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.
February 29, 2008

The Honorable Richard B. Cheney
President of the Senate
U.S. Capitol
Washington, DC 20510

Dear Mr. Vice President:

I am pleased to submit a copy of the Medicare Payment Advisory Commission’s March 2008 Report to the Congress: Medicare Payment Policy. This report fulfills the Commission’s legislative mandate to evaluate Medicare payment issues and make specific recommendations to the Congress.

The report contains five chapters:

• The first chapter provides context for the chapters that follow by documenting the rise in Medicare and total health care spending as a share of the economy.

• The report then assesses payment adequacy and provides the Commission’s update and other recommendations on eight payment systems in traditional Medicare.

• The report has two chapters on private plans—both Medicare Advantage plans and plans that provide prescription drug coverage only. Both chapters provide updated statistics on enrollment and offerings and offer recommendations for these programs.

• The last chapter of the report provides recommendations for improving participation in programs for low-income Medicare beneficiaries.

Sincerely,

Glenn M. Hackbarth, J.D.
Chairman

Enclosure
February 29, 2008

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

Dear Madam Speaker:

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Sincerely,

Glenn M. Hackbarth, J.D.  
Chairman

Enclosure
Acknowledgments

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

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Executive summary
Executive summary

As required by the Congress, the Medicare Payment Advisory Commission reviews Medicare payment policies and makes recommendations each March. In this report, we consider Medicare fee-for-service (FFS) payment policy in 2009 for: acute care hospitals, physicians, outpatient dialysis, skilled nursing facilities, home health, inpatient rehabilitation facilities, and long-term care hospitals. We also make recommendations to reform payments for the Medicare Advantage (MA) plans beneficiaries can join in lieu of traditional FFS Medicare and recommendations specific to special needs plans (SNPs).

With each passing year, the Commission’s concern about Medicare’s long-term sustainability grows. To slow the growth in Medicare expenditures, we have concluded that the Congress and CMS will need to make changes across a broad front. This report focuses on policy recommendations that would limit provider updates to create incentives for greater efficiency, reward quality, and modify payment rates to private plans and providers to ensure that we neither overpay nor underpay for key services. Other changes, which we will take up in our June 2008 report, will include ideas for altering Medicare’s payment systems to reward better coordination of care, efficiency over time, and investing in information about comparative effectiveness. Changes in Medicare are complex to develop and implement, and the effects are uncertain and unfold gradually. Time, therefore, is of the essence.

This report also includes recent findings on enrollment and availability for MA plans and the private plans offering the Medicare prescription drug benefit. We provide information on the benefits and premiums of the plans offering the Medicare prescription drug benefit, both the stand-alone prescription drug plans and the prescription drug plans affiliated with MA plans. We also provide recommendations to increase participation in the Medicare Savings Programs and the low-income drug subsidy. These programs directly target low-income beneficiaries and thus help them more efficiently than broadly subsidizing MA plans.

At the beginning of each chapter, we list the recommendations it contains. Within the chapters, 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, do not take into account the complete package of policy recommendations, the interactions among them, or assumptions about changes in provider behavior. In Appendix A, we list all recommendations and the Commissioners’ votes.

Context for Medicare payment policy

Medicare and other purchasers of health care in our nation face enormous challenges. As discussed in Chapter 1, health care costs are growing faster than the economy and incomes, and quality frequently falls short of patients’ needs. Unexplained variations in the use and quality of care in the current system suggest that opportunities exist for reducing waste and improving quality. The Commission has recommended a number of policies to increase the value of care Medicare purchases, including paying more for higher quality, measuring physician resource use, and analyzing comparative effectiveness. However, the underlying incentives in current payment systems and the structure of the delivery system will make significant gains in value difficult to realize.

The Medicare trustees and others warn of a serious mismatch between the benefits and payments the program currently provides and the financial resources available for the future. Projected levels of spending could also impose a significant financial liability on Medicare beneficiaries, who must pay premiums and cost sharing. Improving the program’s long-term financial prognosis will require some combination of expenditure reductions (e.g., benefit adjustments or payment efficiencies) and new financing.

The program’s shaky financial outlook is a strong impetus for change. As is true for other purchasers of health care services in the United States, Medicare’s spending is growing much faster than the U.S. economy. In addition, CMS began Medicare’s new outpatient prescription drug program, Part D, in 2006. This program adds an important benefit to Medicare but greatly expands the program’s need for resources. Finally, the leading edge of the baby boomers will become Medicare beneficiaries after 2010, which will also accelerate Medicare spending. These factors will lead Medicare to require an unprecedented share of our gross domestic product.

Other federal programs such as Social Security and Medicaid will also require greater resources at the same time that Medicare spending expands. Some
analysts contend that growth in our nation’s economy has historically been large enough to finance expansion of both health and nonhealth spending. Other analysts disagree, saying long-term economic growth alone will not be sufficient to bring the country’s fiscal position into balance. According to this point of view, expounded by the Congressional Budget Office among others, fiscal stability will require a sizable slowdown in the growth rate of spending on health care and may also require a substantial increase in taxes as a share of our nation’s economy.

