared for CMS, Kennell stated that the most commonly used definition of these patients was proposed by Nierman and Nelson (Kennell and Associates 2010). They noted that the chronically critically ill patient exhibited metabolic, endocrine, physiologic, and immunologic abnormalities that resulted in profound debilitation and often ongoing respiratory failure, abnormalities that slowed or precluded recovery from a wide range of

acute forms of medical, surgical, and neurologic critical illness (Nierman and Nelson 2002). On the basis of this definition, Kennell suggested the following as specific attributes of medically complex patients:

- prolonged mechanical ventilation (for weeks or months),
- multiple organ failure,
- multiple or chronic comorbidities (such as coronary artery disease, chronic obstructive pulmonary disease, stroke, diabetes, and renal failure), or
- multiple community-acquired or hospital-acquired infections or ulcers.

Research suggests that relatively few critically medically complex patients return to their previous level of health and function and that most end up with significant physical and cognitive limitations (Carson et al. 1999, Cox et al. 2007, Nelson et al. 2004, Scheinhorn et al. 2007, Unroe et al. 2010). It is important, therefore, that any potential patient criteria identify those medically complex patients who are likely to benefit from an LTCH program of care. Some of the most severely ill medically complex patients may not be appropriate for LTCH admission because they are too sick to benefit from specialized LTCH care or because their prognosis for improvement is so poor. Other options (e.g., remaining in the acute care hospital or transferring to hospice care) may be better suited to the patient's needs and may cost Medicare less. At the same time, other medically complex patients may not be appropriate for admission to LTCHs because they are less severely ill and can be cared for in other post-acute care settings.

Predicting outcomes for medically complex patients is a difficult task, but researchers have identified some factors that may be useful for clinicians and policymakers. Among mechanically ventilated patients admitted to an LTCH, patient age, previous level of function, the presence of diabetes, renal failure, low platelet counts, and the need for vasopressors have been shown to be useful in determining which patients admitted to LTCHs have a good chance of improving and surviving (Carson et al. 1999, Carson et al. 2008). In addition, a 2003 study of 300 LTCH admissions (not limited to patients receiving mechanical ventilation) found that postdischarge outcomes were highly dependent on the number of organ system failures a patient had when admitted to the LTCH (Dematte-D'Amico et al. 2003). For patients with no organ system failures, 75 percent survived at time of discharge and 44 percent went home. By comparison, only 31 percent of patients with four or more organ system failures survived, and none went home.

Disparities in payment for medically complex care

Payment incentives for acute care hospitals to reduce their costs have likely sparked some of the growth in use of LTCH services. The Commission and other policymakers have long been concerned about the possibility that acute care hospitals discharging patients to LTCHs may be unbundling services paid under the acute care hospital PPS. To the extent that this practice occurs, Medicare pays twice for the same service—once to the acute care hospital and once to the LTCH. Further, early discharges from acute care hospitals may distort the acute inpatient PPS relative weights by reducing the costs of caring for certain types of cases in acute care hospitals that routinely discharge to LTCHs. To the extent that such distortion occurs, even after recalibration, acute care hospital payments may be too low for some patients in areas without LTCHs.

Growth in the use of LTCH services may also be the result of disparities in Medicare's payments across sites of service. Recent research showed that aggregate average Medicare margins for full episodes of care (calculated across different sites of care and therefore not representative of the profitability of any one care setting) would be higher for patients who used LTCHs than for similar patients who did not (Kandilov and Dalton 2011). These findings suggest a disparity in profitability between acute care hospitals and LTCHs for at least some MS–DRGs. Such disparities can influence providers' decisions about patient admission, transfer, and discharge. The Commission has long held that payment for the same set of services should be the same regardless of where the services are provided to help ensure that beneficiaries receive appropriate, high-quality care in the least costly setting consistent with their clinical conditions (Medicare Payment Advisory Commission 2009).

CMS needs more data to compare types of patients, payments and costs, quality of care, and outcomes across facilities that furnish medically complex care and other post-acute care. Such data will provide the information needed to determine whether care is appropriate and of high quality and whether payments are sufficient. CMS's post-acute care payment reform demonstration—which tested the use of a single assessment tool in multiple post-acute care settings, including LTCHs—and pay for

reporting should begin to provide the data CMS needs. Ongoing CMS research on differences in LTCHs' and acute care hospitals' clinical composition, payments and costs, and outcomes will further enhance understanding in this area.

Referral centers for medically complex care

The Commission pointed out previously that providers may need a critical mass of medically complex patients to maintain treatment expertise and achieve a high quality of care (Medicare Payment Advisory Commission 2008a, Medicare Payment Advisory Commission 2008b, Medicare Payment Advisory Commission 2010). Research has shown that higher patient volume is associated with better outcomes for certain procedures, such as surgery for cancers of the pancreas and esophagus (Birkmeyer et al. 2002, Institute of Medicine 2000). Studies have also found a positive relationship between volume and outcomes for patients admitted to ICUs in acute care hospitals, notably those receiving mechanical ventilation (Durairaj et al. 2005, Kahn et al. 2006, Kahn et al. 2009). The Commission's analysis of LTCHs with high and low Medicare margins, discussed above, suggests that a critical mass of patients might also be needed to achieve economies of scale.

If LTCHs with higher patient volume can provide more value for the Medicare program and its beneficiaries by demonstrating better outcomes with greater efficiency, then it may be appropriate to view LTCHs (and other providers of medically complex care) as regional referral centers serving wider catchment areas. Seen in this light, the proliferation of LTCHs in some markets is cause for concern. The quality measures that will be reported starting in October 2012 will allow policymakers to begin to compare quality across LTCHs. In the future, additional measures may allow outcome comparisons as well. Such analyses will provide much needed information about the best models of care for medically complex patients. ■

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, active physician involvement with patients during their treatment with physician on-site availability on a daily basis, and interdisciplinary treatment teams of health care professionals.

2 More information on the prospective payment system for LTCHs is available at: http://medpac.gov/documents/MedPAC_Payment_Basics_11_LTCH.pdf.

3 Short-stay outliers are identified as those patients with a length of stay less than or equal to five-sixths of the geometric mean length of stay for the patient's MS–LTC–DRG. A geometric mean is useful for analyzing data that are skewed.

4 Kahn and colleagues found that the share of Medicare critical acute care hospitalizations ending in transfer to skilled nursing facilities (SNFs) and inpatient rehabilitation facilities (IRFs) also has increased, while the percentage of critical acute care hospitalizations ending in discharge to the home has decreased. Among critical acute care patients receiving intensive ventilator support, discharges to SNFs and IRFs have remained relatively constant, while discharges to LTCHs have increased (Kahn et al. 2010).

5 New LTCHs often are located in states without certificate-of-need programs.

6 This analysis looked at non-short-stay outlier cases by core-based statistical areas (CBSAs). CBSAs with no LTCH claims were eliminated from the analysis.

7 Kahn and colleagues included only Medicare beneficiaries who were 65 or older in their study. The researchers found that almost half of the Medicare beneficiaries who received mechanical ventilation in acute care hospital ICUs in 2006 died in the hospital. Of those discharged alive, 21 percent were discharged home. Patients who were discharged home may have received home health care.

8 In the Commission's analysis, episodes did not include the costs of readmission to the acute care hospital. That could have resulted in an understatement of the average costs of patients who did not use LTCHs, because these patients were more likely than LTCH users to be readmitted to the hospital. However, we compared LTCH users and nonusers without readmissions and found similar results: LTCH users without readmissions cost Medicare more for the total episode than patients without readmissions who used alternative settings. Among patients most likely to use LTCHs, we found a positive but statistically insignificant difference in total episode spending between LTCH users and nonusers without readmissions.

9 The hospital industry generally uses the term "step-down unit" to describe an acute care hospital unit for patients who need more monitoring than is typically provided in a medical or surgical unit but who do not require the intensity of care provided in an ICU.

10 Under the law, "grandfathered" satellite facilities (those that were operating as of September 30, 1999) are treated differently from grandfathered HWHs. Grandfathered satellites continued to operate under the 75 percent threshold established for rate year 2008, transitioning to a 50 percent threshold in 2009 and a 25 percent threshold in 2010. By comparison, grandfathered HWHs have no threshold applied under the law.

11 Such a policy has been in place for acute care hospitals since 2003. Under Medicare's Hospital Inpatient Quality Reporting Program, CMS requires hospitals to report a specified list of quality measures each year in order to receive a full update to Medicare payment rates in the ensuing year. This program creates incentives for providers not only to report the quality of their care but also to take steps to improve it and raise their quality scores. CMS makes some of the quality data available to consumers on Medicare's Hospital Compare website. More than 95 percent of acute care hospitals opt to participate in the program.

12 CMS reduced the update to the LTCH base payment rate in fiscal years 2010 and 2011 to offset, in part, payment increases due to documentation and coding improvements between 2007 and 2009.

13 Many new LTCHs operate at a loss for a period of time after opening. For this analysis of high- and low-margin LTCHs, we examined only LTCHs that submitted valid cost reports in both 2009 and 2010. We excluded government-owned LTCHs.

14 LTCHs are paid 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 ($17,931in 2012). Medicare pays 80 percent of the LTCH's costs above the threshold.

15 Numbers do not sum due to rounding.

16 To help ensure that providers are capable of furnishing care to medically complex beneficiaries, the Commission also recommended that the Secretary develop facility criteria for LTCHs. Such criteria might include requirements for staffing, the availability of physicians, and patient assessment.

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CHAPTER 11

Hospice services

RECOMMENDATION

11 The Congress should update the payment rates for hospice for fiscal year 2013 by 0.5 percent.

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

(For additional recommendations on improving the hospice payment system, see text box on pp. 285–287.)

CHAPTER 11

Hospice services

Chapter summary

The Medicare hospice benefit covers palliative and support services for beneficiaries with a life expectancy of six months or less. Beneficiaries must "elect" the Medicare hospice benefit; in so doing they agree to forgo Medicare coverage for intensive conventional treatment for their terminal condition. In 2010, more than 1.1 million Medicare beneficiaries received hospice services from more than 3,500 providers, and Medicare expenditures totaled about $13 billion.

Assessment of payment adequacy

The indicators of payment adequacy for hospices, discussed below, are generally 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 2010, hospice use increased across all demographic and beneficiary groups examined. However, hospice use rates remained lower for racial and ethnic minorities than whites.

- ***Capacity and supply of providers*—**The supply of hospices increased 53 percent between 2000 and 2010, with an increase of almost 3 percent in 2010. For-profit providers accounted for almost the entire increase in the number of hospices, both over the past decade and in the past year.

In this chapter

- ***Volume of services*—**Use of Medicare hospice services continues to increase, with growth in the number of hospice users and the average length of stay. In 2010, 44 percent of Medicare beneficiaries who died that year used hospice, up from 42 percent in 2009 and 23 percent in 2000. Average length of stay among decedents grew from 54 days in 2000 to 84 days in 2009 to 86 days in 2010. The median length of stay during the same years remained stable at approximately 17 or 18 days. The increase in average length of stay over the past decade mostly reflects longer stays among patients with the longest stays.

***Quality of care*—**At this time, we do not have sufficient data to assess the quality of hospice care provided to Medicare beneficiaries, as information on quality of care is very limited. The Patient Protection and Affordable Care Act of 2010 mandates that CMS publish hospice quality measures by 2012. CMS has adopted two quality measures for the first year of reporting. Hospices must report these measures in 2013 (based on data from the last 3 months of calendar year 2012) or face a 2 percent reduction in their annual update for fiscal year 2014.

***Providers' access to capital*—**Hospices are not as capital intensive as some other provider types because they do not require extensive physical infrastructure. Continued entry of new for-profit freestanding providers (a 5 percent increase in 2010), and modest (1 percent) growth in the number of nonprofit freestanding providers, suggests that access to capital is adequate. Hospital-based and home-health-based hospices have access to capital through their parent providers.

***Medicare payments and providers' costs*—**The aggregate Medicare margin, which is an indicator of the adequacy of Medicare payments relative to costs, was 7.1 percent in 2009, up from 5.1 percent in 2008. The projected 2012 margin is 5.1 percent. These margin estimates exclude nonreimbursable costs associated with bereavement services and volunteers (which if included would reduce margins by at most 1.5 percent and 0.3 percent, respectively). ■

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 terminally ill beneficiaries who have a life expectancy of six months or less if the terminal illness follows its normal course. A broad set of services are 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 inpatient care (including respite care); drugs and biologicals for symptom control; home medical equipment; physical, occupational, and speech therapy; bereavement services for the patient's family; and other services for palliation of the terminal condition. In 2010, more than 1.1 million Medicare beneficiaries received hospice services and Medicare expenditures totaled about $13 billion.

Beneficiaries must "elect" the Medicare hospice benefit; in so doing, they agree to forgo Medicare coverage for intensive conventional treatment for the terminal illness. 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 the attending physician, the medical director, or another hospice physician and by an interdisciplinary group. 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. Under current policy, the first hospice benefit period is 90 days. For a beneficiary to initially elect hospice, two physicians (a hospice physician and the beneficiary's attending physician, if any) must certify that the beneficiary has a life expectancy of six months or less if the illness runs its normal course. If the patient's terminal illness continues to engender the likelihood of death within six months, the patient can be recertified for another 90 days. After the second 90-day period, the patient can be recertified for an unlimited number of 60-day periods, as long as he or she remains eligible.[1] For recertification, only the hospice physician has to certify that the beneficiary's life expectancy is six months or less. Beneficiaries can transfer from one hospice to another once during a hospice election period and can disenroll from hospice at any time.

In recent years, Medicare spending for hospice care increased dramatically. Spending reached about $13 billion in calendar year 2010, more than quadrupling since 2000. This spending increase was driven by greater numbers of beneficiaries electing hospice and by longer stays among hospice patients with the longest stays.

Medicare payment for hospice services

The Medicare program pays a daily rate to hospice providers for each day a beneficiary is enrolled in hospice. The hospice assumes all financial risk for costs and services associated with care related to the patient's terminal illness. The hospice provider receives payment for every day a patient is enrolled, regardless of whether the hospice staff visited the patient each day. This payment design is intended to encompass not only the cost of visits but also other costs a hospice incurs related to on-call services, care planning, drugs, medical equipment, and supplies related to the patient's terminal condition; patient transportation between sites of care specified in the plan of care; and other less frequently used services.

Payments are made according to a fee schedule that has base payment amounts for four categories of care: routine home care, continuous home care, inpatient respite care, and general inpatient care (Table 11-1, p. 284). A hospice is paid the routine home care rate ($151 per day in 2012) for each day the patient is enrolled in hospice, unless the hospice provides care under one of the other categories (continuous home care, inpatient respite care, or general inpatient care). Routine home care accounts for more than 95 percent of hospice care days. The payment rates for hospice are updated annually by the inpatient hospital market basket index.[2] The payment methodology and the base rates for hospice care have not been recalibrated since initiation of the benefit in 1983.

The hospice daily payment rates are adjusted geographically to account for differences in wage rates among local markets. Each category of care's base rate has a labor share, which is adjusted by the hospice wage index for the location where care is furnished and the result is added to the nonlabor portion. From 1983 to 1997, Medicare adjusted hospice payments with a 1983 wage index based on 1981 Bureau of Labor Statistics data. In fiscal year 1998, CMS began using the most current hospital wage index to adjust hospice payments and applied a budget-neutrality adjustment each year to make

TABLE 11–1 **Medicare hospice payment categories and rates, FY 2012**

Category	Description	Base payment rate
Routine home care	Home care provided on a typical day	$151 per day
Continuous home care	Home care provided during periods of patient crisis	$36.73 per hour
Inpatient respite care	Inpatient care for a short period to provide respite for primary caregiver	$156 per day
General inpatient care	Inpatient care to treat symptoms that cannot be managed in another setting	$672 per day

Note: FY (fiscal year). Payment for continuous home care (CHC) is an hourly rate 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. A nurse must deliver more than half of the hours of this care to qualify for CHC-level payment. The minimum daily payment rate at the CHC level is $294 per day (8 hours at $36.73 per hour); maximum daily payment at the CHC level is $881 per day (24 hours at $36.73 per hour).

Source: CMS Manual System Pub 100–04 Medicare Claims Processing, Transmittal 22260, "Update to Hospice Payment Rates, Hospice Cap, Hospice Wage Index and the Hospice Pricer for FY 2012." July 29, 2011.

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. In fiscal year 2010, CMS began phasing out the budget-neutrality adjustment over seven years. It was reduced by 0.4 percent in 2010 and by an additional 0.6 percent in both 2011 and 2012; it will be reduced by an additional 0.6 percent each subsequent year, until the budget-neutrality adjustment is eliminated entirely in fiscal year 2016.

Beneficiary cost sharing for hospice services is minimal. For prescriptions, hospices may charge 5 percent coinsurance (not to exceed $5) for each prescription furnished outside the inpatient setting. For inpatient respite care, beneficiaries may be charged 5 percent of Medicare's respite care payment per day. In practice, hospices do not generally charge or collect these copays from Medicare beneficiaries. Given that hospice is one of the only areas in the Medicare program with minimal or no cost sharing and given that hospice length of stay has increased substantially for patients with the longest stays, in the future the Commission may explore the potential for modest cost sharing for the hospice benefit. (For a more complete description of the hospice payment system, see http://www.medpac.gov/documents/MedPAC_Payment_Basics_11_hospice.pdf.)

Commission's prior recommendations

The Commission's analyses of the hospice benefit in the June 2008 and March 2009 reports found that the structure of Medicare's hospice payment system makes very long stays in hospice more profitable for providers than shorter stays, which may have led to inappropriate use of the benefit among some hospices (Medicare Payment Advisory Commission 2008, Medicare Payment Advisory Commission 2009). We also found that the benefit lacks adequate administrative and other controls to check the incentives for long stays in hospice and that CMS lacks data vital for effective management of the benefit. In March 2009, the Commission made recommendations to reform the hospice payment system, ensure greater accountability in use of the hospice benefit, and improve data collection and accuracy (see text box). Since that time, additional data have become available on hospice visit patterns across episodes of care. These data confirm prior findings and further support the need for payment system reform. A discussion of our analysis of these additional data sources can be found in the online appendices to the March 2010 and March 2011 reports (http://www.medpac.gov).

The Patient Protection and Affordable Care Act of 2010 (PPACA) included a number of provisions related to Medicare hospice services, including several policies consistent with some of the Commission's recommendations, particularly in the areas of greater accountability and data collection. PPACA also gives CMS the authority to revise in a budget-neutral manner the methodology for determining hospice payment rates for routine home care and other services as the Secretary of Health and Human Services determines appropriate beginning no earlier than fiscal year 2014. PPACA includes additional hospice provisions, such as

March 2009 Commission recommendations on hospice

The Commission's June 2008 and March 2009 reports identified a number of trends and issues that raised concern that the structure of the hospice payment system creates financial incentives for very long stays and that CMS does not have adequate administrative controls to check these incentives or ensure providers' compliance with the benefit's eligibility criteria. The Commission found:

- a substantial increase in the number of hospices, driven almost entirely by growth in for-profit providers;
- a substantial increase in average length of stay due to increased lengths of stay among patients with the longest stays;
- a positive correlation between hospice profit margins and average length of stay (i.e., profitability increases as average length of stay increases);
- anecdotal reports, obtained from a Commission-convened panel of hospice industry experts, that some hospices admit patients who do not meet the Medicare hospice eligibility criteria (a life expectancy of six months or less if the disease runs its normal course); and
- focused efforts by some hospices to enroll nursing home residents, a population that tends to have conditions associated with long hospice stays, as well as anecdotal reports of questionable relationships between some nursing facilities and hospices.

The Commission's examination of the hospice payment system has shown that long stays in hospice are more profitable for providers than short stays. Its analyses have found that hospice visits tend to be more frequent at the beginning and end of a hospice episode and less frequent in the intervening period. The Medicare payment rate, which is constant over the course of the episode, does not take into account the different levels of effort that occur during different periods within an episode. As a result, long hospice stays, which generally have a lower average visit intensity over the course of an episode, are more profitable than short stays. The incentives in the current hospice payment system for long stays may have led to inappropriate use of the benefit among some providers. To address these problems, the Commission made recommendations in March 2009 to reform the hospice payment system, to ensure greater accountability in use of the hospice benefit (which included two parts, increased accountability standards for providers and more Office of Inspector General (OIG) investigations), and to improve data collection and accuracy. The Congress and CMS have adopted policies consistent with several of these recommendations.

Several policies to increase provider accountability have been adopted. Effective October 2009, CMS requires that all certifications and recertifications include a brief

(continued next page)

a productivity-related adjustment that will reduce the hospice annual update and an additional market basket reduction beginning in fiscal year 2013, a hospice quality data pay-for-reporting program beginning in fiscal year 2014, a pilot project to test a hospice pay-for-performance program to start by January 2016, and a demonstration project to test concurrent hospice and conventional care.

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 intensive conventional treatment (often in inpatient settings) and die at home, with family, and 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). To achieve this outcome, the Congress included in the benefit two limitations, or "caps," on payments to hospices. (For a discussion of the cost of hospice care relative to conventional care at the end of life, see the Commission's June 2008 report.)

March 2009 Commission recommendations on hospice (cont.)

physician narrative explaining the clinical basis for the patient's prognosis. Effective January 2011, the Patient Protection and Affordable Care Act of 2010 (PPACA) requires a hospice physician or nurse practitioner to have a face-to-face visit with a patient before recertification for the third benefit period (which typically begins after 180 days) and every subsequent benefit period.

In addition, the OIG has completed or has work under way in several of the areas the Commission recommended for study. The OIG recently completed a study on hospices that rely heavily on nursing home patients (Office of Inspector General 2011). The OIG found that these hospices are more likely to be for profit and to treat patients with conditions that typically have longer stays and require less complex care. The OIG recommended that CMS: (1) monitor hospices that rely heavily on nursing home patients and (2) reduce payment rates for hospice services provided in nursing homes. The OIG's 2012 work plan includes additional studies examining hospices' marketing practices and financial relationships with nursing facilities, an examination of the appropriateness of general inpatient hospice care, an analysis to determine whether hospice drugs are double-billed to Part D, and an assessment of Medicare payments when patients are transferred from acute care hospitals to hospice general inpatient care.

In the area of data collection, CMS expanded its data-reporting requirements for hospice claims in January 2010, consistent with the Commission's recommendation to include the length of visits in 15-minute increments as well as additional types of visits such as physical, speech, and occupational therapist visits. PPACA mandated that CMS begin collecting additional data to inform hospice payment system reform as the Secretary of Health and Human Services determines appropriate not later than January 1, 2011.

Some additional steps have been taken on payment reform but the pace and shape of those efforts is unclear at present. Therefore, we are reprinting the payment reform recommendation below. In addition, PPACA included a provision requiring Medicare to review hospice claims exceeding 180 days for hospices with many long-stay patients, consistent with a Commission recommendation. This provision has not been implemented by CMS, so we are reprinting that recommendation as well.

The Congress should direct the Secretary to change the Medicare payment system for hospice to:

- **have relatively higher payments per day at the beginning of the episode and relatively lower payments per day as the length of the episode increases,**

(continued next page)

The first cap limits the number of days of inpatient care a hospice may provide to not more than 20 percent of its total Medicare patient care days. This cap is rarely exceeded, and when it is, 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. It 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 multiplied by the cap amount ($23,014.50 in 2009), it must repay the excess to the program.[3,4] This cap is not applied individually to the payments received for each beneficiary but rather to the total payments across all Medicare patients admitted to the hospice in the cap year. The number of hospices exceeding the average annual 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 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).

March 2009 Commission recommendations on hospice (cont.)

- **include a relatively higher payment for the costs associated with patient death at the end of the episode, and**
- **implement the payment system changes in 2013, with a brief transitional period.**

These payment system changes should be implemented in a budget-neutral manner in the first year.

Compared with the current hospice payment system, this payment model would result in a much stronger relationship between Medicare payments and hospices' level of effort in providing care throughout an episode and promote stays of a length consistent with hospice as an end-of-life benefit. It would also have the effect of changing the distribution of payments across providers. Providers with shorter stay patients, which tend to have lower margins, would see an increase in their Medicare payments and providers with longer stay patients, which tend to have higher margins, would see a decrease.

Under PPACA, the Congress gave CMS the authority to revise in a budget-neutral manner the hospice payment system for routine home care and other services as the Secretary determines appropriate not earlier than fiscal year 2014. The statute indicates that such revisions may include adjustments to the per diem payments to reflect changes in the resource intensity of services throughout a hospice episode but does not mandate such an approach. CMS is required to consult with hospices and the Commission on revisions to the payment system.

The Congress should direct the Secretary to:

- **require that a hospice physician or advanced practice nurse visit the patient to determine continued eligibility prior to the 180th-day recertification and each subsequent recertification and attest that such visits took place,**
- **require that certifications and recertifications include a brief narrative describing the clinical basis for the patient's prognosis, and**
- **require that all stays in excess of 180 days be medically reviewed for hospices for which stays exceeding 180 days make up 40 percent or more of their total cases.**

Measures consistent with the Commission's recommendation for increased hospice accountability have been implemented, with the exception of focused medical review. As of January 2011, PPACA requires focused medical review of hospice claims for providers with a very high share of patients with stays in excess of 180 days, consistent with a Commission recommendation. However, this provision has not been implemented by CMS. Hospice length of stay varies considerably across providers, with a subset of providers having much longer stays for patients of similar diagnoses than other providers. Focused medical review of hospices with unusually high rates of long-stay patients would provide greater oversight of the benefit and target that scrutiny toward those providers for whom it is most warranted. ■

Are Medicare payments adequate in 2012?

To address whether payments for 2012 are adequate to cover the costs efficient providers incur and how much providers' costs should change in the coming year (2013), we examine several indicators of payment adequacy. Specifically, we assess: beneficiaries' access to care by examining the capacity and supply of hospice providers 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 providers' costs. Overall, the Medicare payment adequacy indicators for hospice providers are positive. Unlike our assessments for other providers, we could not use quality of care as a payment adequacy indicator, as information on hospice quality is generally not available.

Beneficiaries' access to care: Use of hospice continues to increase

Hospice use among Medicare beneficiaries has grown substantially in recent years, suggesting increased

TABLE 11–2

Use of hospice continues to increase

	Percent of Medicare decedents who used hospice						
	2000	2007	2008	2009	2010	Average annual percentage point change 2000–2009	Percentage point change 2009–2010
All beneficiaries	22.9%	38.9%	40.1%	42.0%	44.0%	2.1%	2.0%
FFS beneficiaries	21.5	38.0	39.2	41.0	43.0	2.2	2.0
MA beneficiaries	30.9	42.9	44.0	46.1	47.8	1.7	1.7
Dual eligibles	17.5	34.5	35.9	37.5	39.2	2.2	1.7
Nondual eligibles	24.5	40.3	41.5	43.4	45.5	2.1	2.1
Age (in years)							
<65	17.0	24.5	25.1	26.0	27.2	1.0	1.2
65–74	25.4	35.6	36.2	37.3	38.6	1.3	1.3
75–84	24.2	40.1	41.2	43.1	45.0	2.1	1.9
85+	21.4	43.5	45.4	48.0	50.4	3.0	2.4
Race/ethnicity							
White	23.8	40.5	41.8	43.7	45.8	2.2	2.1
African American	17.0	29.9	30.8	32.6	34.0	1.7	1.4
Hispanic	21.1	32.6	32.9	34.8	37.0	1.5	2.2
Asian American	15.2	22.9	24.5	26.0	28.1	1.2	2.1
Native North American	13.0	28.8	29.8	29.7	30.6	1.9	0.9
Gender							
Male	22.4	35.9	36.8	38.6	40.4	1.8	1.8
Female	23.3	41.5	43.0	45.1	47.1	2.4	2.0
Beneficiary location							
Urban	24.3	40.4	41.7	43.5	45.4	2.1	1.9
Micropolitan	18.5	34.5	35.8	37.5	39.8	2.1	2.3
Rural, adjacent to urban	17.6	33.6	34.7	36.9	38.7	2.1	1.8
Rural, nonadjacent to urban	15.8	30.0	30.5	32.8	34.5	1.9	1.7
Frontier	13.2	26.0	25.7	27.1	30.1	1.5	3.0

Note: FFS (fee-for-service), MA (Medicare Advantage). Beneficiary location reflects the beneficiary's county of residence. The frontier category is defined as population density equal to or less than 6 people per square mile.

Source: MedPAC analysis of data from the denominator file and the Medicare Beneficiary Database from CMS.

awareness of and access to hospice services. In 2010, about 44 percent of Medicare beneficiaries who died that year used hospice, up from just under 23 percent in 2000 (Table 11-2). From 2009 to 2010, the proportion of Medicare decedents who used hospice grew from about 42 percent to 44 percent. While hospice use varied by beneficiary characteristics (i.e., enrollment in fee-for-service (FFS) and managed care, dual and nondual eligibles, age, gender, race, urban and rural residence), it increased substantially across all beneficiary groups between 2000 and 2010.

Use of hospice is slightly more frequent among beneficiaries who had been enrolled in Medicare Advantage than FFS, although differences in hospice use rates have narrowed over time. In 2000, in rounded figures, 22 percent of Medicare FFS decedents used

hospice compared with 31 percent of decedents previously enrolled in Medicare Advantage. By 2010, these use rates rose to 43 percent of Medicare FFS decedents and 48 percent of Medicare Advantage decedents. It is important to note that Medicare Advantage plans do not provide hospice services. Once a beneficiary in a Medicare Advantage plan elects hospice, the beneficiary receives hospice services and any nonhospice Medicare-covered services via the Medicare FFS program.

Hospice use varies by other beneficiary characteristics. In 2010, a smaller proportion (39 percent) of Medicare decedents who were dually eligible for Medicare and Medicaid used hospice compared with the rest of Medicare decedents (46 percent). Hospice use has increased in all age groups but is more prevalent among older beneficiaries. In 2010, the percent of decedents age 85 or older who used hospice grew to just over 50 percent. Female beneficiaries were also more likely than male beneficiaries to use hospice, which partly reflects the longer average life span among women than men and greater hospice use among older beneficiaries.

Table 11-2 also shows differences in hospice use by racial and ethnic groups. As of 2010, hospice use was highest among white Medicare decedents followed by decedents of Hispanic, African American, Native North American, and Asian American ethnicity. Hospice use grew substantially among all these groups between 2000 and 2010. Despite a substantial increase in hospice use over the past decade for all racial and ethnic groups, differences in hospice use across racial and ethnic groups persist but are not fully understood. Researchers examining this issue 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 2000).

Hospice use is more prevalent among beneficiaries residing in urban areas than in rural areas, although use has grown in all types of areas (Table 11-2). In 2010, the share of decedents residing in urban counties who used hospice was 45 percent; in micropolitan counties, 40 percent; in rural counties adjacent to urban counties, 39 percent; in rural nonadjacent counties, 35 percent; and in frontier counties, 30 percent. Use rates for beneficiaries residing in these areas increased between 1.7 percentage points and 3.0 percentage points compared with the prior year, continuing the substantial upward trend in hospice use that has occurred across these areas over the past 10 years.

One driver of increased hospice use over the past decade has been substantial growth in hospice election by patients with noncancer diagnoses, as there has been increased recognition that hospice can appropriately care for such patients. Patients with noncancer diagnoses accounted for 69 percent of all hospice users in 2008, up from 47 percent in 1998 (Centers for Medicare & Medicaid Services 2008). Between 1998 and 2009, the number of hospice users with debility increased from just over 8,500 to nearly 121,000, and the number with Alzheimer's disease or non-Alzheimer's dementia grew from about 28,000 to 181,000 (Centers for Medicare & Medicaid Services 2008, Centers for Medicare & Medicaid Services 2009).

Capacity and supply of providers: Supply of hospices continues to grow, driven by growth in for-profit providers

The number of hospice providers has grown substantially over the past decade. From 2000 to 2010, the total number of hospices increased 53 percent, from just over 2,300 to more than 3,500 (Table 11-3, p. 290). The most rapid growth occurred between 2003 and 2007, with an average annual growth rate of about 7 percent. The number of providers grew at an average rate of about 3 percent per year from 2007 to 2010, with growth of 2.7 percent in the most recent year (2010). The somewhat slower growth in the past few years may in part be influenced by guidance CMS issued in 2007 to state survey and certification agencies that placed surveys of hospices applying to be new Medicare providers (and surveys of certain other providers) in the lowest tier of their workload priorities.[5]

For-profit hospices accounted for most of the growth in the number of hospices. Overall, the number of for-profit hospices grew 150 percent from 2000 to 2010, while the number of nonprofits declined 1 percent and hospices with government or other ownership structures increased 27 percent over this period.[6] The number of for-profit hospices grew at an average rate of about 15 percent per year from 2003 to 2007 and at an average rate of 5 percent per year from 2007 to 2010. In comparison, during the same periods, the number of nonprofit hospices increased at average annual rates of 0.3 percent and 0.4 percent, respectively. Among nonprofit hospices, the number of freestanding providers (not classified separately in Table 11-3, p. 290) increased modestly over the past decade, with average growth of 1.4 percent per year from 2002 to 2009 and 1.2 percent in 2010. As of 2010, about 54 percent of hospices were for profit, 33 percent were

TABLE 11–3

Total number of hospices rose substantially between 2000 and 2010, driven by growth in for-profit hospices

							Average annual percent change		
Category	**2000**	**2003**	**2007**	**2008**	**2009**	**2010**	**2000–2003**	**2003–2007**	**2007–2010**
All hospices	2,318	2,350	3,249	3,372	3,462	3,555	2.0%	7.2%	3.0%
For profit	756	835	1,646	1,751	1,833	1,915	6.8	15.2	5.2
Nonprofit	1,176	1,132	1,147	1,154	1,158	1,162	–1.2	0.3	0.4
Government/other	376	383	456	467	471	478	1.7	3.7	1.6
Freestanding	1,214	1,304	2,158	2,288	2,385	2,477	5.2	11.2	4.7
Home health based	545	502	550	549	546	556	–2.6	2.2	0.4
Hospital based	547	531	525	518	513	503	–0.7	–0.5	–1.4
SNF based	12	13	16	17	18	19	0.0	7.5	5.9

Note: SNF (skilled nursing facility).

Source: MedPAC analysis of data from CMS Providing Data Quickly system, https://pdq.cms.hhs.gov, accessed November 1, 2011.

nonprofit, and 13 percent were government or other ownership structures.

Growth in the number of hospices occurred predominantly among freestanding providers. Between 2000 and 2010, the number of freestanding hospices grew 104 percent. The number of home-health-based and hospital-based hospices changed only modestly. The number of home-health-based hospices fluctuated between 2000 and 2010, resulting in a 2 percent net increase in the number of providers over this period. From 2000 to 2010, the number of hospital-based hospices declined about 8 percent overall, with a decline of less than 1 percent per year before 2007 and an average decline of 1.4 percent per year from 2007 to 2010. From 2000 to 2010, skilled nursing facility (SNF)–based hospices grew from 12 providers to 19 providers.[7] As of 2010, 70 percent of hospices were freestanding, 16 percent were home health based, 14 percent were hospital based, and fewer than 1 percent were SNF based.[8]

The increase in the supply of hospices over the past decade occurred in both rural and urban areas. Between 2000 and 2009, the number of hospices located in urban areas grew 62 percent; in rural areas, the increase was about 31 percent (not shown in Table 11-3). The number of hospices in rural areas dipped slightly (1 percent) between 2009 and 2010, while the number in urban areas increased 5 percent during this period. Hospice location does not provide a full picture of access to services because a hospice's service area may extend beyond the boundaries of the county where it is located. In our urban and rural margin analysis later in the chapter, hospices are categorized by predominant type of county served based on the beneficiaries' county of residence. That analysis shows that the predominant type of county served is urban for 70 percent of hospices, micropolitan for 18 percent of hospices, rural adjacent for 6 percent of hospices, and rural nonadjacent for 6 percent of hospices as of 2009. In addition, 4 percent of hospices had beneficiaries residing in frontier counties, accounting for more than 10 percent of their caseload.

Growth in the number of hospices by state between 2000 and 2010 varied, with some states experiencing extremely robust growth (more than double in Louisiana, Mississippi, Nevada, South Carolina, Texas, and Utah) and other states experiencing no growth (South Dakota) or small declines in the number of hospice providers (Arkansas, Kentucky, Maryland, New York, and North Dakota).[9] Four states with the highest share of hospices exceeding the aggregate payment cap in 2009 (Alabama, Mississippi, South Carolina, and Arizona) had above-average growth in the number of hospices between 2000 and 2009, with increases in the number of providers ranging from about 78 percent to more than 150 percent

TABLE 11–4 **Volume of hospice use increased substantially between 2000 and 2010**

Category	2000	2009	2010	Annual change, 2000–2009	Change, 2009–2010
Number of hospice users	513,000	1,090,000	1,159,000	8.7%*	6.3%
Total spending (in billions)	$2.9	$12.1	$13.0	17.2*	7.2
Average length of stay among decedents (in days)	54	84	86	5.0*	2.1
Median length of stay among decedents (in days)	17	17	18	0 days	1 day

Note: Average length of stay is calculated for decedents who used 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/her lifetime.
*Average annual change.

Source: MedPAC analysis of the denominator file, the Medicare Beneficiary Database, and the 100 percent hospice claims standard analytic file from CMS.

during that time. However, more hospice providers does not necessarily translate into more access to care. Our March 2010 report showed that hospice enrollment rates (as measured by the percent of Medicare decedents who used hospice) were unrelated to a state's supply of hospice providers (as measured by the number of hospices per 1,000 decedents) (Medicare Payment Advisory Commission 2010). Furthermore, between 2009 and 2010, hospice use among decedents increased, even in states that experienced a decline in the number of hospice providers in 2010.

Volume of services: Growth in the number of hospice users and average length of stay have increased Medicare hospice spending substantially

The number of Medicare beneficiaries receiving hospice services increased rapidly in the past decade, more than doubling between 2000 and 2010. In 2010, more than 1.1 million beneficiaries used hospice services, up from just over 0.5 million in 2000 (Table 11-4). Between 2000 and 2009, the number of hospice users increased at an average annual rate of 8.7 percent per year. The number of hospice users continued to grow in 2010 by 6.3 percent.

Average length of stay also increased substantially in the past decade. Medicare decedents in 2010 who used hospice had an average stay of 86 days (over the course of their lifetime), compared with 54 days for Medicare decedents in 2000. Growth in length of stay has slowed some in the past few years. Average length of stay among Medicare decedents for the 3 years between 2008 and 2010 increased from 83 days to 84 days to 86 days, respectively.[10]

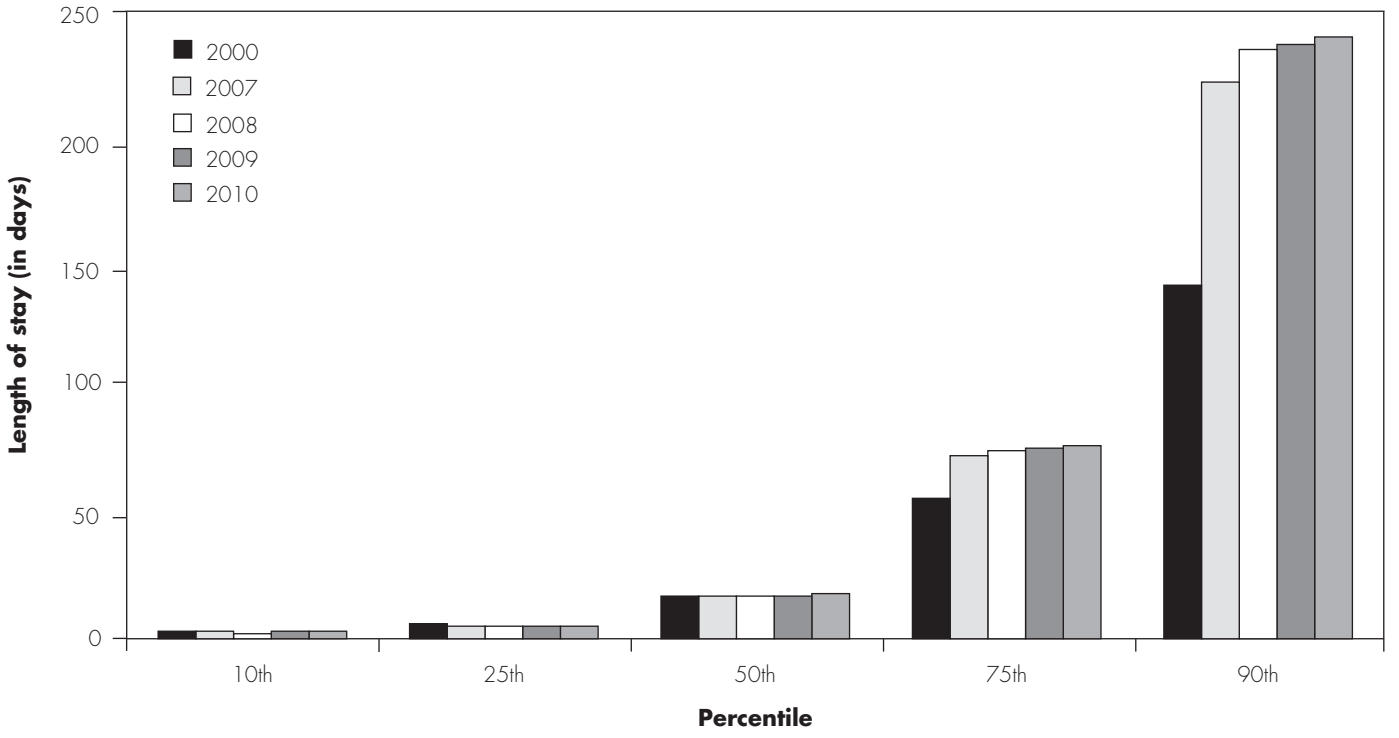
The increased average length of stay reflects in large part an increase in very long hospice stays, while short stays remained virtually unchanged (Figure 11-1, p. 292). Between 2000 and 2010, hospice length of stay at the 90th percentile grew substantially, increasing from 141 days to 240 days. Growth in very long stays slowed somewhat in the 3 years between 2008 and 2010, as the 90th percentile grew by 5 days over this period, from 235 days to 237 days to 240 days, respectively. Median length of stay, which held steady at 17 days for most of the decade, edged upward to 18 days in 2010. The 25th percentile was 5 days in 2010, unchanged from the prior year.

Both the increase in length of stay for patients with the longest stays and the persistence of very short stays are concerns. With very long stays, the concern is that incentives in the payment system may be spurring some providers to pursue business models that maximize profit by taking on very-long-stay patients who may not meet the hospice eligibility criteria. At the extreme, some providers may be offering hospice as a long-term care benefit rather than as an end-of-life benefit.

With very short hospice stays, the concern is that patients enter hospice too late to fully benefit from all that hospice has to offer. 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, such as reluctance among physicians, patients, and their families to recognize a terminal situation and the financial incentives of acute care

FIGURE 11–1

Very long hospice stays have grown longer while short stays remained virtually unchanged



Note: Length of stay is calculated for decedents who used 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/her lifetime.

Source: MedPAC analysis of the Medicare Beneficiary Database from CMS.

providers to continue treating a terminal patient (Medicare Payment Advisory Commission 2009).

Some point to the requirement that beneficiaries forgo intensive conventional care to enroll in hospice as a factor that contributes to short hospice stays. PPACA mandates a three-year demonstration at 15 sites to test the effect on quality and cost of allowing concurrent hospice and conventional care. A few private insurers are experimenting with this approach among the commercially insured, working age, managed care population. One insurer has reported that its concurrent care program resulted in more hospice enrollment, less use of intensive services, and lower costs (Krakauer et al. 2009). It is uncertain whether this type of approach would yield savings in a Medicare FFS environment with the absence of health plan utilization management and an elderly population with a greater prevalence of noncancer diagnoses, which tend to result in longer hospice stays.

The increase in long hospice stays is partly the result of the enrollment of more beneficiaries with noncancer diagnoses, for whom it may be more difficult to predict life expectancy. For example, average length of stay among Medicare decedents in 2009 was 53 days for beneficiaries with cancer, compared with 132 days for beneficiaries with neurological conditions (Table 11-5). Over the past decade, with increased recognition that hospice can care for patients with noncancer diagnoses, the share of the hospice population with noncancer diagnoses has grown (now constituting two-thirds of hospice patients) and average length of stay has grown. But other factors are also at work. Over the past decade, average length of stay has grown substantially in all diagnosis categories (except cancer), and this growth accounts for most of the overall growth in average length of stay. Part of the growth in within-diagnosis length of stay reflects the rapid entry of for-profit providers, whose patients on average have longer stays than those of nonprofit providers overall and within diagnosis groups. For example, average length of

stay among decedents served by for-profit and nonprofit providers, respectively, was 100 days and 69 days across all diagnoses and 151 days and 113 days for decedents with a neurological diagnosis. Average length of stay also varies by site of service. Among Medicare decedents in 2009, average length of stay in hospice was shortest (14 days) among patients whose main location of care was a hospice facility or hospital. Average length of stay was longest for decedents whose main location of care was an assisted living facility (143 days), followed by a nursing facility (107 days) and the patient's home (87 days). Differences in the diagnosis profile of patients residing in assisted living facilities and nursing facilities explain some of the differences in average length of stay compared with patients at home. The markedly longer stays among assisted living facility residents (who currently constitute about 8 percent of hospice patients) compared with nursing facility residents is not understood and bears further monitoring and examination.

It may also be worthwhile to consider providing physicians who refer patients to hospice with summary feedback on the length of stay of patients they refer. If referring physicians have information about the outcome of their referrals, it might help them gauge the timing of their conversations with patients about hospice and might have the potential to lower the prevalence of very short stays and very long stays. Of course, there will always be some very short and very long stays in hospice because of uncertainty in predicting life expectancy and unforeseen events. But, to the extent that some of the very short and very long stays occur because physicians lack information about what occurs after a hospice referral, this type of feedback might have the potential to influence referrals to hospice and help promote lengths of stay that are sufficient to benefit patients and that are consistent with an end-of-life benefit.

Some providers, particularly those that exceed the aggregate payments cap, have a higher average length of stay across all diagnoses. The percent of hospices that exceeded the cap in 2009 is estimated to be about 12.5 percent (Table 11-6, p. 294). Medicare hospice payments over the cap represented just under 1.7 percent of total hospice payments in 2009. Because of refinements to our methodology for calculating cap overpayments in 2008 and 2009 (due to changes in data availability and efforts to match as closely as possible the CMS claims processors' cap calculation methodology), our cap estimates across time are not entirely comparable. Nevertheless, on the basis of additional analyses we performed, we believe that the percent of hospices exceeding the cap increased each year from 2002 through 2009, while the percent of total hospice payments over the cap and the average amount of the overpayment per above-cap hospice has declined since 2006.

CMS released a final rule in 2011 concerning the cap calculation that has implications for cap overpayment estimates in 2009 and future years. As discussed in more detail in the text box (pp. 296-297), CMS established an

TABLE 11–5 **Hospice average length of stay among decedents by beneficiary and hospice characteristics, 2009**

Characteristic	Average length of stay among decedents (in days)
Beneficiary	
Diagnosis	
Cancer	53
Neurological conditions	132
Heart/circulatory	76
Debility	98
COPD	107
Other	85
Main location of care	
Home	87
Nursing facility	107
Assisted living facility	143
Hospice facility or hospital	14
Hospice	
Hospice ownership	
For profit	100
Nonprofit	69
Type of hospice	
Freestanding	87
Home health based	70
Hospital based	62

Note: COPD (chronic obstructive pulmonary disease). Average length of stay is calculated for Medicare beneficiaries who died in 2009 and used hospice that year and reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during his/her lifetime. Main location is defined as the location where the beneficiary spent the largest share of days while enrolled in hospice.

Source: MedPAC analysis of 100 percent hospice claims standard analytical file data, Medicare Beneficiary Database, Medicare hospice cost reports, and Provider of Services file data from CMS.

TABLE 11–6 **Hospices that exceeded Medicare's annual payment cap, selected years**

	2002	2004	2006	2008*	2009*
Percent of hospices exceeding the cap	2.6%	5.8%	9.4%	10.2%	12.5%
Average payments over the cap per hospice exceeding the cap (in thousands)	$470	$749	$731	$571	$485
Payments over the cap as percent of overall Medicare hospice spending	0.6%	1.7%	2.4%	1.7%	1.7%
Total Medicare hospice spending (in billions)	$4.4	$6.6	$8.8	$11.4	$12.0

Note: The cap year is defined as the period beginning November 1 and ending October 31 of the following year.
*Due to a change in data availability and refinements in the estimation methodology, the estimates in 2008 and 2009 are not entirely comparable to the prior year estimates.

Source: MedPAC analysis of 100 percent hospice claims standard analytical file data, Medicare hospice cost reports, Provider of Services file data from CMS, and CMS Providing Data Quickly system. Data on total spending for each fiscal year from the CMS Office of the Actuary.

alternative methodology for calculating cap overpayments. This new methodology ("the proportional methodology") modifies how beneficiaries who receive services in more than one cap year from the same hospice figure into the cap calculation. CMS has given hospices a choice of which methodology is used. For the 2012 cap year and beyond, the new "proportional" methodology will be used unless a hospice elects to remain with the current "streamlined" methodology. For cap years before 2012, the current streamlined methodology will be used, except for hospices that file a valid appeal or lawsuit concerning their cap overpayments, in which case the proportional methodology will be used to calculate their overpayments for the appealed year going forward. Hospices have up to 180 days after the date of the cap overpayment demand letter received from the CMS claims processing contractor to file an appeal. Some hospices are still within the window to appeal the 2009 cap calculations. Therefore, uncertainty exists about which cap formula will be used to calculate cap overpayments for 2009 for individual providers. In light of this uncertainty, for estimation purposes we have assumed that the current streamlined methodology is used for the 2009 cap calculation for all hospices. This is a conservative approach and likely results in our overstating the amount of cap overpayments and understating our margin estimates slightly.

Above-cap hospices are more likely to be for profit, freestanding providers and to have smaller patient loads than below-cap hospices.[11] While above-cap hospices treat more patients with conditions that tend to have longer lengths of stay (e.g., Alzheimer's disease and other neurological conditions), within each diagnosis group, above-cap hospices had longer stays than below-cap hospices. For example, 46 percent of hospice patients with chronic obstructive pulmonary disease in 2009 had stays beyond 180 days in above-cap hospices, compared with 25 percent of patients in below-cap hospices (Table 11-7).

One other facet of hospice care we examined is the frequency with which hospice providers' patients do not remain in hospice until death. While some patients improve while under hospice care (often referred to as the "hospice effect") and revoke their election or choose to withdraw from hospice and return to conventional care for other reasons, unusually high rates of patients' being discharged alive among some providers raises concerns that some hospices may be pursuing business models that seek patients likely to have long stays who may not meet the hospice eligibility criteria and then discharge them when they incur substantial cap liabilities. It is also possible that in some cases unusually high live discharge rates could be an indicator of hospice patients' dissatisfaction with the quality of care furnished by an individual hospice provider. In 2009, just under 18 percent of discharges were live discharges across all hospice providers. Similar to our findings in the March 2010 report, above-cap hospices had substantially higher rates of patients discharged alive from hospice. In 2009, about 44 percent of discharges in above-cap hospices involved patients who were discharged alive compared with 16 percent of discharges in below-cap hospices (Table 11-8). This pattern holds true when comparing patients with similar diagnoses. For example, among patients with heart and circulatory conditions discharged from hospice

TABLE 11–7

Hospice length of stay by diagnosis for above-cap and below-cap hospices, 2009

Diagnosis	Percent of stays beyond 180 days among hospice users: Above-cap hospices	Below-cap hospices
All	42%	19%
Cancer	17	9
Neurological conditions	50	30
Heart/circulatory	44	18
Debility	43	23
COPD	46	25
Other	49	23

Note: COPD (chronic obstructive pulmonary disease). Data reflect the percent of hospice users in 2009 whose hospice stay was beyond 180 days.

Source: MedPAC analysis of 100 percent hospice claims standard analytical file data from CMS.

in 2009, 48 percent of discharges by above-cap hospices were live discharges compared with 14 percent in below-cap hospices. Between 2008 and 2009, there was almost no change in the hospice live discharge rate overall and in above-cap and below-cap hospices.

The longer stays and higher frequency of patients being discharged alive from hospice among above-cap hospices compared with other hospices suggest that above-cap hospices may be admitting patients who do not meet the hospice eligibility criteria. A pattern of certain providers enrolling hospice patients who may not meet eligibility criteria for long periods of time and then discharging them back to traditional Medicare is disruptive for these beneficiaries and may result in them not receiving the most appropriate services for their condition, which may translate into poor quality of care. It also raises fiscal concerns for the Medicare program if some hospices do not comply with the benefit's eligibility criteria and merits further investigation by the Office of Inspector General (OIG) and CMS.

Some hospices have asserted that Medicare's aggregate cap impedes access to hospice care. As shown in previous reports, the hospice cap is unrelated to the prevalence of hospice use across states (Medicare Payment Advisory Commission 2010, Medicare Payment Advisory Commission 2011). In 2009, 6 of the top 10 states with the highest rates of hospice enrollment among Medicare decedents had very few (3 percent or less) or no hospices exceed the cap. In addition, hospice use rates vary substantially across the states that have a relatively high share of hospices over the cap. Among the five states with the largest share of hospice providers over the cap, the percent of decedents who used hospice ranged from substantially below the national average in one state to about average in two states to slightly above average in one state and substantially above average in another state. These data demonstrate that exceeding the cap does not reflect high hospice enrollment rates.

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, as publicly reported information on quality is generally not available. PPACA mandates that CMS publish hospice quality measures by 2012. Beginning in fiscal year 2014, hospices that do not report quality data will receive a 2 percentage point reduction in their annual payment update.

CMS has adopted two quality measures for the first year of the pay-for-reporting program. Hospices must report these measures in 2013 (based on data from the last three months of calendar year 2012) or face a 2 percent reduction in their payments for fiscal year 2014. The first measure endorsed by the National Quality Forum (NQF)

TABLE 11–8

Hospice live discharges as a percent of all hospice discharges, by diagnosis, for above- and below-cap hospices, 2009

Diagnosis	Hospices: Above cap	Below cap
All	44%	16%
Cancer	21	10
Neurological conditions	35	17
Heart/circulatory	48	14
Debility	49	20
COPD	51	20
Other	57	25

Note: COPD (chronic obstructive pulmonary disease).

Source: MedPAC analysis of 100 percent hospice claims standard analytical file data and the denominator file from CMS.

Hospice cap

The Medicare hospice payment system includes an aggregate cap that effectively limits the average annual payment per beneficiary that a hospice provider can receive. The hospice cap is established in statute (Section 1814(i)(2) of the Social Security Act). The methodology CMS has historically used to operationalize the hospice cap (now referred to as "the streamlined methodology") has been a source of controversy. Some above-cap hospices challenged the methodology in court. In the fiscal year 2011 hospice final rule, CMS established an alternative methodology ("proportional methodology") for operationalizing the cap. Below is a summary of the two methodologies, the time frame for their use, and a discussion of operational aspects of the new methodology that will be important for ensuring that overpayments are fully collected.

General cap formula. For each cap year (November 1 through October 31 of the following year), if total payments to a hospice for that year exceed the hospice's total number of patients for that year multiplied by the cap amount ($23,014.50 in 2009), the hospice must repay the difference to the government.

The difference between the streamlined and proportional approach to the cap calculation relates to how beneficiaries who receive care in more than one cap year from the same hospice are treated in the beneficiary count of the cap calculation.

Streamlined methodology. An individual who receives care from only one hospice is included in the beneficiary count for the cap calculation the first year the beneficiary is enrolled in hospice. If that beneficiary is enrolled in hospice for more than one cap year, the beneficiary is included in the beneficiary count only for the year of admission. For beneficiaries who receive care from more than one hospice, the beneficiary is reflected as a fraction in the beneficiary count for a provider in each year the beneficiary receives hospice care from that provider. The fraction reflects the number of days of hospice care in a cap year the beneficiary received care from that hospice as a percent of all days of hospice care received by that beneficiary from all hospices in all years.

Proportional methodology. The beneficiary is reflected as a fraction in the beneficiary count for a provider in each year the beneficiary receives hospice care from that provider, regardless of the number of hospices from which the beneficiary received care. This fraction is calculated using the same method as used under the streamlined methodology for beneficiaries who change hospices.

CMS has given hospices a choice of methodology. The general time frames for implementation of the methodologies are as follows.

2011 cap year and earlier. Streamlined methodology will be used unless the hospice has filed or files a valid appeal or lawsuit, in which case the proportional approach is used from that point going forward. Hospices have 180 days from the date of the overpayment demand letter received from the CMS claims processing contractors to file an appeal.

2012 cap year and after. Proportional methodology will be used unless the hospice elects to remain with

(continued next page)

focuses on pain management (i.e., the share of patients who reported being uncomfortable because of pain at admission whose pain was brought to a comfortable level within 48 hours—commonly referred to as the National Hospice and Palliative Care Organization's comfortable dying measure). The second measure is process related and is designed to assist with the development of future quality measures. Hospices will report whether they are tracking at least three measures focused on patient care and what those measures are, which CMS indicated will help with the identification of feasible quality measures in the future. At the time of publication, NQF was considering endorsement of additional quality measures in the areas of palliative care and end-of-life care, which may be a source of additional quality measures for hospice in the future.

In November 2011, we convened a technical panel of hospice clinicians, researchers, quality experts, and

Hospice cap (cont.)

the streamlined methodology. Hospices that elect to remain with the streamlined methodology have the option of electing the proportional methodology once in the future, at which point they must remain with the proportional methodology going forward.

Implementation of the new methodology. Both the original and new cap methodologies are calculated based on the most recent data available at the time the calculation is made. How far after the close of the cap year the calculation is performed affects the amount of overpayments estimated for both calculations but more so for the new proportional methodology. Under both methodologies, when prorating a beneficiary's hospice use, the beneficiary is reflected in the beneficiary count of the cap formula for a particular hospice and cap year as a fraction that reflects the number of days of hospice care provided by that hospice in that cap year as a percent of the beneficiary's total hospice days in all years and across all hospices. The longer after the close of the cap year the calculation is done, the more complete the view of hospice care beyond the cap year at issue will be, and thus the calculation of the beneficiary fraction will be more accurate. Under the proportional methodology, this fractional approach occurs for all beneficiaries who receive hospice care in more than one year or from more than one provider, whereas under the streamlined methodology it occurs only for those who switched hospices. Consequently, when the cap calculation is done soon after the close of the cap year, the proportional methodology generates substantially lower overpayments in the aggregate than the streamlined methodology. CMS has noted the potential for the proportional methodology to understate a hospice's cap liabilities because only a partial view of future hospice use is available at the time of the cap calculation for those beneficiaries who continue receiving hospice in future cap years (CMS 2011). CMS has stated that it has the ability to reopen the overpayment calculation for a cap year up to three years after the cap determination for that year is made (CMS 2011).

Commission analysis highlights the importance of that reopening process for the proportional methodology. At the individual hospice level, whether a hospice has more overpayments under one formula versus the other depends on the individual circumstances of the hospice. But at the aggregate level summing across all hospices, we find that the new proportional methodology generally produces lower overpayments than the streamlined methodology, particularly when the calculation is done soon after the close of the cap year. Modeling the streamlined methodology versus the proportional methodology, we find that the proportional methodology yields overpayments amounting to less than 50 percent of the overpayments estimated by the streamlined methodology when calculated 2 months after the close of the cap year, with this percentage approaching 80 percent at 10 months and about 90 percent at 22 months. Also, the number of hospices exceeding the cap increases the longer the lag between the close of the cap year and when the calculation is performed. These results illustrate the importance of establishing a national standard time frame for initially performing the cap calculation and a national standard process for reopening that calculation in future years to ensure that all hospices that exceed the cap for a given cap year are identified and overpayments are fully collected. ■

other stakeholders to provide input on hospice quality measurement. Panelists provided feedback on what they thought were the most important indicators of hospice quality and related issues.

Measures

Panelists discussed the challenges of hospice quality measurement. The purpose of hospice care—to provide comfort care and psychosocial and other supports to patients and their caregivers near the end of life—makes quality measurement inherently challenging. Because of the nature of hospice care, there may be limited ability to identify outcome measures. The NQF pain measure CMS adopted for the first year of reporting is one; more work is needed to develop others. Panelists noted that a combination of structure, process, and survey measures, combined with the NQF pain measure, may be the best gauge of quality at this time.

Symptom management

Panelists generally agreed that quality measures that gauge the effectiveness of symptom management where feasible, or whether hospices have appropriate processes in place to screen for and manage symptoms, are an important piece of quality measurement. One panelist noted that in considering what types of symptoms are good initial candidates for quality measurement, policies might best focus on symptoms that affect the largest share of patients and where there is strong knowledge of how to address those symptoms. This panelist pointed to pain and dyspnea as two symptoms that best fit those criteria and a number of panelists agreed that they are important areas. Psychological symptoms such as anxiety and depression were viewed as important but harder targets for quality measurement because less is known about effective management of these symptoms at the end of life. One panelist suggested that possible measures in this area could be whether a hospice screened for these psychological symptoms and identified whether a plan was in place to address them (without specifying the type of plan).

Overall, panelists supported the pain measure adopted by CMS for the first year of the quality reporting (i.e., the percentage of patients uncomfortable because of pain at the initial assessment who are comfortable within 48 hours), although they expressed concern about certain issues. Some panelists noted that for some patients there is a trade-off between pain control and cognitive awareness and that some patients choose awareness over pain control. Some expressed concern that this pain measure does not allow for patient preferences in this type of situation. Several panelists, however, noted that this measure's focus on a patient's perception of comfort rather than on a numeric pain scale was important because it did not impose on patients an outside judgment of the level at which their pain should be. At the same time, some panelists noted that there would be value in having a pain measure based on the patient's definition of comfort and another measure using a numeric pain scale. Other issues discussed include concerns about whether hospices would follow the protocol for the pain measure correctly and the exclusion of patients who are not able to self-report. Some panelists pointed out that there may be variability across hospices in the types of patients they consider unable to self-report or in extreme cases some may exclude certain types of patients from the protocol, which could affect the results. Panelists thought it was important to have information on the number of patients for whom an individual hospice had missing data as a gauge of potential issues.

Bereaved family member surveys Many panelists believe data from bereaved family member surveys are valuable indicators of hospice quality. Some noted that the unit of care for hospice is the patient and the caregiver, so information about how the hospice meets caregivers' needs for information and support (e.g., the degree to which caregivers have the information they need about administering medications, the degree to which caregivers feel prepared about what to expect during the dying process) are indicators of a hospice's performance. Other panelists noted that with patients generally unable to report on the experience of care, family members are in the closest proximity to report such information (such as whether the patient was respected and perceptions of the overall quality of care received). A panelist also noted that the perspective of bereaved family members on the care a hospice provides resonates with potential patients and families as they select a hospice. From a practical perspective, panelists pointed out that many hospices conduct a postdeath survey of bereaved family members so they should be familiar with the general process. However, a standard survey instrument would have to be selected if it were to become part of CMS's quality reporting program. One survey, the National Hospice and Palliative Care Organization's Family Evaluation of Hospice Care, has NQF endorsement. While panelists believe such surveys provide valuable information, they also noted that the responses tend to be skewed positive and that survey measures would need to be accompanied by other types of quality measures to provide a full picture of quality.

Staffing and service measures A number of panelists thought measures related to hospice staff and the services they provide are important gauges of quality. Examples of indicators of quality according to some panelists include staff contact hours, staff caseload, certification of staff, and staff turnover. Some panelists also noted that there is variation across hospices in the breadth of services they offer, which may reflect quality (e.g., whether they serve patients with expensive needs, whether they provide alternative therapies, and the level of their responsiveness on nights and weekends).

Claims-based measures of poor quality Several panelists indicated that Medicare claims data might be a potential source of indicators of poor quality care. For example, hospices observed in the claims data to provide few visits in the last days of life, to provide no higher acuity hospice care (general inpatient care or continuous home care) to

any patients, or to have unusually high live discharge rates might be a flag for poor quality and bear further scrutiny. We intend to explore these types of data in the future.

Other issues

Patient assessment instrument Hospice does not have a uniform patient assessment instrument. Panelists had varied views on the need for such an instrument. Several panelists believe the only way to obtain consistent data across hospices is to adopt a patient assessment instrument. Others have concerns about such an instrument, particularly what items to include and whether it would result in hospices focusing on the items in the instrument to the detriment of other aspects of hospice care. Some panelists pointed to the psychosocial and spiritual aspects of hospice care as being the most difficult to reflect in an assessment instrument.

Short-stay patients A number of quality indicators used in CMS's Hospice Assessment Intervention and Measurement project that are being considered for NQF endorsement exclude patients with a length of stay of less than seven days. Panelists thought it was important that this short-stay population be included in quality measures; that is, hospices should be accountable for quality standards regardless of length of stay.

Surveys and accreditation Panelists discussed perceived variation in the sophistication and quality of care across hospice providers, including concerns that a small subset of providers may provide substandard care. Panelists had varied opinions about what should be done if hospices exhibited indicators of poor quality. Some believed they should be subject to immediate survey (inspection) by a state survey agency. Others indicated that the survey and certification process was not necessarily strong enough to pick up deficiencies. Some panelists believed that requiring accreditation of hospices might be an avenue to explore but noted that the accreditation process for hospices, while perceived to be stronger than the survey process, also needed strengthening.

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 adequate.

Some freestanding hospices are part of large publicly traded chain providers. Recent financial reports for these hospices have generally been favorable and they appear to have adequate access to capital. Two publicly traded companies have reported strong revenue growth and increases in average length of stay, and they have invested in new hospice agencies or (in the case of one company) inpatient units. Another publicly traded hospice company, which recently merged with another large multisector health care provider, reported a decline in hospice admissions and indicated that efforts are under way to reduce costs and grow volume. This firm is substantially leveraged, but it is reflective of the costs of the recent merger and not an indicator of Medicare payment adequacy for hospice.

Less information is available on access to capital for privately held freestanding providers. Among private equity groups, the number of merger and acquisition transactions for hospice providers is up in the first half of 2011 compared with the same period in 2010 (Braff Group 2011). The continued influx of for-profit freestanding providers and modest growth in the number of nonprofit freestanding providers suggest that capital is accessible. Hospital-based and home-health-based hospices have access to capital through their parent providers, which also appear to have adequate access to capital.

Medicare payments and providers' costs

As part of the update framework, we assess the relationship between Medicare payments and providers' costs by considering whether current costs approximate what efficient providers are expected to spend on delivering high-quality care. Medicare margins illuminate the relationship between Medicare payments and providers' costs. We examined margins through the 2009 cost-reporting year, the latest period for which cost report data and claims data are available.[12] 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 11-9, p. 300). This variation is one reason why we observe differences in hospice margins across provider types in our margin analyses. In 2009, hospice costs per day were $142 on average across all hospice providers, a very slight increase from $141 per day in 2008.[13] Freestanding hospices had lower costs per day than home-health-based hospices and hospital-based

TABLE 11–9

Hospice costs per day vary by type of provider, 2009

		Percentile		
	Average	25th	50th	75th
All hospices	$142	$109	$133	$168
Freestanding	137	107	128	157
Home health based	146	111	137	171
Hospital based	178	120	156	201
For profit	130	103	123	152
Nonprofit	156	121	149	181
Above cap	114	97	114	135
Below cap	146	112	137	172
Urban	145	112	136	171
Rural	127	102	126	160

Note: Data reflect aggregate cost 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 the case mix or wages across hospices.

Source: MedPAC analysis of Medicare hospice cost reports and Medicare Provider of Services data from CMS.

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 the Medicare cost report data indicates that, across all hospice types, those with longer average lengths of stay 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. A few examples of indirect costs are management and administrative costs, accounting and billing, and capital costs. In 2009, indirect costs made up 34 percent of total costs for freestanding hospices, compared with 38 percent of total costs for home-health-based hospices and 43 percent of total costs for hospital-based hospices. The higher indirect costs among provider-based hospices suggest that their costs may be inflated because of the allocation of overhead costs from the parent provider.[14]

Hospice margins

From 2003 to 2009, the aggregate hospice Medicare margin oscillated from as low as 4.6 percent to as high as 7.1 percent (Table 11-10, p. 302). As of 2009, the aggregate hospice Medicare margin was 7.1 percent, up from 5.1 percent in 2008. Margins varied widely across individual hospice providers. In 2009, the Medicare margin was –13.7 percent at the 25th percentile, 5.3 percent at the 50th percentile, and 20.2 percent at the 75th percentile. Our estimates of Medicare margins from 2003 to 2009 exclude overpayments to above-cap hospices and are calculated based on Medicare-allowable, reimbursable costs consistent with our approach in other Medicare sectors.[15,16]

We excluded nonreimbursable bereavement costs from our margin calculations. The statute requires that hospices offer bereavement services to family members of their 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 2009 aggregate Medicare margin by at most 1.5 percentage points.[17] As discussed in more detail in our March 2011 report, this estimate of 1.5 percent is likely an overestimate of the bereavement costs associated with Medicare hospice patients. Some hospices report the cost of bereavement services provided to the families of hospice and nonhospice patients combined on the Medicare cost report, and we are not able to separately identify the bereavement costs related to hospice patients.

We also excluded nonreimbursable volunteer costs from our margin calculations. By statute, Medicare hospice providers are required to utilize some volunteers in the provision of hospice care. (For background on this requirement, see text box.) 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 types of 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.[18]

Hospice volunteer requirement

When the hospice benefit was established, the Congress included in the statute a requirement that a hospice use "volunteers in its provision of care and services in accordance with standards set by the Secretary, which standards shall ensure a continuing level of effort to utilize such volunteers" (Section 1861(dd)(2)(E) of the Social Security Act). In addition, the statute requires that hospices keep records on the use of volunteers, including documenting the resulting cost savings and service expansions achieved. According to the regulation implementing the Medicare hospice benefit, the intent of the volunteer requirement was to ensure that the establishment of the hospice benefit "did not diminish the voluntary spirit of hospices" (Health Care Financing Administration 1983). When the requirement was established, virtually all hospice providers were "voluntary" or charitable organizations; today, more than half are for-profit providers.

To implement the volunteer requirement, the Secretary established that hospices must use volunteers to provide patient care and administrative services (e.g., clerical work) equal to at least 5 percent of total patient care hours provided by paid staff or contractors. While volunteers may provide cost savings for hospices to the extent that they substitute for care or services that otherwise would be provided by paid staff, hospices do incur costs in recruiting and training volunteers.

According to survey data published in 2012 by the National Hospice and Palliative Care Organization, hospices relied on 458,000 volunteers in 2010, with the majority (about 59 percent) providing assistance to patients and their families averaging about 47 hours of service per volunteer per year (National Hospice and Palliative Care Organization 2012). About 19 percent of volunteers provided clinical support (e.g., clerical work) and another 22 percent provided general support (e.g., fundraising or board of directors).[19] Volunteers provided 5.2 percent of clinical staff hours in hospices in 2010. A few examples of services volunteers provide are visiting with patients socially, helping patients and caregivers with errands, and staying with patients so caregivers can have a few hours of respite. Some hospices also use volunteers to sit vigil with patients who do not have family in the last hours or days of life so that these patients do not die alone.

This volunteer requirement is unique to hospice providers. No other type of Medicare provider is required to utilize volunteers. This practice raises questions about the role the volunteer requirement plays in hospice care and whether hospices should have the flexibility to determine what level of volunteers, if any, they utilize. ■

Freestanding, for-profit, and urban hospices have higher margins than their counterparts. In 2009, freestanding hospices had an aggregate Medicare margin of 10.0 percent, compared with home-health-based hospices at 5.2 percent and hospital-based hospices at –12.8 percent. The aggregate Medicare margin was considerably higher among for-profit hospices (11.4 percent) than among nonprofit hospices (3.4 percent). Among nonprofit hospices, freestanding and home-health-based hospices had substantially higher margins than hospital-based hospices. In 2009, the aggregate Medicare margin was 6.2 percent for freestanding nonprofit hospices and 7.4 percent for home-health-based hospices compared with –11.4 percent for hospital-based hospices (provider-based nonprofit margins are not broken out in Table 11-10). Generally, hospices' margins vary by the size of the provider; hospices with more patients have higher margins on average. Overall, hospices in urban areas have a higher aggregate Medicare margin (7.6 percent) than those in rural areas (3.1 percent), although this finding is not consistent by type of hospice. Freestanding hospices in urban areas have higher margins than those in rural areas. In contrast, home-health-based and hospital-based hospices in rural areas have higher margins than their counterparts in urban areas. A later section of this chapter examines margins of hospice providers based on the predominant type of county served (urban, micropolitan, rural adjacent, rural nonadjacent, and frontier).

Hospice financial performance also varies by length of stay (Table 11-11, p. 303). In 2009, hospices with longer stays had higher margins (with margins dropping somewhat for hospices in the longest stay category because some hospices in that category exceeded the cap

TABLE 11–10 **Hospice Medicare margins by selected characteristics, 2003–2009**

Category	Percent of hospices 2009	2003	2004	2005	2006	2007	2008	2009
All	100%	6.6%	5.0%	4.6%	6.4%	5.8%	5.1%	7.1%
Freestanding	69	10.9	8.3	7.2	9.7	8.7	8.0	10.0
Home health based	16	3.9	3.1	3.1	3.8	2.3	2.7	5.2
Hospital based	15	–14.0	–11.6	–9.1	–12.8	–10.7	–12.2	–12.8
For profit (all)	54	15.7	11.8	9.9	12.0	10.4	10.0	11.4
Freestanding	47	16.6	12.3	10.3	12.7	11.3	11.3	12.8
Nonprofit (all)	33	1.1	0.3	1.0	1.5	1.7	0.2	3.4
Freestanding	16	5.6	3.7	3.8	5.8	5.6	3.2	6.2
Urban	70	7.4	5.9	5.1	7.1	6.3	5.6	7.6
Rural	30	0.1	–2.3	0.2	0.8	1.4	1.3	3.1
Patient volume (quintile)								
Lowest	20	–2.2	–6.1	–6.6	–5.5	–8.0	–9.6	–8.1
Second	20	–4.1	–1.2	–1.6	0.3	1.0	–1.4	1.0
Third	20	1.6	1.1	1.9	2.4	3.1	3.9	3.5
Fourth	20	3.3	2.8	4.4	5.8	5.8	6.2	6.5
Highest	20	9.6	7.2	5.9	8.1	7.1	6.0	8.9
Below cap	87.5	6.7	5.6	5.1	7.0	6.1	5.5	7.6
Above cap (excluding cap overpayments)	12.5	3.5	–3.4	–0.8	0.3	2.5	1.0	1.3
Above cap (including cap overpayments)	12.5	23.9	18.9	20.7	20.7	20.5	19.0	18.3

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, 100 percent hospice claims standard analytical file, and Medicare Provider of Services data from CMS.

and our estimates assume the return of cap overpayments by these hospices). As noted previously, the higher profitability of long stays reflects a mismatch between the Medicare payment system and hospices' level of effort throughout an episode. Hospice visits tend to be more intense at the beginning and end of the episode and less intense in the intervening period, but Medicare makes a flat payment per day. The Commission's recommendation to revise the hospice payment system to have relatively higher payments per day at the beginning and end of the episode (near the time of the patient's death) and lower payments in the intervening period would better align payments and costs and would likely reduce the variation in profitability across hospices and patients.

In addition, hospices with a high share of patients in nursing facilities and assisted living facilities have higher margins than other hospices. For example, in 2009 hospices in the top quartile in terms of the percent of their patients residing in nursing facilities had a 13.8 percent margin compared with a margin of 6 percent to 7 percent in the middle quartiles and a margin of –0.6 percent in the bottom quartile. Margins also vary by the share of a provider's patients in assisted living facilities, with the margin ranging from 1.0 percent among providers in the lowest quartile to 11.5 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, when comparing hospices with similar lengths of stay, those with more nursing facility patients have higher margins, which may reflect efficiencies in the nursing facility setting, possibly from treatment of patients in a centralized location (e.g., lower mileage costs and staff time required for travel when a hospice treats more

patients in a single location), and reduction in workload due to overlap in aide services and supplies provided by the hospice and nursing facility. The Commission recommended that the OIG study hospice care provided in nursing facilities. The OIG recently completed a report on hospices that have a large share of their patients in nursing facilities and found that these providers are more likely to be for profit, have longer lengths of stay, and treat patients with diagnoses that require less complex care (Office of Inspector General 2011). They also noted an overlap in payments provided to hospices and nursing facilities for aide services. The OIG recommended that CMS monitor hospices that focus on nursing facility patients and reduce payments for hospice care in nursing facilities. In the Commission's October 2011 letter to the Congress on repeal of the sustainable growth rate and possible offsets, the Commission included a placeholder policy to operationalize the OIG's recommendation for a reduction in hospice rates in nursing homes (see http://www.medpac.gov/documents/10142011_MedPAC_SGR_letter.pdf).

Differences in margins across freestanding, home-health-based, and hospital-based hospices are in part due to differences in indirect costs (e.g., general and administrative expenses, capital costs), which are higher for provider-based hospices and are likely inflated because of the allocation of overhead costs from the parent provider. 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 5 percentage points higher for home-health-based hospices and 12 percentage points higher for hospital-based hospices, and the industry-wide aggregate Medicare margin would be about 1.8 percentage points higher.[20] We intend to continue to examine the differences in the levels of indirect costs across providers and consider whether issues with the allocation of overhead from the parent provider warrant the exclusion of provider-based hospices from our margin calculations.

TABLE 11–11

Hospice Medicare margins by length of stay and patient residence, 2009

Hospice characteristic	Medicare margin
Average length of stay	
Lowest quintile	–8.6%
Second quintile	2.8
Third quintile	8.7
Fourth quintile	14.2
Highest quintile	8.9
Percent of stays > 180 days	
Lowest quintile	–9.0
Second quintile	3.5
Third quintile	8.6
Fourth quintile	14.4
Highest quintile	8.3
Percent of patients in nursing facilities	
Lowest quartile	–0.6
Second quartile	6.1
Third quartile	6.7
Highest quartile	13.8
Percent of patients in assisted living facilities	
Lowest quartile	1.0
Second quartile	2.3
Third quartile	7.6
Highest quartile	11.5

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, 100 percent hospice claims standard analytical file, and Medicare Provider of Services data from CMS.

Urban and rural margins

Overall, the aggregate Medicare margin is higher for hospices that provide services predominantly in urban counties than for those that predominantly provide services in rural counties. To examine hospice margins by degree of rurality, we categorized hospices based on the type of county (i.e., urban, micropolitan, rural adjacent, rural nonadjacent based on the urban influence codes) in which the largest share of its patients live, and we excluded above-cap hospices.[21] Hospices that predominantly serve urban counties had a margin of 8.0 percent compared with 3.7 percent for hospices that predominantly serve nonurban counties (Table 11-12, p. 304). However, the higher margins for hospices serving urban counties compared with rural counties is not consistent across types of hospices. Margins are more favorable for freestanding hospices predominantly serving urban counties rather than rural counties. For home-health-based hospices, margins are slightly better for those serving rural counties rather than urban ones. For hospital-based hospices,

TABLE 11–12

Aggregate Medicare margins for below-cap hospices by type of county served, 2009

Hospice provider by predominant type of county served	Aggregate Medicare margin	Percent of hospices
Urban	8.0%	70%
Rural	3.7	30
Micropolitan	3.1	18
Rural, adjacent to urban	3.5	6
Rural, nonadjacent to urban	6.5	6
Frontier*	8.8	4

Note: Excludes above-cap hospices. Predominant county served is determined using the beneficiary's address registered with Social Security and reflects the type of county that accounts for the largest share of the provider's caseload. Frontier is defined as a county with a population density of 6 people per square mile or less.
*Providers with more than 10 percent of patients residing in frontier counties.

Source: MedPAC analysis of Medicare hospice cost reports, Medicare Beneficiary Database, 100 percent hospice claims standard analytical file, and Medicare Provider of Services data from CMS.

margins are negative for those serving urban and rural counties, with rural hospices overall having slightly better margins. Among hospices predominantly serving rural counties, margins are higher for hospices serving more remote counties. Margins were relatively similar for hospices predominantly serving micropolitan counties or rural adjacent counties (3.1 percent and 3.5 percent, respectively), while margins were higher for those predominantly serving rural nonadjacent counties (6.5 percent). This result largely reflects differences in margins among hospital-based hospices. Freestanding hospices have relatively similar margins across the three different types of rural counties. Hospital-based hospices have positive margins for those serving rural adjacent counties and negative margins for those serving other types of counties (rural and urban). We also examined margins for the 4 percent of hospices that have more than 10 percent of their patients residing in frontier counties (defined as a population density of six or fewer per square mile). These hospices had a higher aggregate margin (8.8 percent) than other hospices, although the median is near zero and margins vary widely across this small group of providers. Overall, these data suggest that while hospices serving rural areas in the aggregate have lower margins than those serving urban areas, margins do not appear to decrease as the degree of rurality increases. Furthermore, some hospices that provide services to beneficiaries in remote areas, such as frontier counties, do so with favorable margins.

Differences in patient volume explain some of the overall difference observed in margins between hospices predominantly serving urban and rural counties. For below-cap hospices serving urban and rural areas, margins generally increase as patient volume increases (Table 11-13). Rural hospices are much more likely to be very small and much less likely to be very large than their urban counterparts, which contributes to the overall differences in profitability between hospices predominantly operating in rural versus urban counties. Volume accounts for some, but not all, of the difference in margins between urban and rural hospices. Comparing hospices in the same quintile in terms of Medicare patient volume, hospices serving urban areas have a somewhat higher aggregate margin than those serving rural areas, with the exception of one quintile (Table 11-13).

Projecting margins for 2012

To project the aggregate Medicare margin for 2012, we model the policy changes that went into effect between 2009 (the year of our most recent margin estimates) and 2012. The policies include:

- a market basket update of 2.1 percent for fiscal year 2010, 2.6 percent for fiscal year 2011, and 3.0 percent for fiscal year 2012;
- the first three years of the seven-year phase-out of the wage index budget-neutrality adjustment factor, which reduced payments to hospices by 0.4 percent in fiscal year 2010 and by an additional 0.6 percent in each fiscal year 2011 and 2012;
- additional wage index changes, which reduced payments in fiscal years 2010 and 2011 and increase payments in fiscal year 2012;[22] and
- additional net costs beginning in 2011 associated with the face-to-face visit requirement for recertification of patients in the third benefit period and in subsequent benefit periods.