Addressing a challenge of this magnitude will require an extended effort, and analysts have urged policymakers to take immediate action to address Medicare’s finances. They argue that major changes to these programs should be phased in to allow beneficiaries, providers, and taxpayers time to adapt to them. However, Medicare’s financial challenge is already growing more acute. For example, expenditures for the Hospital Insurance (HI) trust fund, which funds inpatient stays and other post-acute care, began to exceed its annual income from taxes in 2004. Since then, HI has remained solvent due to existing trust fund balances and interest income—but the fund is projected to be exhausted in 2019. As cost growth continues to outstrip revenue and the retirement of the baby boom generation draws closer, the time for phasing in major changes is growing shorter.

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

Chapter 2 presents the Commission’s annual payment update recommendations 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 is changed. To determine an update, we first assess the adequacy of Medicare payments for efficient providers in the current year (2008). Next, we assess how those providers’ costs are likely to change in the year the update will take effect (the policy year—2009). Finally, we make a judgment as to what, if any, update is needed. When considering whether payments in the current year (2008) are adequate, we account for policy changes (other than the update) that are scheduled to take effect through the policy year (2009) under current law.

Competitive markets demand continual improvements in productivity from workers and firms. These workers and firms pay the taxes that finance Medicare. As a prudent purchaser, Medicare’s payment systems should encourage providers to produce a unit of service as efficiently as possible while maintaining quality. Consequently, the Commission may choose to apply an adjustment to the update to encourage this efficiency. The Commission begins its deliberations with the assumption that all providers can achieve efficiency gains similar to the economy at large (the 10-year average of productivity gains in the general economy, currently 1.5 percent). But the Commission may alter that assumption depending on the circumstances of a given set of providers in a given year. This factor links Medicare’s expectations for efficiency to the gains achieved by the firms and workers who pay taxes that fund Medicare.

Hospital inpatient and outpatient services

Most indicators of payment adequacy for hospital services are positive. The number of Medicare-participating hospitals has increased in each of the past four years. Inpatient and outpatient service volume per beneficiary continues to increase. The quality of care hospitals provide to Medicare beneficiaries is mixed; mortality rates have dropped and CMS’s indicators of clinical effectiveness have improved, but more adverse event rates (e.g., decubitus ulcer, postoperative pulmonary embolism, or deep vein thrombosis) have increased than decreased. Spending on hospital construction has risen substantially in recent years—with increases averaging almost 20 percent in the past two years. For the second year in a row, the median values of many financial indicators (e.g., days cash on hand and measures of debt service coverage) were among the best ever recorded. This ready access to capital indicates that revenue is sufficient to give the capital markets confidence in the creditworthiness of the industry.

One indicator of payment adequacy is negative: We project an overall Medicare margin for hospitals covered by prospective payments of –4.4 percent in 2008. If all hospitals were efficiently providing Medicare services, this low aggregate margin would be a major source of concern. However, hospital costs and Medicare profitability vary widely. Some hospitals are efficient enough to have low costs, positive Medicare margins, and high quality scores. Other hospitals have higher costs and lower Medicare margins. The Commission finds that, because of high private-payer payment rates, those hospitals often face little financial pressure to control their costs. Medicare should encourage hospitals to be efficient and control their costs, rather than accommodate high cost growth resulting from lack of financial pressure.
Balancing these indicators, the Commission recommends an update of market basket (the projected change in hospital input prices) for inpatient and outpatient services, implemented concurrently with a quality incentive payment program. The initial payment withhold for pay for performance should range between 1 percent and 2 percent. The Commission’s reasoning is that, given the mixed picture of indicators, an individual hospital’s quality performance should determine whether its net increase in payments in 2008 is above or below the market basket increase.

The current indirect medical education (IME) adjustment (5.5 percent) substantially exceeds the estimated relationship between teaching intensity and costs per case (2.2 percent). Teaching hospitals are not accountable for how they use these IME payments. The payments contribute to a wide gap in Medicare margins between teaching and nonteaching hospitals. IME payments are also highly concentrated; fewer than 300 hospitals received three-quarters of the $5.8 billion payments in 2006. The Commission again recommends that the Congress reduce the IME adjustment by 1 percentage point to 4.5 percent per 10 percent increment in the resident-to-bed ratio. The savings should be used to fund in part a quality incentive payment policy for all hospitals. Our update recommendation, this IME recommendation, and pay for performance should be viewed as a package that would improve the accuracy of Medicare’s payments for acute inpatient services while creating a strong incentive for improving the quality of care.