Taking these policy changes into account and assuming that hospice costs generally grow at a rate similar to forecasted input price growth, we project an aggregate Medicare margin for hospices of 5.1 percent in fiscal

year 2012. This margin projection excludes the nonreimbursable costs associated with bereavement services and volunteers (which would lower the aggregate margin at most by 1.5 and 0.3 percentage points, respectively). It also does not include any adjustment for the higher indirect costs observed among hospital-based and home-health-based hospices (which would increase the overall aggregate Medicare margin by as much as 1.8 percentage points).

In considering the 2012 margin projection as an indicator of the adequacy of current payment rates for 2013, one policy of note is the continued phase-out of the wage index budget-neutrality adjustment. Our 2012 margin projection reflects the first three years (through 2012) of the seven-year phase-out of the wage index budget-neutrality adjustment. In 2013, the fourth year of this phase-out will result in an additional 0.6 percentage point reduction in payments.

TABLE 11–13

Aggregate Medicare margins for below-cap hospices by Medicare patient volume and predominant type of county served, 2009

Number of Medicare patients	Aggregate Medicare margin		Percent of hospices	
	Urban	Rural	Urban	Rural
Quintile				
Lowest	1.8%	–5.9%	11.5%	35.3%
Second	4.1	2.3	15.5	27.4
Third	3.8	4.0	19.2	19.7
Fourth	6.6	4.4	24.4	13.4
Highest	9.1	7.1	29.5	4.2
All	8.0	3.7	100	100

Note: Excludes above-cap hospices. Predominant county served is determined using the beneficiary's address registered with Social Security and reflects the type of county that accounts for the largest share of the provider's caseload.

Source: MedPAC analysis of Medicare hospice cost reports, Medicare Beneficiary Database, 100 percent hospice claims standard analytical file, and Medicare Provider of Services data from CMS.

How should Medicare payments change in 2013?

Our indicators of payment adequacy in 2012 are generally positive. The Commission believes hospices can operate within the Medicare payment system with a modest update in fiscal year 2013.

Update recommendation

RECOMMENDATION 11

The Congress should update the payment rates for hospice for fiscal year 2013 by 0.5 percent.

RATIONALE 11

Our payment indicators for hospice are generally positive. The number of hospices has increased in recent years because of the entry of for-profit providers. The number of beneficiaries enrolled in hospice, average length of stay, and total hospice payments have also increased. Access to capital appears adequate. The projected 2012 aggregate Medicare margin is 5.1 percent.

IMPLICATIONS 11

Spending

- Under current law, hospices would receive an update in fiscal year 2013 equal to the hospital market basket index (currently estimated at 2.9 percent) less an adjustment for productivity (currently estimated at 0.9 percent) and less an additional 0.3 percentage point, for a net update of 1.7 percent (based on current estimates). Our recommendation for a 0.5 percent update in fiscal year 2013 would decrease federal program spending by between $50 million and $250 million over one year and by less than $1 billion over five years. The spending implication of this recommendation is based on Medicare spending projections that were made prior to a sequester, as the recommendation was developed and voted on before the sequester was triggered and became current law. If a Medicare sequester does occur, it will change the spending implication of the recommendation.

Beneficiary and provider

- We do not expect this recommendation to have adverse impacts on beneficiaries' access to care. This recommendation is not expected to affect providers' willingness and ability to care for Medicare beneficiaries. ■

Endnotes

1 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.

2 The Patient Protection and Affordable Care Act of 2010 (PPACA) makes changes to the annual update to hospice payments. Hospice payments will continue to be updated based on the hospital market basket, subject to certain adjustments stipulated by PPACA. Beginning in fiscal year 2013, a productivity adjustment will be applied to the market basket update. The market basket also will be reduced by an additional 0.3 percentage point in fiscal year 2013 and potentially an additional 0.3 percentage point in each fiscal year from 2014 to 2019 if certain targets for health insurance coverage among the working age population are met.

3 The average annual payment cap is calculated for the period November 1 through October 31 each year.

4 The most recent cap threshold for cap year ending October 31, 2011, is $24,527.69.

5 In late 2007, CMS issued guidance to state survey and certification agencies indicating that surveys of new hospices applying to be Medicare providers (as well as other types of providers that have the option of obtaining Medicare status through accreditation rather than state surveys) should be in the lowest tier of their workload priorities.

6 The government and other ownership structure category is an aggregation of three ownership types: (1) government ownership, (2) combination government and nonprofit ownership, and (3) other. The 27 percent increase in hospices with government and other ownership structures is driven by growth in hospices reporting other ownership structures, which increased more than 50 percent between 2000 and 2010. The number of government providers decreased about 10 percent and the number of providers with a combination of government and nonprofit ownership increased by less than 5 percent over this period.

7 This count of SNF-based hospices does not include freestanding hospices that are owned by a company that also owns nursing facilities. While we do not have an estimate of the number of freestanding hospices that are part of these types of joint ownership arrangements, joint ownership relationships exist among some hospice and nursing home chains.

8 The number of hospital-based hospices may be understated and the number of home-health-based hospices may be overstated, because some hospices that are part of hospital-based home health agencies may report being home health based rather than hospital based.

9 Not mentioned in the text, Alaska and Nevada also experienced substantial growth in the number of hospices in percentage terms (more than doubling) but a modest increase in the raw number of providers (from 1 in 2000 to 5 in 2010 for Alaska and from 7 in 2000 to 20 in 2010 for Nevada).

10 Average length of stay reported in this chapter is calculated based on data for Medicare decedents. Length of stay for beneficiaries discharged alive or who remained patients at the end of the year is much higher than average length of stay among decedents but appears to have declined modestly between 2009 and 2010.

11 In 2009, hospices that exceeded the aggregate cap had the following characteristics. About 87 percent were for profit, 8 percent were nonprofit, and 5 percent had "other" ownership structures. More than 90 percent of above-cap hospices were freestanding providers. The median caseload per year for above-cap hospices was nearly 50 percent less than the median caseload for below-cap hospices.

12 The aggregate Medicare margin is calculated by the following formula: [(sum of total payments to all providers) – (sum of total costs to all providers)/(sum of total payments to all providers)]. Data on total costs come from the Medicare cost reports. Data on total Medicare payments and total cap overpayments come from Medicare claims data. We present margins for 2009 (rather than 2010 like other sectors) because of time lags in the claims data. We have complete claims data for all hospices only for the 2009 cost-reporting year (which for some hospices includes part of calendar year 2010).

13 In the cost-per-day calculation, costs reflect aggregate costs for all types of hospice care combined (routine home care, continuous home care, general inpatient care, and inpatient respite care). Days reflect the total number of days the hospice is responsible for care for Medicare 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.

14 In general, hospices with a larger volume of patients have lower indirect costs as a share of total costs. While patient volume explains some of the difference in indirect costs across providers, freestanding hospices still have lower indirect costs than provider-based hospices when providers with similar patient volumes are compared.

15 Hospices that exceed the Medicare aggregate cap must repay the excess to Medicare. We do not consider the overpayments to be hospice revenues in our margin calculation.

16 The margin estimates for the period 2002–2005 in this report differ from the estimates for the same period in our June 2008 report. The margin estimates in this report exclude overpayments to above-cap providers and exclude Medicare nonreimbursable costs, whereas the prior margin estimates did not.

17 Bereavement costs are generally similar across most types of hospices; however, nonprofits report higher costs than for profits (2.0 percent and 1.2 percent of total costs, respectively).

18 Fundraising costs are also considered nonreimbursable and are not included in our margin calculations. These costs amounted to 1.5 percent of total costs in 2009.

19 Volunteers engaged in general support services (e.g., fundraising or board of directors) do not count toward the requirement that hospice volunteers provide services equal to at least 5 percent of patient care provided by paid staff or contractors.

20 These estimates are adjusted to account for differences in patient volume across freestanding and provider-based hospices.

21 Above-cap hospices are excluded because they have a disproportionate effect on the margins for certain types of rural areas. Above-cap hospices have unusually long stays, high discharge-alive rates, and artificially low margins due to the return of cap overpayments. They are not reflective of an efficient provider and have been excluded to not skew the comparisons across types of rural areas.

22 Hospices' payments increase or decrease slightly from one year to the next because of the annual recalibration of the hospital wage index. The annual wage index recalibration was expected to reduce Medicare hospice payments by 0.3 percent in 2010 and 0.2 percent in 2011 and to increase payments by 0.1 percent in 2012, according to estimates in the CMS final rules or notices establishing the hospice payment rates for those years.

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CHAPTER 12

The Medicare Advantage program: Status report

CHAPTER 12

The Medicare Advantage program: Status report

Chapter summary

Each year the Commission provides a status report on the Medicare Advantage (MA) program. In 2011, the MA program included more than 3,400 plan options, enrolled more than 12 million beneficiaries, and paid MA plans about $124 billion. 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 an update on current quality indicators in MA.

The MA program allows Medicare beneficiaries to receive benefits from private plans rather than from the traditional FFS Medicare program. The Commission supports private plans in the Medicare program; beneficiaries should be able to choose between the traditional FFS Medicare program and the alternative delivery systems that private plans can provide. Private plans, because they are paid a capitated rate rather than on a FFS basis, have greater incentives to innovate and to use care management techniques. However, to encourage efficiency and innovation, Medicare should place some degree of financial pressure on MA plans, just as the Commission has recommended for providers in the traditional FFS program.

Enrollment—In 2011, MA enrollment increased by 6 percent to 12.1 million beneficiaries (25 percent of all Medicare beneficiaries). Enrollment

In this chapter

in HMO plans—the largest plan type—increased 6 percent. Enrollment in private FFS (PFFS) plans declined from about 1.7 million to about 0.6 million enrollees, continuing the decline from the previous year. New network requirements for PFFS plans began in 2011 (mandated by the Medicare Improvements for Patients and Providers Act of 2008). Beginning in 2010, many plan sponsors reduced PFFS offerings and transitioned their enrollment to network-based preferred provider organization (PPO) plans; others changed their PFFS offerings to network plans. Predictably, PPOs showed rapid growth in enrollment between 2010 and 2011, with local PPO enrollment growing about 65 percent and regional PPO enrollment growing about 34 percent. The MA plan bids submitted to CMS project an increase in overall enrollment for 2012, primarily in HMOs.

Plan availability—In 2012, virtually all Medicare beneficiaries have access to an MA plan (0.3 percent do not), and 99 percent have access to a network-based coordinated care plan (CCP). Eighty-eight percent of beneficiaries have access to an MA plan that includes Part D drug coverage and charges no premium (beyond the Medicare Part B premium). Beneficiaries are able to choose from an average of 12 MA plan options, including 8 CCPs in 2012.

Plan payments—For 2012, under the Patient Protection and Affordable Care Act of 2010 (PPACA), the base county benchmarks used to set plans' payment rates average approximately 3 percent less than the benchmarks for 2011. However, 93 percent of 2012 plan enrollment is projected to be in plans that will receive add-ons to their benchmarks through a CMS MA quality bonus demonstration program. These quality bonus add-ons will range from 3 percent to 10 percent in 2012, in effect substantially offsetting the PPACA benchmark reductions in legislation for 2012.

We estimate that 2012 MA benchmarks (including the quality bonuses), bids, and payments will average 112 percent, 98 percent, and 107 percent of FFS spending, respectively (assuming no sustainable growth rate reduction in Medicare physician payment rates during 2012). Last year, we estimated that, for 2011, these figures would be 113 percent, 100 percent, and 110 percent, respectively. The PPACA benchmark reductions, quality bonuses, and underestimates of FFS spending levels for 2012, combined with projected enrollment shifts into HMOs, resulted in some movement of projected MA payments toward FFS spending levels.

Quality measures—Overall, quality indicators for MA plans improved somewhat in 2011. A larger number of process measures and outcome measures showed improvement compared with past years, with differences by plan type. Local PPO plans had results similar to HMO plans on many measures but had lower results

on measures relying on extraction of information from medical records. Regional PPOs and PFFS plans generally had poorer results than other plan types. The health outcome survey of MA enrollees showed some improvement in outcomes, accompanied by a small number of plans showing worse than expected outcomes. Because quality indicators are now the basis of bonus payments, we expect to see continued improvement in measures, as plans pay closer attention to quality initiatives and seek to improve their documentation and record keeping.

As of 2012, MA plans with better performance on quality indicators will receive bonus payments in the form of increased benchmarks. Legislation authorized the bonus payments for plans meeting certain standards of performance, but CMS has used its demonstration authority to institute a program-wide system, across all MA plans, that provides bonuses to a far greater number of plans. The Commission has stated its concerns over the use of the demonstration authority in this manner—an authority intended to test innovations on a smaller scale—and the consequent added program costs. While the statutory provisions would have given bonuses to plans with about 25 percent of the projected MA enrollment for 2012, under CMS's MA quality bonus demonstration, as we have noted, plan projections show that 93 percent of enrollees are expected to be in plans receiving bonuses, resulting in additional program costs estimated to be $2.8 billion for 2012, compared with the $200 million that would have been expended in bonus payments under the statute.

The 2012 bonuses will be based on CMS star ratings as of 2011. The star ratings include clinical process and outcome measures, patient experience measures, and contract performance measures. Recently released star ratings for 2012 will determine bonus amounts in the 2013 contract year. With the 2012 star rating methodology, CMS has made improvements by adding outcome measures and giving greater weight to outcomes and patient experience measures over process measures. ■

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 2011, the MA program included more than 3,400 plan options, enrolled more than 12 million beneficiaries, and paid MA plans about $124 billion. The Commission supports private plans in the Medicare program, as they enable beneficiaries to choose between the FFS Medicare program and the 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 targeted at preventing avoidable hospital readmissions), and robust information systems that provide more timely feedback to providers. Plans can also reward beneficiaries for seeking care from more efficient providers and give beneficiaries more predictable cost sharing, but plans often restrict the choice of providers.

By contrast, traditional FFS Medicare has lower administrative costs while offering beneficiaries an unconstrained choice of health care providers. Traditional Medicare also has the potential to modify its payment methods over time to better reward value. To date, there has been limited application of care management in FFS Medicare. 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.

While Medicare program payments should not unduly advantage MA over FFS, or vice versa, truly efficient MA plans may be able to capitalize on their administrative flexibility to provide a better value to beneficiaries who enroll in MA. Currently, much of the extra value that MA plans provide to their enrollees is due to the fact that Medicare spends more under the MA program than under FFS Medicare for similar beneficiaries. This higher spending results in extra benefits being provided by way of increased government outlays but with 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 has recommended 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 in the same market. Alternatively, neutrality can be achieved by establishing a defined contribution that is available for enrollment in either FFS Medicare or an MA plan. The Commission will continue to monitor the effect of the changes mandated by the Patient Protection and Affordable Care Act of 2010 (PPACA) on plan payments and performance as well as 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 an update on current quality indicators in MA.

Trends in enrollment, plan availability, and payment

In contrast to traditional FFS Medicare, MA enrolls beneficiaries in private health plans of several types. Plans are paid a fixed capitated rate per enrollee in contrast to FFS Medicare, which pays providers a predetermined 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. They can choose individual counties to serve and can vary their premiums and benefits across counties.
- *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.
- *Coordinated care plans (CCPs)*—This category includes all HMOs, local PPOs, and regional PPOs.
- *Private FFS (PFFS) plans*—Before 2011, PFFS plans typically did not have provider networks, making them less able than other plan types to coordinate

TABLE 12–1

Medicare Advantage enrollment grew in 2011

	MA enrollment (in millions)		Percent change in enrollment	2011 MA enrollment as a share of total Medicare
	November 2010	November 2011		
Total	11.4	12.1	6%	25%
Plan type				
CCP	9.8	11.5	18	24
HMO	7.5	8.0	7	16
Local PPO	1.4	2.3	65	5
Regional PPO	0.9	1.2	34	2
PFFS	1.7	0.6	–64	1
Restricted availability plans included in totals above				
SNPs*	1.4	1.4	4	3
Employer group*	2.0	2.2	9	4
Urban/rural				Share of Medicare in urban/rural areas
Urban	10.0	10.6	6	26
Rural	1.4	1.5	5	14

Note: MA (Medicare Advantage), CCP (coordinated care plan), PPO (preferred provider organization), PFFS (private fee-for-service), SNPs (special needs plans). CCP includes HMO, local PPO, and regional PPO plans. Totals may not sum due to rounding.
*SNPs and employer group plans have restricted availability and their enrollment is included in the statistics by plan type and location. They are presented separately to provide a more complete picture of the MA program.

Source: MedPAC analysis of CMS enrollment files.

care. They used Medicare FFS payment rates and had fewer quality reporting requirements. Given that PFFS plans generally lacked care coordination, had lower quality measures, paid Medicare FFS rates, and had higher administrative costs than traditional FFS Medicare, they were viewed as providing little value. In response, the Congress made changes in the law in the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) so that, in areas with two or more network MA 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 to become PPOs or HMOs or to operate as network-based PFFS plans.

Two additional plan classifications cut across plan types. First are special needs plans (SNPs), which offer benefit packages tailored to specific populations (i.e., beneficiaries who are dually eligible for Medicare and Medicaid, are institutionalized, or have certain chronic conditions). SNPs must be CCPs. Second are 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 may no longer be PFFS plans. Both SNPs and employer group plans are included in our plan data, with the exception of plan availability figures, as these plans are not available to all beneficiaries.

How Medicare pays MA plans

Plan payment rates are determined by the MA plan bid (the dollar amount the plan estimates will cover the Part A and Part B benefit for a beneficiary of average health status) and the payment area's benchmark (the maximum amount of Medicare payment set by law for an MA plan to provide Part A and Part B benefits). 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 equal to the difference. If a plan's bid is below the benchmark, its payment rate is its bid plus a percentage (between 67 percent and 73 percent in 2012) of the difference between

the plan's bid and the benchmark. Because benchmarks are often 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. (Actual plan payments, as opposed to payment rates, are risk-adjusted.) In 2011, payments to MA plans totaled approximately $124 billion. A more detailed description of the MA program payment system can be found at http://www.medpac.gov/documents/MedPAC_Payment_Basics_11_MA.pdf.

Enrollment trends: Plan enrollment grew in 2011

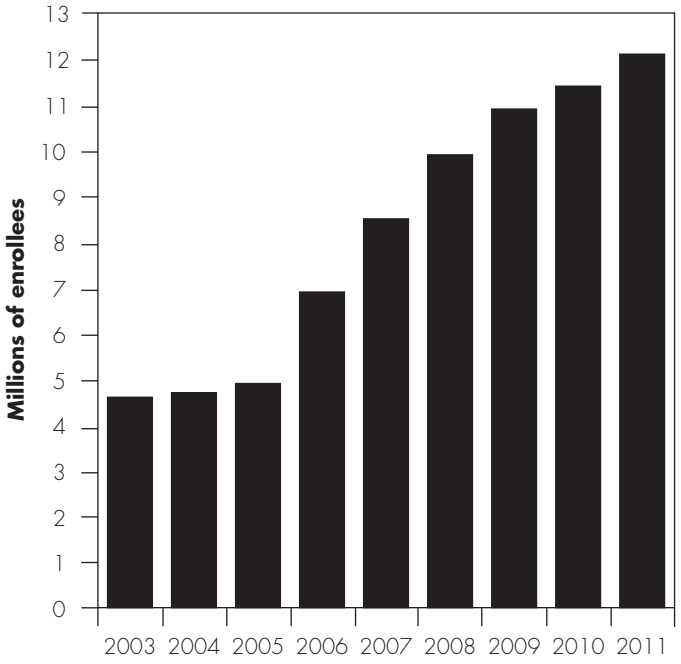
Between November 2010 and November 2011, enrollment in MA plans grew by about 6 percent, or 700,000 enrollees, to 12.1 million beneficiaries. About 25 percent of all Medicare beneficiaries were enrolled in MA plans in 2011(Table 12-1).

Enrollment patterns differ in urban and rural areas. A larger share of urban Medicare beneficiaries are enrolled in MA (about 26 percent) compared with beneficiaries residing in rural counties (about 14 percent). In 2011, 33 percent of rural MA enrollees were in HMO plans (not shown in Table 12-1) compared with about 71 percent of urban enrollees. At the same time, 17 percent of rural enrollees were in PFFS plans compared with 3 percent of urban enrollees.

The percentage of Medicare beneficiaries enrolled in MA plans in 2011 varied widely by local area. In some metropolitan areas, less than 1 percent of Medicare beneficiaries were enrolled in MA plans, whereas in other areas enrollment was 60 percent or more.

Among plan types, HMOs continued to enroll the most beneficiaries (8.0 million), with 16 percent of all Medicare beneficiaries in HMOs in 2011. Between 2010 and 2011, PFFS enrollment shrank from about 1.7 million to about 0.6 million enrollees. The decrease followed reduced PFFS plan offerings that resulted from MIPPA's network requirements for PFFS plans beginning in 2011. Some PFFS plans seemed to shift their enrollment to network plans. Between 2010 and 2011, PPOs exhibited rapid enrollment growth, with local PPO enrollment increasing about 65 percent and regional PPO enrollment increasing about 34 percent. In 2011, SNP enrollment stayed at 1.4 million and employer group enrollment grew about 9 percent to 2.2 million enrollees.

FIGURE 12–1 **Medicare Advantage enrollment, 2003–2011**



Source: CMS monthly Medicare Advantage enrollment reports.

MA enrollment growth in 2011 continued a trend begun in 2003 (Figure 12-1). Since 2006, enrollment has grown by about 75 percent. From 2010 to 2011, the enrollment growth rate increased from 5 percent to 6 percent. We did not have 2012 enrollment information as of this report's publication, but plans projected overall enrollment growth of 7 percent to 8 percent for 2012. Almost all the growth was projected to be in HMOs, while regional PPO and PFFS plans were projected to contract.

Plan availability for 2012

Every year, we base our plan availability and projected enrollment for the coming year on the bid data that plans submit to CMS. The data, especially over the past few years, have proved to reliably project availability and overall enrollment. Based on these data, we find that access to MA plans remains high in 2012, with most Medicare beneficiaries having access to a large number of plans. While almost all beneficiaries have had access to some type of MA plan since 2006, local CCP plans have become more widely available in the past few years (Table 12-2, p. 318). Ninety-three percent of Medicare

TABLE 12–2

Access to Medicare Advantage plans remains high

	Percent of beneficiaries with access to MA plans by type							
Type of plan	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
All plan types	84%	100%	100%	100%	100%	100%	100%	100%
CCP								
HMO or local PPO	67	80	82	85	88	91	92	93
Regional PPO	N/A	87	87	87	91	86	86	76
PFFS	45	80	100	100	100	100	63	60
Zero-premium plans with Part D	N/A	73	86	88	94	85	90	88
Average number of MA plans open to all beneficiaries in a county	5	12	20	35	34	21	12	12

Note: MA (Medicare Advantage), CCP (coordinated care plan), PPO (preferred provider organization), N/A (not applicable), PFFS (private fee-for-service). These figures exclude special needs plans and employer-only plans. A zero-premium plan with Part D includes Part D coverage and has no premium beyond the Part B premium. Regional PPOs were created in 2006. Part D began in 2006.

Source: MedPAC analysis of plan bids to CMS, 2011.

beneficiaries have an HMO or local PPO plan operating in their county of residence, up from 92 percent in 2011 and 67 percent in 2005. Regional PPOs are available to 76 percent of beneficiaries, down from 86 percent in 2011 due to the withdrawal of the only California regional PPO in 2012. Access to PFFS plans decreased between 2011 and 2012, from 63 percent to 60 percent of beneficiaries, consistent with MIPPA's network requirements for PFFS plans. Overall, virtually all Medicare beneficiaries have access to an MA plan (0.3 percent do not), and 99 percent have access to a CCP (not shown in Table 12-2).

In 2012, 88 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 90 percent in 2011.

The availability of SNPs has changed slightly and varies by the type of special needs population served (not shown in Table 12-2). In 2012, 78 percent of beneficiaries reside in areas where SNPs serve beneficiaries who are dually eligible for Medicare and Medicaid (up from 76 percent in 2011); 41 percent live where SNPs serve institutionalized beneficiaries (down from 47 percent in 2011); and 45 percent live where SNPs serve beneficiaries with chronic conditions (down from 46 percent in 2011). Overall, 83 percent of beneficiaries reside in counties served by at least one type of SNP.

In most counties, a large number of MA plans are available to beneficiaries, although the number varies by county. For example, in 2012, beneficiaries in Miami and New York City can choose from more than 50 plans. Some counties, representing 0.3 percent of the beneficiaries, have no MA plans available; however, many of these beneficiaries have the option of joining cost plans (another managed care option under Medicare).[1] On average, 12 plans including 8 CCPs are offered in each county in 2012, the same as in 2011.

2012 benchmarks, bids, and payments relative to FFS spending

We use the plan bid projections to compare projected MA spending with projected FFS spending on a like set of FFS beneficiaries. We calculate and present three sets of percentages: the percentage of the benchmarks relative to projected FFS spending, the percentage of the bids relative to projected FFS spending, and the resulting payments to MA plans relative to projected FFS spending. The benchmarks are set each April for the following year. The plans submit their bids in June and incorporate the recently released benchmarks. Thus, the plan bid submissions provide the information we use for the benchmarks, bids, and payments. The benchmarks reflect current law FFS spending estimates for 2012 at the time the benchmarks were published in April 2011.

TABLE 12–3

Projected payments exceed FFS spending for all plan types in 2012

	Percent of FFS spending in 2012		
Plan type	**Benchmarks**	**Bids**	**Payments**
All MA plans	112%	98%	107%
HMO	112	95	106
Local PPO	114	108	113
Regional PPO	107	100	105
PFFS	112	106	110
Restricted availability plans included in totals above			
SNP*	114	101	110
Employer groups*	114	108	113

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. FFS spending by county is estimated using the 2010 MA rate book. Spending related to the double payment for indirect medical education payments made to teaching hospitals was removed.
*SNPs and employer group plans have restricted availability and their enrollment is included in the statistics by plan type. They are presented 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.

For 2012, the April 2011 current law estimates of FFS spending assumed that the sustainable growth rate (SGR) formula would be used to cut physician fee schedule rates by nearly 30 percent. However, we project 2012 FFS assuming a freeze rather than a reduction from the SGR. This results in total FFS spending of about 5 percent above what was expected when the benchmarks were set. This process does not reflect a change in our methods, as we make these adjustments each year, but the magnitude of the adjustment is larger this year.

We estimate that 2012 MA benchmarks, bids, and payments will average 112 percent, 98 percent, and 107 percent of FFS spending, respectively (Table 12-3). (Benchmarks, bids, and payments are weighted by plans' projected 2012 enrollment by county to estimate overall averages and averages by plan type.)

Last year, we estimated that, for 2011, these figures would be 113 percent, 100 percent, and 110 percent, respectively. The PPACA benchmark reductions, quality bonuses, and underestimates of FFS spending growth for 2012 when setting the benchmarks (described above), combined with projected enrollment shifts into HMOs, resulted in benchmarks and projected MA payments that are closer to FFS spending levels. With the exception of employer group plans, the payments for all plan types are projected to be closer to FFS spending levels in 2012 than they were in 2011. Most notably, HMOs submitted bids that averaged 95 percent of FFS spending, although there is much variation in the relationships between individual plan bids and expected FFS spending.

MA benchmarks

Under PPACA, county benchmarks in 2012 are transitioning to a system in which each county's benchmark in 2017 is a certain percentage (ranging from 95 percent to 115 percent) of the average per capita FFS Medicare spending for the county's residents. (See the March 2011 report for details on PPACA benchmark changes.) The percentage is based on a county's level of FFS spending relative to spending for other counties. (The FFS spending estimates will be updated every three years or more frequently at CMS's discretion.)

For 2012, the base county benchmarks (before any quality bonuses are applied) average approximately 3 percent less than the benchmarks for 2011. However, for 2012, 93 percent of MA enrollees are projected to be in plans that will receive add-ons to their benchmarks through the PPACA quality provisions or the 2012–2014 CMS quality demonstration program. These quality bonus add-ons will range from 3 percent to 10 percent in 2012, in effect substantially offsetting the PPACA benchmark reductions in legislation for 2012.

Each plan's benchmark is based on the county benchmarks of its enrollees. Local PPOs tend to draw enrollment from counties with higher benchmarks relative to the counties' FFS spending than other plan types. SNPs also tend to have higher benchmarks relative to the counties' FFS spending, as a large share of total SNP enrollment is in Puerto Rico, where benchmarks have been set 80 percent higher than per capita FFS spending (as discussed in the June 2009 report (Medicare Payment Advisory Commission 2009)).

MA bids and payments for different plan types

The pre-quality benchmark reductions under PPACA may have encouraged plans to tighten costs and lower their bids for 2012. The average bid for 2012 is 98 percent of the projected FFS spending for similar beneficiaries, down from 100 percent in 2011. Many plans (about 46 percent of the nonemployer plans, up from 37 percent in 2011) bid to provide Part A and Part B benefits for less than what the FFS Medicare program would spend to provide these benefits. About 0.5 million beneficiaries, excluding those enrolled in SNPs and employer group MA plans, are projected to enroll in plans that bid lower than 75 percent of FFS spending. On the other hand, a similar number of beneficiaries are projected to enroll in plans that bid at least 117 percent of FFS spending.

Despite the fact that the plan bids average less than FFS spending, payments for enrollees in these plans usually exceed FFS spending because the benchmarks are high relative to FFS spending. For example, HMOs as a group bid an average of 95 percent of FFS spending, yet payments for HMO enrollees are estimated to average 106 percent of FFS spending because the benchmarks average 112 percent of FFS spending. Other plan types have average bids above FFS spending and, as a result, payments for PFFS and local PPO enrollees are estimated to be 110 percent and 113 percent, respectively, of FFS spending (Table 12-3).

We analyzed bids and payments to SNPs and employer group plans separately, because their bidding behavior differs from that of other plan types. Payments to SNPs are estimated to average well above FFS spending because the plans tend to be located in areas that have high benchmarks relative to FFS spending, and their bids tend to be greater than FFS spending. Employer group plans consistently bid higher than plans that are open to all Medicare beneficiaries. These plans bid an average of 108 percent of FFS spending and are paid about 113 percent of FFS, while nonemployer plans bid an average of 96 percent of FFS and are paid about 107 percent of FFS (not shown in Table 12-3). The dynamic of the bidding process for employer group plans is more complicated than for other MA plans, because employer group plans can negotiate benefit and premium particulars with employers after the Medicare bidding process is complete. Conceptually, the closer the bid is to the benchmark—that is, the maximum Medicare payment—the better it is for the plan and the employers, because a higher bid brings in more revenue from Medicare, potentially offsetting expenses that would have required a larger contribution from employers (or employees). On the other hand, nonemployer plans have an incentive to bid below the benchmark to obtain rebates they can use to finance extra benefits that, in turn, are used to attract increased enrollment.

The ratio of MA plan payments to FFS spending varies by plan type, but the ratios for all plan types are substantially higher than 100 percent. In 2012, overall payments to plans average an estimated 107 percent of FFS spending, meaning that the Medicare program will pay approximately $9 billion more for the MA enrollees than it would have paid to cover the same enrollees in FFS Medicare. (This figure includes the quality bonus payments discussed below.)

MA risk adjustment and coding intensity adjustment

Medicare payment to plans is calculated separately for each beneficiary as the plan's payment rate times the beneficiary's risk score. The risk scores are based on diagnoses attributed to the beneficiary 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. The plans have an incentive to ensure that the providers serving the beneficiary record all diagnoses completely in order to receive the maximum payment they may rightfully claim. Providers in FFS, who are paid per service rather than per beneficiary, do not have the same financial incentive to code beneficiaries' diagnoses so precisely. Thus, a beneficiary treated by providers who code for MA plans may have a higher risk score than if treated by providers billing FFS Medicare.

Experience supports the contention that MA plan enrollees have higher risk scores than otherwise similar FFS beneficiaries because of more complete coding. CMS

has found that diagnoses for MA plan members have been growing more rapidly than the risk scores of FFS beneficiaries. For 2012, plan bids project an average risk score of about 1.03 compared with 1.02 projected for 2011 and 1.00 for 2010. Thus, as mandated by the Deficit Reduction Act of 2005, CMS has been making an across-the-board adjustment to the scores. Taking into account multiple years of coding differences, CMS reduced risk scores by 3.41 percent from 2010 through 2012. Under PPACA, CMS can continue to correct for the differences it finds without any restrictions for 2013, but for 2014 and all future years PPACA specifies minimum reductions that CMS must make in the scores, although CMS has discretion to make larger reductions. The mandated reductions will end once CMS begins risk-modeling based on MA utilization rather than on FFS utilization in the current model; however, CMS will be able to devise an adjustment to account for any difference between FFS and MA risk levels.

Quality in MA plans

In this section, we review the quality indicators in MA to determine

- whether plan quality has improved over time;
- how quality in MA differs from that in the traditional FFS program—to the extent that there are data that allow comparisons; and
- what differences exist in MA by plan type, plan characteristics, and plan enrollment, including a separate examination of SNPs.

We also examine the star rating methodology that CMS uses to determine which plans are eligible for quality bonus payments, the MA enrollment distribution by star ratings, and differences among plans in star ratings.

Our analysis of the quality of care among MA plans relies on the metrics that currently exist, which we describe below. We recognize, however, that the measurement of quality is multidimensional and involves intensive data collection efforts. As the Commission noted in its report on quality measurement in MA and FFS, there are many gaps in our knowledge of quality, and a long-term effort is required to fill those gaps, to improve the measurement of quality, and to have more measures of health outcomes (Medicare Payment Advisory Commission 2010b).

Quality measures and their data sources

We use three data sources to evaluate the quality of care in MA, each of which is described more fully in an online appendix to the March 2010 report (http://medpac.gov/chapters/Mar10_Ch06_APPENDIX.pdf):

- The Healthcare Effectiveness Data and Information Set (HEDIS®) includes a set of clinical quality measures that health plans report to CMS.[2] These measures are developed from several sources: administrative data, such as claims and encounter data; clinical data extracted from medical records; and two beneficiary surveys. HEDIS includes "process" measures, such as whether plans are monitoring blood glucose levels for diabetics, and "intermediate outcome" measures, such as whether diabetics are controlling their blood glucose levels.
- The Consumer Assessment of Healthcare Providers and Systems for MA plans (CAHPS®–MA) is a beneficiary survey producing "patient experience" measures. The survey asks plan enrollees to rate their access to care and satisfaction with their health plan and its providers.[3] The CAHPS–MA survey consists of questions in six domains: how well doctors communicate, getting care quickly, getting needed care without delays, health plan information and customer service, overall rating of health care quality, and overall rating of health plan quality. CAHPS is the source of HEDIS measures that track flu and pneumonia vaccination rates. There is a separate CAHPS survey of patient experience measures among FFS beneficiaries. The CAHPS surveys thus allow a direct comparison of MA and traditional FFS Medicare.[4]
- The Health Outcomes Survey (HOS) is a survey of self-reported health status among Medicare health plan enrollees. It is a source of seven HEDIS measures and a major source of measures that apply to older Medicare beneficiaries. The HOS is the source of an overall outcome measure that gauges whether a health plan's enrollees have had any improvement or decline in their health status over a two-year period. A plan is deemed to have better or poorer outcomes if its results on the physical or mental health measures are better or worse than expected and differ significantly from the national average across all plans.

HEDIS, CAHPS, and HOS are the principal data sources that inform the MA quality bonus payment

system newly instituted in 2012. In addition, CMS uses certain administrative data, along with Part D (drug plan) measures, to compute an overall plan rating that determines an MA plan's eligibility for and level of bonus payments and rebate dollars.

A new source of data on MA quality—detailed encounter data from plans—will be available for analysis sometime after 2012. Using encounter data, CMS can establish additional MA quality measures, including those that can be compared with FFS measures developed from claims data, such as hospital readmissions, admission rates for ambulatory care sensitive conditions, potentially preventable emergency department visits, and mortality rates after a hospital stay (Medicare Payment Advisory Commission 2010b). However, once collected, the encounter data would need to be evaluated and validated as a source of data on quality. Thus, we would not expect that encounter data could be used immediately as a data source for measuring quality.

Has plan quality improved over the past year?

Overall, we see some improvement in the quality indicators for MA plans. A larger number of HEDIS process measures and intermediate outcome measures show improvement compared with past years; the CAHPS–MA data show improvement from last year, with very similar CAHPS results for FFS; and the HOS survey shows some improvement in outcomes, accompanied by a small number of plans showing worse than expected outcomes. Because quality indicators are now the basis of bonus payments, we expect to see continued improvement in measures, as plans pay closer attention to quality initiatives and seek to improve their documentation and record keeping.

HEDIS results

We examine 45 HEDIS measures, which include all the effectiveness of care measures, as they are termed (such as the intermediate outcome measures and the clinical process measures), and several measures of access to care (such as the provision of alcohol and drug abuse treatment). The HEDIS results indicate that quality improved in HMOs and local PPOs between 2010 and 2011.[5] Looking at plans that reported results in both 2010 and 2011 ("same store" results), HMOs improved on 14 of the 45 HEDIS measures we track, and local PPOs improved on 9 of the 45 measures. There was improvement among some important measures, with four of the six intermediate outcome measures improving among HMOs or PPOs or both plan types (Table 12-4). Results for all other HEDIS measures remained stable between 2010 and 2011, measured on a same store basis, for both HMOs and local PPOs.

Of the 45 HEDIS measures, 16 are used as elements of the star rating system that determines plan quality bonuses. CMS now uses a weighted approach in the star rating system, with HEDIS intermediate outcome measures, for example, having a weight of 3, patient experience measures (such as members' ratings of the quality of their care) having a weight of 1.5, and other measures—such as HEDIS process measures—having a weight of 1. The weighted values, which include Part D measures, are averaged to determine an overall plan star rating.

Of the 14 HEDIS measures showing improvement among HMOs, 6 are elements in the star measurement system—meaning that HMOs reporting in both 2010 and 2011 improved in 6 of 16 star measures, including the intermediate outcome measure for members with hypertension who control their blood pressure (Table 12-4). As an intermediate outcome measure, this measure is one of the 5 Part C measures that has the maximum weight of 3 (with 5 Part D measures also having a weight of 3 within the overall plan rating that determines bonus payments for MA–prescription drug plans). For local PPOs, nine HEDIS measures show improvement among plans reporting in both 2010 and 2011, of which three are star rating system elements, including the intermediate outcome measure of cholesterol control among diabetics. In terms of the importance of some measures relative to others in judging plan quality, from the plans' perspective, measures that are included in the star ratings are important because they determine bonus payment amounts. Apart from the bonus issue, it is arguably the case that inclusion in the star rating system is an indication that a particular measure is important in that CMS exercises judgment in deciding which measures to include in the star rating system. For example, some measures are excluded from, or dropped from, the star rating system because they apply to a very small number of beneficiaries and are therefore of limited utility in evaluating quality over time and across plans.

As we have done in the past, we continue to examine HEDIS HMO results and PPO results separately. One reason for the separate evaluations is that, before the last two reporting cycles, HMOs reported on a different basis from other plan types for certain measures, the so-called hybrid measures. Such measures can be based exclusively or partially on documentation from a sample

TABLE 12–4

Plans show improvement between 2010 and 2011 on many measures, but HMOs and PPOs differ on hybrid measure results

	Weight for star rating, 2012 (if element of star ratings)	Which plan type(s) improved between 2010 and 2011[a]	Average rate for all HMOs, 2011	Average rate for all local PPOs, 2011
HEDIS®: Hybrid measures that improved				
Intermediate outcome measures				
Blood pressure control among members with hypertension	3	HMOs	61.9	55.8
Blood pressure control among diabetics		HMOs; local PPOs	62.3	55.7
Cholesterol control among diabetics	3	Local PPOs	52.2	45.9
Blood glucose control among diabetics		Local PPOs	65.7	58.1
Other hybrid measures				
Recording of body mass index	1[b]	HMOs; local PPOs	50.5	36.7
Colorectal cancer screening	1	HMOs	57.7	41.3[c]
Monitoring nephropathy among diabetics	1	Local PPOs	89.2	87.3
HEDIS®: Nonhybrid measures that improved				
Treatment of chronic obstructive pulmonary disease (3 measures)	[d]	HMOs (3 measures); local PPOs (2 measures)	34.0 66.6 78.3	36.4 70.2 76.0
Monitoring persistently used drugs (5 measures, including one total measure)	[e]	HMOs (4 measures); local PPOs (1 measure)	90.7 93.1 90.9 68.2 Total: 90.2	90.9 92.7 91.3 69.5 Total: 90.7
Glaucoma screening among older adults	1	HMOs	63.8	65.5
Persistence of beta blocker use after a heart attack		Local PPOs	83.1	83.6
Health Outcomes Survey measures that improved				
Advising patients on physical activity	1	HMOs	48.0	47.6
Managing the risk of falls	1	HMOs	60.5	55.1

Note: PPO (preferred provider organization), HEDIS® (Healthcare Effectiveness Data and Information Set). "Hybrid" measures are those that can include extraction of information from medical records or are exclusively based on medical record data. Nonhybrid measures are based exclusively on administrative records such as claims and encounter data. Each measure shown as improved had statistically significant improvement for the particular plan type between 2010 and 2011.
a. Includes only plans reporting in both years.
b. New for 2012.
c. Different reporting standard from HMOs.
d. One measure in stars in 2011, but none in 2012 stars.
e. Total measure in stars in 2011, but none in 2012 stars.

Source: MedPAC analysis of CMS HEDIS public use files.

of medical records, though for some hybrid measures HMOs could, at their option, report solely on the basis of administrative data, such as claims and encounter data. Until two years ago, non-HMO plans had to report hybrid measure results using only administrative records. Thus, for the 13 measures that are of this type—including all 6 intermediate outcome measures of HEDIS—HMOs and other plan types could not be directly compared.

Beginning in 2010, both HMOs and PPOs used the same reporting standards. Local PPOs did show improvement in many hybrid measures between 2010 and 2011. Some of the improvements likely reflect PPOs becoming better at using medical record information to report HEDIS results as of 2010, the first year PPOs were permitted to use medical record review to report results for these measures.

Although PPOs and other plan types can now use medical record information to report hybrid measures, there continue to be differences across plan types for the hybrid measures. Among the 45 HEDIS measures that we track, the cases with substantial differences in the 2011 HEDIS results between HMOs and local PPOs usually are measures that involve medical record review—as in the first five measures listed in Table 12-4. Other measures in Table 12-4 (p. 323) show that local PPO results are very similar to HMO results, and in some instances PPOs perform better than HMOs.

One possible reason for the HMO versus non-HMO differences to persist on hybrid measures, even into the second year of PPOs using medical record documentation for HEDIS reporting, is that HMO plans differ from non-HMO plans in their relationship with physicians who provide care to their members. Because members can use non-network providers in PPOs and PFFS plans, a plan may have difficulty gaining access to all of an individual's medical records to document information necessary for reporting hybrid HEDIS measures. Non-HMO plans may also have greater difficulty encouraging all physicians who see their members, particularly those who do not have contracts with plans, to undertake quality improvement activities, and improved documentation and coding, which could result in improved HEDIS results for the plan. At the same time, with local PPOs now showing improvement on many hybrid measures, PPOs appear to be overcoming problems they may have had in data collection and are becoming better at collecting and reporting HEDIS hybrid measures.

Table 12-4 (p. 323) indicates that HMOs reporting results in both 2010 and 2011 (same store results) showed statistically significant improvement on 14 of 45 HEDIS measures, compared with improvements on 9 measures in the preceding time period (using the same metric of plans reporting in each year of a 2-year period). The HEDIS measures showing statistically significant improvement include two measures of blood pressure control (for all hypertensives and among diabetics), rates of colorectal cancer screening and glaucoma screening, three measures of treatment of chronic obstructive pulmonary disease (COPD), four measures of the monitoring of persistently used drugs, and two measures collected through the HOS (providing advice on physical activity and managing the risk of falls). Another measure that improved is the recording of body mass index (BMI) in the medical record, which was a relatively new measure first reported publicly last year.

Local PPOs reporting in both 2010 and 2011 (same store results) showed statistically significant improvement on nine measures, several of which were among the HMO improved measures. These measures included two measures of COPD treatment, blood pressure control among diabetics, recording of BMI, and one measure of monitoring persistently used drugs. Local PPOs also improved on measures of cholesterol control and blood glucose control among diabetics, monitoring nephropathy among diabetics, and persistence of the use of beta blockers after a heart attack (which is, however, a measure reported by only 25 local PPOs in both 2010 and 2011).

While 14 of 45 measures improved for HMOs and 9 improved for PPOs, the remainder of the 45 HEDIS measures remained stable between 2010 and 2011 when compared on a "same store" basis. Measures that remain essentially unchanged include the intermediate outcome measures of cholesterol control among patients with cardiovascular conditions and a measure of blood glucose control among diabetics, the hybrid measures of eye exam rates for diabetics, cholesterol screening for diabetics and for members with cardiovascular conditions, and blood glucose testing among diabetics. Plans generally perform well on these measures, though the diabetic eye exam rate may be considered low at 65 percent for HMOs and 63 percent for local PPOs. Among other measures that remained stable, average breast cancer screening rates are at 69 percent among HMOs and 66 percent for local PPOs. There are six measures of the use of potentially harmful drugs or possible drug interactions. The rate of use of one potentially harmful drug among the elderly averages 22.1 percent among HMOs and 22.0 percent among local PPOs; the rate for the use of two such drugs is 5.1 percent for each plan category.

It is difficult to generalize about plan performance on certain HEDIS measures because of the small number of beneficiaries to whom the measures apply. CMS does not include such measures in the star rating system for bonus payments. For example, in the case of the measure on persistence of beta blockers after a heart attack, only 230 of 458 plans can report on this measure due to small numbers, compared with 457 of 458 reporting a rate for blood glucose monitoring among diabetics. Other measures of this nature are measures of follow-up care after an inpatient mental health stay, measures of antidepression medication management, and measures of alcohol and drug abuse treatment. Recognizing the limitations on whether there can be generalizations about the results, the trend for these measures between 2008 and

TABLE 12–5

Most Health Outcomes Survey–based measures have had little change over time, and PPOs and newer HMOs often perform well on these measures

HEDIS® measures collected through the Health Outcomes Survey	HMOs reporting in each of 3 years			HMOs new in 2011	All PPOs, 2011
	2008	2010	2011		
Discussing urinary incontinence	57.7	57.0	58.1	62.9	58.6
Receiving urinary incontinence treatment	35.2	35.5	36.3	37.2	36.9
Discussing physical activity in older adults	51.2	51.7	53.2	52.9	54.3
Advising physical activity in older adults	46.0	46.7	48.2*	48.6	47.8
Discussing fall risk	29.2	29.8	31.2	40.9	31.6
Fall risk management	55.4	57.1	59.7*	67.2	55.9
Osteoporosis testing	65.9	70.4	71.9	62.3	73.9

Note: HOS (Health Outcomes Survey), PPO (preferred provider organization), HEDIS® (Healthcare Effectiveness Data and Information Set). "HMOs new in 2011" are HMOs reporting these measures in 2011 but not 2010. Numbers for each of the categories: HMOs reporting in each of 3 years (165 to 190 for each measure), HMOs new in 2011 (43 to 46), and all PPOs, 2011 (76 to 80). Rate is percent of applicable enrollees receiving the treatment (e.g., the percent of members age 65 or older reporting a urinary incontinence problem who discussed the issue with their caregiver).
*Indicates that for these plans the change in the measure between 2010 and 2011 was statistically significant ($p < 0.05$).

Source: MedPAC analysis of CMS HEDIS® public use files.

2011 shows declines for the alcohol and substance abuse measures and improvement for the inpatient mental health and the antidepression medication management measures.

There are variations in performance across different categories of plans. Although newer HMOs (those with contracts begun in 2005 or later) tended to have lower HEDIS scores than older HMOs, for certain measures, including the measures of avoiding high-risk medications and drug interactions, newer HMOs had better scores. Newer HMOs also had better scores on the HEDIS measures collected through the HOS (Table 12-5), though there has been some improvement in the HOS-collected measures for HMOs reporting since 2008, with two measures showing statistically significant improvement among HMOs between 2010 and 2011 (advising older adults to engage in physical activity and managing the risk of falls).

The issue of access to medical records does not arise for the HEDIS measures that are collected directly from members through the two enrollee surveys, the HOS and CAHPS. Thus, while we see what are often large differences between HMOs and non-HMOs in hybrid HEDIS measures (Table 12-4, p. 323), for the HOS-collected measures, PPO results are similar to, and in two instances better than, HMO results (Table 12-5). For most of the seven HEDIS measures collected through the HOS, PPO results are similar to HMO results. One characteristic of the HOS measures that may be problematic is that the HOS measures depend on beneficiary recall, and differences may exist among HMO and PPO beneficiary populations' relative cognitive abilities. (In part because of the reliance on beneficiary recall, CMS has withdrawn the osteoporosis testing measure from the star ratings, and the geriatric assessment measurement panel of the National Committee for Quality Assurance, which maintains the HEDIS measures, is exploring the development of an administrative measure to replace the measure collected through the self-reported responses of the HOS survey (Goldstein 2011).)

HOS overall health outcome results

As has been true over the past several years, HOS overall outcome results indicate that most plans have health outcomes within expected ranges that do not differ from the national average across plans (Table 12-6, p. 326). In last year's data, and in the two previous reporting cycles, there were no outlier plans on physical health changes. This year, 11 of 330 plans (3.3 percent) show improved physical health and 12 plans (3.6 percent) show declines in physical health outcomes. Most plans are within expected ranges on the mental and physical health outcome measures. For the 2007–2009 period, about 8 percent of plans were outliers by HOS standards, of which about 5 percent had worse than expected mental health outcomes.

TABLE 12–6

Medicare HOS performance measurement results show a small change in the most recent time period

Cohort	Years	Total number of plans reporting	Percent of plans with mental health outcomes:		Percent of plans with physical health outcomes:	
			Better than expected	Worse than expected	Better than expected	Worse than expected
Cohort 8	2005–2007	154	5.8%	2.6%	0%	0%
Cohort 9	2006–2008	187	1.1	5.3	0	0
Cohort 10	2007–2009	268	3.0	4.9	0	0
Cohort 11	2008–2010	330	3.3	3.9	3.3	3.6

Note: HOS (Health Outcomes Survey). Cohort is the group of beneficiaries surveyed and then resurveyed over the two-year time period shown.

Source: CMS posting of HOS results. http://www.hosonline.org/surveys/hos/hosresults.aspx.

In the 2008–2010 period, about 7 percent of plans were outliers in mental health outcomes, with slightly more than half of them showing worse than expected outcomes. In physical health, about 7 percent of plans were outliers, nearly evenly divided between those showing better and worse outcomes than expected.

Using the star rating system measures of improvement or decline in physical and mental health, we find that most outlier plans are relatively smaller. The average enrollment of all contracts having a star rating for the measures of health improvement or decline is about 66,000 compared with an average of about 16,000 among plans at either end of the star scale in this measure (i.e., outliers in improvement and outliers in declines). Three organizations are outliers that show declines in both mental and physical health, and three organizations appear in one category as improved and in the other as showing a decline—for example, showing improvement in mental health and declines in physical health.

Quality results for regional PPO and PFFS plans

In terms of number of reporting entities (without accounting for enrollment levels), very few regional PPOs and PFFS plans report HEDIS results, making it difficult to evaluate the performance of these types of plans or to determine how they compare with HMOs and local PPOs. In the 2011 HEDIS data, 17 PFFS plans and 13 regional PPOs reported results, compared with 314 HMOs and 114 local PPOs. Regional PPO averages are generally lower than local PPO average rates, but for 16 HEDIS measures regional PPO rates are within 3 percent of the local PPO average—including blood glucose and cholesterol testing measures, monitoring diabetic nephropathy, one of the COPD measures, and several measures in the monitoring of persistently used drugs and the avoidance of possibly harmful drugs and drug interactions. The greatest differences between regional and local PPO results were in 2 measures of blood glucose control for diabetics, colorectal cancer screening (a measure with a 10-year look-back period), 1 drug interaction measure, the use of spirometry testing in COPD assessment, and the measure of osteoporosis management in women with a fracture.

PFFS plans, which are not network plans and may have no contracted providers, have HEDIS rates that are generally lower than for local PPOs but have 10 measures (of the 45 measures we track) with rates similar to those for local PPOs—4 drug monitoring measures, breast cancer screening, osteoporosis management in women with a fracture, and 4 HEDIS measures among those with small numbers discussed above. The greatest differences between PFFS and local PPOs are in measures of blood pressure, blood glucose, or cholesterol control and in the recording of BMI.

Because of the small number of regional PPOs and PFFS plans, in order to evaluate improvement between 2010 and 2011, rather than comparing the averages of "same store" results between the two years for these plan types, we examined how individual plans performed on each of the 45 measures we track to determine how many plans improved, declined, or had results in which the 2010 and 2011 results did not show a statistically

TABLE 12–7 **HMOs and local PPOs had higher vaccination rates in 2011 than regional PPOs and PFFS**

Vaccination rates	HMO	Local PPO	Regional PPO	PFFS
Flu	69%	69%	66%*	64%*
Pneumonia	69	69	66*	65*

Note: PPO (preferred provider organization), PFFS (private fee-for-service).
*Indicates rates where the difference is statistically significant: Flu rates for regional PPOs and PFFS differ from HMOs and PPOs; the regional PPO and PFFS pneumonia rates differ from those of HMOs and local PPOs but do not differ from each other.

Source: MedPAC analysis of Consumer Assessment of Healthcare Providers and Systems data.

significant difference. For regional PPO plans reporting in both 2010 and 2011, there were 4 measures (out of 45 tracked) in which the majority of plans showed improvement, including glaucoma screening, recording of BMI, colorectal cancer screening, and the total rate for monitoring of persistently used drugs (the total rate being a combination of several individual rates). Six of 12 regional PPOs declined in a measure of the use of high-risk medications in the elderly. For PFFS plans reporting in both 2010 and 2011, six of nine plans showed improved results for glaucoma screening, while the remaining three plans reporting this measure showed a decline in the rate. Four of seven plans showed improvement in the use of spirometry testing in the assessment and diagnosis of COPD. Three of nine PFFS plans declined in four drug monitoring measures and the blood glucose testing measure. On net, across the 38 HEDIS measures that can be assessed in this manner (out of 45 possible measures we track), regional PPOs and PFFS plans had little change in HEDIS results between 2010 and 2011.[6]

As for measures captured through the CAHPS–MA survey, we found that, similar to 2010 results, in 2011 regional PPO plans had a statistically significantly lower rate for flu vaccination (66 percent of enrollees) than HMOs and local PPOs (69 percent of enrollees), as did PFFS plans (64 percent of enrollees) (Table 12-7).

To the extent that we can evaluate their HOS performance, regional PPOs and PFFS plans performed relatively poorly in the HOS measures of improvement or decline in physical and mental health status. In the HOS-based star ratings for physical and mental health, 10 regional PPOs and 6 PFFS plans reported results. Four of the 10 regional PPOs were in the lowest quartile of scores for all plans. This number contrasts with 27 percent of local PPOs in the lowest quartile. Of the six PFFS plans reporting results, half were in the lowest quartile of scores in the physical health measure and four of six were in the lowest quartile for mental health measures.

How do MA plans compare with FFS Medicare on quality measures?

Using the CAHPS surveys of MA enrollees and FFS beneficiaries to compare quality, we found little difference between MA and the FFS program in the surveys' results for vaccination rates and access to care measures (Table 12-8, p. 328). To compare the private plans and traditional program at a national level, we adjusted the CAHPS results to match the two programs' geographic areas. We used state-level FFS results to arrive at a national FFS rate. The FFS rates were adjusted to match the distribution across states of the MA plans in the CAHPS sample. After this adjustment, we found that vaccination rates were similar in MA and FFS, with slight improvement in both programs compared with last year's results. Last year, pneumonia vaccination rates were slightly better in MA, but for 2011 rates in the two sectors were very similar. Vaccination rates for both programs in 2011 were higher than they were in 2010, with a year-over-year difference that was statistically significant.

What variation in MA quality indicators exists among plans?

To summarize some of the differences across plans discussed above, we find that local PPO plans had results similar to HMO plans on many measures but had lower results on measures relying on extraction of information from medical records. We also find that regional PPOs and PFFS plans generally had poorer results than other plan types. In addition to these findings, we have examined differences in plans by population and plan type, as we have in the past (Medicare Payment Advisory Commission

TABLE 12–8

Overall, in 2011 MA plans and FFS continue to have similar CAHPS® results

CAHPS® measure	MA average 2010	MA average 2011	Adjusted FFS average 2010	Adjusted FFS average 2011
Vaccination rates				
Flu	66%	69%	66%	69%
Pneumonia	67	69	66	70
Access to care measures *(members reporting "usually or always")*				
Easy to get an appointment with a specialist	90	92	91	92
Get care for an illness as soon as wanted	89	92	90	91
Get routine care appointment as soon as wanted	86	88	88	88

Note: MA (Medicare Advantage), FFS (fee-for-service), CAHPS® (Consumer Assessment of Healthcare Providers and Systems). Adjusted refers to geographic adjustment of results in FFS to match the distribution by state of MA enrollment.

Source: MedPAC analysis of CAHPS data.

2010b). As was the case in the preceding year, using CAHPS data, we find that flu vaccination rates were about 10 percent higher in 2011 for enrollees who have retiree coverage through their MA plan (employer-sponsored MA benefit packages). As was also true last year, there continue to be differences in the age distribution of enrollees across plan types, with regional PPOs having a greater share of enrollees under age 65 (19 percent as of December 2009) than other plan types (12 percent in HMOs). Although the HEDIS measures are not risk-adjusted and are not intended to be measures that should be risk-adjusted—that is, the measures should be valid across all age groups—the different age distribution may explain some of the results we see for regional PPOs.

Results for special needs plans

In this year's report, we have attempted to examine the performance of SNPs in particular. Isolating results for SNPs as a separate category can be difficult because of the MA quality reporting mechanisms. A SNP is often a component of a larger entity consisting of SNP and non-SNP members. The larger entity reports aggregate HEDIS data across its entire membership—for example, the rate of breast cancer screening among all Medicare members—and we are unable to disaggregate such results solely for the SNP population. However, there are other direct and indirect ways to evaluate the performance of SNPs.

We can directly evaluate SNPs for the quality indicators collected through the CAHPS survey. The CAHPS data we use are beneficiary-level data, and we can evaluate quality by assigning beneficiaries to their respective plan types (SNP or non-SNP and by type of SNP). Another source for direct evaluation of SNPs is the public reporting that CMS releases for a small subset of HEDIS measures that SNPs report, including SNPs that are part of larger entities that include non-SNP enrollment. Finally, as an indirect, or proxy, measure of SNP quality, we can compare organizations with a large proportion of SNP enrollees with organizations with few, or no, SNP enrollees.

Of the three types of SNPs—for dual-eligible enrollees, for chronically ill enrollees, and for enrollees in institutions—the flu and pneumonia vaccination rates among dual-eligible SNPs were the lowest among the three. The dual-eligible plans had flu vaccination rates of 64 percent (65 percent if Puerto Rico is excluded) while institutional and chronic care SNPs both had relatively higher flu vaccination rates of 73 percent. However, duals in MA SNPs have the same flu vaccination rates as duals in other MA plans, and their rates are about the same as the rate for duals in FFS Medicare.

SNPs separately report a set of 12 HEDIS measures to CMS so the results for such plans can be disaggregated from the results reported at the MA contract level (which may include SNPs and non-SNPs or multiple SNPs). SNPs also report certain measures that only SNPs are required to report: advance care planning (which includes advance directives, actionable medical orders, living wills,

a surrogate decision maker), functional status assessment, medication review, and pain screening—the last three of which are elements of the star rating system. CMS publishes results for some measures that SNPs report. For the SNP quality measures that CMS has posted to date (for three years, 2008–2010), we found that in general SNP performance was poorer than non-SNP performance, but there was wide variation across plans.

A proxy method of evaluating SNP quality is to examine the results at the MA contract level for plans that are primarily SNPs (defined as 75 percent or more of enrollment in SNP plans—which include 64 HMO contracts) versus those with little SNP enrollment (defined as 10 percent or less—which include 164 HMO contracts). Using this proxy method, we found that HMOs that are SNPs generally had lower HEDIS scores, except for the HOS measures on managing and discussing fall risks and managing urinary incontinence. SNPs point out that some of the HEDIS measures may not be the most appropriate measures for evaluating care rendered to individuals with multiple chronic conditions or other special needs. SNPs also suggest that the appropriate comparison is by population types within sectors—comparing, for example, HEDIS results for duals in SNPs with those of duals in non-SNP MA plans, though we do not have the person-level data to make such comparisons. We also note below that, although organizations with a higher proportion of SNP enrollment had lower star ratings in general, many organizations with a high proportion of SNP enrollment (or exclusively SNP enrollment) had relatively high star ratings.

Quality bonus program based on star ratings begins in 2012

Consistent with a recommendation that the Commission made for MA in 2004 (Medicare Payment Advisory Commission 2004) and consistent with the general direction of Medicare payment policy across FFS, the MA program now includes a system of bonus payments for high-performing plans.

Individual elements of the HEDIS, CAHPS, and HOS quality indicators are part of CMS's 5-star rating system for MA plans, as are certain contract administration factors. Each measure or factor is given a star rating, and scores on these elements are weighted (as described below) and averaged to arrive at an overall quality rating designated by 1 to 5 stars. Plans can receive a higher star rating after the averaging process, with an increase of 0.2 to 0.4 in the overall star rating, for high scores on the measures if they are consistently high across the range of measures.

The star ratings are made available to Medicare beneficiaries through the Plan Finder tool of the Medicare.gov website, and the ratings are the basis of MA quality bonus payments put in place as of 2012 by PPACA. New star ratings were posted for the open enrollment period of November–December 2011 for enrollments effective in 2012. However, because bonus payments determine the level of MA benchmarks for each plan, and because bids are due each April for the following contract year, the bids plans submitted in June of 2011 for the 2012 contract year had bonus amounts determined under the 2011 star ratings that were announced in the fall of 2010. Although 2012 bonus payments are based on the earlier 2011 star ratings (in which 3 plans had a 5-star rating), the provision that allows 5-star plans to enroll beneficiaries outside the annual open enrollment period is based on the most current star ratings—the 2012 ratings, in which 9 plans have a 5-star rating. For organizations with drug plans (MA–Prescription Drug plans), the bonus payments are based on the overall star rating, which includes both Part C (MA) measures and Part D measures.

In a 2011 report and in a comment letter to CMS, the Commission expressed concerns about the methodology of the CMS star rating system and concerns about a demonstration project that awards quality bonuses to a large majority of plans rather than the limited number of plans that would be eligible for such bonuses under the statute (Medicare Payment Advisory Commission 2011b, Medicare Payment Advisory Commission 2011c). In making additional program expenditures, limited Medicare dollars should go to truly high-performing plans, and beneficiaries should have a clear signal of quality differences among plans when making a decision at the point of enrollment. The Commission has a long-standing recommendation regarding CMS's overly broad use of demonstration authority, a recommendation made in 2006 in connection with a program to provide additional payments to oncologists. Later, with respect to two program-wide demonstrations under Part D, the Commission reiterated that "the Secretary should use … demonstration authority to test innovations in the delivery and quality of health care. Demonstrations should not be used as a mechanism to increase payments. … [The] demonstration authority is intended for smaller scale projects that help decision makers learn about innovations in financing and delivering Medicare services" (Medicare Payment Advisory Commission 2011c).

TABLE 12–9

The new star system gives greater weight to outcome measures

Category	2011		2012	
	Number of measures (equally weighted)	As percent of all measures	Total points assigned (measures given differing weights)	As percent of all measures by weights
I. Contract performance on Part C and Part D measures	17	33%	18.5	23%
II. CAHPS® patient experience measures and disenrollment rates (the latter for 2012 only)	9	18	12	15
III. Part C and Part D clinical quality measures	25	49	49	62
a. Outcome measures	7	28	31	63
b. Process measures	18	72	18	37

Note: CAHPS® (Consumer Assessment of Healthcare Providers and Systems).

Source: MedPAC analysis of CMS star rating documentation.

Like the Part D demonstrations, the MA quality bonus payment demonstration is a program that "increases program spending at a time when Medicare already faces serious problems with cost control and long-term financing" (Medicare Payment Advisory Commission 2007). Under the statute, only plans with 4 stars or more (maximum of 5 stars) can receive a bonus. In contrast, CMS's demonstration extends bonuses to plans at 3 stars or above, meaning that 80 percent of current enrollees are in plans that will receive bonuses, and plan projections show that 93 percent of enrollees will be in bonus plans this year—compared with a projected 25 percent of enrollees who will be in plans with 4 or more stars. The result is an additional cost to the Medicare program, which, on the basis of plan bids, we project to be $2.8 billion for 2012 (in bonus payments beyond those called for in the statute, which would otherwise have totaled $200 million in 2012).

With regard to the star rating methodology, CMS has addressed many of the Commission's concerns by changing the system's methodology for the 2012 ratings. The 2012 ratings were available for beneficiaries to use in the 2012 open enrollment period that occurred from October to November 2011. The 2012 ratings will be the basis for bonus payments in 2013. In its comment letter, the Commission noted that under the CMS demonstration, a bonus would be available to plans that CMS specifically identified as low-performing plans (indicated by an "icon" at the medicare.gov website that advised prospective enrollees that the plan had a record of poor performance and beneficiaries should carefully weigh their decision to enroll in such a plan). CMS modified the standards for bonus payments so that any plan under sanctions automatically receives a 2.5-star rating, making the plan ineligible for bonus payments.

Another issue of concern was that the star rating system placed too much emphasis on contract performance (such as call center response time) rather than on measures of clinical quality and patient experience. In response, CMS has incorporated more outcome measures into the star rating system. For 2012, CMS is using a HEDIS measure for the first time that reports an all-cause hospital readmission rate for beneficiaries age 65 or older. Because it is a first-year measure, CMS assigns the measure a weight of 1, lower than other outcome measures, which are weighted at 3.[7] In addition to adding more outcome measures, CMS has given greater weight to outcome and patient experience measures (Table 12-9). For example, the HOS measures of improvement or decline in physical and mental health have a weight of 3 points, CAHPS patient experience measures have a weight of 1.5 points, and HEDIS process measures have a weight of 1 point. These changes result in clinical quality measures constituting 62 percent of the weight of the measures in 2012 compared with 49 percent in 2011 and outcome measures constituting nearly two-thirds of the clinical quality measures compared with 28 percent in 2011.

In recommending pay-for-performance or quality bonus programs, the Commission has emphasized rewarding high levels of performance as well as improvement over time (Medicare Payment Advisory Commission 2004). Given that the star rating system incorporates elements from all three of the sources of quality indicators described above, it may appear that the star rating system can be used to answer the question of whether quality indicators have improved in MA from one year to another. However, the new weighting system, which is a major change in the star rating methodology, limits what can be concluded from year-over-year comparisons between 2010 and 2011. In addition, even when there is not a major change in the methodology for assigning stars, the following factors can produce changes from one year to another that limit the utility of the star ratings as a means of comparing overall MA quality from one year to another:

- CMS can change the measures to include for star rating purposes (e.g., by dropping some HEDIS measures and adding others, as illustrated in Table 12-4, p. 323).
- The cut points for stars given to individual measures can change based on the distribution of plan results (e.g., for the HEDIS breast cancer screening measure, the 5-star threshold was a rate of 82 percent or higher in 2011, while in 2012 the 5-star threshold is a lower rate, 80 percent).
- Because a plan can still obtain a star rating without reporting all measures (they can report as few as 51 percent of the measures), a change in a plan's star rating may be solely a consequence of the plan's performance on previously unreported measures.

CMS is examining ways to include improvement over time as a component of the star rating system, as indicated in the Agency's recent letter requesting comments on possible changes to the star rating system for the 2013 ratings (Centers for Medicare & Medicaid Services 2011).

Table 12-10 (p. 332) shows the star distribution of enrollment in November 2011 by plan type, using the 2011 star ratings and the 2012 star ratings. Even though the rating methodology changed between 2011 and 2012, the majority of plans' star ratings remained the same. When there were changes, most were half-star changes in one direction or the other (up or down in the overall star rating). Of the 383 plans rated in both years, the ratings of 10 contracts improved by 1 star; 4 contracts declined by 1 star; 1 contract declined by 1.5 stars; ratings for 73 contracts declined by 0.5 star; 87 contracts improved by 0.5 star; and ratings for 208 contracts were unchanged. In 2011, 3 plans had 5-star ratings, and in the 2012 star ratings, 9 plans have 5-star ratings.

Under the 2012 star ratings, more enrollees are in higher rated plans, which tend to be HMO plans. In both 2011 and 2012, only HMOs have 5-star ratings. This result is in part due to the lower level of performance of non-HMO plans on the intermediate outcome measures that are hybrid measures (as illustrated in Table 12-4, p. 323, and the discussion of that table). In the Part C star measures, there are 3 HEDIS intermediate outcome measures, with a total weight of 9. All HEDIS star measures, other than those from CAHPS or the HOS, have a total weight of 21.5 (out of an all-measure total of 52 Part C measures, on a weighted basis). The 3 HEDIS intermediate outcome measures are therefore 17 percent of all Part C weighted measures (9 of 52), and 42 percent of the HEDIS measures that contribute to star ratings (9 of 21.5) that are not from CAHPS or the HOS.

In both sets of star ratings in 2011 and 2012, local PPOs and HMOs are the highest rated plans, but in the 2011 ratings the proportion of PPO enrollees in plans with 4 or more stars, at 24 percent, was close to the HMO level of 29 percent. In the 2012 ratings, 36 percent of HMO enrollees are in plans with 4 or more stars, but only 14 percent of local PPO enrollees are in plans with 4 or more stars. This difference does not reflect a decline in the performance of local PPOs compared with HMOs, but instead it shows how the use of weighting, and the decisions on what measures to include in the star ratings, created a different distribution of higher rated plans across the different plan categories. The changes also affected regional PPOs and PFFS plans. In the 2012 ratings, enrollment in regional PPOs is almost entirely in 3-star plans, while in 2011 about half of the regional PPO enrollment was in 2.5-star plans. The PFFS distribution in the 2012 ratings is similar to what it was in 2011 (Table 12-10, p. 332).

We have also examined the star ratings by plan type and geography. Plans with higher SNP enrollment tend to have lower ratings in general, but many SNPs—those in Minnesota, Massachusetts, and Wisconsin—have relatively high star ratings. Older plans tend to have higher star ratings, and plans with a greater proportion of employer group enrollment tend to have higher star ratings. In the 2012 ratings, the average star rating for urban plans (with 50 percent or more urban enrollment)

TABLE 12–10

As of November 2011, almost a quarter of enrollees are in plans rated at 4 stars or higher, using the 2011 star ratings, with a higher proportion in such plans under the 2012 star ratings

	Percentage distribution of enrollment				
Number of stars	**All**	**HMO**	**Local PPO**	**Regional PPO**	**PFFS**
2011					
5.0	1%	1%	—	—	—
4.5	14	19	8%	—	—
4.0	8	9	16	—	1%
3.5	25	31	33	3%	5
3.0	32	29	31	45	43
2.5	7	4	4	51	1
2.0	0.03	0.04	—	—	—
Not rated	13	7	8	1	49
2012					
5.0	9%	14%	—	—	—
4.5	10	10	7%	—	—
4.0	9	12	7	—	—
3.5	32	34	50	2%	1%
3.0	27	19	26	92	34
2.5	9	10	7	3	12
2.0	0.3	0.3	0.1	—	—
Not rated	5	1	3	2	54

Note: PPO (preferred provider organization), PFFS (private fee-for-service). Enrollment includes cost-reimbursed plans that are not eligible for bonus payments but are given star ratings. "—" indicates no plans receiving the star rating displayed. Within the PFFS category for 2012, the 54 percent figure for "not rated" plans consists exclusively of plans that were too new to be rated.

Source: MedPAC analysis of CMS star ratings and enrollment data.

was 3.34; the average star rating for nonurban plans (drawing the majority of their enrollment from areas not within a metropolitan statistical area) was higher, at 3.56. These results suggest that, despite concerns about the ability to form provider networks in rural areas, plans operating in these areas can perform at high levels. Similarly, SNPs can also perform at high levels, as indicated by the high star ratings among several such plans.

PPACA reduces rebate levels, which vary by star ratings

In 2014, star levels will also be a factor in determining rebate levels for plans with bids below their benchmarks. The current proportion of 75 percent of the bid-to-benchmark difference will be reduced, by 2014, to 70 percent for the highest rated plans and to 50 percent for the lowest rated plans. In 2012, rebate levels will range from 63 percent to 72 percent of the bid-to-benchmark difference. The dollar distribution of rebates in 2012 is similar to that for 2011 (Table 12-11).

Concerns with the star ratings

One of our concerns with the current star rating system is the reporting unit to which the ratings apply. The geographic area to which a single rating applies may be extensive and may encompass many kinds of health care markets and provider networks. This situation is of special concern for PFFS plans spread over wide geographic areas, which are diminishing in number, but also for regional PPO plans, which cover wide geographic areas and have had significant growth in enrollment. We have pointed out that other plan types operating in large states—such as California, Texas, and Florida—with clearly defined,

differing market areas, also present a problem in assigning stars if the contract covers the entire state.[8] In addition, the problem of a wide contract area extends to local plans (local PPOs and HMOs) in that HEDIS data and other quality data are reported at the contract level for an organization, but the geographic service area included within a local HMO or PPO contract may be extensive and can include multiple noncontiguous areas. For example, Humana's Miami-based HMO contract, contract number H1036, operates in 22 counties in Florida but also includes in its authorized services three counties in Oregon (in the Portland area) and counties in North Carolina and Mississippi.[9] Given that 97 percent of the organization's enrollment is in Florida, the Humana star rating of 3.5 (2012 rating) may not be an accurate indicator of the performance of the Oregon plan or a fair comparison under CAHPS measures between the Oregon MA plan and FFS results in that area. Similarly, a UnitedHealthcare local PPO based in Indiana is offered in 19 counties in Indiana, but 83 percent of the enrollment under this contract is outside Indiana in counties where the PPO is authorized to enroll only employer group enrollees. The plan has enrollees in 48 other states, with the greatest proportion in Georgia (52 percent of non-Indiana enrollees). We suggest that CMS more closely examine the configuration of some local contracts to determine whether the reporting units should be modified. We recognize that in many cases a problem of small numbers arises and a particular area cannot be evaluated. If there is a small numbers issue, there are alternative ways to evaluate quality (Medicare Payment Advisory Commission 2010b). ■

TABLE 12–11

Rebate values by plan type remain at about the same level in 2012 as in 2011

Plan type	2011	2012
HMOs	$96	$96
Local PPOs	35	34
Regional PPOs	41	42
PFFS	31	29
All	76	79

Note: PPO (preferred provider organization), PFFS (private fee-for-service).

Source: MedPAC analysis of plan bids to CMS, 2011.

Endnotes

1 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.

2 HEDIS® is a registered trademark of the National Committee for Quality Assurance.

3 CAHPS® is a registered trademark of the Agency for Healthcare Research and Quality.

4 We are aware of work that has been done comparing MA and FFS quality using other sources of data, including, for example, Brennan and Shepard (2010) and Cohen et al. (2012), and we are examining those studies.

5 In this chapter, we examine year-over-year changes in measures. Information on results for earlier years and trends over time for selected measures can be found in the Commission's June 2011 and June 2010 data books (Medicare Payment Advisory Commission 2010a, Medicare Payment Advisory Commission 2011a). Often, when a measure is introduced the results improve in the early years of the measure and plateau after a certain point—with some measures being withdrawn as not amenable to further improvement. For example, the recording of body mass index, a measure first publicly reported in 2010, increased from an average rate of 38.4 percent in 2010 to 51.7 percent in 2011 among HMOs reporting in both years.

6 As noted, this analysis was based on looking at the results for individual HEDIS measures by individual plan, among PFFS and regional PPO plans, and comparing the confidence intervals shown for 2010 results with those of 2011 results by plan and by measure.

7 CMS is using the HEDIS readmission measure for star rating purposes even though National Committee for Quality Assurance does not publicly report a new measure in the first year of use of the measure. We did note some anomalies in the readmission measures, which we have discussed with CMS, including whether there should be a minimum threshold of admissions for the readmission measure to be used (e.g., one plan with 5 stars had no admissions and therefore no readmissions). CMS reported that the intent was to have a minimum of 10 admissions before a star rating would be assigned. There also appear to have been issues with readmission rates for the under-65 population, but CMS has not included the under-65 readmission rates in the public release of HEDIS data, and they are not a component of the star rating system.

8 Kaiser of California reports separate results for Northern and Southern California for many quality measures. However, the star rating is assigned to the single Kaiser contract, H0524, and the individual Northern and Southern California measure rates are averaged to determine the measure rate for purposes of assigning stars to H0524.

9 In the early years of the Medicare HMO contracting program, it would not have been possible for a contract number to have a geographic configuration like that of the Florida organization. Contract numbers essentially represented rating areas for commercial rating purposes. If an HMO operated in a metropolitan area such as Washington, DC, for example, and the Washington premium structure differed from that of contiguous Northern Virginia counties, the entity would have had a regional component in Northern Virginia with different premiums. On contracting for Medicare enrollees, such an entity would have had two H numbers because the two areas were distinct rating areas, and the Medicare pricing and benefit package were determined through a comparison with the contractor's commercial rate structure. As various Medicare HMO contracting requirements were reduced or eliminated over time—such as the requirement that the Medicare area match the commercial area and the requirement that at least half of an organization's enrollment had to be non-Medicare/Medicaid enrollees—the connection between the H number and the service area and rating areas was lost. CMS subsequently encouraged the consolidation of H numbers within a state, as in the case of Kaiser, which previously had separate H numbers for Northern and Southern California.

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CHAPTER 13

Status report on Part D, with focus on beneficiaries with high drug spending

RECOMMENDATION

13 The Congress should modify the Part D low-income subsidy copayments for Medicare beneficiaries with incomes at or below 135 percent of poverty to encourage the use of generic drugs when available in selected therapeutic classes. The Congress should direct the Secretary to develop a copay structure, giving special consideration to eliminating the cost sharing for generic drugs. The Congress should also direct the Secretary to determine appropriate therapeutic classifications for the purposes of implementing this policy and review the therapeutic classes at least every three years.

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

CHAPTER 13

Status report on Part D, with focus on beneficiaries with high drug spending

Chapter summary

Each year the Commission provides a status report on Part D to:

- provide information on beneficiaries' access to prescription drugs—including enrollment figures and benefit and design changes—program costs, and the quality of Part D services.
- analyze changes in plan bids, premiums, benefit designs, and formularies.

In addition, this chapter reports on beneficiaries with high drug spending and the relationship between the high use of drugs and quality of care in Part D. It also includes the Commission's recommendation to revise Part D's low-income cost-sharing subsidy.

Enrollment in Part D—In 2011, more than 70 percent of Medicare beneficiaries were enrolled in Part D plans or in employer plans that receive Medicare's retiree drug subsidy. Other beneficiaries receive their drug coverage through other sources of creditable coverage. Although 2011 data are not available, in 2010, about 10 percent had no drug coverage or coverage less generous than Part D. Among those in Part D plans, 10.6 million low-income individuals (about 36 percent of Part D enrollees) received the low-income subsidy (LIS). Roughly two-thirds of Part D enrollees are in stand-alone prescription drug plans (PDPs); the rest are in Medicare Advantage–Prescription Drug plans (MA–PDs). MA–PD enrollees are much more likely

In this chapter

than those in PDPs to receive basic and supplemental benefits combined in their drug plan. Most enrollees report high satisfaction with the Part D program and with their plans.

Benefit offerings for 2011—The number of plan offerings remained relatively stable from 2011 to 2012. Sponsors are offering about 6 percent fewer stand-alone PDPs and about 2 percent more MA–PDs than in 2011. Beneficiaries will continue to have 25 to 36 PDP options to choose from, along with many MA–PDs. MA–PDs continue to be more likely than PDPs to offer enhanced benefits that include some coverage in the gap.

For 2012, about the same number of premium-free PDPs will be available to enrollees who receive the LIS: 327 plans qualified compared with 332 in 2011. In most regions, LIS enrollees will continue to have many premium-free plans available. In two regions, Florida and Nevada, only a handful of plans qualified despite changes made in the Patient Protection and Affordable Care Act of 2010 to increase the number of qualifying plans.

Part D spending—Between 2006 and 2010, Part D spending increased from about $43 billion to $56 billion (average annual growth of about 6 percent), and CMS expects it will have reached $59 billion in 2011. These expenditures include the direct monthly subsidy plans receive for their Part D enrollees, reinsurance paid for very-high-cost enrollees, premiums and cost sharing for LIS enrollees, and payments to employers that continue to provide drug coverage to their retirees who are Medicare beneficiaries. In 2010, LIS payments continued to be the largest component of Part D spending. Medicare's reinsurance payments are the fastest growing component of Part D spending, driven primarily by LIS beneficiaries who use many drugs that tend to be expensive brand-name medications.

Between 2007 and 2009, average annual per capita gross spending for Part D–covered drugs grew by 3.6 percent. Growth in per capita spending varied across different groups, with Part D enrollees who do not receive the LIS experiencing significantly lower growth (2.2 percent per year, on average) than LIS enrollees (6.1 percent per year, on average). Although percentage growth in per capita spending among MA–PD enrollees was greater than for PDP enrollees, the average dollar increase was lower for MA–PD enrollees.

Growth in Part D premiums—In 2012, the base beneficiary premium will be $31.08, which is a slight decrease from $32.34 in 2011. The base beneficiary premium reflects the basic portion of the benefit (which does not include premiums

for enhanced or supplemental, benefits). The actual premium paid depends on the beneficiary's choice of plans.

Generic substitution and the role of LIS—Switching from brand-name drugs to generic drugs can result in significant cost savings. Plan sponsors have been more successful at encouraging generic drug use among non-LIS enrollees than among LIS enrollees. Multiple factors contribute to the difference in generic use rate across populations, including financial incentives. Plans often use cost-sharing differentials to encourage beneficiaries to use generic drugs. Such tools are not available to manage the drug use of LIS enrollees. By revising the LIS copayment structure, Medicare may be able to reduce program spending without substantially affecting access to needed medications.

The policy we recommend would provide the Secretary with broad authority and flexibility to provide stronger financial incentives to use generic drugs when clinically appropriate. Several safeguards are in place to ensure that access is not negatively affected. First, the policy applies to drug classes where lower cost (or free) generic alternatives are available. Second, the increase in the copay amount we are contemplating for the policy for selected drug classes takes into account the limited incomes of these beneficiaries. Third, most individuals already use or could switch to generics for the classes this policy applies to and are likely to experience reductions in out-of-pocket (OOP) costs for at least some of their medications. This reduction would offset the increase in copays for brand-name drugs in selected classes if beneficiaries or their physicians choose to continue with those brand-name drugs. Fourth, the policy would retain the existing exceptions and appeals process allowing beneficiaries to appeal coverage or cost-sharing amounts. Finally, the true OOP limit under Part D's benefit structure will limit the OOP costs for LIS beneficiaries who need many brand-name medications.

High use of drugs and quality of pharmaceutical care—Beneficiaries with high drug use may have medical problems caused or exacerbated by their heavy use of medications (polypharmacy). They are at increased risk of adverse drug events, drug–drug interactions, and use of inappropriate medications. In addition, research shows that high use of medication is associated with lower adherence to medication therapies.

Part D plans are required to implement medication therapy management programs (MTMPs) to improve the quality of the pharmaceutical care that high-risk beneficiaries receive. Our earlier review of MTMPs revealed wide variations in eligibility criteria, the kinds of interventions provided to enrollees, and the outcomes sponsors measured (Medicare Payment Advisory Commission 2009).

Since 2010, CMS has tightened criteria for MTMPs. The agency has begun an evaluation of the impact of MTMPs on high-risk, chronically ill beneficiaries. We currently do not have sufficient data to determine whether the programs increase the quality of pharmaceutical care to participants but will continue to monitor this program. ■

TABLE 13–1 **Parameters of the defined standard Part D benefit increase over time**

	2006	2011	2012
Deductible	$250.00	$310.00	$320.00
Initial coverage limit	2,250.00	2,840.00	2,930.00
Annual out-of-pocket spending threshold	3,600.00	4,550.00	4,700.00
Total covered drug spending at annual out-of-pocket threshold	5,100.00	6,447.50*	6,657.50*
Maximum amount of cost sharing in the coverage gap	2,850.00	3,607.50	3,727.50
Minimum cost sharing above the annual out-of-pocket threshold:			
Copay for generic/preferred multisource drug prescription	2.00	2.50	2.60
Copay for other prescription drugs	5.00	6.30	6.50

Note: *Total covered drug spending at annual out-of-pocket threshold depends on the mix of brand and generic drugs filled during the coverage gap. The amount for 2012 ($6,657.50) is for an individual with no other sources of supplemental coverage filling only brand-name drugs during the coverage gap.

Source: CMS, Office of the Actuary.

Each year since 2006, the Commission has provided a status report on Medicare's Part D program. To monitor the ability of the program—under its competitive approach—to meet Medicare's goals of maintaining beneficiary access while holding down program spending, we examine several performance indicators: beneficiaries' access to prescription drugs (including data on enrollment and changes in Part D plan benefit designs and formularies for 2012), program costs, and the quality of services.

In addition, this chapter reports on beneficiaries with high drug spending and the relationship between the high use of drugs and quality of care in Part D. It also includes the Commission's recommendation to revise Part D's low-income cost-sharing subsidy.

Background

Medicare's payment system for Part D is very different from its payment systems for fee-for-service providers. It uses competing private plans to deliver prescription drug benefits; instead of setting prices administratively, Medicare's payments to Part D plans are based on bids submitted by plan sponsors.

Competitive design

Part D uses two avenues of competition designed to give plan sponsors incentives to offer beneficiaries attractive prescription drug coverage while controlling growth in drug spending. First, private plans must compete for enrollees. Ideally, beneficiaries choose a plan that provides access to the medications they need at premiums and copayments they are willing to pay, and they reevaluate that decision from time to time.[1] In a second avenue of competition, sponsors may seek to gain market share by annually bidding at a level they hope will fall below regional thresholds to qualify their plans to remain premium-free for most enrollees who receive Part D's low-income subsidy (LIS).

Only about 6 percent of Part D enrollees switched plans voluntarily in the first few years of the program. (More recent data on switching plans are not available.) This proportion is similar to the share of individuals in the Federal Employees Health Benefits Program who switch plans each year. Experience suggests that beneficiaries do not switch plans in great numbers for several reasons. Many beneficiaries are satisfied with their choice. In other cases, they may want to avoid the difficulties involved in comparing dozens of plan benefits that differ on many dimensions, such as cost-sharing requirements, formularies, utilization management, network of pharmacies, and quality of services. In the future, if beneficiaries are unwilling to switch, even when faced with significant premium increases, sponsors will have less of an incentive to compete on premiums and control drug spending.

Benefit structure

Medicare defines a standard Part D benefit structure with parameters that change at the same rate as the annual change in beneficiaries' average drug expenses (Table 13-1). For 2012, the defined standard benefit includes a $320 deductible and 25 percent coinsurance until the

TABLE 13–2

Over 70 percent of Medicare beneficiaries receive drug coverage through Part D plans or RDS, 2011

	Beneficiaries	
	In millions	Percent of Medicare enrollment
Medicare enrollment	48.9	100%
Part D enrollment		
Part D plans	29.3	60
Plans receiving RDS*	6.2	13
Total Part D	35.4	72

Note: RDS (retiree drug subsidy). Totals may not sum due to rounding.
*Excludes federal government and military retirees covered by either the Federal Employees Health Benefit Program or the TRICARE for Life program.

Source: MedPAC based on Table III.A3 and Table IV.B8 of the Medicare Board of Trustees' report for 2011.

enrollee reaches $2,930 in total covered drug spending. Enrollees exceeding that total face a coverage gap up to an annual threshold of $4,700 in out-of-pocket (OOP) spending that excludes cost sharing paid by most sources of supplemental coverage, such as employer-sponsored policies. Enrollees with drug spending exceeding that amount pay the greater of either $2.60 to $6.50 per prescription or 5 percent coinsurance.

Before 2011, enrollees exceeding the initial coverage limit were responsible for paying the full discounted 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), beginning in 2011, beneficiaries face reduced cost sharing for both brand-name and generic drugs in the coverage gap.[2] In 2012, the cost sharing for drugs filled during the gap phase is 50 percent for brand-name drugs and 86 percent for generic drugs.[3] An individual with no other source of drug coverage reaches the $4,700 limit at $6,657.50 in total drug expenses (the sum of the enrollee's spending plus spending the Part D plan covers).[4]

Formularies

In Part D, each plan sponsor operates one or more formularies—lists of drugs the plans cover and the terms under which they cover them—to manage the cost and use of prescription drugs. When designing formularies, sponsors strike a balance between providing enrollees with access to medications and controlling growth in drug spending, which they accomplish by negotiating drug prices and dispensing fees with pharmacies and rebates with pharmaceutical manufacturers and by managing enrollees' utilization. Part D sponsors rely on clinicians—generally physicians and pharmacists who participate on a pharmacy and therapeutics committee—when deciding which drugs to list. Sponsors also select the cost-sharing tier for each listed drug and whether any utilization management tools apply, taking into account clinical and financial factors (such as how tier-placement decisions might affect sponsors' rebates from drug manufacturers). Making all medications readily accessible at preferred (i.e., relatively low) levels of cost sharing can lead to a monthly plan premium that is high relative to a sponsor's competitors, whereas an overly restrictive formulary may keep a plan's premium competitive but may make the plan less attractive to potential enrollees because it covers a limited number of drugs.

Part D enrollees' access to prescription drug benefits in 2011

Implementation of the Part D program in 2006 increased the share of beneficiaries who have significant drug coverage from 75 percent before Part D to about 90 percent. In general, Medicare beneficiaries appear to have good access to prescription drugs. All individuals have access to dozens of Part D plan options, and many continue to receive drug coverage through former employers. Surveys indicate that beneficiaries enrolled in Part D are generally satisfied with the Part D program and with their plan (Department of Health and Human Services 2010, J.D. Power and Associates 2006, Keenan 2007, *Medical News Today* 2009, PRNewswire 2010, Weems 2008).

In 2011, over 70 percent of Medicare beneficiaries were in Part D plans or employer plans receiving retiree drug subsidy

In 2011, about 60 percent of an estimated 48.9 million Medicare beneficiaries were enrolled in Part D plans and about 13 percent had drug coverage through employer-sponsored plans that received Medicare's retiree drug subsidy (RDS) (Table 13-2).[5] Some beneficiaries receive

their drug coverage through other sources of creditable coverage, including the Department of Veterans Affairs, TRICARE (the Department of Defense's health benefit for retired military members), and other payers.[6] In 2010, the most recent year for which data are available, about 10 percent of beneficiaries had no drug coverage or coverage less generous than Part D's standard benefit. Research indicates that beneficiaries who do not enroll in Part D tend to have lower drug spending, better health, and lower risk scores (Heiss et al. 2006, Riley et al. 2009).

As of April 2011, about two-thirds (18.6 million) of Part D enrollees were in stand-alone prescription drug plans (PDPs), while the remaining one-third (10.7 million) were enrolled in Medicare Advantage–Prescription Drug plans (MA–PDs), which offer a combined benefit package of medical services and prescription drugs (Table 13-3).[7] PDPs are required to be available region wide in 1 of 34 Medicare-designated PDP regions and can serve multiple regions, while MA–PDs can be local, operating on a county-wide basis, or region wide, serving in 1 of 26 MA regions.

Eighty percent of LIS enrollees are enrolled in stand-alone PDPs

In 2011, about 10.5 million individuals, or 36 percent of Part D enrollees, received the LIS. Of these enrollees, 6.4 million were dually eligible to receive Medicare and Medicaid. Another 4.3 million qualified for the LIS either because they received benefits through the Medicare Savings Program or Supplemental Security Income program or because they were determined eligible by the Social Security Administration after applying directly to that agency (Boards of Trustees 2011). Among LIS beneficiaries, 80 percent (8.3 million) were enrolled in PDPs and the rest (2.2 million) were in MA–PDs (Table 13-3). CMS randomly assigns most LIS beneficiaries to PDPs that qualify as premium-free plans unless the beneficiary chooses a plan that is different from the assigned plan. As a result, a much smaller share of LIS beneficiaries are enrolled in MA–PDs.

Distribution of enrollment varies across regions

Part D enrollment varies geographically. In 2009, enrollment ranged between 39 percent and 69 percent of Medicare beneficiaries across the 34 PDP regions (Table 13-4). Part D enrollment tends to be lower in states with large employers that receive Medicare's RDS—in Michigan and Ohio, for example. In most regions,

TABLE 13–3

Part D enrollment by plan type and LIS status, 2011

		Plan type	
	All Part D	PDP	MA–PD
Beneficiaries (in millions)	29.3	18.6	10.7
By LIS status			
LIS	10.5	8.3	2.2
Non-LIS	18.8	10.3	8.5

Note: LIS (low-income subsidy), PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). Totals may not sum due to rounding.

Source: MedPAC based on monthly Part D enrollment data as of April 2011 (https://www.cms.gov/MCRAdvPartDEnrolData/).

Medicare beneficiaries received their drug coverage through Part D plans or through drug coverage provided by their former employers that receive the RDS. In region 5 (Delaware–District of Columbia–Maryland), region 7 (Virginia), and region 34 (Alaska), less than 65 percent of beneficiaries were in Part D plans or plans receiving the RDS. In these regions, a higher proportion of Medicare beneficiaries may have received drug coverage from other sources, such as the Federal Employees Health Benefits Program or the Indian Health Service.

Most beneficiaries have access to many PDPs and MA–PDs. In general, MA–PD enrollment is high in regions with higher MA penetration. For example, in 2009, more than 45 percent of Part D enrollees were in MA–PDs in parts of the West (Arizona, California, Colorado, Nevada), in Florida and Hawaii, and in parts of the Northeast (the Pennsylvania–West Virginia region). By comparison, in other parts of the Northeast, Midwest, and several South Central states, less than 20 percent of Part D enrollees are in MA–PDs.

The number of beneficiaries receiving Part D's LIS also varies considerably by region. In 2009, the share of Part D enrollees receiving the LIS ranged from 27 percent in the upper Midwest and several central western states to 61 percent in Alaska (Table 13-4, p. 346). Participation in Part D's LIS program is related to many factors, such as underlying rates of poverty and health status in each region, the degree to which a state's Medicaid program reaches out to enroll eligible individuals, and the criteria

TABLE 13–4

Part D enrollment varies widely across regions, 2009

		Percent of Medicare enrollment		Percent of Part D enrollment			
				Plan type		Subsidy status	
PDP region	State(s)	Part D	RDS	PDP	MA–PD	LIS	Non-LIS
1	ME, NH	55%	13%	88%	12%	49%	51%
2	CT, MA, RI, VT	58	18	69	31	42	58
3	NY	59	19	57	43	46	54
4	NJ	53	22	81	19	35	65
5	DE, DC, MD	45	19	85	15	41	59
6	PA, WV	63	13	53	47	33	67
7	VA	52	11	80	20	38	62
8	NC	59	16	75	25	43	57
9	SC	54	16	79	21	45	55
10	GA	60	11	79	21	44	56
11	FL	60	13	54	46	34	66
12	AL, TN	62	12	67	33	47	53
13	MI	54	25	63	37	34	66
14	OH	54	25	65	35	36	64
15	IN, KY	56	18	83	17	41	59
16	WI	54	15	66	34	33	67
17	IL	55	19	87	13	38	62
18	MO	62	12	71	29	35	65
19	AR	61	9	83	17	45	55
20	MS	65	6	90	10	54	46
21	LA	62	13	67	33	49	51
22	TX	57	15	71	29	45	55
23	OK	60	8	80	20	38	62
24	KS	61	7	85	15	29	71
25	IA, MN, MT, NE, ND, SD, WY	66	9	74	26	27	73
26	NM	62	8	63	37	39	61
27	CO	59	13	49	51	29	71
28	AZ	61	12	43	57	31	69
29	NV	56	13	47	53	28	72
30	OR, WA	57	11	60	40	31	69
31	ID, UT	57	11	59	41	28	72
32	CA	69	10	52	48	39	61
33	HI	66	4	48	52	29	71
34	AK	39	25	97	3	61	39

Note: PDP (prescription drug plan), RDS (retiree drug subsidy), MA–PD (Medicare Advantage–Prescription Drug [plan]), LIS (low-income subsidy). Definition of regions based on PDP regions used in Part D.

Source: MedPAC analysis of Part D enrollment data from CMS.

states use to determine eligibility for their Medicaid programs. For example, states can increase the number of residents eligible for the Medicare Savings Program by not counting certain types of assets or sources of income in their eligibility criteria for Medicaid benefits.

Distribution of enrollment across plan types

Access to prescription drugs can be affected by the type of plan one chooses. 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

TABLE 13–5 **MA–PD enrollees more likely to be in enhanced plans with no deductible, 2011**

	PDP		MA–PD	
	Number (in millions)	Percent	Number (in millions)	Percent
Total	17.0	100%	8.6	100%
Type of benefit				
Defined standard	1.3	8	0.1	1
Actuarially equivalent*	12.6	74	0.6	7
Enhanced	3.0	18	7.9	92
Type of deductible				
Zero	7.3	43	7.8	91
Reduced	2.1	13	0.5	6
Defined standard**	7.6	45	0.2	3

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). The 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. Totals may not sum due to rounding.
*Includes "actuarially equivalent standard" and "basic alternative" benefits.
**$310 in 2011.

Source: MedPAC analysis of CMS landscape, plan report, and enrollment data.

or are enhanced in some way. Actuarially equivalent plans have the same average benefit value as defined standard plans but a different benefit structure (both actuarially equivalent and defined standard plans are referred to as basic benefits).[8] For example, a plan may use tiered copays (e.g., charging $7 per generic prescription 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 sponsor offers at least one stand-alone PDP with basic benefits in a PDP region, it may also offer a plan with enhanced benefits—basic and supplemental benefits combined, with a higher average benefit value—by including, for example, lower cost sharing, coverage in the gap, and an expanded drug formulary that includes non-Part D–covered drugs.[9] Since Medicare does not subsidize supplemental benefits, enrollees must pay the full premium for any additional coverage.

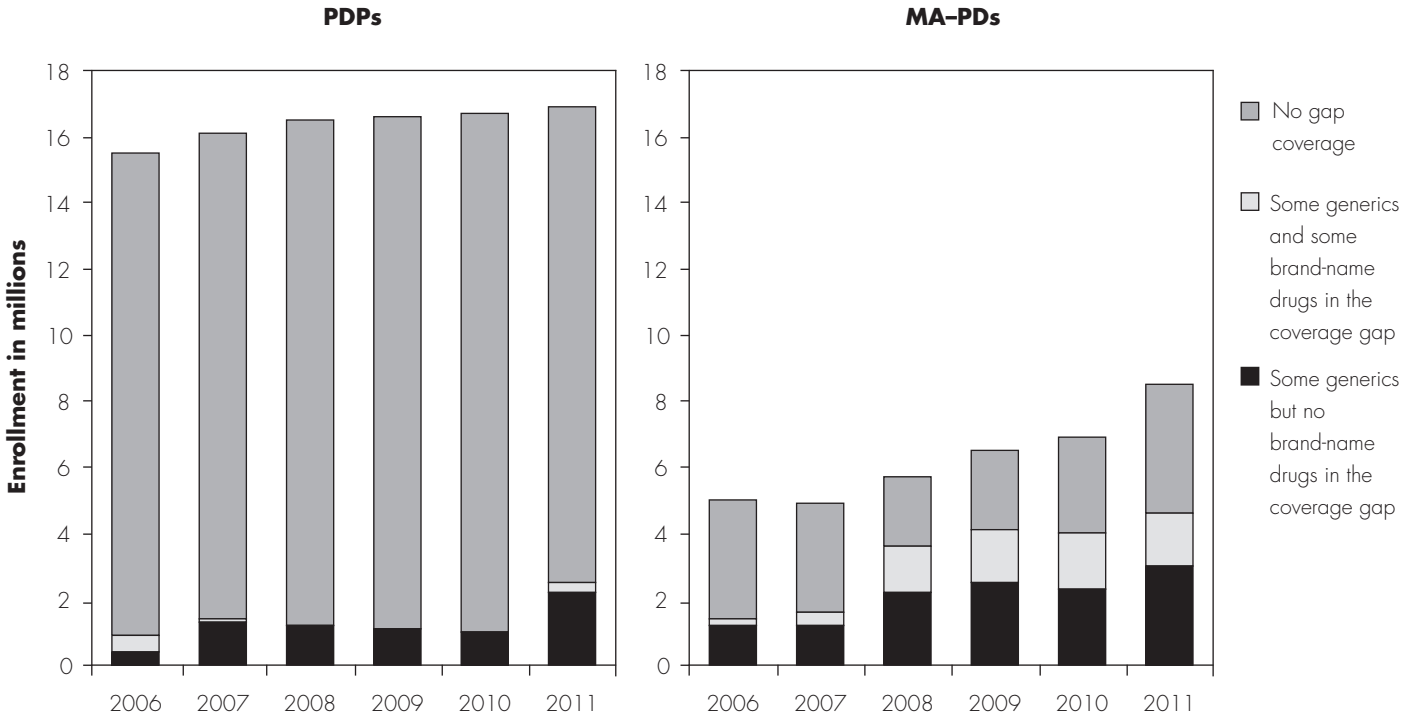
In 2011, 74 percent of PDP enrollees had basic coverage that was actuarially equivalent to the defined standard benefit, most with tiered copays. Another 18 percent of PDP enrollees had enhanced benefits—the typical enhancement being a lower deductible rather than benefits in the coverage gap.[10] Eight percent were in defined standard plans. MA–PD enrollees were predominantly in plans that used copayments, with 99 percent in actuarially equivalent or enhanced plans (Table 13-5).

Enrollees in stand-alone PDPs are more likely to have a deductible in their plans' benefit design than enrollees in MA–PDs. In 2011, slightly more than half of PDP enrollees paid no deductible or a lower deductible than was prescribed in the defined standard benefit; the remaining enrollees were in plans with the standard $310 deductible. By comparison, 97 percent of MA–PD enrollees had a reduced deductible or no deductible at all (Table 13-5), which reflects the ability of MA–PDs to use MA (Part C) rebate dollars to supplement benefits or lower premiums.[11]

The ability of MA–PDs to use Part C rebate dollars to enhance their Part D benefits affects the difference between PDPs and MA–PDs in their availability to offer benefits in the coverage gap (Figure 13-1, p. 348). In 2011, 15 percent of PDP enrollees (about 2.5 million beneficiaries) were in plans that offered benefits in the coverage gap, usually for generic drugs rather than brand-name drugs. However, nearly 45 percent of PDP enrollees received Part D's LIS, which effectively eliminated their coverage gap. By comparison, 54

FIGURE 13–1

PDP enrollees are less likely to have benefits in the coverage gap



Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]).

Source: MedPAC analysis of CMS landscape and enrollment data.

percent of MA–PD enrollees (about 4.7 million beneficiaries) were in plans offering gap coverage. About two-thirds of these enrollees were in plans that covered generic but not brand-name drugs.

Use of Part D benefits and share of enrollees reaching the coverage gap

Prescription drugs are used widely by Medicare beneficiaries. Based on the Commission's analysis of 2009 prescription drug event (PDE) data taken from Part D claims, 92 percent of Part D enrollees filled at least one prescription during the year. Enrollees filled an average of 4.1 prescriptions per month, with considerably higher average utilization among those who received the LIS (5.0 per month) than among beneficiaries who did not (3.6 per month) (see section on per capita spending and use, p. 357). As mentioned above, most LIS enrollees are in PDPs that are less likely to offer supplemental benefits, such as coverage in the gap. However, the extra help with cost sharing provided by the low-income cost-sharing subsidy limits their OOP spending and effectively eliminates the coverage gap for LIS enrollees.

In 2009, the share of Part D enrollees with spending that was high enough to put them in the coverage gap remained stable at around 30 percent of enrollees (Figure 13-2).[12] In that year, most non-LIS enrollees faced 100 percent of the plan's negotiated cost of the drug for prescriptions filled in the coverage gap, unless they were in a plan that provided some benefits in the gap. LIS enrollees, for whom the gap is eliminated, accounted for more than half of the enrollees with spending high enough to reach the coverage gap (nearly 4.7 million, or about 16 percent of all Part D enrollees). About 2.4 million, or 8 percent of Part D enrollees, had spending high enough to reach Part D's catastrophic coverage phase. Of these 2.4 million individuals, about 2 million (7 percent of Part D enrollees) received the LIS.

Benefit offerings for 2012

Beneficiaries will continue to have many choices of Part D plans in each region. However, each year, a subset of

beneficiaries are affected by the entry and exit of plans resulting from decisions by plan sponsors or CMS not to renew contracts. Changes in business strategies also affect plan benefits that are available in a given region.

Number of plans remains relatively stable in 2012

In 2012, the total number of stand-alone PDPs has declined slightly (6 percent)—1,041 compared with 1,109 in 2011, while the number of MA–PDs has increased by 2 percent—1,541 compared with 1,506 in 2011 (Figure 13-3).[13] Although the number of plans offered has fluctuated over the years, there was a significant reduction in the number of PDPs between 2010 and 2011. That reduction was primarily the result of CMS's policy intended to differentiate more clearly between basic and enhanced benefit plans and a policy discouraging plans with low enrollment. That reduction in the number of plans does not appear to have affected beneficiaries' access to Part D plans.[14] The number of PDPs available remained relatively stable between 2011 and 2012. In 2012, Medicare beneficiaries continue to have many plans to choose from, ranging from 25 PDP options in Hawaii and Alaska to 36 PDP options in the Pennsylvania–West Virginia region, along with many (sometimes dozens of) MA–PDs. The number of MA–PDs available to a beneficiary varies by the county of residence.

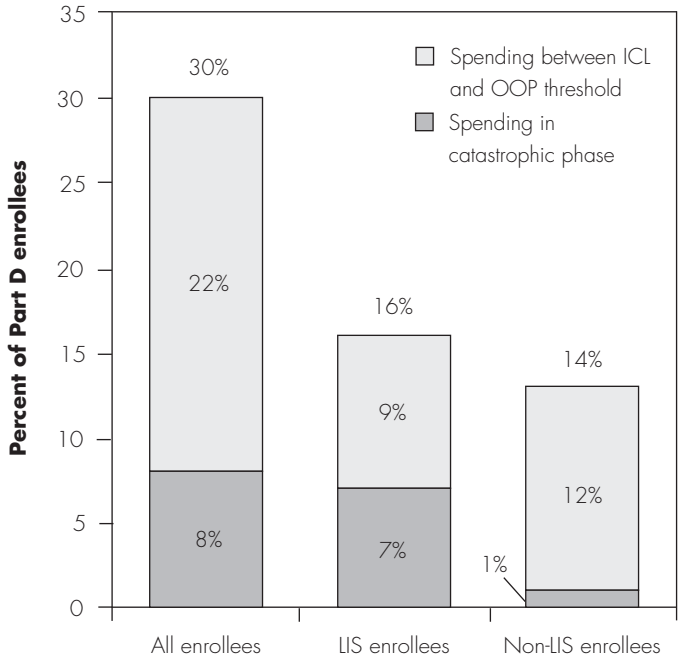
In 2012, 327 PDPs are available to LIS enrollees at no premium, compared with 332 in 2011 (Figure 13-3, p. 350). Most regions continue to have many premium-free plans available. However, in two regions, only a handful of premium-free plans are available (three plans in Florida and two plans in Nevada). As of December 2011, about 2.5 million LIS enrollees were expected to be in plans that do not qualify as premium-free in 2012.[15] CMS estimates that it will have reassigned 700,000 LIS enrollees to different plans because their previous plan's premium no longer falls below the 2012 threshold.[16] LIS enrollees who selected a plan that differed from their randomly assigned plan have not been reassigned.

Notable changes for 2012 in benefit design

Beneficiaries are encouraged to reexamine their options from time to time. In addition to the annual change in plan availability and premiums charged, most plans make some changes annually to their benefit offerings—such as deductible amounts and plan formularies that can have a direct effect on access to and affordability of medications.

FIGURE 13–2

Part D enrollees with spending in the coverage gap and catastrophic phase, 2009



Note: ICL (Initial coverage limit), LIS (low-income subsidy). For LIS enrollees, the cost-sharing subsidy effectively eliminates the coverage gap. In 2009, Part D enrollees reached the ICL at $2,700 in gross drug spending. If they had no supplemental coverage, an enrollee reached the annual out-of-pocket (OOP) threshold at $4,350 of OOP spending. Some non-LIS enrollees who reached the catastrophic phase of the benefit may have had some gap coverage. Sums may not add to totals due to rounding.

Source: MedPAC analysis of Part D prescription drug event data and Part D denominator file from CMS.

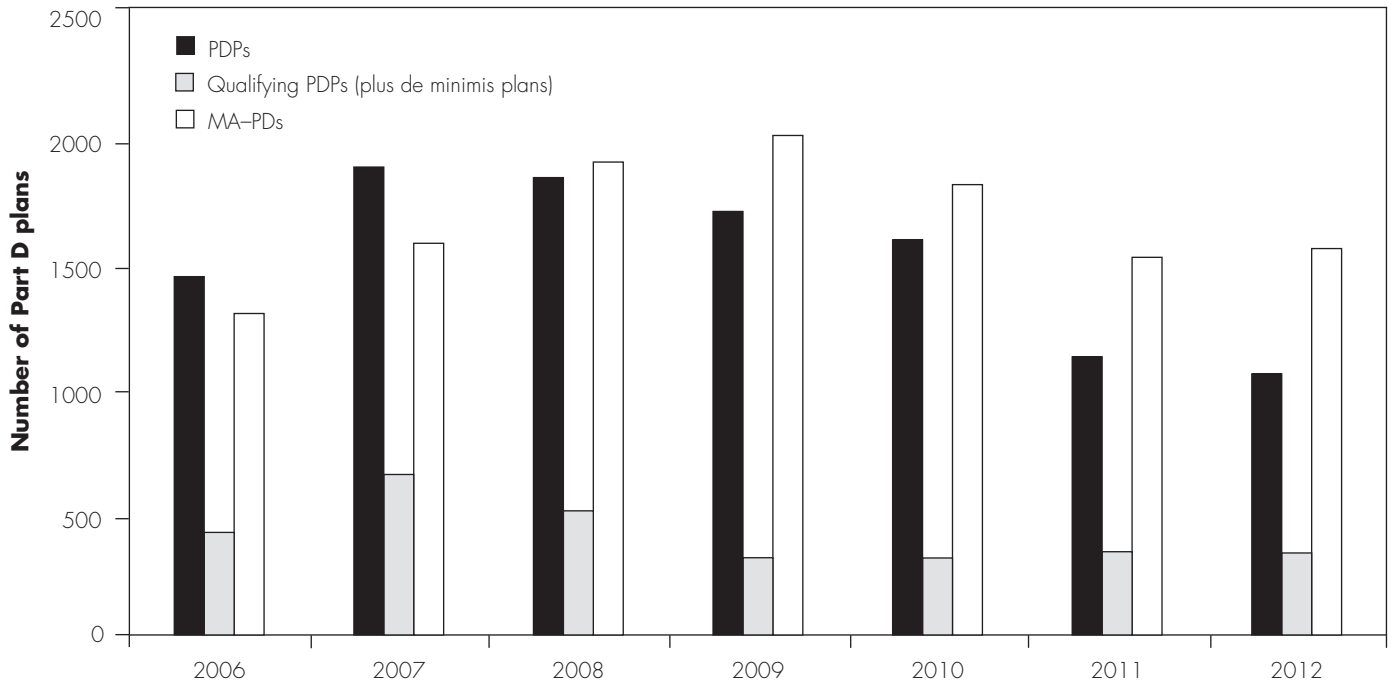
Benefit designs

For the 2012 benefit year, the structure of drug benefits for both stand-alone PDPs and MA–PDs held fairly steady. As in previous years, a smaller share of PDPs have no deductible (47 percent) compared with MA–PDs (89 percent). More than half of PDPs continue to charge a deductible in 2012, with most charging the defined standard amount ($320) (Table 13-6, p. 350).

In 2012, a smaller percentage of PDPs provide gap coverage than in 2011 (Figure 13-4, p. 351).[9] In 2011, 33 percent of PDPs included some gap coverage—usually some or all generic drugs but no brand-name medications. For 2012, that share declined to 26 percent. By contrast, the share of MA–PDs with gap coverage held steady at about 50 percent in 2012. The extent of coverage in the gap varies from plan to plan. For example, gap coverage

FIGURE 13–3

Part D plans remain stable, but slightly fewer premium-free plans for LIS beneficiaries in 2012



Note: LIS (low-income subsidy), PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]. Qualifying PDPs are plans for which 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 from the regional LIS premium threshold.

Source: CMS landscape and plan report files.

TABLE 13–6

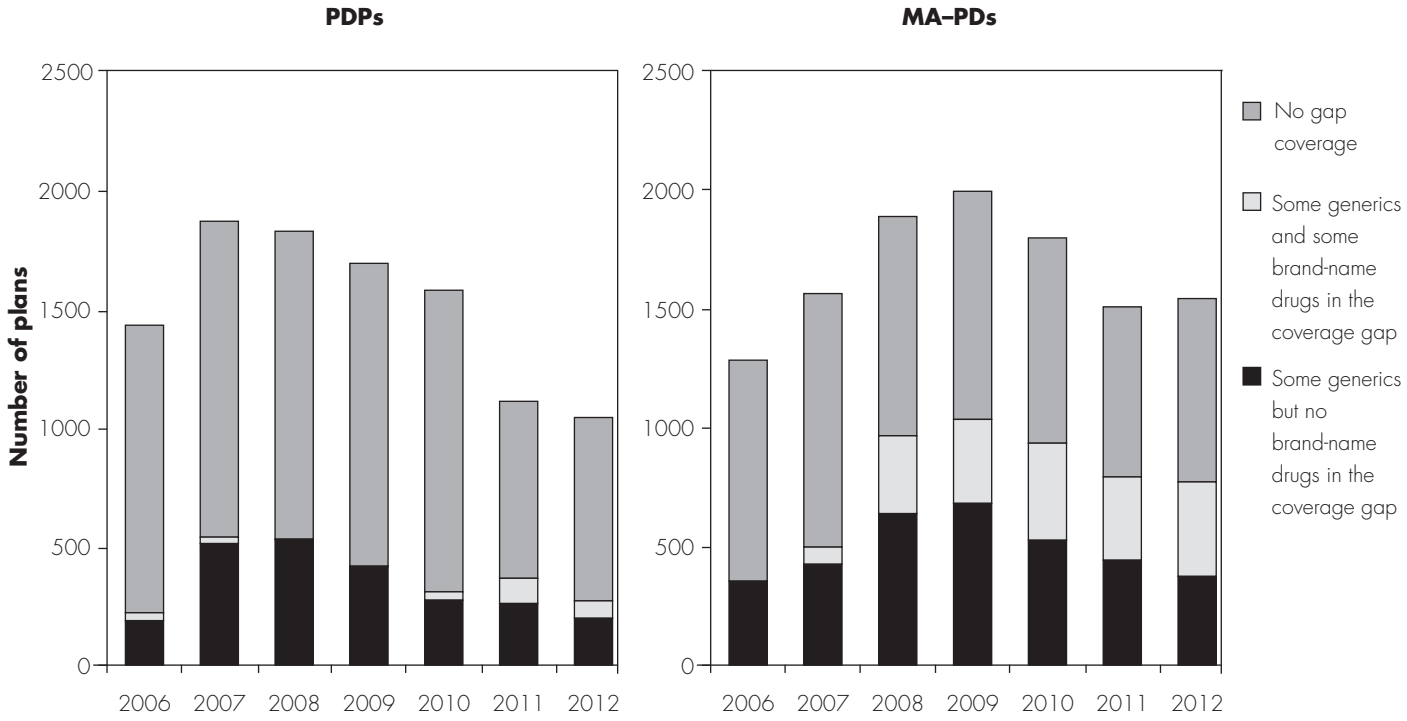
PDPs are more likely to have a deductible, 2012

	PDP		MA–PD	
	Number	**Percent**	**Number**	**Percent**
Total	1,041	100%	1,541	100%
Type of benefit				
Defined standard	95	9	37	2
Actuarially equivalent*	446	43	86	6
Enhanced	500	48	1,418	92
Type of deductible				
Zero	488	47	1,372	89
Reduced	108	10	98	6
Defined standard**	445	43	71	5

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–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. Figures are not weighted by enrollment. Totals may not sum due to rounding.
*Includes "actuarially equivalent standard" and "basic alternative" benefits.
**$310 in 2011.

Source: MedPAC analysis of CMS landscape and plan report data.

FIGURE 13–4 **MA–PDs are more likely than PDPs to offer benefits in the coverage gap**



Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). Figures are not weighted by enrollment.

Source: MedPAC analysis of CMS landscape and plan report files.

offered by some plans includes less than 10 percent of generic drugs on the formulary. The share of PDPs that cover brand-name drugs in the coverage gap continues to be small, with only 7 percent covering any brand-name drugs in 2012.

The changes made by PPACA will make supplemental benefits to provide coverage during the gap less important over time, as the gradual phase-out of the coverage gap will be completed by 2020. Beginning in 2011, the manufacturer's discount for brand-name drugs reduced cost sharing in the coverage gap from 100 percent to 50 percent of the negotiated prices. For generic drugs, beneficiaries paid 93 percent coinsurance. In 2012, beneficiaries are seeing a further reduction (from 93 percent to 86 percent) in their cost sharing for generic drugs filled during the gap.

Plan formularies

Under contract with the Commission, researchers at NORC at the University of Chicago, Georgetown University, and Social & Scientific Systems analyzed Part D formulary data for 2012. CMS generally requires that plan formularies include at least two drugs in each therapeutic category and class unless only one drug is available. 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-name and generic versions of specific chemicals (Medicare Payment Advisory Commission 2008).

The number of drugs that sponsors list on a formulary is one way to measure beneficiaries' access to prescription drugs under Part D. A plan's use of utilization management tools—such as its processes for nonformulary exceptions, prior authorization, quantity limits, and step therapy requirements—is another way to measure access.[17] For example, in some cases unlisted drugs are covered through the nonformulary exceptions process, which is relatively easy with some plan sponsors and more burdensome with others.

TABLE 13–7 **Formularies for stand-alone PDPs with highest 2011 enrollment**

Stand-alone PDPs with the highest 2011 enrollment	Enrollment, 2011 (in millions)	Percent of drugs on formulary		Percent of formulary drugs with any utilization management*	
		2011	2012	2011	2012
AARP MedicareRx Preferred	4.7	94%	92%	27%	34%
Community CCRx Basic	1.7	76	76	41	46
Humana PDP Enhanced	1.4	94	91	35	41
CVS Caremark Value	1.3	75	75	41	45
First Health Premier	1.0	83	83	36	39
Humana-Walmart	1.0	85	84	33	40
WellCare Classic	0.7	69	70	27	30

Note: PDP (prescription drug plan). Enrollment figures are based on September 2011 and exclude employer plans and territories. The number of drugs on the formulary for 2011 is 1,168; for 2012, the number is 1,180.
*Any utilization management includes the use of prior authorization, quantity limit, and step therapy requirements.

Source: NORC/Georgetown University/Social & Scientific Systems analysis for MedPAC of formularies submitted to CMS.

For the seven largest PDPs, which accounted for about two-thirds of the enrollment in stand-alone PDPs in 2011, the shares of all distinct chemical entities (drugs) listed on their formularies remained stable or saw modest changes between 2011 and 2012 (Table 13-7). Among the top seven PDPs, three plans—AARP MedicareRx Preferred, Humana PDP Enhanced, and Humana Walmart-Preferred—saw a small decrease in the share of drugs listed in 2012. Although the shares remained stable for the other four plans, the actual number of drugs listed on the formulary increased between 2011 and 2012 for three plans because the number of distinct chemical entities listed on CMS's formulary reference files also increased between 2011 and 2012.

The use of utilization management tools in Part D—including quantity limits, step therapy, and prior authorization—has grown in the past few years. Sponsors use such tools for drugs that are expensive, potentially risky, or subject to abuse, misuse, and experimental use. They are also often used to encourage the use of lower cost therapies. For 2012, the top seven stand-alone PDPs increased the share of drugs on plan formularies with some type of utilization management. The increase ranged from 3 to 7 percentage points for the seven plans and averaged about 5 percentage points across all PDPs. Among the top seven plans, two plans—Community CCRx Basic and CVS Caremark Value—continue to have the highest share of drugs with utilization management in 2012.

Costs of Part D

To monitor Part D's costs, we examine aggregate program spending, trends in plans' bid amounts and enrollees' premiums, plans' cost-sharing requirements, per capita spending, and trends in the prices at the pharmacy counter. Spending for beneficiaries with high drug costs is driving some components of Part D spending to grow more rapidly than others.

Aggregate program costs

Medicare pays plan sponsors three major types of subsidies on behalf of each enrollee in their plans:

- Direct subsidy—Medicare makes a monthly payment to plans set as a share of the national average bid for Part D basic benefits, adjusted for the risk of the individual enrollee.
- Reinsurance—Medicare subsidizes 80 percent of drug spending above an enrollee's annual OOP threshold. Reinsurance reduces risk for Part D sponsors by providing greater federal subsidies for the highest cost enrollees.

TABLE 13–8 **Medicare's reimbursement amounts for Part D on an incurred basis**

	Calendar year						Average annual percent change
	2006	2007	2008	2009	2010	2011*	2007–2011
In billions of dollars							
Direct subsidy	$17.6	$18.1	$17.7	$18.9	$19.7	$20.0	2.6%
Reinsurance	6.0	8.0	9.4	10.1	11.3	12.8	12.5
Low-income subsidy	15.1	16.8	18.0	19.6	21.0	22.4	7.5
Retiree drug subsidy	3.8	3.9	3.8	3.8	4.0	4.0	0.7
Total	$42.5	$46.7	$48.9	$52.4	$56.1	$59.2	6.1

Note: The numbers above reflect reconciliation amounts. Most enrollees paid premiums directly to Part D plans and those amounts are not included above. On a cash basis, the Board of Trustees estimates that premiums paid by enrollees totaled $3.5 billion in 2006, $4 billion in 2007, $5 billion in 2008, $6.1 billion in 2009, $6.6 billion in 2010, and $7.2 billion in 2011. Totals may not sum due to rounding.
*Estimated.

Source: MedPAC based on Table IV.B.10 of the Medicare Board of Trustees' report for 2011.

- LIS—Medicare pays the plan to cover expected cost sharing and premiums for enrollees eligible for the subsidy.

Direct and reinsurance subsidies combined cover 74.5 percent of the cost of basic Part D benefits, on average. In addition to these subsidies, Medicare establishes symmetric risk corridors separately for each plan to limit a plan's overall losses or profits. Under risk corridors, Medicare limits plans' potential losses and gains by financing a portion of any higher than expected costs or by recouping a portion of higher than expected profits.

Low-income subsidy continues to be the largest share of Part D costs

Between 2006 and 2010, incurred reimbursements for Part D (including spending for the RDS) grew from $42.5 billion to $56.1 billion (Table 13-8). In 2010, the total was made up of $19.7 billion in direct subsidy payments to plans, $11.3 billion in payments for individual reinsurance, $21 billion for the LIS, and $4 billion in RDS payments. CMS's Office of the Actuary estimated that Part D spending would be about $59 billion in 2011 (Boards of Trustees 2011).

In 2010, the LIS continued to be the largest component of Part D spending. Moreover, substantial portions of other categories were spent on behalf of LIS enrollees. Although less than 40 percent of Part D enrollees receive the LIS, these individuals tend to use more medications than non-LIS enrollees, and so disproportionate shares of spending for the direct subsidy and for individual reinsurance also reflect benefits for LIS enrollees.

Medicare payments for individual reinsurance have grown considerably faster than other components of Part D spending. Multiple factors likely contribute to the growth in reinsurance spending, such as filling more prescriptions and/or using higher priced products that have few, or no, therapeutic substitutes. Our analysis of the drug spending and utilization for Part D enrollees with spending high enough to reach the catastrophic phase of the benefit shows that the growth in reinsurance spending has been driven by the volume of prescriptions filled by these enrollees and by their tendency to use more brand-name medications than enrollees who do not incur high drug spending. Many of the therapies used by beneficiaries who reach the catastrophic phase of the benefit are in therapeutic classes that have generic alternatives that would cost significantly less than their brand-name counterparts (see text box, pp. 354–355). Our analysis of enrollees with high drug spending suggests ways to reduce Medicare spending for reinsurance without substantially affecting access to needed medications.

National average bid

Between 2011 and 2012, national average benefit costs for basic Part D benefits are projected to decrease by 4 percent. During this period, the direct subsidy component

Beneficiaries with high drug spending under Part D

In 2009, about 2.4 million individuals, or about 8 percent of Part D enrollees, incurred spending high enough to reach the catastrophic phase of the benefit (high-cost enrollees). Those enrollees accounted for nearly 40 percent of total spending for drugs covered under Part D. Most were enrolled in stand-alone prescription drug plans. Compared with other Part D enrollees, high-cost enrollees were more likely to receive Part D's low-income subsidy (LIS) and to reside in an institution (Table 13-9). They were also more likely to be disabled beneficiaries under age 65 (data not shown).

In our analysis of Part D prescription drug event data for 2009—the most recent year available—we find that high-cost enrollees fill more prescriptions, on average, and the cost of each prescription tends to be higher compared with non-high-cost enrollees. In 2009, high-cost enrollees filled, on average, 111 prescriptions at $110 per prescription compared with 41 prescriptions at $42 per prescription for other Part D enrollees (Table 13-10). That is, they filled, on average, more than nine prescriptions per month compared with about four prescriptions for other enrollees, and the cost of each prescription was more than double that of non-high-cost beneficiaries.

Of the $29 billion spent on prescription drugs filled by high-cost enrollees, 10 therapeutic classes accounted for slightly more than 60 percent of the total. Eight of the top 10 therapeutic classes coincided with those that are most heavily used by non-high-cost beneficiaries. Although high-cost beneficiaries use many drugs commonly used by non-high-cost enrollees, they tended to use more brand-name drugs than other enrollees.

In 2009, 42 percent of prescriptions filled by high-cost enrollees were for brand-name drugs compared with 26 percent for other enrollees (Table 13-11).

TABLE 13–9 **Characteristics of Part D enrollees with high drug spending, 2009**

	Type of enrollees	
	High cost	**Non high cost**
Enrollees (in millions)	2.4	26.3
By plan type		
PDP	86%	63%
MA–PD	14	37
By subsidy status		
LIS	83%	34%
Non-LIS	17	66
By institutionalized status		
Institutionalized	14%	4%
Community	86	96

Note: PDP (prescription drug plan), MA–PD(Medicare Advantage–Prescription Drug [plan]), LIS (low-income subsidy). Totals may not sum to 100 percent due to rounding. A beneficiary is classified as LIS if that individual received Part D's LIS at some point during the year. For individuals who switch plan types during the year, classification into plan types is based on a greater number of months of enrollment.

Source: MedPAC analysis of Medicare Part D denominator file and MBD/CMS Medicare Entitlement file.

TABLE 13–10 **Part D spending and utilization by high-cost and non-high-cost enrollees, 2009**

	Type of enrollees	
	High cost	**Non high cost**
Enrollees (in millions)	2.4	26.3
Aggregate utilization		
Gross drug spending* (in billions)	$29.2	$44.6
Prescriptions (in millions)	264	1,074
Average prescriptions per enrollee	111	41
Average spending per prescription	$110	$42

Note: Prescriptions standardized to a 30-day supply. Components may not sum to totals due to rounding. We also calculated the drug spending and utilization excluding enrollees residing in institutions. Excluding the institutionalized enrollees did not substantially change the results. *Gross drug spending includes all payments made to pharmacies by Part D plans, enrollees, and other payers for the costs of drugs, dispensing fees, and sales tax.

Source: MedPAC analysis of 2009 Part D prescription drug event data and MBD/CMS Medicare Entitlement file.

Beneficiaries with high drug spending under Part D (cont.)

Some of the difference likely reflects differences in the health status and the mix of drugs taken by high-cost enrollees, but there were some notable differences within a given therapeutic class. For example, among diabetic therapies, brand-name drugs accounted for 62 percent of the prescriptions filled by high-cost enrollees compared with 33 percent for non-high-cost enrollees. Similarly, among the antihyperlipidemics, used to treat high cholesterol, brand-name drugs accounted for 58 percent of prescriptions filled by high-cost enrollees compared with 36 percent for other enrollees.

Although health status may explain the need for some of the brand-name medications, financial incentives may also affect the choice of brand-name drugs over generic drugs. Most high-cost enrollees receive Part D's low-income cost-sharing subsidy that pays for cost-sharing amounts above the statutorily set copayment. This subsidy may limit how well plan sponsors can manage the drug spending for those individuals. Our findings suggest that a change in the LIS cost-sharing structure has the potential to reduce program spending without substantially affecting access to needed medications. ■

TABLE 13–11

Use of brand-name drugs by high-cost and non-high-cost enrollees for selected drug classes, 2009

	Percent of prescriptions represented by brand-name drugs, by type of enrollees	
	High cost	Non high cost
Diabetic therapy	62%	33%
Asthma/COPD therapy agents	90	91
Analgesics (narcotic)	14	5
Peptic ulcer therapy	44	25
Antihyperlipidemics	58	36
Antihypertensive therapy agents	38	26
Total, all therapeutic classes	42	26

Note: COPD (chronic obstructive pulmonary disease). Shares are calculated as a percent of all prescriptions standardized to a 30-day supply. Therapeutic classification based on the First DataBank Enhanced Therapeutic Classification System 1.0.

Source: MedPAC analysis of 2009 Part D prescription drug event data.

of Part D benefit spending is projected to decrease by 2 percent, while the reinsurance component is expected to decrease by 6 percent (Table 13-12, p. 356). The drop in the expected costs by plan sponsors likely reflects the entry of generic drugs for some of the top-selling brand-name drugs most widely used by Medicare beneficiaries.[18]

Growth in per capita benefit cost for Part D has fluctuated over the years. We saw a significant drop between 2006 and 2007 primarily due to many sponsors bidding too high in the first year of the program.[19] The expected benefit costs grew by 9 percent between 2008 and 2009 and by 5 percent between 2009 and 2010. For 2011, the expected costs remained about the same as in 2010, growing by only 1 percent, while actual spending is expected to grow by 5.7 percent (Table 13-8 and Table 13-12). Although year-to-year trends in the national average bid provide information about costs of the drug benefit, those trends are an imperfect measure of spending. Since bids are projections of sponsors' estimated costs, not actual costs, reconciliation at the end of the year could result in a higher or lower trend in spending for Part D.

Average Part D premiums

In 2012, the base beneficiary premium is $31.08, a 4 percent decrease from $32.34 in 2011. Since premiums vary widely across plans, the actual average monthly premium depends on the beneficiary's choice of plans. The base beneficiary premium reflects the basic portion of the benefit (the portion that does not include premiums for enhanced, or supplemental, benefits), and the actual premium paid by individual beneficiaries is higher or lower depending on their selected plan's bid (Medicare Payment Advisory Commission 2011c).

In the past, the Commission has calculated the expected average Part D premiums as well as the expected increase or decrease in premiums for the coming year using the

TABLE 13–12

National average bid and components of average prospective monthly payments per enrollee for basic coverage

	2006[a]	2007[b]	2008[c]	2009[d]	2010[d]	2011[d]	2012[d]
Amounts in dollars							
National average monthly bid							
Base beneficiary premium	$32.20	$27.35	$27.93	$30.36	$31.94	$32.34	$31.08
Monthly payment to sponsors	60.10	53.08	52.59	53.97	56.39	54.71	53.42
Subtotal	92.30	80.43	80.52	84.33	88.33	87.05	84.50
Expected individual reinsurance	33.98	26.82	29.01	34.73	36.92	39.77	37.38
Total average benefit cost	126.28	107.25	109.53	119.06	125.25	126.82	121.88
Annual percent change							
National average monthly bid							
Base beneficiary premium	N/A	–15%	2%	9%	5%	1%	–4%
Monthly payment to sponsors	N/A	–12	–1	3	4	–3	–2
Subtotal	N/A	–13	0	5	5	–1	–3
Expected individual reinsurance	N/A	–21	8	20	6	8	–6
Total average benefit cost	N/A	–15	2	9	5	1	–4

Note: These amounts reflect averages based on bids to provide basic Part D benefits; they do not net out subsequent reconciliation amounts with CMS. They were calculated from bids by plans to provide the defined standard benefit or actuarially equivalent basic benefits, as well as the portion of enhanced Part D coverage attributable to basic benefits. Enrollees in plans with enhanced coverage must pay the full price of benefits that supplement basic coverage. The combination of monthly payments to plans and expected payments for individual reinsurance make up 74.5 percent of total average monthly benefit costs.
a. Since Part D began in 2006, Medicare law directed CMS to weight the bids of stand-alone drug plans equally (with an aggregate weight representing enrollment in traditional Medicare) and weight bids from Medicare Advantage (MA) drug plans by their prior-year MA enrollment.
b. CMS used its general demonstration authority to calculate these values using 20 percent enrollment weighting and 80 percent weighting as in the 2006 approach.
c. CMS used its general demonstration authority to calculate these values using 60 percent enrollment weighting and 40 percent weighting as in the 2006 approach.
d. Bids are fully weighted by prior-year enrollment as called for by law.

Source: MedPAC based on CMS releases of Part D national average monthly bid amounts and base beneficiary premiums for 2006 through 2012, as well as other data provided by CMS.

current year enrollment. We have not calculated the expected average premiums for 2012, as they would be sensitive to the assumptions we make about beneficiary switching. During the first few years of the program, a relatively small share (around 6 percent) of enrollees switched plans in any given year. However, that figure has not been updated for several years.

As a result of changes made in PPACA, the premium subsidy for higher income beneficiaries is lower than the statutorily defined subsidy of 74.5 percent. Similar to the income-related premium for Part B, the reduced subsidy applies to individuals with an annual adjusted gross income greater than $85,000 and to couples with an adjusted gross income greater than $170,000. In 2011, about 885,000 beneficiaries were subject to the reduced premium subsidy.[20]

Plans' cost-sharing requirements

Cost-sharing requirements have generally been rising over the past few years. In 2012, cost-sharing requirements for the top seven stand-alone PDPs based on enrollment in 2011 saw some modest changes that tended to increase the difference in cost-sharing amounts between tiers (Table 13-13). For example, of the top seven plans, three plans (AARP MedicareRx Preferred, Community CCRx Basic, and Humana PDP Enhanced) lowered cost sharing for preferred brand-name drugs, and two plans (AARP MedicareRx Preferred and WellCare Classic) increased cost sharing for nonpreferred brand-name drugs, widening the difference in cost-sharing amounts between preferred and nonpreferred brand tiers. Two plans, First Health Premier and Humana Walmart-Preferred, lowered cost-sharing amounts for generic drugs (the reduction was for preferred generic drugs for Humana Walmart-Preferred).

TABLE 13–13 **Cost-sharing amounts for stand-alone PDPs with highest 2011 enrollment**

Stand-alone PDPs with the highest 2011 enrollment	Enrollment, 2011 (in millions)	Generic		Preferred brand		Nonpreferred brand		Specialty	
		2011	2012	2011	2012	2011	2012	2011	2012
AARP MedicareRx Preferred*	4.7	$7	$4/$8	$45	$41	$79	$95	33%	33%
Community CCRx Basic	1.7	2	2	31%	25%	60%	46%	25	25
Humana PDP Enhanced	1.4	7	7	$39	$38	$73	$73	33	33
CVS Caremark Value	1.3	5	6	$39.75	$45	$95	$95	25	25
First Health Premier	1.0	8	5	17%	20%	36%	36%	29	26
Humana Walmart-Preferred*	1.0	2/5	1/5	20%	20%	35%	35%	N/A	N/A
WellCare Classic	0.7	0	0	$42	$41	$92	$95	25	25

Note: PDP (prescription drug plan), N/A (not applicable). Enrollment figures are based on September 2011 and exclude employer plans and territories. In cases where plans vary cost-sharing amounts across regions, we report unweighted median cost-sharing amounts.
*Indicates plans with two tiers, preferred and nonpreferred, for generic drugs in 2011 and/or 2012.

Source: NORC/Georgetown University/Social & Scientific Systems analysis for MedPAC of formularies submitted to CMS.

CVS Caremark Value increased its cost sharing for generic drugs to $6 from $5 in 2011, but since the plan also increased the cost sharing for preferred brand-name drugs by about $5, the difference in cost-sharing amounts between generic and preferred brand-name tiers is wider than in 2011.

For 2012, coinsurance for drugs on a specialty tier remains flat for most of the top seven plans. One exception is First Health Premier, which reduced the coinsurance for drugs on the specialty tier to 26 percent from 29 percent in 2011. Humana Walmart-Preferred, a plan that entered the market in 2011, does not have a specialty tier.

From an enrollee's perspective, cost-sharing requirements for specialty-tier drugs can be high until the enrollee reaches Part D's catastrophic spending limit. In addition, under CMS's regulations, enrollees may not appeal specialty-tier cost sharing as they can for other drugs, such as those on tiers for nonpreferred brands. Because drugs on specialty tiers are often used to treat serious chronic illnesses, such as rheumatoid arthritis and multiple sclerosis, patients who need these drugs can face relatively high cost sharing for medications on top of significant OOP costs for their medical care. From a sponsor's perspective, high-cost drugs may be used more widely than the evidence of their effectiveness supports, and higher coinsurance may temper their use. Some sponsors may use a specialty tier if most of their competitors also use one to limit the risk of attracting enrollees who take very expensive drugs.

Per capita spending and use

Under the Part D program, payments to plans are based on the average of the bids plan sponsors submit to CMS each year. The bids are intended to reflect the expected costs for a Medicare beneficiary of average health; CMS adjusts payments to plans based on the actual health status of the plans' enrollees.

Between 2007 and 2009, the average per capita spending for Part D–covered drugs for MA–PD enrollees has been consistently lower than for stand-alone PDP enrollees by about $90 per member per month. The average per capita spending for LIS enrollees has been about double that of non-LIS enrollees, with the difference between the two groups growing over time (Table 13-14, p. 358).

Growth in average per capita spending between 2007 and 2009 shows that spending for non-LIS enrollees remained relatively stable (2.2 percent) compared with LIS enrollees (6.1 percent). Some of the difference in per capita spending growth between LIS and non-LIS enrollees is due to higher growth in the average number of prescriptions filled by LIS enrollees (4.3 percent compared with 3.3 percent for non-LIS enrollees). Although the growth in per capita drug spending among MA–PD enrollees was greater than for stand-alone PDP enrollees (5.8 percent compared with 4.3 percent), the average growth was lower for MA–PD enrollees in terms of the dollar increase ($9 compared with $11).

TABLE 13–14 **Average per capita spending and use per month for Part D–covered drugs, 2007–2009**

	Part D spending and utilization per enrollee								
	Average spending			Average annual change, 2007–2009		Average prescription use			Average annual percent change, 2007–2009
	2007	2008	2009	In dollars	In percent	2007	2008	2009	
All Part D	$212	$221	$228	$8	3.6%	3.9	4.1	4.1	2.8%
By plan type									
PDP	239	250	260	11	4.3	4.1	4.3	4.4	2.8
MA–PD	151	162	169	9	5.8	3.4	3.6	3.7	4.1
By LIS status									
LIS	301	324	339	19	6.1	4.6	4.9	5.0	4.3
Non-LIS	156	159	163	3	2.2	3.4	3.6	3.6	3.3

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), LIS (low-income subsidy). Part D prescription drug event (PDE) records are classified into plan types based on the contract identification on each record. For purposes of classifying the PDE records by LIS status, monthly LIS eligibility information in Part D's denominator file was used. Estimates are sensitive to the method used to classify PDE records to each plan type and LIS status. Gross drug spending includes all payments to pharmacies, including payments by drug plans, Medicare's LIS, and beneficiary out-of-pocket. Prescriptions standardized to a 30-day supply.

Source: MedPAC analysis of Medicare Part D PDE data and denominator file from CMS.

Part D drug prices

Most plan sponsors do not negotiate drug prices directly with pharmaceutical manufacturers. Instead, sponsors engage in two separate negotiations:

- The first involves pharmacies or a network of pharmacies over the prices the plan will pay the pharmacy for drug ingredient costs and dispensing fees.
- The second involves the terms under which manufacturers pay retrospective rebates.

Plan sponsors tend to use rebate revenues to offset plans' benefit spending (reducing plan premiums) rather than lowering the price of prescriptions at the pharmacy counter. As a result, drug prices measured in this section are not affected by the outcomes of the second negotiations.

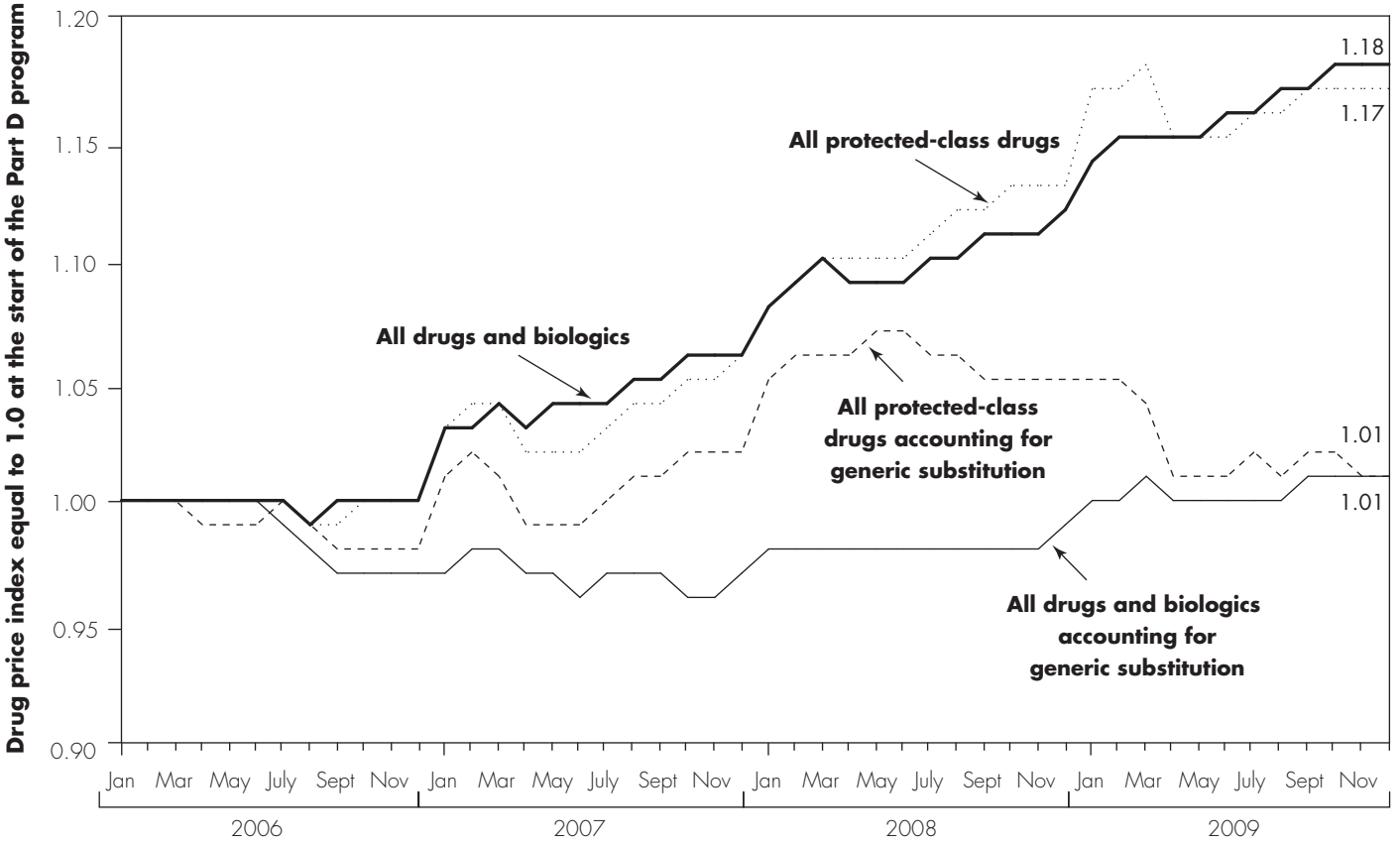
Part D plan sponsors have had mixed success at influencing drug prices. They have been quite successful at encouraging enrollees to use generic alternatives when available (Congressional Budget Office 2010, Office of Inspector General 2007). Plan sponsors regularly use cost-sharing differentials to encourage enrollees to use generic drugs and negotiate rebates from manufacturers for brand-name drugs that have therapeutic alternatives. But sponsors have had less success negotiating rebates for unique drug and biologic products.

To track drug prices, the Commission contracted with researchers at Acumen, LLC, to construct a series of volume-weighted price indexes (Figure 13-5). The indexes do not reflect retrospective rebates from manufacturers but do reflect the prices sponsors and beneficiaries paid to pharmacies at the point of sale (including ingredient costs and dispensing fees). Measured by individual national drug codes (NDCs), Part D drug prices rose by an average of 18 percent cumulatively between January 2006 and December 2009.[21] At the same time, Part D sponsors have had success encouraging enrollees to switch from brand-name drugs to generic substitutes, particularly during the program's first two years. As measured by a price index that takes this substitution into account, Part D prices grew cumulatively by 1 percent between January 2006 and December 2009.[22]

For most drug classes, CMS requires plan formularies to cover at least two drugs in every therapeutic class and key drug type that are not therapeutically equivalent, unless only one drug is approved for that class. This policy protects 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

FIGURE 13–5

Availability of generics, rather than protected status, key to slower price growth under Part D



Note: Chain-weighted Fisher price indexes.

Source: Acumen, LLC, analysis for MedPAC.

drug classes, CMS requires Part D plans to cover "all or substantially all" drugs in the class. Those classes are antineoplastics, antidepressants, antipsychotics, antiretrovirals, anticonvulsants, and immunosuppressants used by transplant patients. Although plans can still charge higher cost sharing for them—for example, by placing them on tiers for nonpreferred brands—plans may have limited ability to influence utilization for these classes of drugs.

As measured by individual NDCs, prices for drugs in the six classes showed a trend similar to that for all Part D drugs, rising by a cumulative 17 percent over the four-year period (Figure 13-5). This growth is influenced heavily by two classes of drugs: antidepressant medications, which account for about half of the volume in the six classes and had many generics on the market during this period, and anticonvulsants, which account for more than a quarter of the volume and also had generic alternatives available during the same period.

Our price index for the individual NDCs of antidepressant and anticonvulsant drugs fell by nearly 4 percent and 10 percent, respectively, during the four-year period (data not shown). Other classes are made up almost entirely of brand-name drugs, and prices for these products grew rapidly, ranging from a little more than 20 percent for antiretrovirals to 46 percent for antineoplastics.

When protected-class drugs were grouped to take generic substitution into account, their prices grew by a cumulative 1 percent over the four-year period. Thus, despite the drugs' protected status, plan sponsors appeared to have had success at moving enrollees toward generics for these drugs when generic substitutes are available. However, it is possible that the drugs' protected status may keep plan

sponsors from negotiating rebates from manufacturers in classes in which one brand-name drug can be a therapeutic substitute for another brand-name drug. We lack rebate information to test this hypothesis.

Measuring plan performance in Part D

CMS collects quality and performance data for Part D plans to monitor sponsors' operations and help beneficiaries choose among plans. CMS relies on several sources for these data—the Consumer Assessment of Healthcare Providers and Systems survey, agency monitoring of plans, data furnished by sponsors, and claims information (Centers for Medicare & Medicaid Services 2011d).

For 2012, 17 metrics are grouped into four domains:

- drug plan customer service (five measures);
- member complaints, problems getting services, and choosing to leave the plan (three measures);
- member experience with the drug plan (three measures); and
- drug pricing and patient safety (six measures).

Compared with previous years, the 2012 plan rating puts more emphasis on patient safety and appropriate medication use. For example, in 2012, CMS added three measures of medication adherence to the drug pricing and patient safety domain. These measures use Part D's PDE data to assess how frequently plan enrollees adhere to the recommended medication therapy for oral antidiabetics, antihypertensives, and antihyperlipidemics (statins). Finally, CMS has dropped some nonclinical measures, including two that were related to call center operations.

For MA–PDs, the star ratings on Medicare's web-based Plan Finder are based on 53 measures, including 36 measures that assess the quality of medical services provided in addition to the 17 measures used for stand-alone PDPs to assess the quality of prescription drug services provided.

CMS aggregates individual scores for each of the measures (17 for PDPs and 53 for MA–PDs) on the Plan Finder under a 5-star system; 5 stars means excellent performance and 1 star reflects poor performance. CMS presents star ratings that combine individual scores in each domain as well as a summary rating that represents overall performance. For 2012 ratings, clinical measures are weighted three times as much as process measures (such as enrollment timeliness), and enrollee experience (such as access to medications) is weighted one and a half times as much as the process measures. In previous years, all measures were weighted equally.

In 2012, ratings for stand-alone PDP sponsors range from 2 stars to 5 stars, while ratings for MA–PD sponsors range from 1.5 stars to 5.0 stars. Weighted by enrollment, the average star rating among PDP sponsors is 2.96 compared with 3.49 for 2011, and the average among MA–PD sponsors is 3.44 compared with 3.18 for 2011 (Centers for Medicare & Medicaid Services 2011b). However, given the number of changes CMS made for 2012 measures and how they are weighted, plan ratings for 2012 are not directly comparable to ratings for 2011 and earlier years.

Generally, LIS enrollees do not tend to be in plans run by sponsors with star ratings that differ systematically from plans that enroll more non-LIS beneficiaries (Medicare Payment Advisory Commission 2011d). Based on the Commission's calculation using enrollment as of April 2011, the ratings for PDP sponsors ranged from 2 stars to 5 stars for both LIS and non-LIS enrollees, with an enrollment-weighted average of about 3 stars for both groups of enrollees. Similarly, the ratings for MA–PD sponsors ranged from 1.5 stars to 5 stars for both LIS and non-LIS enrollees, with an enrollment-weighted average of about 3.4 stars for non-LIS enrollees and 3.2 stars for LIS enrollees.

Generic substitution and role of the low-income cost-sharing subsidy

Generic substitution can result in significant reductions in spending. The Commission's set of volume-weighted indexes shows that, when taking into account generic substitution, prices for Part D drugs grew cumulatively by just 1 percent between January 2006 and December 2009.[23] However, measured by individual NDCs, Part D drug prices rose by an average of 18 percent cumulatively over the same period. This finding suggests that, overall, generic substitution has played a key role in keeping down prices for Part D drugs. The Congressional Budget Office (CBO) estimates that, in 2007, dispensing generic drugs rather than their brand-name counterparts reduced total prescription drug costs for Part D by about $33 billion

(Congressional Budget Office 2010). Even so, for the same year, the CBO estimates that Part D could have saved an additional $900 million if all prescriptions for multiple-source brand-name drugs had instead been filled with their generic counterparts and an additional $4 billion if generics had been dispensed as therapeutic substitutes for brand-name drugs in seven drug classes.[24]

For many therapeutic classes, plan sponsors use differences in cost-sharing amounts along with other utilization management tools to encourage generic substitution (a switch from a brand-name drug to the chemically equivalent generic drug) and therapeutic substitution (a switch from a brand-name drug to the generic form of a different drug within the same therapeutic class).[25] Plan sponsors have been more successful at encouraging generic drug use among non-LIS enrollees than among LIS enrollees. The Commission estimates that, in 2009, non-LIS enrollees had an overall average generic dispensing rate (GDR) of 72 percent compared with 68 percent for LIS enrollees (Medicare Payment Advisory Commission 2011a). Although this difference does not seem large, greater differences in GDRs are apparent for some of the most widely used categories of drugs. For example, in the therapeutic class of antihyperlipidemics (cholesterol-lowering drugs), non-LIS enrollees had a GDR of 63 percent compared with 56 percent for LIS enrollees. Among prescriptions filled for diabetic therapies, non-LIS enrollees had a GDR of 67 percent while LIS enrollees had a 53 percent GDR. Among peptic ulcer therapies, non-LIS enrollees achieved a GDR of 76 percent compared with 66 percent for LIS enrollees.

Multiple factors can contribute to 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. Since LIS beneficiaries are more likely to be disabled and tend to have a greater disease burden than non-LIS enrollees, some of the difference in GDRs likely results from differences in medication needs between the two groups. Prescriber behavior and pharmacy incentives can also affect beneficiaries' use of generics when available. Wide variations in generic use rate seen across states may be due, at least in part, to regional differences in physician prescribing behavior and state regulations about dispensing generic drugs (see text box, p. 363). At the same time, since one of the key tools used by plan sponsors to manage drug spending—using cost-sharing differentials between drugs on different tiers to encourage enrollees to use lower cost drugs—is not available to manage the drug spending of LIS enrollees, sponsors have limited ability to manage spending for this population.

Under Part D, cost sharing for LIS enrollees is set by law rather than by each plan. Most LIS enrollees (more than 80 percent) pay nominal copays.[26] Smaller numbers of other LIS enrollees pay 15 percent coinsurance.[27] Although copays for LIS enrollees are structured to encourage the use of lower cost generics when they are available, the financial incentives are much weaker than those non-LIS enrollees typically face. For example, in 2011, dual-eligible beneficiaries with incomes at or below 100 percent of poverty paid $1.10 for generic drugs and preferred multiple-source drugs and $3.30 for all other brand-name drugs. Corresponding amounts for dual-eligible beneficiaries with incomes above 100 percent of poverty were $2.50 and $6.30 for generic drugs and brand-name drugs, respectively. By comparison, median copays for non-LIS enrollees were $7 for a generic drug, $42 for a preferred brand-name drug, and about $80 for a nonpreferred brand-name drug. Non-LIS enrollees typically paid 25 percent to 30 percent of the negotiated price of a drug on a plan's specialty tier (Medicare Payment Advisory Commission 2011b).

Cost differentials that make generic prescriptions relatively more attractive can have a strong impact on generic use. However, a policy based on financial incentives must be carefully constructed, particularly for the LIS population, to ensure access to needed medications. For example, policymakers may want to reduce or eliminate copays for generic drugs and increase copays for brand-name drugs in therapeutic classes where generic substitutes are available. An example of a policy that would change the copay amounts to encourage the use of generic drugs is shown in Table 13-15 (p. 362). The policy would eliminate the cost sharing for generic drugs and increase the brand copay from $3.30 to $6 when generic substitutes are available in the same drug class. For brand-name drugs that do not have generic substitutes, policymakers would want to keep the cost-sharing amounts at the current level, as shown in the example below, so that beneficiaries will continue to have the same level of access to needed medications.

Reducing or eliminating copays for generic drugs would improve access for LIS enrollees. Many individuals who switch from brand-name drugs to generic drugs will likely see their OOP costs reduced, and individuals currently using generic drugs also would see their OOP costs go down (see text box, p. 364). Lower cost sharing could also improve their adherence to the medication therapies.

TABLE 13–15 **Example of a change to LIS cost-sharing structure to encourage the use of generic drugs**

	Drug class:	
	With generic substitute(s)	With no generic substitutes
Current LIS cost-sharing		
Generic drug	$1.10	$1.10
Brand-name drug on preferred tier	$3.30	$3.30
Brand-name drug on nonpreferred tier	$3.30	$3.30
Alternative LIS cost-sharing		
Generic drug	$0	Same as under current law
Brand-name drug on preferred tier	$6	
Brand-name drug on nonpreferred tier	≥$6	

Note: LIS (low-income subsidy). Copay amounts are for 2011 and apply to noninstitutionalized LIS beneficiaries with incomes at or below 100 percent of poverty.

Beneficiary education will play an important role in encouraging clinically appropriate generic substitutions. For example, CMS may want to coordinate with plan sponsors to increase awareness of the availability of free or lower cost medications and provide accurate information about generic drugs to dispel any misperceptions or concerns that beneficiaries may have. Plan sponsors can further encourage the use of generic drugs through the use of utilization management tools and through prescriber education. In the future, CMS may want to rate plan performance, in part, based on generic dispensing rates for selected drug classes where generic substitutes are available.

During the next several years, patents for many top-selling brand-name products will expire, and many are likely to become available in generic forms.[28] This change provides a significant opportunity to reduce Part D's growth in spending, particularly for the faster growing reinsurance and LIS program components, through increased generic substitutions. A policy that encourages more use of generic drugs by LIS enrollees will lower the cost-sharing subsidy Medicare pays on behalf of LIS enrollees. In addition, since more than 80 percent of beneficiaries whose spending reaches the catastrophic phase of the benefit receive the LIS, such a policy has the potential to also reduce Medicare's payments for individual reinsurance.

A policy that uses financial incentives to make generic drugs relatively more attractive raises some concerns, as it could negatively affect access to brand-name medications that are in classes with generic substitutes. To address this concern, such a policy should have appropriate protections in place to ensure beneficiaries' access to medications they need.

To achieve the policy goal of encouraging generic and therapeutic substitutions in classes where such substitutions are clinically appropriate (e.g., antihyperlipidemics used to lower high cholesterol), the Secretary should be given a broad authority and flexibility to determine appropriate therapeutic classifications for implementing the policy. This authority would allow the Secretary to define a drug class broadly or narrowly, depending on the clinical appropriateness of the therapeutic substitution.

There will be classes where therapeutic substitutions are not clinically appropriate (e.g., HIV/AIDS and cancer drugs). The Secretary would have the authority to exclude those classes from the policy even if there are generic substitutes in the same class. For brand-name drugs in those excluded classes, the copay amounts would remain the same as under current law.

Second, current exceptions and the appeals process should remain in effect when clinical reasons prevent enrollees from substituting with a lower cost medication in the same therapeutic class. The Commission would strongly encourage the Secretary to closely monitor the program for any unintended effects, particularly as it relates to beneficiaries' access to needed medications. The Secretary should take advantage of her access to various administrative data to evaluate changes in beneficiaries' access and the effectiveness of exceptions and the appeals process.

The Commission also plans to use Part D's PDE data and any other publicly available data on access under Part D (such as measures used for Part D plan rating) to monitor the effects of such a policy. In addition, we hope to obtain data on the exceptions and appeals process used by Part D plans to evaluate the effectiveness of these processes in ensuring beneficiaries' access to medications they need.

States' mandatory generic substitution laws and generic drug use by enrollees receiving the low-income subsidy

States have implemented a variety of policies with regard to generic substitution. As of 2007, about a quarter of the states had laws mandating that pharmacists dispense the generic version of a drug, unless specifically directed by the prescriber to dispense the brand version of the drug (Epilepsy.com 2012, Shrank et al. 2010). The other three-quarters allow pharmacists to substitute a generic version of the drug when the prescriber does not specify that the brand version be dispensed. States with mandatory generic substitution laws generally do not require the pharmacist to obtain patient consent, while most of the states that allow (but do not mandate) pharmacists to substitute with a generic version require them to obtain patient consent.

All states (including those with mandatory generic substitution laws) have policies that allow doctors (or other prescribers) to specify that the pharmacist dispense the brand-name drug. The ease of indicating that the prescription should not be substituted with a generic version varies across states. Thirty-seven states require that the doctor handwrite "brand medically necessary," "dispense as written," or something equivalent on the prescription form. Seven states require the doctor to sign on the "dispense as written" line, as opposed to the "product selection permitted" line on the prescription form. Eight states require the doctor to check or write her initials in the "dispense as written" box on the form (American Academy of Neurology 2008).

In our analysis of 2009 Part D prescription drug event data, we did not find a systematic relationship between generic dispensing rates (GDRs) for Part D enrollees receiving the low-income subsidy (LIS) and the characteristics of the states' generic substitution policy. For example, GDRs among LIS enrollees residing in states that require mandatory generic substitution ranged from 61 percent to 72 percent, with an average GDR of about 67.5 percent, while the GDR for LIS enrollees residing in states that do not require mandatory generic substitution ranged from 64 percent to 74 percent, with an average GDR of about 68.5 percent.

Many states have added requirements that prescribers must meet to have the brand version of a drug dispensed for their Medicaid populations. For example, in Arkansas and Georgia, prescribers must submit a form explaining the medical basis for using the brand version of the drug; in Connecticut, they must indicate the basis for medical necessity on the prescription form. Other states have simpler requirements, such as signing on an extra line, or checking an extra box. Although these requirements do not directly affect Medicare beneficiaries, such policies could affect prescriber behavior and pharmacy incentives in a given state, contributing to the difference in GDRs across states. ■

RECOMMENDATION 13

The Congress should modify the Part D low-income subsidy copayments for Medicare beneficiaries with incomes at or below 135 percent of poverty to encourage the use of generic drugs when available in selected therapeutic classes. The Congress should direct the Secretary to develop a copay structure, giving special consideration to eliminating the cost sharing for generic drugs. The Congress should also direct the Secretary to determine appropriate therapeutic classifications for the purposes of implementing this policy and review the therapeutic classes at least every three years.

RATIONALE 13

Many Part D plan sponsors use cost differentials that make generics or lower cost drugs relatively more attractive to manage drug spending. However, since cost sharing for LIS enrollees is set by law rather than by each plan, sponsors have limited ability to manage drug spending for this population. Although copays for LIS enrollees are structured to encourage the use of lower cost generics when they are available, the financial incentives are much weaker than those non-LIS enrollees typically face. The policy would give the Secretary the authority to provide stronger financial incentives to use lower cost generics

An illustrative example of how beneficiary out-of-pocket costs may change under an alternative cost-sharing structure

The change in the beneficiary out-of-pocket (OOP) costs that would result from lowering the copay for generics while raising the copay for brand-name drugs in selected classes is likely to vary from individual to individual. For a low-income subsidy (LIS) enrollee who currently takes generic drugs and no brand-name drugs, the policy would result in a reduction in his or her OOP costs. For an individual on both generic and brand-name medications, the net change in his or her OOP costs would depend on multiple factors:

- the mix of generic and brand-name medications;
- the plan's cost-sharing requirements (although they do not apply directly to LIS beneficiaries) that determine when the individual enters the catastrophic phase of the benefit, beyond which there is no cost sharing for LIS beneficiaries;
- the extent to which the individual switches to generic medications in response to the change in copay amounts under the policy; and
- the extent to which brand-name drugs are in classes where generic drugs are available and substitution is clinically appropriate.

For example, an LIS enrollee (with an income at or below 100 percent of the poverty level) who fills 10 prescriptions for brand-name drugs every month spends $33 ($3.30 multiplied by 10 prescriptions) per month until he or she reaches the catastrophic phase of the benefit.[29] Under a policy that eliminates copays for generics and increases copays for brand-name drugs from $3.30 to $6 when generic substitutes are available (see Table 13-15), if 5 of the 10 prescriptions are in classes with generic substitutes, this enrollee could reduce his or her monthly OOP from $33 to $16.50 ($0 multiplied by 5 prescriptions plus $3.30 multiplied by 5 prescriptions) by switching to generics for all 5 medications. Even if the individual switches to generics for only three medications, the reduction in OOP costs would more than offset the increase in the copays for the two brand-name drugs that have a $6 copay. On the other hand, if he or she continues to take the brand-name medications in classes with generic substitutes, the monthly OOP costs would increase to $46.50 ($6 multiplied by 5 prescriptions plus $3.30 multiplied by 5 prescriptions). However, an individual taking many expensive medications is likely to reach the catastrophic phase of the benefit at some point during the year, which limits how much an LIS enrollee spends OOP in a given year. ■

when they are available, while taking into account the limited income of this population.

IMPLICATIONS 13

Spending

- This recommendation would decrease federal program spending relative to current law.

Beneficiary and provider

- A lower generic copay would reduce OOP costs for beneficiaries on generic medications and beneficiaries who switch from brand-name medications to generic medications. This change could increase beneficiaries' access to medications and improve adherence to medication therapies.
- Some plan sponsors may experience a decrease in the costs of providing the benefit if their LIS enrollees switch from brand-name drugs to generic drugs. This switch would tend to decrease premiums for all beneficiaries and reduce subsidy payments Medicare makes to Part D plans.
- Some pharmacies may experience an increase in profits from dispensing more generic medications.

High use of drugs and quality of pharmaceutical care

Although adoption of a policy that encourages the use of generic drugs will reduce costs for the program and for LIS enrollees if these individuals switch to generic drugs, it does not address the quality of pharmaceutical care.

Medication problems can arise from underuse, overuse, or inappropriate use of prescription drugs. Various problems are associated with high use of prescription drugs. However, the success of plans' medication therapy management programs (MTMPs), designed to improve pharmaceutical quality of care for high drug users, has been difficult to determine.

Problems associated with high use of prescription drugs

Beneficiaries with high use of prescription drugs may have medical problems caused or exacerbated by their heavy use of medications. They are at risk for adverse drug events (ADEs), harmful drug interactions, and use of inappropriate medications. When a patient is prescribed multiple drugs, generally five to seven, clinicians warn of polypharmacy. This condition occurs when a patient is prescribed more drugs than are clinically warranted (often by multiple prescribers) or when all the prescribed medications are appropriate but the total is too many for the patient to ingest and manage safely (Haque 2009). The elderly, who are most likely to have multiple chronic conditions, are at high risk for polypharmacy.

ADEs, harmful drug interactions, and use of inappropriate medications are responsible for many medical encounters. Using the National Ambulatory Medical Care Survey and the National Hospital and Ambulatory Care Survey (2005–2007), Sarkar and colleagues (2011) found 4.3 million outpatient visits related to ADEs, with the elderly having the highest age-specific rate. The most consistent risk factor for ADEs is the number of drugs being taken, and the risk increases exponentially as the number of drugs increases (Chrischilles et al. 2009, Laird 2001, Lorincz et al. 2011). In one study, researchers found that the mean number of ADEs increased by 10 percent for each additional medication taken (Gandhi et al. 2003).

Many of these adverse events are similar to problems frequently experienced by the elderly, like falling, confusion, urinary retention, and general failure to thrive (Gray and Gardner 2009). As a result, an ADE may be mistaken for a new medical condition and treated with additional medications, leading to a prescribing cascade and potentially additional ADEs.

In addition to the large number of drugs prescribed for people with high use, many in this group take drugs considered inappropriate for the elderly. Researchers have developed lists of medications that are most likely to produce adverse consequences in elderly patients (Beers 1997, Beers et al. 1991, Fick et al. 2003, Gill et al. 2007, Hamilton et al. 2011), the most well-known of which is the Beers list. Studies show conflicting results on the extent to which listed medications lead to adverse events. For example, Budnitz and colleagues (2007) found more emergency department visits associated with use of warfarin, insulin, and digoxin than with medications found on the Beers list. In contrast, Berdot and colleagues (2009) found that use of long-acting benzodiazepines and other psychotropic drugs—medications on the Beers list—is associated with a significant risk of falling in elderly patients. One study found a positive relationship between regions with high rates of potentially inappropriate prescribing and higher nondrug medical spending (Zhang et al. 2010).

Although studies use different criteria to determine drugs inappropriate for the elderly, they show a significant relationship between the number of drugs a person is taking and the likelihood the person is taking medications classified in the study as inappropriate (Berdot et al. 2009, Chrischilles et al. 2009, Steinman et al. 2006). Without diminishing the importance of safeguarding against the use of inappropriate medications, Laroche and colleagues (2007) concluded that reducing the number of drugs taken by the elderly is the most important step that can be taken to decrease ADEs.

Polypharmacy is also the strongest predictor of nonadherence to drug regimens (Laird 2001). Nonadherence can be intentional as patients try to balance increased costs, side effects, and the inconvenience of taking multiple medications at different times of day. Patients may not discuss these issues with their physicians. In a recent study, Mansur and colleagues (2009) documented a direct relationship between the number of medications, inappropriate prescriptions, and nonadherence in patients discharged from hospitals.

Medication therapy management programs

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 requires PDPs and MA–PDs to implement MTMPs to improve the quality of pharmaceutical care for high-risk beneficiaries. Legislators intended MTMPs to improve medication use and reduce adverse events for beneficiaries taking multiple medications.

In our 2009 review of MTMPs, we examined research evaluating the programs in general and available data under Part D (Medicare Payment Advisory Commission

2009). We also conducted interviews with CMS, pharmacists, health plan sponsors, pharmacies, trade associations, and companies that provide medication therapy management services under contract to sponsors. We found that MTMPs differed on the number and type of chronic conditions and prescriptions a beneficiary must have to be eligible, the kinds of interventions provided to enrollees, and the outcomes sponsors measure. We did not have sufficient data to determine whether the programs increased the quality of pharmaceutical care to participants.

Since 2010, CMS has tightened criteria for MTMPs (Centers for Medicare & Medicaid Services 2011a), although plans still have considerable flexibility in determining eligibility criteria. New requirements include:

- Plan sponsors must enroll targeted beneficiaries using an opt-out method of enrollment.
- All programs must conduct an interactive comprehensive medication review at least annually with written summaries. They must perform quarterly medication reviews with follow-up interventions, if necessary.
- Sponsors must offer interventions to prescribers to resolve drug therapy problems.

CMS reports that as of 2010, 2.6 million of 3 million eligible enrollees participated in MTMPs (Centers for Medicare & Medicaid Services 2011a, Centers for Medicare & Medicaid Services 2011c). The agency awarded a two-year contract in 2011 to evaluate the impact of MTMPs on high-risk, chronically ill enrollees. However, CMS has not provided any data on the outcomes achieved by these programs. The goals of the study are to:

- evaluate the extent to which MTMPs target populations with medication therapy issues.
- evaluate the impact of MTMPs on key clinical outcomes, drug adherence, and Medicare costs.
- gather information on pharmacists' perspectives on MTMP implementation and impacts.
- evaluate how best practices can inform CMS operational guidelines (Centers for Medicare & Medicaid Services 2011c).

CMS is also considering adding a patient safety measure related to MTMPs for the 2013 Plan Finder. We will continue to monitor this program going forward. ■

Endnotes

1 Beginning in 2012, Medicare beneficiaries enrolled in PDPs or MA–PDs are allowed to switch to a plan that has the highest rating (5 stars) based on CMS's quality and performance rating system for Part D plans at any point during the year.

2 PPACA eliminates the coverage gap by: (1) requiring pharmaceutical manufacturers to offer a 50 percent discount on brand-name drugs filled during the coverage gap, (2) gradually phasing down cost sharing for generics beginning in 2011, (3) phasing down cost sharing for brand-name drugs beginning in 2013, and (4) reducing the OOP threshold on true OOP spending over the 2014 to 2019 period.

3 As a result of the changes made by PPACA, pharmaceutical manufacturers of brand-name drugs must provide a 50 percent discount for drugs filled while beneficiaries are in the coverage gap. Beneficiaries are responsible for the remaining 50 percent of the cost of the drugs. Since the manufacturer discount applies only to the ingredient costs, the effective cost sharing for brand-name drugs filled during the coverage gap will be slightly higher than 50 percent once dispensing fees and sales taxes are factored in.

4 The amount of total covered drug spending at which a beneficiary meets the annual OOP threshold depends on the mix of brand-name and generic drugs an individual fills during the coverage gap. The 2012 amount of total drug expenses at the annual OOP threshold of $6,657.50 is for an individual with no other sources of supplemental coverage filling only brand-name drugs during the coverage gap.

5 If an employer agrees to provide primary drug coverage to its retirees with an average benefit value that is equal to or greater than Part D (called creditable coverage), Medicare provides the employer with a tax-free subsidy for 28 percent of each eligible individual's drug costs that fall within a specified range of spending. Under PPACA, employers would still receive the RDS on a tax-free basis, but, beginning in 2013 they will no longer be able to deduct prescription drug expenses for which they receive the subsidy as a cost of doing business.

6 Creditable coverage refers to prescription drug benefits through sources such as a former employer that are at least as generous as the standard Part D benefit.

7 Enrollment figures based on CMS's Monthly Summary Report as of April 2011 (https://www.cms.gov/MCRAdvPartDEnrolData/MCESR/list.asp#TopOfPage, accessed October 17, 2011).

8 Medicare allows insurers to offer two types of plans that have the same average benefit value as the defined standard benefit. The first type, which CMS calls actuarially equivalent, uses the same deductible as the defined standard benefit but has different cost sharing during the plan's initial coverage phase. The second type, called basic alternative, allows insurers to use a lower deductible than the defined standard benefit, different cost sharing, and a modified initial coverage limit. Because they have the same average benefit value as the defined standard benefit, in this chapter we refer to both types as actuarially equivalent benefits.

9 As a result of the changes made by PPACA, Part D's basic benefit includes some coverage in the gap. Enhanced benefit plans that include coverage in the gap must provide coverage in the gap beyond what is required by PPACA.

10 Sponsors can enhance benefits in other ways as well—for example, covering drugs not allowed under basic Part D benefits, such as weight-loss medications and over-the-counter products. In the first few years of the Part D program, a handful of PDP sponsors offered insurance products that covered some brand-name and generic drugs in the coverage gap. However, those plans attracted beneficiaries with relatively high drug spending and the plans experienced financial losses. In the following years, nearly all affected sponsors withdrew those products from the market.

11 Under the Part C payment system, which is used to pay MA plans, 75 percent 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.

12 Commission analysis based on 2009 PDE data. Estimates are derived by comparing an individual's gross drug spending with the level of spending at which the beneficiary enters the coverage gap under the defined standard benefit. In the past, our estimates of the number of beneficiaries who had spending high enough to enter the coverage gap have been comparable to those published by CMS.

13 In previous years, we have treated different segments of an MA–PD as separate plans for the purpose of reporting the number of plans available. Beginning this year, we no longer distinguish between different segments of a plan. With the previous methodology, the increase in the number of MA–PDs would have been 4 percent (compared with 2 percent using the new method of counting)—1,633 compared with 1,566 in 2011.

14 CMS is allowing sponsors to offer only one basic plan and up to two enhanced plans in any given region, with a requirement that the plans have "meaningful differences"—defined as a difference of at least $22 per month in a beneficiary's expected monthly OOP cost for a common market basket of drugs between basic and enhanced plans. If a sponsor is offering two enhanced plans in the same service area, the second enhanced plan must have a higher value than the first and include coverage of at least some brand-name drugs in the coverage gap. Beginning with the 2012 plan year, CMS is also requiring a "meaningful difference"—defined as a difference of at least $16 in a beneficiary's expected monthly OOP cost between the two enhanced plan offerings.

15 This estimate is based on the Commission's analysis of CMS enrollment and crosswalk data files.

16 Email correspondence with CMS on November 16, 2011.

17 Prior authorization refers to requirements for preapproval from a plan before coverage. Quantity limits refer to a plan limiting the number of doses of a particular drug covered in a given time period. Under step therapy, plans require the enrollee to try specified drugs before moving to other drugs.

18 For example, Lipitor, a popular drug used to treat high cholesterol with annual sales of about $6 billion is expected to face competition from a generic market entry later this year. Many more medications are expected to face generic competition in the next few years. For example, Lexapro (for treatment of depression and anxiety), Seroquel (for treatment of schizophrenia and bipolar disorder), and Plavix (used to prevent blood clots) will likely face competition from generic drugs beginning in 2012.

19 For 2006, the first year of the program, plan sponsors had no claims experience on which to base their bids and many sponsors bid too high. Payment reconciliation resulted in a net payment of $4.3 billion from the sponsors to Medicare as part of the payment reconciliation.

20 Based on CMS's estimate as of October 2011.

21 An individual NDC uniquely identifies the drug's labeler, drug, dosage form, strength, and package size. Because each specific drug often is available in different dosages, strengths, and package sizes, the same drug typically has many different NDCs.

22 For this index, Acumen grouped NDCs that are pharmaceutically identical, aggregating prices across trade drug 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.

23 Acumen, LLC, analysis for the Commission (2011). The indexes reflect the prices plan sponsors and beneficiaries paid to pharmacies at the point of sale and do not reflect retrospective rebates from manufacturers.

24 CBO's estimated savings from therapeutic substitution analyzed the effects of switching an enrollee from a single-source brand-name drug to the generic form of a different drug that is in the same therapeutic class. The seven classes selected for the analysis totaled about $10 billion out of $60 billion in payments to plans and pharmacies in 2007.

25 Therapeutic substitution also includes a switch from a brand-name drug on a nonpreferred tier to another brand-name drug on a preferred tier within the same therapeutic class.

26 Dual-eligible beneficiaries in institutions do not pay cost sharing.

27 A small number of LIS enrollees receive a partial subsidy that pays for a portion of their premiums and provides extra help with their cost sharing. These beneficiaries account for less than 5 percent of LIS enrollees. In 2012, they have a $65 deductible, a 15 percent coinsurance up to the OOP threshold, and maximum copayments of $2.60 for generic and preferred multiple-source drugs and $6.50 for all other brand-name drugs above the OOP threshold.

28 Between 2011and 2013, brand-name products that account for more than $47 billion in annual U.S. drug sales will lose patent protection. A disproportionate drop in cost will be seen in 2012 due to nearly $24.5 billion in brand-name agents losing patent protection (Express Script 2010 drug trend report).

29 The term "true out-of-pocket," or TrOOP, refers to a feature of Part D that allows only certain types of spending to count toward the catastrophic threshold. In addition to a beneficiary's own OOP spending, spending made on behalf of the beneficiary by family members, official charities, qualifying state pharmaceutical assistance programs, or Part D's LIS count toward the OOP threshold. Once an LIS enrollee reaches the catastrophic phase of the benefit, the LIS covers all cost sharing required by the plan.

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APPENDIX A

Commissioners' voting on recommendations

APPENDIX A

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

3-1 The Congress should increase payment rates for the inpatient and outpatient prospective payment systems in 2013 by 1.0 percent. For inpatient services, the Congress should also require the Secretary of Health and Human Services beginning in 2013 to use the difference between the increase under current law and the Commission's recommended update to gradually recover past overpayments due to documentation and coding changes.

Yes: *Armstrong, Baicker, Behroozi, Berenson, Borman, Butler, Castellanos, Chernew, Dean, Gradison, Hackbarth, Hall, Kuhn, Naylor, Stuart, Uccello*

No: *Miller*

3-2 The Congress should direct the Secretary of Health and Human Services to reduce payment rates for evaluation and management office visits provided in hospital outpatient departments so that total payment rates for these visits are the same whether the service is provided in an outpatient department or a physician office. These changes should be phased in over three years. During the phase-in, payment reductions to hospitals with a disproportionate share patient percentage at or above the median should be limited to 2 percent of overall Medicare payments.

Yes: *Armstrong, Baicker, Berenson, Borman, Butler, Castellanos, Chernew, Dean, Gradison, Hackbarth, Hall, Naylor, Stuart, Uccello*
No: *Kuhn, Miller*
Not voting: *Behroozi*

3-3 The Secretary of Health and Human Services should conduct a study by January 2015 to examine whether access to ambulatory physician and other health professionals' services for low-income patients would be impaired by setting outpatient evaluation and management payment rates equal to those paid in physician offices. If access will be impaired, the Secretary should recommend actions to protect access.

Yes: *Armstrong, Baicker, Behroozi, Berenson, Borman, Butler, Castellanos, Chernew, Dean, Gradison, Hackbarth, Hall, Kuhn, Miller, Naylor, Stuart, Uccello*

Chapter 4: Physician and other health professional services

The Commission's recent recommendations on updating Medicare's payments to physicians and other health professionals are reprinted in Appendix B (pp. 377–400).

Chapter 5: Ambulatory surgical center services

5-1 The Congress should update the payment rates for ambulatory surgical centers by 0.5 percent for calendar year 2013. The Congress should also require ambulatory surgical centers to submit cost data.

Yes: *Armstrong, Baicker, Behroozi, Berenson, Borman, Butler, Castellanos, Chernew, Dean, Gradison, Hackbarth, Hall, Kuhn, Miller, Naylor, Stuart, Uccello*

5-2 The Congress should direct the Secretary to implement a value-based purchasing program for ambulatory surgical center services no later than 2016.

Yes: *Armstrong, Baicker, Behroozi, Berenson, Borman, Butler, Castellanos, Chernew, Dean, Gradison, Hackbarth, Hall, Kuhn, Miller, Naylor, Stuart, Uccello*

Chapter 6: Outpatient dialysis services

The Congress should update the outpatient dialysis payment rate by 1 percent for calendar year 2013.

Yes: *Armstrong, Baicker, Behroozi, Berenson, Borman, Butler, Castellanos, Chernew, Dean, Gradison, Hackbarth, Hall, Kuhn, Miller, Naylor, Stuart, Uccello*

Chapter 7: Skilled nursing facility services

7-1 The Congress should eliminate the market basket update and direct the Secretary to revise the prospective payment system for skilled nursing facilities for 2013. Rebasing payments should begin in 2014, with an initial reduction of 4 percent and subsequent reductions over an appropriate transition until Medicare's payments are better aligned with providers' costs.

Yes: *Armstrong, Baicker, Behroozi, Berenson, Borman, Butler, Castellanos, Chernew, Dean, Gradison, Hackbarth, Hall, Kuhn, Miller, Naylor, Stuart, Uccello*

7-2 The Congress should direct the Secretary to reduce payments to skilled nursing facilities with relatively high risk-adjusted rates of rehospitalization during Medicare-covered stays and be expanded to include a time period after discharge from the facility.

Yes: *Armstrong, Baicker, Behroozi, Berenson, Borman, Butler, Castellanos, Chernew, Dean, Gradison, Hackbarth, Hall, Kuhn, Miller, Naylor, Stuart, Uccello*

Chapter 8: Home health care services

The Commission reiterates its March 2011 recommendations on improving the home health payment system (see text box, pp. 216–217).

Chapter 9: Inpatient rehabilitation facility services

The Congress should eliminate the update to the Medicare payment rates for inpatient rehabilitation facilities in fiscal year 2013.

Yes: *Armstrong, Baicker, Behroozi, Berenson, Borman, Butler, Castellanos, Chernew, Dean, Gradison, Hackbarth, Hall, Kuhn, Miller, Naylor, Stuart, 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 2013.

Yes: *Armstrong, Baicker, Behroozi, Berenson, Borman, Butler, Castellanos, Chernew, Dean, Gradison, Hackbarth, Hall, Kuhn, Miller, Naylor, Stuart, Uccello*

Chapter 11: Hospice services

The Congress should update the payment rates for hospice for fiscal year 2013 by 0.5 percent.

Yes: *Armstrong, Baicker, Behroozi, Berenson, Borman, Butler, Castellanos, Chernew, Dean, Gradison, Hackbarth, Hall, Kuhn, Miller, Naylor, Stuart, Uccello*

Chapter 12: The Medicare Advantage program: Status report

No recommendations

Chapter 13: Status report on Part D, with focus on beneficiaries with high drug spending

The Congress should modify the Part D low-income subsidy copayments for Medicare beneficiaries with incomes at or below 135 percent of poverty to encourage the use of generic drugs when available in selected therapeutic classes. The Congress should direct the Secretary to develop a copay structure, giving special consideration to eliminating the cost sharing for generic drugs. The Congress should also direct the Secretary to determine appropriate therapeutic classifications for the purposes of implementing this policy and review the therapeutic classes at least every three years.

Yes: *Armstrong, Baicker, Behroozi, Berenson, Borman, Butler, Castellanos, Chernew, Dean, Gradison, Hackbarth, Hall, Kuhn, Miller, Naylor, Stuart, Uccello*

APPENDIX B

Moving forward from the sustainable growth rate (SGR) system

MEDPAC Medicare Payment Advisory Commission

601 New Jersey Avenue, N.W. • Suite 9000
Washington, DC 20001
202-220-3700 • Fax: 202-220-3759
www.medpac.gov

Glenn M. Hackbarth, J.D., Chairman
Robert A. Berenson, M.D., F.A.C.P., Vice Chairman
Mark E. Miller, Ph.D., Executive Director

October 14, 2011

The Honorable Max Baucus
Chairman, Committee on Finance
U.S. Senate
219 Dirksen Senate Office Building
Washington, DC 20510

The Honorable Orrin G. Hatch
Ranking Member, Committee on Finance
U.S. Senate
104 Hart Senate Office Building
Washington, DC 20510

The Honorable Dave Camp
Chairman, Committee on Ways and Means
U.S. House of Representatives
1102 Longworth House Office Building
Washington, DC 20515

The Honorable Sander M. Levin
Ranking Member, Committee on Ways and Means
U.S. House of Representatives
1139E Longworth House Office Building
Washington, DC 20515

The Honorable Fred Upton
Chairman, Committee on Energy and Commerce
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, DC 20515

The Honorable Henry A. Waxman
Ranking Member, Committee on Energy and Commerce
U.S. House of Representatives
2322A Rayburn House Office Building
Washington, DC 20515

RE: Moving forward from the sustainable growth rate (SGR) system

Dear Chairmen and Ranking Members:

The sustainable growth rate (SGR) system—Medicare's formulaic payment method for services provided by physicians and other health professionals—is fundamentally flawed and is creating instability in the Medicare program for providers and beneficiaries. This system, which ties annual updates to cumulative expenditures since 1996, has failed to restrain volume growth and, in fact, may have exacerbated it. Although the pressure of the SGR likely minimized fee increases in the last decade, this effect disproportionately burdened physicians and health professionals in specialties with less ability to increase volume. Additionally, temporary, stop-gap "fixes" to override the SGR are undermining the credibility of Medicare because they engender uncertainty and anger among physicians and other health professionals, which may be causing anxiety among beneficiaries. The risks of retaining the SGR now clearly outweigh the benefits. Moreover, the cost of full repeal, as

well as the cost of temporary reprieves, grows inexorably. It will never be less expensive to repeal the SGR than it is right now.

With this assessment, the Commission recommends that the Congress repeal the SGR system and replace it with a 10-year schedule of specified updates for the physician fee schedule. The Commission drew on three governing principles to form our proposal. First, the link between cumulative fee-schedule expenditures and annual updates is unworkable and should be eliminated. Second, beneficiary access to care must be protected. Third, proposals to replace the SGR must be fiscally responsible.

From these principles, we recommend complete repeal of the SGR system and propose a series of updates that would no longer be based on an expenditure- or volume-control formula. These legislated updates would allow total Medicare expenditures for fee-schedule services to increase annually—roughly doubling over the next ten years. Approximately two-thirds of this increase would be attributable to growth in beneficiary enrollment and one-third would be attributable to growth in per beneficiary service use. Although our proposed updates reduce fees for most services, current law calls for far greater fee reductions and could lead to potential access problems under the SGR. The Commission finds it crucial to protect primary care from fee reductions, considering that the most recent data show that access risks are concentrated in primary care.

As is our charge, each year MedPAC will continue to review annually whether payments to physicians and other health professionals are adequate. To this end, we will continue to survey beneficiaries, conduct physician focus groups, track physician and practitioner participation in Medicare, and examine changes in volume and quality of ambulatory care. If, through these analyses, we determine that a future increase in fee-schedule rates is needed to ensure beneficiary access to care, then the Commission would submit such a recommendation to the Congress. Enacting our recommendation would eliminate the SGR and would alter the trajectory of fee-schedule spending in Medicare's baseline. Therefore, future fee increases relative to this new baseline would require new legislation and would carry a budgetary cost.

Our recommendation for repealing the SGR carries a high budgetary cost. The Congress, of course, may seek offsets for repealing the SGR inside or outside of the Medicare program. Because MedPAC was established to advise the Congress on Medicare policies, we are offering a set of savings options that are limited to the Medicare program. We do not necessarily

recommend that the Congress offset the repeal of the SGR entirely through Medicare. The steep price of this effort, and the constraint that we imposed on ourselves to offset it within Medicare, compels difficult choices, including fee-schedule reductions and offsets that we might not otherwise support.

The Commission is also proposing refinements to the accuracy of Medicare's physician fee schedule through targeted data collection and reducing payments for overpriced services. Even with improvements to the fee schedule's pricing, moreover, Medicare must implement payment policies that shift providers away from fee-for-service (FFS) and toward delivery models that reward improvements in quality, efficiency, and care coordination, particularly for chronic conditions. The Commission is also recommending incentives in Medicare's accountable care organization (ACO) program to accelerate this shift because new payment models—distinct from FFS and the SGR—have greater potential to slow volume growth while also improving care quality. Similarly, incentives for physicians and health professionals to participate in the newly established Medicare bundling pilot projects could also improve efficiency across sectors of care.

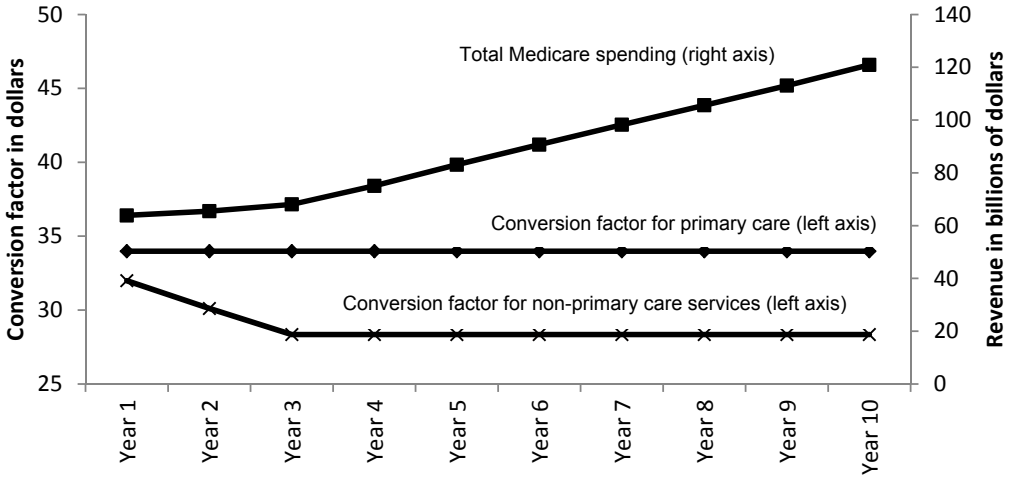
Respectfully, we submit the recommendations described below. Several of them are interrelated. Our willingness to recommend difficult measures underscores the urgency we attach to repealing the SGR. The cost of repealing the SGR, as well as the cost of any short-term reprieves, will only increase. Meanwhile, the opportunities for offsetting that cost by reducing Medicare expenditures will only shrink if Medicare savings are used for other purposes (such as, to help finance coverage for the currently uninsured or for deficit reduction). Our concern is that repealing the SGR will become increasingly difficult unless the Congress acts soon.

Repealing the SGR formula and realigning fee-schedule payments to maintain access to primary care

Repealing the SGR formula ultimately severs the link between future payment updates and cumulative expenditures for services provided by physicians and other health professionals. In place of the SGR, the Commission proposes a 10-year path of legislated updates (Figure 1). This path is consistent with the principles of an affordable repeal of the SGR, continued annual growth in Medicare spending for physician services, and maintaining access to care. For primary care, which we define more specifically later in this section, the Commission recommends that

payments rates be frozen at their current levels. For all other services, there would be reductions in the fee schedule's conversion factor in each of the first three years, and then a freeze in the conversion factor for the subsequent seven years.[1] While there would be decreases in payment rates for most services, projected growth in the volume of services—due to increases in both beneficiary enrollment in Medicare and per beneficiary service use—would lead to continued annual increases in total Medicare expenditures for fee-schedule services. We describe previous spending trends in Appendix Figure A-1.

Figure 1. Potential update path for fee schedule services



Source: MedPAC analysis of Part B fee-for-service spending per beneficiary, enrollment growth, and growth in the volume of fee-schedule services per beneficiary. See text for details.

The rationale for exempting primary care from fee-schedule cuts comes from recent research suggesting that the greatest threat to access over the next decade is concentrated in primary care services.[2] In both patient surveys and physician surveys, access to primary care providers is more

[1]Alternative update paths with the same approximate cost are possible. For example, fees for non-primary care services could receive smaller reductions over more years. Under this alternative, however, by year 10, the conversion factor for non-primary care services would be lower than that proposed in Figure 1.

[2]Medicare Payment Advisory Commission. 2011. *Report to the Congress: Medicare payment policy.* Washington, DC: MedPAC; Friedberg, M. et al. 2010. Primary care: A critical review of the evidence on quality and costs of health care. *Health Affairs* 29, no. 5 (May): 766-772; Vaughn, B. et al. 2010. Can we close the income and wealth

problematic than access to specialists. These findings hold for both Medicare and privately insured patients, magnifying the vulnerability of access to primary care services.

One example of this research comes from MedPAC's annual patient survey that we use to obtain the most timely data possible for analyzing access to physician services. This survey interviews Medicare beneficiaries age 65 and over and privately insured individuals age 50 to 64. (For more details on the survey's methodology, please see Chapter 4 our March 2011 Report to the Congress.) Results from this annual survey consistently find that both Medicare beneficiaries and privately insured individuals are more likely to report problems finding a new primary care physician compared with finding a new specialist (Appendix Table A-2). For instance, in 2010, although only 7 percent of beneficiaries reported looking for a new primary care physician in the past year, among those looking, 79 percent stated that they experienced no problems finding one. In contrast 87 percent of the beneficiaries who were looking for a new specialist reported that they had no problems finding one. Among privately insured individuals looking for a new primary care physician, 69 percent reported no problems finding one compared with 82 percent of those looking for a new specialist.

Consistent with this patient survey, physician surveys have also found that primary care physicians are less likely than specialists to accept new patients. Again, this discrepancy holds for both Medicare and privately insured patients. For example, the 2008 National Ambulatory Medical Care Survey finds that 83 percent of primary care physicians accept new Medicare patients, compared with 95 percent of specialists (Appendix Table A-3). Acceptance rates are lower for patients with other insurance as well. Specifically, 76 percent of primary care physicians accepted new patients with private (non-capitated) insurance compared with 81 percent of specialists. In a 2008 survey conducted by the Center for Studying Health System Change, physicians who classified themselves in surgical or medical specialties were more likely

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gap between specialists and primary care physicians? *Health Affairs* 29, no. 5 (May): 933-940; Bodenheimer, T. et al. 2009. A lifeline for primary care. *New England Journal of Medicine* 360, no. 26 (June 25): 2693-2696; Grumbach, K. and J. Mold. 2009. A health care cooperative extension service. *Journal of the American Medical Association* 301 no. 24 (June 24): 2589-2591; Rittenhouse, D. et al. 2009. Primary care and accountable care—two essential elements of delivery-system reform. *New England Journal of Medicine* 361, no. 24 (December 10): 2301-2303; Colwill, J. et al. 2008. Will generalist physician supply meet demands of an increasing and aging population? *Health Affairs* 27, no. 3 (April 29): w232-w241.

than primary care physicians (classifying themselves as either in internal medicine or family/general practice) to accept all new Medicare, Medicaid, and privately insured patients.[3]

Exempting primary care from the reductions would mean that Medicare payments for those services would not be based entirely on resource-based relative values. Although resources used to furnish a service (e.g., the time and intensity of effort or practice expenses incurred) are appropriately considered in establishing the fee schedule, other considerations may also be important, including ensuring access or recognizing the value of the services in terms of improving health outcomes or avoiding more costly services in the future. Market prices for goods and services outside health care often reflect such factors. The Congress has demonstrated precedent for this approach in the Medicare fee schedule, such as through the primary care and general surgery bonuses included in the Patient Protection and Affordable Care Act of 2010 (PPACA), as well as floors established for work and practice expense values and bonuses for services provided in health professional services shortage areas.

Regarding the proposed updates included in our recommendation to repeal the SGR, we specify a definition of primary care that focuses on protecting the practitioners and services which make up the core of primary care. The Commission limits the primary care update path to physicians and other health professionals who meet both of the following criteria:

- *Practitioner specialty designation*: Physicians who—when enrolling to bill Medicare—designated their specialty as geriatrics, internal medicine, family medicine, or pediatrics. Eligible practitioners would also include nurse practitioners, clinical nurse specialists, and physician assistants.
- *Practice focused on primary care*: Physicians and practitioners who have annual allowed Medicare charges for selected primary care services equal to at least 60 percent of their total allowed charges for fee-schedule services. Primary care services used to determine eligibility are: office visits, home visits, and visits to patients in nursing facilities, domiciliaries, and rest homes.

Under our proposal, the legislated updates for primary care would apply to the following services when provided by eligible primary care practitioners: office visits, home visits, and visits to

[3]Boukus, E. et al. 2009. *A snapshot of U.S. physicians: Key findings from the 2008 Health Tracking Physician Survey.* Data bulletin no. 35. Washington, DC: HSC.

patients in hospitals, nursing facilities, domiciliaries, and rest homes.[4] MedPAC analysis of claims data finds that under these specifications, about 9 percent of fee-schedule spending would be protected from fee reductions each year. For eligible primary care practitioners, these protected services typically account for the vast majority of their Medicare billing. Payment rates for other services—such as laceration repairs and endoscopies—furnished by all fee-schedule providers, including primary care practitioners, would be subject to the fee reductions in the first three years.[5]

Table 1. Potential update path for fee-schedule services

	Primary care		Other services		Annual
Year	Payment rate change	Conversion factor	Payment rate change	Conversion factor	payments (billion)
Y1	0.0%	$33.98	−5.9%	$31.99	$64
Y2	0.0	33.98	−5.9	30.11	66
Y3	0.0	33.98	−5.9	28.34	68
Y4	0.0	33.98	0.0	28.34	75
Y5	0.0	33.98	0.0	28.34	83
Y6	0.0	33.98	0.0	28.34	91
Y7	0.0	33.98	0.0	28.34	98
Y8	0.0	33.98	0.0	28.34	106
Y9	0.0	33.98	0.0	28.34	113
Y10	0.0	33.98	0.0	28.34	121

Note: The current (2011) conversion factor is $33.98.
Source: MedPAC analysis of Part B fee-for-service spending per beneficiary, enrollment growth, and growth in the volume of fee-schedule services per beneficiary 2004-2009.

Medicare fees for non-primary care services would be reduced by 5.9 percent each year for 3 years (Table 1). We arrive at this path after satisfying two requirements: protecting core primary care services that are furnished by primary care providers from payment reductions, and

[4]Expanded definitions of primary care are possible. For example, the range of specialties could be expanded. However, protecting more services from the fee reduction will result in either a higher cost (and the need for more offsets) or a deeper fee reduction for the non-primary care services. Alternative definitions of protected services are also possible, such as using the number of unique diagnosis codes that a provider sees over the course of a year to distinguish between highly specialized providers and those that provide a more comprehensive range of care.
[5]The freeze on payment rates for primary care could be implemented either with a separate conversion factor, or with a claims-based payment modifier. If the freeze is implemented with a claims-based payment modifier, a single, reduced conversion factor would apply to all services; but, for eligible primary care services, the payment modifier would increase the fee and effectively reverse the conversion factor reduction.

achieving a total estimated 10-year cost that is no more than $200 billion. If the update paths depicted in Figure 1 were implemented in 2012, the conversion factor for non-primary care would decrease over a period of three years from the current level of $33.98 to about $28.34. It would then stay at that level for the remaining seven years of the budget window. By contrast, under current law, the conversion factor would be $24.27 at the end of the budget window. Taking into account the increase in the number of Medicare beneficiaries over the next 10 years and growth in the volume of services provided per beneficiary, total practitioner payments from Medicare would rise from $64 billion to $121 billion. On a per beneficiary basis, practitioner payments would continue to rise at an average rate of 2.2 percent per year. The $200 billion estimated cost of this proposed update path accounts for the cost of eliminating the significantly larger SGR cuts and replacing them with the updates specified in Table 1.

A freeze in payment levels for primary care is not sufficient to support a robust system of primary care. Payment approaches that recognize the benefits of non-face-to-face care coordination between visits and among providers may be more appropriate for primary care, particularly for patients with chronic conditions. The Centers for Medicare & Medicaid Services (CMS) is embarking on several projects to examine the results (patient health and total spending outcomes) of monthly per-patient payments to primary care providers for their care coordination activities. These include the Comprehensive Primary Care Initiative, the Multipayer Advanced Primary Care Initiative, and the Federally Qualified Health Center Advanced Primary Care Practice Demonstration. Issues that this work will help to inform include patient involvement in selecting these providers and effective ways for attributing one eligible provider per patient.

Recommendation 1:

The Congress should repeal the sustainable growth rate (SGR) system and replace it with a 10-year path of statutory fee-schedule updates. This path is comprised of a freeze in current payment levels for primary care and, for all other services, annual payment reductions of 5.9 percent for three years, followed by a freeze. The Commission is offering a list of options for the Congress to consider if it decides to offset the cost of repealing the SGR system within the Medicare program.

Collecting data to improve payment accuracy

In addition to a conversion factor, the physician fee schedule includes relative value units (RVUs). These RVUs account for the amount of work required to provide each service, the expenses that practitioners incur related to maintaining a practice, and malpractice insurance costs. To arrive at the payment amount for a given service, its RVUs are adjusted for variations in the input prices in different markets, and then the total of the adjusted RVUs is multiplied by the conversion factor.

The Secretary lacks current, objective data needed to set the fee schedule's RVUs for practitioner work and practice expenses.[6] The fee schedule's time estimates are an example. The RVUs for practitioner work are largely a function of estimates of the time it takes a practitioner to perform each service. However, research for CMS and for the Assistant Secretary for Planning and Evaluation of the Department of Health and Human Services has shown that the time estimates are likely too high for some services. In addition, anecdotal evidence and the experience of clinicians on the Commission suggest problems with the accuracy of the time estimates. Furthermore, under CMS's recent potentially misvalued services initiative, time estimates for a number of services have been revised downward after consultation with the Relative Value Scale Update Committee (RUC). These revisions suggest that current time estimates—which rely primarily on surveys conducted by physician specialty societies that have a financial stake in the process—are subject to bias.

Reliable, objective data are also needed for the fee schedule's practice expense RVUs. CMS's methodology for determining these RVUs relies on various types of data: time estimates for clinical employees who work in practitioners' offices, prices for equipment and supplies used in practitioners' offices, and total practice costs for each physician specialty. The Commission questions the accuracy and timeliness of these data.[7]

The Commission evaluated sources of data the Secretary could consider. Surveys might be an alternative, but they are costly and response rates are likely to be low. Time and motion studies

[6]Medicare Payment Advisory Commission. 2011. *Report to the Congress: Medicare and the health care delivery system.* Washington, DC: MedPAC.
[7]Medicare Payment Advisory Commission. 2011. *Report to the Congress: Medicare and the health care delivery system.* Washington, DC: MedPAC.

would be costly, too, and they are subject to bias. And mandatory data reporting—analogous to the cost reports submitted by institutional providers—would raise issues of administrative burden on practitioners.

Instead of these approaches, the Secretary could collect data on a recurring basis from a cohort of practitioner offices and other settings where practitioners work. Participating practices and other settings could be recruited through a process that would require participation in data reporting among those selected. The cohort would consist of practices with a range of specialties, practitioner types, patient populations, and furnished services. Further, the cohort should consist of practices with features that make them efficient (e.g., economies of scale, reorganized delivery systems). If necessary, practices could be paid to participate. The Commission is working with contractors to assess the potential of using electronic health records, patient scheduling systems, cost accounting, and other systems as sources of data in physician practices and integrated delivery systems.

Recommendation 2:

The Congress should direct the Secretary to regularly collect data—including service volume and work time—to establish more accurate work and practice expense values. To help assess whether Medicare's fees are adequate for efficient care delivery, the data should be collected from a cohort of efficient practices rather than a sample of all practices. The initial round of data collection should be completed within three years.

Identifying overpriced services

Moving forward from the SGR could also include a change in the process for identifying overpriced services in the physician fee schedule. The current process for identifying potentially misvalued services is time consuming, occurring over several years. In addition, the process has inherent conflicts. The process relies on surveys conducted by physician specialty societies. Those societies and their members have a financial stake in the RVUs assigned to services.

To accelerate the review process, the Secretary should be directed to analyze the data collected under recommendation 2, identify overpriced services, and adjust the RVUs of those services. Further, the Congress should direct the Secretary to achieve an annual numeric goal equivalent to

a percentage of fee-schedule spending. This would be a goal for reducing the RVUs of overpriced services. These adjustments should be implemented in a budget neutral manner. Therefore, while payments could decrease considerably for any given overpriced service, they would increase slightly for all other services.

As mentioned earlier, the RUC and CMS have started a potentially misvalued services initiative, and there is some evidence that this effort has drawn attention to inaccurate pricing. As an example, for fee schedule payments in 2011, CMS received work RVU recommendations from the RUC for 291 billing codes and made decisions after considering all of those recommendations.[8] In some cases, comprehensive billing codes were established that bundled component services, thereby recognizing that efficiencies can arise when multiple services are furnished during a single patient encounter. Other recommendations did not include a change in billing codes. Instead, the RUC had addressed the question of whether current RVUs are too high or too low for certain services because of a change in technology or other factors. The net effect of the increases and decreases in work RVUs—had the changes not been budget neutral, as required by statute—would have been a reduction in spending under the fee schedule of 0.4 percent. Previously, the net effects of work RVU changes had been smaller: 0.1 percent per year in both 2009 and 2010.

The American Medical Association's (AMA's) position is that the process for identifying potentially misvalued services has been broader in scope than that suggested by these budget neutrality adjustments.[9] The AMA reports that in addition to about $400 million that was redistributed for 2011 due to changes in work RVUs, another $40 million was redistributed due to changes in the RVUs for professional liability insurance, and $565 million was redistributed due to changes in practice expense RVUs.

An annual numeric goal for RVU reductions—stated in terms of a percentage of spending for practitioner services—could foster further collaboration between the RUC and CMS in improving

[8]Centers for Medicare and Medicaid Services, Department of Health and Human Services. 2010. Medicare program; payment policies under the physician fee schedule and other revisions to Part B for CY 2011. Final rule. Federal Register 75, no. 228 (November 29): 73169-73860.

[9]American Medical Association. undated. The RUC Relativity Assessment Workgroup Progress Report. http://www.ama-assn.org/resources/doc/rbrvs/five-year-progress.pdf.

payment accuracy. For example, such a goal should focus the effort on high-expenditure services, thereby making a time-consuming and resource-intensive review process more efficient. In addition, collecting objective data to improve payment accuracy—the data collection addressed by recommendation 2—will make the process more effective. As to the level of the numeric goal, judgment is required. If the AMA's estimates are accurate, RVU changes for 2011 led to a redistribution of payments equaling almost 1.2 percent of total allowed charges.

Recommendation 3:

The Congress should direct the Secretary to identify overpriced fee-schedule services and reduce their relative value units (RVUs) accordingly. To fulfill this requirement, the Secretary could use the data collected under the process in recommendation 2. These reductions should be budget neutral within the fee schedule. Starting in 2015, the Congress should specify that the RVU reductions achieve an annual numeric goal—for each of five consecutive years—of at least 1.0 percent of fee-schedule spending.

Accelerate delivery system changes to emphasize accountability and value over volume

Even with more accurate RVU assignments, the FFS payment system inherently encourages volume over quality and efficiency. Indeed, rapid volume growth in the last decade is due, in large part, to the underlying volume incentives in FFS reimbursement. New payment models, such as the ACO program and new bundled payment initiatives, present an opportunity to correct some of the undesirable incentives in FFS and reward providers who are doing their part to control costs and improve quality.

Repealing the SGR provides an opportunity for Medicare to implement policies that encourage physicians and other health professionals to move toward delivery models with better accountability for quality and value. With this shift, we should see a greater focus on population health and care coordination—thereby improving patient experience and aligning incentives for beneficiaries to become more engaged with their own care management. Through the ACO program and bundled payment approaches, Medicare is taking important steps in this direction—embarking on new payment models that can encourage providers to work together across sectors to maximize quality and efficiency.

Within the ACO program, incentives for these improvements are strongest for ACOs which bear financial risk, often called two-sided risk ACOs. These ACOs are eligible for both rewards and penalties based on their performance on quality and spending measures. In contrast, bonus-only ACOs are not subject to performance-based penalties. Therefore, the Commission recommends aligning policies related to Medicare's fee schedule with incentives for physicians and health professionals to join or lead two-sided risk ACOs.

Specifically, the Commission recommends that physicians and health professionals who join or lead two-sided risk ACOs should be afforded a greater opportunity for shared savings compared to those in bonus-only ACOs and those who do not join any ACO. The greater opportunity for shared savings would come from calculating the two-sided risk ACO's spending benchmark using higher-than-actual fee-schedule growth rates.

More precisely, assuming the initial reduction in fee-schedule rates outlined in our first recommendation, the Commission recommends that the spending benchmarks for assessing the performance of two-sided risk ACOs be calculated using a freeze in fee-schedule rates, rather than the actual fee reductions. Under this circumstance, two-sided risk ACOs would have a greater opportunity to produce spending that is below their benchmark, and thus be more likely to enjoy shared-savings payments from Medicare.[10]

This recommendation might increase the willingness of physicians and other health professionals to join or lead two-sided risk ACOs. In doing so, it would accelerate delivery system reform toward models with greater accountability for health care quality and spending. As ACO models develop and make strides in improving quality and efficiency, the volume-based FFS environment should be made increasingly less attractive for Medicare providers. Accordingly, the advantage offered to the two-sided risk ACOs would increase in the second and third year that the fee-schedule reductions are in place.

[10]One issue to examine under this policy would be to monitor the effect of differential payments for services provided by ACO and non-ACO providers. The differential shared savings opportunities are intended to hasten improvements in our delivery system and shift payments away from FFS. The incentives should be revisited as enrollment increases to ensure that ACOs are having the desired effect of encouraging more organized care delivery and lowering overall spending growth.

Final regulations on the ACO program are not yet completed. Therefore, it is difficult to determine the effects of this recommendation, relative to current law. Theoretically, by offering providers a greater opportunity to share in Medicare savings, the Commission's recommendation could reduce total Medicare savings. However, more importantly, if more providers decided to join two-sided risk ACOs as a result of greater shared savings opportunities in this recommendation, total Medicare savings could increase over the long term.

Recommendation 4:

Under the 10-year update path specified in recommendation 1, the Congress should direct the Secretary to increase the shared savings opportunity for physicians and health professionals who join or lead two-sided risk accountable care organizations (ACOs). The Secretary should compute spending benchmarks for these ACOs using 2011 fee-schedule rates.

The Secretary could also consider developing analogous pricing incentives in Medicare's new bundled payment initiatives. That is, in the context of fee-reductions, bundled pricing would assume a rate freeze across all fee-schedule services. In testing this approach for improvements in quality and efficiency, the Secretary could, at the same time, assess the effect that bundled payments have on growth in the total number of episodes.

Offsetting the cost of the SGR package

The Commission describes a budget-neutral package for repealing the SGR, offsetting the cost within the Medicare program (Appendix Table A-4). Under current law, the SGR calls for a very large fee reduction (30 percent on January 1, 2012) and the budget score associated with repealing the SGR has grown exponentially. Given the high cost of repealing the SGR and the current economic environment, the Commission's proposal must be fiscally responsible.

The list of options offered by the Commission spreads the cost of repealing the SGR across physicians and other practitioners, as well as other providers and Medicare beneficiaries. Under the Commission's approach, physicians and other practitioners who provide non-primary care services will experience a series of Medicare fee reductions, followed by a freeze in payment

rates. Primary care physicians and other primary care practitioners would experience a freeze in rates for the primary care services they provide. Through these reductions and freezes, physicians and other health professionals are shouldering a large part of the cost of repealing the SGR. The cost of repealing the SGR and replacing it with a complete freeze in fee-schedule payment rates would be approximately $300 billion over ten years, but the Commission's approach would cost approximately $200 billion, with most physicians and practitioners absorbing $100 billion in the form of lower payments than they would receive under a freeze.

To offset this $200 billion in higher Medicare spending relative to current law (which applies the SGR fee cuts), the Congress may seek offsets inside or outside of the Medicare program. Because MedPAC was established to advise the Congress on Medicare policies, we are offering a set of savings options that are limited to the Medicare program. We do not necessarily recommend that the Congress offset the repeal of the SGR entirely through Medicare. Also, we offer this set of options with the express purpose of assisting the Congress in evaluating ways to repeal the SGR. The steep price of this effort, and the constraint that we are under to offset it within Medicare, compels difficult choices, including fee-schedule payment reductions and offsets that we might not otherwise support.

The offset options listed in Appendix Table A-4 would spread the impact of the reductions across other providers and Medicare beneficiaries. They are grouped in two categories. Those in Tier I— about $50 billion— are MedPAC recommendations not yet enacted by the Congress. Those in Tier II—about $168 billion—are informed by analyses done by MedPAC, other commissions, and government agencies. Several of the options in Tier II are designed to make changes to Medicare payments to encourage the use of more cost effective care. The estimates of savings are preliminary staff estimates and do not represent official scores.

The Commission has not voted on each individual item in the Tier II list, and their inclusion should not be construed as a recommendation. Tier II does not include all of the proposals that have been offered for reducing long-term Medicare spending—e.g., increasing the age of eligibility, or requiring higher contributions from beneficiaries with higher-than-average incomes, or premium support. The exclusion of such policies should not be construed as a

statement of MedPAC's position on these policies. Such policies raise complex issues that are beyond the scope of Tier II offsets.

To reiterate, we offer the list of offset options to assist the Congress in its deliberations on resolving the SGR problem. The Congress could choose different directions to offset the related cost—for example, other spending or revenue offsets, even from outside the Medicare program.

In closing, given the urgency of the need to resolve the SGR policy, the Commission is submitting this letter to the Congress in advance of our usual March and June publication schedule. At a minimum our proposal underscores the exigency of the matter, the complexity of deriving any solution, and the degree of sacrifice a resolution entails. If you have further questions or otherwise wish to discuss this important issue, please feel free to contact me or Mark E. Miller, MedPAC's Executive Director.

Sincerely,

Glenn M. Hackbarth, J.D.
Chairman

Appendix

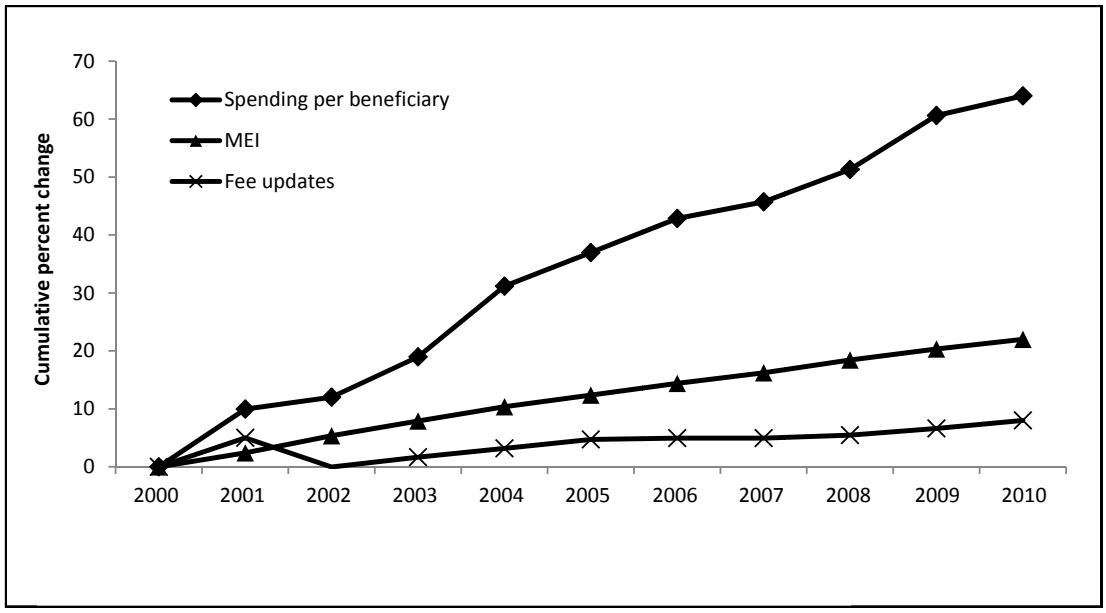
TABLE A–1

Commissioners' voting on recommendations

1	The Congress should repeal the sustainable growth rate (SGR) system and replace it with a 10-year path of statutory fee-schedule updates. This path is comprised of a freeze in current payment levels for primary care and, for all other services, annual payment reductions of 5.9 percent for three years, followed by a freeze. The Commission is offering a list of options for the Congress to consider if it decides to offset the cost of repealing the SGR system within the Medicare program. *Yes: Armstrong, Baicker, Behroozi, Berenson, Butler, Chernew, Dean, Gradison, Hackbarth, Hall, Kuhn, Miller, Naylor, Stuart, Uccello* *No: Borman, Castellanos*
2	The Congress should direct the Secretary to regularly collect data—including service volume and work time—to establish more accurate work and practice expense values. To help assess whether Medicare's fees are adequate for efficient care delivery, the data should be collected from a cohort of efficient practices rather than a sample of all practices. The initial round of data collection should be completed within three years. *Yes: Armstrong, Baicker, Behroozi, Berenson, Borman, Butler, Castellanos, Chernew, Dean, Gradison, Hackbarth, Hall, Kuhn, Miller, Naylor, Stuart, Uccello*
3	The Congress should direct the Secretary to identify overpriced fee-schedule services and reduce their relative value units (RVUs) accordingly. To fulfill this requirement, the Secretary could use the data collected under the process in recommendation 2. These reductions should be budget neutral within the fee schedule. Starting in 2015, the Congress should specify that the RVU reductions achieve an annual numeric goal—for each of five consecutive years—of at least 1.0 percent of fee-schedule spending. *Yes: Armstrong, Baicker, Behroozi, Berenson, Butler, Castellanos, Chernew, Dean, Gradison, Hackbarth, Hall, Kuhn, Miller, Naylor, Stuart, Uccello* *No: Borman*
4	Under the 10-year update path specified in recommendation 1, the Congress should direct the Secretary to increase the shared savings opportunity for physicians and health professionals who join or lead two-sided risk accountable care organizations (ACOs). The Secretary should compute spending benchmarks for these ACOs using 2011 fee-schedule rates. *Yes: Armstrong, Baicker, Behroozi, Berenson, Butler, Castellanos, Dean, Gradison, Hackbarth, Hall, Kuhn, Miller, Naylor, Stuart, Uccello* *No: Borman* *Not voting: Chernew*

FIGURE A–1

Growth in spending for fee-schedule services, 2000–2010



- Spending for fee-schedule services grew from $37 billion in 2000 to $64 billion in 2010—an increase of 72 percent.
- On a per beneficiary basis, spending grew over this period from $1,200 to $2,000—an increase of 64 percent. This increase amounts to an average annual spending increase of 5 percent per beneficiary, per year.
- Medicare spending on fee-schedule services grew much more rapidly over this period than both the payment rate updates and the Medicare Economic Index (MEI). The cumulative increase in fee-schedule updates from 2000 to 2010 was 8 percent. The comparable cumulative increase in the MEI was 22 percent.
- The growth in spending per beneficiary was due more to growth in the volume and intensity of services provided than to fee increases. The volume of imaging, tests, and "other procedures" (procedures other than major procedures) grew more rapidly than the volume of major procedures and evaluation and management services.

TABLE A–2

Most aged Medicare beneficiaries and older privately insured individuals have good access to physician care, 2007–2010

	Medicare (age 65 or older)				Private insurance (age 50–64)			
Survey question	**2007**	**2008**	**2009**	**2010**	**2007**	**2008**	**2009**	**2010**
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	75%*	76%*	77%*	75%*	67%*	69%*	71%*	72%*
Sometimes	18*	17*	17*	17*	24*	24*	22*	21*
Usually	3	3*	2*	3*	4	5*	3*	4*
Always	3	2	2	2	3	2	3	3
For illness or injury								
Never	82*	84*	85*	83*	76*	79*	79*	80*
Sometimes	13*	12*	11*	13*	17*	16*	17*	15*
Usually	3	1	2	2	3	2	2	2
Always	2	1*	1	1*	3	2*	2	2*
Looking for a new primary care physician: "In the past 12 months, have you tried to get a new primary care doctor?"								
Yes	9	6	6	7	10	7	8	7
No	91	93	93	93	90	93	92	93
Looking for a new specialist: "In the past 12 months, have you tried to get a new specialist?"								
Yes	14	14*	14*	13*	15	19*	19*	15*
No	86	85*	86*	87*	84	81*	81*	84*
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	70*	71	78	79*	82*	72	71	69*
Small problem	12	10	10	8	7	13	8	12
Big problem	17	18	12*	12	10	13	21*	19
Specialist								
No problem	85	88	88	87*	79	83	84	82*
Small problem	6	7	7	6*	11	9	9	11*
Big problem	9	4	5	5	10	7	7	6
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")	10*	8*	7*	8*	12*	12*	11*	12*

Note: Numbers may not sum to 100 percent because missing responses ("Don't know" or "Refused") are not presented. Overall sample sizes for each group (Medicare and privately insured) were 2,000 in 2007, 3,000 in 2008, and 4,000 in 2009 and 2010. Sample sizes for individual questions varied.
*Statistically significant difference between the Medicare and privately insured samples in the given year at a 95 percent confidence level.

Source: MedPAC-sponsored telephone survey conducted in 2007, 2008, 2009, and 2010.

TABLE A–3

Acceptance of new patients is lower among primary care physicians, across most insurers

Accepting new patients, type of insurance	Primary care specialties	All other specialties
Any new patients	89.5%	97.8%
Medicare	83.0	95.2
Medicaid	55.1	68.7
Capitated private insurance	58.3	43.7
Non-capitated private insurance	76.4	81.3
Workers' compensation	53.4	61.2
Self-pay	85.7	95.1
No charge	39.7	52.2

Note: Results include office-based physicians with at least 10 percent of practice revenue coming from Medicare.

Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Ambulatory Medical Care Survey (2008).

TABLE A–4 **Potential Medicare offset options for repealing the SGR system**

- Along with the recommendations included in this letter, the Commission is offering a set of savings options for the purpose of assisting the Congress in offsetting the budgetary cost of repealing the SGR system. The projected savings amounts are unofficial, based on MedPAC staff estimates, and subject to change.

- The options are divided into two tiers. Tier I—about $50 billion—contains proposals that have been recommended by the Commission in previous reports or comment letters. Tier II—about $170 billion—contains options informed by outside (e.g., the Office of Inspector General, Department of Health and Human Services; Congressional Budget Office options) and MedPAC staff analysis. The Commission has not voted on or recommended the items on the Tier II list. The exclusion of policies from this list should not be construed as a statement of MedPAC's position on such policies.

- In the statute creating MedPAC, the Congress charges the Commission with reviewing Medicare policies, including their relationship to access and quality of care for Medicare beneficiaries. Therefore, all of the offset options on this list are Medicare policies; the Congress could choose to employ other savings or revenue offsets including those from outside of Medicare.

TABLE A–4

Potential Medicare offset options for repealing the SGR system

Tier I: MedPAC work		5-year savings ($ in billions)	10-year savings ($ in billions)	Reference
1	Copayment for home health episode	2	4	MedPAC March 2011
2	Hospital update of 1 percent for 2012 and DCI recovery	7	14	MedPAC March 2011
3	Dialysis update of 1 percent for 2012	0	1	MedPAC March 2011
4	Hospice update of 1 percent for 2012	1	2	MedPAC March 2011
5	Apply the competitive bidding offset to all competition-eligible DME categories starting in 2013	1	1	MedPAC June 2003
6	Apply the competitive bidding offset to the DME categories never subject to competitive bidding starting in 2013	2	7	MedPAC June 2003
7	Repeal MA quality bonus demonstration	6	6	MedPAC comment letter, 2011
8	Rebase HH in 2013 and no update in 2012	5	10	MedPAC March 2011
9	No IRF update in 2012	0	1	MedPAC March 2011
10	No LTCH update for 2012	0	1	MedPAC March 2011
11	Raise the compliance threshold for IRFs to 75 percent	1	3	MedPAC comment letter, 2003
12	ASC update of 0.5 percent for 2012 and report on cost and quality	0.1	0.1	MedPAC March 2011
13	Program integrity: prior authorization for imaging by outlier physicians	0	0.1	MedPAC June 2011
Subtotal, MedPAC work		***25***	***50***	

Tier II: Other Medicare		5-year savings ($ in billions)	10-year savings ($ in billions)	Reference
14	Part D LIS cost-sharing policy to encourage substitution	6	17	Staff
15	Apply an excise tax to medigap plans (5 percent)	5	12	CBO: Budget Options 2008
16	Program integrity: pre-payment review of power wheelchairs	0.1	0.2	PB 2012, HHS OIG
17	Require manufacturers to provide Medicaid-level rebates for dual eligibles	25	75	CBO: Budget Options 2011
18	Bundled payment for hospital and physician during the admission	0	1	CBO: Budget Options 2008
19	Pay E&M visits in hospital outpatient departments at physician fee schedule rates	5	10	Staff
20	Reduce payments by 10 percent for clinical lab services	4	10	Staff
21	Risk-adjustment validation audits in the MA program	2	3	PB 2012
22	Bring employer group plan bids closer to other MA plan bids	0	1	Staff
23	Hold the trust funds harmless for MA advance capitation payments	2	3	HHS OIG
24	Restore the Secretary's authority to apply a least costly alternative policy	0	1	Staff
25	Additional reductions through competitive bidding or fee schedule reductions to payments for home oxygen	3	5	HHS OIG
26	Rebase payments to SNFs	10	23	Staff
27	Apply readmissions policy to SNFs, HH, LTCHs, and IRFs	1	4	Staff
28	Targeted 3 percent reduction for hospice care provided in nursing homes for hospices with a significant volume of nursing home patients	0.5	1	HHS OIG
29	Program integrity: validate physician orders for high-cost services	0	2	PB 2012
Subtotal, Other Medicare		***64***	***168***	
Total, Tier I and Tier II		***89***	***219***	

Note: ASC (ambulatory surgical centers), CBO (Congressional Budget Office), DCI (documentation and coding improvements), DME (durable medical equipment), E&M (evaluation and management), HH (home health), HHS (Department of Health and Human Services), IRF (inpatient rehabilitation facilities), LTCH (long-term care hospitals), LIS (low-income subsidy), MA (Medicare Advantage),OIG (Office of Inspector General), PB (provider bulletin), SNF (skilled nursing facility).The Commission is offering a set of savings options for the purpose of assisting the Congress in offsetting the budgetary cost of repealing the SGR. The projected savings amounts are unofficial, based on MedPAC staff estimates, and subject to change.

Acronyms

Acronyms

AAGR	average annual growth rate
AAKP	American Association of Kidney Patients
AAN	American Academy of Neurology
ACCF	American College of Cardiology Foundation
ACH	acute care hospital
ACO	accountable care organization
ADE	adverse drug event
AHRQ	Agency for Healthcare Research and Quality
ALOS	average length of stay
AMA	American Medical Association
AMI	acute myocardial infarction
APC	ambulatory payment classification
ARRA	American Recovery and Reinvestment Act of 2009
ASC	ambulatory surgical center
ASPE	Assistant Secretary for Planning and Evaluation
AST	American Society of Transplantation
AV	arteriovenous
BBA	Balanced Budget Act of 1997
BLS	Bureau of Labor Statistics
BMI	body mass index
CAH	critical access hospital
CAHPS®	Consumer Assessment of Healthcare Providers and Systems
CAHPS®–MA	Consumer Assessment of Healthcare Providers and Systems for Medicare Advantage
CARE	Continuity Assessment Record and Evaluation [tool]
CBO	Congressional Budget Office
CBSA	core-based statistical area
CC	complication or comorbidity
CCP	coordinated care plan
CDC	Centers for Disease Control and Prevention
CEO	chief executive officer
CHC	continuous home care
CHIP	Children's Health Insurance Program
CMG	case-mix group
CMI	case-mix index
CMS	Centers for Medicare & Medicaid Services
COP	condition of participation
COPD	chronic obstructive pulmonary disease
CPI–U	consumer price index for all urban consumers
CPT	Current Procedural Terminology
CT	computed tomography
CY	calendar year
DCI	documentation and coding improvements
DME	durable medical equipment
DOPPS	Dialysis Outcomes and Practice Patterns Study
DRG	diagnosis related group
DSH	disproportionate share
E&M	evaluation and management
EBITDA	earnings before interest, taxes, depreciation, and amortization
ED	emergency department
EGHP	employer group health plan
EHR	electronic health record
eRx	electronic prescribing
ESA	erythropoiesis-stimulating agent
ESRD	end-stage renal disease
FDA	Food and Drug Administration
FFS	fee-for-service
FIM™	Functional Independence Measure™
FY	fiscal year
g/dL	grams per deciliter
GAO	Government Accountability Office
GDP	gross domestic product
GDR	generic dispensing rate
GI	gastrointestinal
H–CAHPS®	Hospital Consumer Assessment of Healthcare Providers and Systems
HCPCS	Healthcare Common Procedure Coding System
HEDIS®	Healthcare Effectiveness Data and Information Set
HFMA	Healthcare Financial Management Association
HHA	home health agency
HHS	Department of Health and Human Services
HI	Hospital Insurance (Medicare Part A)
HMO	health maintenance organization
HOS	Health Outcomes Survey
HPSA	health professional shortage area
HRET	Health Research and Educational Trust
HSC	Center for Studying Health System Change
HUD	Department of Housing and Urban Development
HWH	hospital within hospital
ICL	initial coverage limit

ICU	intensive care unit
IOL	intraocular lens
IOM	Institute of Medicine
IPPS	inpatient prospective payment system
IPS	interim payment system
IQI	inpatient quality indicator
IRF	inpatient rehabilitation facility
IRF–PAI	Inpatient Rehabilitation Facility–Patient Assessment Instrument
IV	intravenous
KFF	Kaiser Family Foundation
LIS	low-income [drug] subsidy
LTCH	long-term care hospital
MA	Medicare Advantage
MACIE	Medicare Ambulatory Care Indicators for the Elderly
MACPAC	Medicaid and CHIP Payment and Access Commission
MA–PD	Medicare Advantage–Prescription Drug [plan]
MCC	major complication or comorbidity
MDH	Medicare-dependent hospital
MedPAC	Medicare Payment Advisory Commission
MedPAR	Medicare Provider Analysis and Review [file]
MEI	Medicare Economic Index
MGMA	Medical Group Management Association
MIPPA	Medicare Improvements for Patients and Providers Act of 2008
MMSEA	Medicare, Medicaid, and SCHIP Extension Act of 2007
MRI	magnetic resonance imaging
MSA	metropolitan statistical area
MS–DRG	Medicare severity–diagnosis related group
MS–LTC–DRG	Medicare severity long-term care diagnosis related group
MTMP	medication therapy management program
N/A	not applicable
N/A	not available
NALTH	National Association of Long Term Hospitals
NCHS	National Center for Health Statistics
NCQA	National Committee for Quality Assurance
NCSL	National Conference of State Legislatures
NDC	national drug code
NFP	not for profit
NHPCO	National Hospice and Palliative Care Organization
NIDDK	National Institute of Diabetes and Digestive and Kidney Diseases
NIH	National Institutes of Health
NORC	(formerly) National Opinion Research Center
NQF	National Quality Forum
NSAS	National Survey of Ambulatory Surgery
NTA	nontherapy ancillary
OASIS	Outcome and Assessment Information Set
OBQM	Outcome-Based Quality Monitoring
OECD	Organisation for Economic Co-operation and Development
OIG	Office of Inspector General
OOP	out-of-pocket
OPD	hospital outpatient department
OPPS	outpatient prospective payment system
OR	operating room
PAC	post-acute care
PB	provider bulletin
PDE	prescription drug event
PDP	prescription drug plan
PE	practice expense
PET	positron emission tomography
PFFS	private fee-for-service
PFS	physician fee schedule
PHC4	Pennsylvania Health Care Cost Containment Council
PLI	professional liability insurance
PPACA	Patient Protection and Affordable Care Act of 2010
PPO	preferred provider organization
PPS	prospective payment system
PQRS	Physician Quality Reporting System
PSI	patient safety indicator
QIP	quality incentive program
RDS	retiree drug subsidy
RN	registered nurse
RUC	Relative Value Scale Update Committee
RUG	resource utilization group
RVU	relative value unit
SCH	sole community hospital
SGR	sustainable growth rate
SMI	Supplementary Medical Insurance (Medicare Part B)
SNF	skilled nursing facility
SNP	special needs plan

SSI	Supplemental Security Income
SSI	surgical site infection
SSO	short-stay outlier
TEFRA	Tax Equity and Fiscal Responsibility Act of 1982
TEP	technical expert panel
TMA	TMA, Abstinence Education, and QI Programs Extension Act of 2007
URR	urea reduction ratio
U.S.	United States
USRDS	United States Renal Data System
VBP	value-based purchasing [program]
VTE	venous thromboembolism

More about MedPAC

Commission members

Glenn M. Hackbarth, J.D., chairman
Bend, OR

Robert Berenson, M.D., F.A.C.P., vice chairman
Urban Institute
Washington, DC

Term expires April 2012

Mitra Behroozi, J.D.
1199SEIU Benefit and Pension Funds
New York, NY

Robert Berenson, M.D., F.A.C.P.

Karen R. Borman, M.D., F.A.C.S.
Abington Memorial Hospital
Abington, PA

Ronald D. Castellanos, M.D.
Southwest Florida Urologic Associates
Ft. Myers, FL

Glenn M. Hackbarth, J.D.

Bruce Stuart, Ph.D.
The Peter Lamy Center on Drug Therapy and Aging at the University of Maryland Baltimore
Baltimore, MD

Term expires April 2013

Scott Armstrong, M.B.A., F.A.C.H.E.
Group Health Cooperative
Seattle, WA

Katherine Baicker, Ph.D.
Harvard School of Public Health
Boston, MA

Thomas M. Dean, M.D.
Horizon Health Care, Inc.
Wessington Springs, SD

Herb Kuhn
Missouri Hospital Association
Jefferson City, MO

Mary Naylor, Ph.D., R.N., F.A.A.N.
University of Pennsylvania, School of Nursing
Philadelphia, PA

Cori Uccello, F.S.A., M.A.A.A., M.P.P.
American Academy of Actuaries
Washington, DC

Term expires April 2014

Peter W. Butler, M.H.S.A.
Rush University
Chicago, IL

Michael Chernew, Ph.D.
Harvard Medical School
Boston, MA

Bill Gradison, M.B.A.
Fuqua School of Business, Duke University
McLean, VA

William J. Hall, M.D., M.A.C.P.
University of Rochester School of Medicine
Rochester, NY

George N. Miller, Jr., M.H.S.A.
Okmulgee Memorial Hospital
Okmulgee, OK

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 SCHIP 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 chair 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 professor of health economics in the Department of Health Policy and Management at the Harvard School of Public Health, where her research focuses on health insurance finance and the effect of reforms on the distribution and quality of care. Dr. Baicker has served on the faculty of the Department of Public Policy in the School of Public Affairs at the University of California, Los Angeles; the Economics Department at Dartmouth College; and the Center for the Evaluative Clinical Sciences and the Department of Community and Family Medicine at Dartmouth Medical School. 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, is on the Congressional Budget Office's Panel of Health Advisers, and is an elected member of the Institute of Medicine. She also served as a commissioner of the Robert Wood Johnson Foundation's Commission to Build a Healthier America and was a member of the Institute of Medicine's Committee on Health Insurance Status and its Consequences. She received her B.A. in economics from Yale University and her Ph.D. in economics from Harvard University.

Mitra Behroozi, J.D., is executive director of the 1199SEIU Benefit and Pension Funds. Ms. Behroozi oversees eight major health and pension funds for health care workers. Collectively, these self-administered and self-insured health funds are among the largest in the nation. Under her leadership, the funds have implemented a series of plan design and innovative cost containment programs, which are protecting benefits for members and retirees. Previously, Ms. Behroozi was a partner with Levy, Ratner & Behroozi, PC, representing New York City unions in collective bargaining negotiations and proceedings. While at the law firm, she also served as union counsel to Taft-Hartley benefit and pension funds. She serves on the National Advisory Council of the Agency for Healthcare Research and Quality, the board of the Brooklyn Health Information Exchange, and the steering committee of the Campaign for Better Care. Ms. Behroozi has a law degree from New York University and an undergraduate degree in sociology from Brown University.

Robert A. Berenson, M.D., F.A.C.P., is an Institute Fellow at the Urban Institute. From 1998 to 2000, he served as director of the Center for Health Plans and Providers in the Centers for Medicare & Medicaid Services overseeing provider payment policy and managed care contracting. Dr. Berenson was founder and medical director of the National Capital Preferred Provider Organization from 1986 to 1996. He served as an assistant director of the White House Domestic Policy staff in the Carter Administration. Dr. Berenson has authored many articles in nationally recognized journals and several books, and he most recently coauthored *Medicare Payment Policy and the Shaping of U.S. Health Care*. Dr. Berenson is a board-certified internist who practiced for 20 years. He received his B.A. from Brandeis University and his M.D. from the Mount Sinai School of Medicine.

Karen R. Borman, M.D., F.A.C.S., is senior associate program director of the General Surgery Residency Program and an attending physician at Abington Memorial Hospital, Abington, PA. She holds clinical faculty appointments at Temple University and Drexel University Schools of Medicine. She is board certified in surgery and in surgical critical care. Her clinical focus is on endocrine surgery, and her research focus is on surgical education. She is a member of the General Surgery CPT/RUC Committee of the American College of Surgeons. She is a

senior member of the American Board of Surgery. She is a past-president of the Association of Program Directors in Surgery. She has worked with the Centers for Medicare & Medicaid Services on issues related to physician payment and service coverage. Dr. Borman was a member of the executive committee and vice-chair of the American Medical Association's Current Procedural Terminology Editorial Panel. She also served on the American Medical Association Diagnostic and Therapeutic Technology Assessment Panel. Dr. Borman earned her medical degree from Tulane University. Her undergraduate degree in chemistry is from the Georgia Institute of Technology.

Peter W. Butler, M.H.S.A., is a nationally recognized health care executive with more than 30 years of experience in academic medical centers and health care systems. In addition to being president and chief operating officer of Rush University Medical Center in Chicago, IL, Mr. Butler is an associate professor and chairman of the Department of Health Systems Management at Rush University. Before joining Rush, he served as president and chief executive officer at the Methodist Hospital System in Houston and senior vice president and chief administrative officer at the Henry Ford Health System in Detroit. He currently serves as chairman of the board of University HealthSystem Consortium. He also serves as chairman of the board of the National Center for Healthcare Leadership. Mr. Butler holds an undergraduate degree in psychology from Amherst College and a master's degree in health services administration from the University of Michigan.

Ronald D. Castellanos, M.D., has practiced urology for more than 30 years. For the past four years Dr. Castellanos has been a member, and for the past year the chair, of the Practicing Physicians Advisory Council on issues related to physician payment. Dr. Castellanos was president of the Florida Urologic Society and has worked with several other organizations on health policy, including the American Urologic Association and the American Lithotripsy Society. Dr. Castellanos earned his medical degree from Hahnemann Medical College. His undergraduate degree is from Pennsylvania State University.

Michael Chernew, Ph.D., is a professor in the Department of Health Care Policy at Harvard Medical School. Dr. Chernew's research activities focus on several areas, most notably the causes and consequences of growth in health care expenditures, geographic variation in medical spending and use, and value-based insurance design. He is a member of the Congressional Budget Office's Panel of Health Advisors and Commonwealth Foundation's Commission on a High Performance Health System. In 2000, 2004, and 2011, he served on technical advisory panels for the Centers for Medicare & Medicaid Services that reviewed the assumptions used by the Medicare actuaries to assess the financial status of the Medicare trust funds. Dr. Chernew is a Faculty Research Fellow of the National Bureau of Economic Research. He coedits the *American Journal of Managed Care* and is a senior associate editor of *Health Services Research*. In 2010, Dr. Chernew was elected to the Institute of Medicine (IOM) of the National Academy of Sciences and serves on the IOM Committee on Determination of Essential Health Benefits. Dr. Chernew earned his undergraduate degree from the University of Pennsylvania and a doctorate in economics from Stanford University.

Thomas M. Dean, M.D., is a board-certified family physician who has practiced in Wessington Springs, SD, since 1978. He is chief of staff at Avera Weskota Memorial Medical Center. Dr. Dean is on the Board of Directors of Avera Health Plan and is president of the South Dakota Academy of Family Physicians. He was president of the National Rural Health Association, and he published articles and presented on health care in rural areas. Dr. Dean received the Dr. Robert Hayes Memorial Award for outstanding rural health provider, received the Pioneer Award from the South Dakota Perinatal Association, and was awarded a Bush Foundation Medical Fellowship to study leadership and health policy. He was also named the 2009 National Rural Health Association's Practitioner of the Year. Dr. Dean earned his medical degree from the University of Rochester School of Medicine and Dentistry. His undergraduate degree is from Carleton College.

Bill Gradison, Jr., M.B.A., D.C.S., is 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.

Glenn M. Hackbarth, J.D., M.A., chairman of the Commission, lives in Bend, OR. He was chief executive officer and one of the founders of Harvard Vanguard Medical Associates, a multispecialty group practice in Boston that serves as a major teaching affiliate of Harvard Medical School. Mr. Hackbarth previously served as senior vice president of Harvard Community Health Plan and president of its Health Centers Division as well as Washington counsel of Intermountain Health Care. He has held various positions at the U.S. Department of Health and Human Services, including deputy administrator of the Health Care Financing Administration (now known as CMS). He currently serves as chairman of the board of the Foundation of the American Board of Internal Medicine. He is also a board member at the Commonwealth Fund and a member of the Commonwealth Fund's Commission on a High Performance Health System. Mr. Hackbarth received his B.A. from Pennsylvania State University and his J.D. and M.A. from Duke University.

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 currently serves 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 a 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.

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 as deputy administrator from 2006 to 2009 and as 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.

George N. Miller, Jr., M.H.S.A., has, over the past two decades, managed a series of hospitals, leading financial turnarounds at four of them. Mr. Miller is the chief executive officer of Okmulgee Memorial Hospital in Okmulgee, OK. Previously, he was the president and chief executive officer of First Diversity Healthcare Group, a national health care consulting firm helping health care organizations improve their operations, and the regional president and chief executive officer of Community Mercy Health Partners and senior vice president of Catholic Health Partners, a hospital chain in the Springfield, OH, area. He has run hospitals in Illinois, Texas, and Virginia and is the immediate past-president of the National Rural Health Association. Mr. Miller has been an adjunct professor for the Master's of Health Care Services Administration for Central Michigan University since 1998. He has an undergraduate degree in business administration from Bowling Green State University and a master of science in health services administration from Central Michigan 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. Since 1989, 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. Dr. Naylor is also the national program director for the Robert Wood Johnson Foundation program, Interdisciplinary Nursing Quality Research Initiative, aimed at generating, disseminating, and translating research to understand how nurses contribute to quality patient care. She was elected to the National Academy of Sciences Institute of Medicine in 2005. She also is a member of the RAND Health Board and the National Quality Forum Board of Directors and chairs the Board of the Long Term Quality Alliance. Dr. Naylor received her M.S.N. and Ph.D. from the University of Pennsylvania and her B.S. in nursing from Villanova University.

Bruce Stuart, Ph.D., is a professor and executive director of the Peter Lamy Center on Drug Therapy and Aging at the University of Maryland in Baltimore. An experienced research investigator, Mr. Stuart has directed grants and contracts with various federal agencies, private

foundations, state governments, and corporations. Mr. Stuart joined the faculty of the University of Maryland's School of Pharmacy in 1997 as the Parke-Davis endowed chair in geriatric pharmacy. Previously, he taught health economics, finance, and research methods at the University of Massachusetts and the Pennsylvania State University. Earlier, Mr. Stuart was director of the Health Research Division in the Michigan Medicaid program. Mr. Stuart was designated a Maryland eminent scholar for his work in geriatric drug use. His current research focuses on the policy implications of the Medicare prescription drug benefit. Mr. Stuart received his economics training at Whitman College and Washington State University.

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. Before joining the Academy in 2001, Ms. Uccello 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 has written extensively on the health insurance market and the Medicare program, including pieces on Medicare's financial condition and the Medicare prescription drug program. She serves as a member of the Technical Review Panel on the Medicare Trustees' Report. Ms. Uccello is a fellow of the Society of Actuaries and a member of the American Academy of Actuaries. She received her B.S. from Boston College and her M.P.P. from Georgetown University.

Commission staff

Mark E. Miller, Ph.D.
Executive director

James E. Mathews, Ph.D.
Deputy director

Analytic staff

Christine Aguiar, M.P.H.
Adaeze Akamigbo, Ph.D.
Catherine Bloniarz, M.S.
Cristina Boccuti, M.P.P.
Carol Carter, Ph.D.
Evan Christman, M.P.Aff.
Zachary Gaumer, M.P.S.
David V. Glass, M.S.
Scott Harrison, Ph.D.
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Dana Kelley, M.P.A.
Julie Lee, Ph.D.
Craig K. Lisk, M.S.
Anne Mutti, M.P.A.
Kim Neuman, M.A.
Nancy Ray, M.S.
John Richardson, M.P.P.
Joan Sokolovsky, Ph.D.
Jeffrey Stensland, Ph.D.
Shinobu Suzuki, M.A.
Ariel Winter, M.P.P.
Daniel Zabinski, Ph.D.

Research assistants

Matlin Gilman
Kelly Miller

Assistant director

Arielle Mir, M.P.A.

Communications and policy assistant

Kahlie Dufresne

Administrative staff

Reda H. Broadnax, B.S.,
Executive officer
Wylene Carlyle
Paula Crowell
Timothy Gulley
Tina Jennings, MTESL
Rachel Macias
Cynthia Wilson

Staff consultants

Julian Pettengill
Carlos Zarabozo, A.B.

MEDPAC Medicare Payment Advisory Commission

601 New Jersey Avenue, NW • Suite 9000 • Washington, DC 20001
(202) 220-3700 • Fax: (202) 220-3759 • www.medpac.gov