**Physician services**

Our analysis finds that most indicators of payment adequacy for physicians are stable. Beneficiary access to physicians is generally good, with no statistically significant changes from last year, but small numbers of beneficiaries continue to report difficulty making timely appointments with their current physician or finding a new primary care physician (finding a new specialist is less of a problem). We find that the number of physicians providing services to Medicare beneficiaries has more than kept pace with growth in the beneficiary population in recent years, and per beneficiary service volume grew at a rate of 3.6 percent in 2006. Our claims analysis shows small improvements in the quality of ambulatory care. The ratio of Medicare payment rates to private payment rates in 2006 was 81 percent, slightly lower than the rate in 2005 (83 percent). If Medicare rates were rapidly decreasing in relation to private sector rates, access for Medicare beneficiaries could become a concern. But, in fact, the ratio has been around 80 percent for many years and is higher than in the early to mid-1990s, when Medicare payment rates averaged about two-thirds of commercial payment rates for physician services.

However, the current physician payment system has several flaws that need to be addressed. Although the Congress has acted each year since 2003 to avert a scheduled negative update to the physician fee schedule conversion factor, the sustainable growth rate formula continues to call for substantial consecutive negative updates through 2016. The Commission remains concerned that repeated annual reductions in physician payment rates would threaten beneficiaries’ access to physician services. Medicare’s current FFS payment system does not systematically reward physicians who provide higher quality care or care coordination, and it offers higher revenues to physicians who furnish the most services—whether or not the services add value. The Commission is also concerned that the current distribution of Medicare physician payments undervalues primary care services and introduces other distorted incentives that encourage overuse of some services and underuse of others. These deficiencies should be corrected for the Medicare program to promote high-quality health care and avert unsustainable growth in spending.

In consideration of expected input costs for physician services and our payment adequacy analysis, the Commission recommends that the Congress update payments in 2008 for physician services by the projected change in input prices less the Commission’s adjustment for productivity growth. In addition, the Congress should enact legislation requiring CMS to establish a process for measuring and reporting physician resource use on a confidential basis for a period of two years.

The second part of our recommendation, reporting physician resource use, is intended to improve the value of physician services purchased by Medicare. Information on resource use would be immediately useful to physicians who want to understand their own practice patterns. Our eventual goal is for Medicare to base physician payment rates at least in part on physician resource use, but realistically it will take time for CMS to develop the infrastructure and work constructively with stakeholders to implement accurate and actionable resource use measurement and reporting systems. CMS should begin development now to provide confidential reporting and to
be prepared to use the information for public reporting and for payment policy, if and when authorized to do so by the Congress.

**Adequacy of payments for dialysis services**

Most indicators of payment adequacy for outpatient dialysis services are positive. The growth in dialysis facilities, treatment stations, and dialysis treatments has kept pace with the growth in the number of dialysis patients, suggesting continued access to care for most dialysis beneficiaries. Providers have sufficient access to capital, as evidenced by recent expansions. Quality of care is improving for some measures; use of the recommended type of vascular access has improved and more patients receive adequate dialysis and have their anemia under control. However, patients’ nutritional status has not improved. We project that Medicare payments will cover the costs of providing outpatient dialysis services to beneficiaries in 2008 with a margin of 2.6 percent.

Therefore, the Commission recommends that the Congress should update the composite rate in calendar year 2009 by the projected rate of increase in the end-stage renal disease market basket index less the Commission’s adjustment for productivity growth.

In addition, the Commission reiterates its recommendation that the Congress implement a quality incentive program for physicians and facilities that treat dialysis patients. The Commission reiterates its recommendation to link Medicare payment for providers treating dialysis patients to the quality of care they furnish because the outpatient dialysis sector is a ready environment for linking payment to quality. Credible measures are available that are broadly understood and accepted. Obtaining information to measure quality will not pose an excessive burden and measures can be adjusted for case mix so providers are not discouraged from taking more complex patients.

**Skilled nursing facility services**

Our indicators of the adequacy of Medicare payments to cover the costs of skilled nursing facility (SNF) services to beneficiaries are generally positive. Beneficiaries continue to have good access to services. The supply of SNFs remained essentially constant, and covered days and admissions per beneficiary have both increased. While access was good for most beneficiaries, those needing expensive nontherapy ancillary services may experience delays in being placed in SNFs. Quality is mixed. Rates of discharge to the community increased over the last two years (a positive trend indicating improved quality) but have returned only to the level reached in 2000, and rates of potentially avoidable rehospitalizations continued to increase (indicating worse quality). Access to capital was good. However, in the late summer, trends in the broader lending market—unrelated to the adequacy of Medicare payments—made borrowing more expensive and more restrictive.

For the sixth consecutive year, aggregate Medicare margins for freestanding SNFs were above 10 percent. We project Medicare margins to be 11.4 percent in 2008. Because all access indicators are positive and SNF payments appear to be more than adequate to accommodate cost growth, the Commission recommends that the Congress eliminate the SNF update for 2009.

The Commission recommends that CMS adopt a quality incentive payment policy for SNFs. Two measures—rates of community discharge and potentially avoidable rehospitalization—capture key goals for SNF patients, are well accepted, have robust risk adjustment, and avoid the problems associated with the current publicly reported measures. We would expect CMS to add to the two measures over time to reflect other aspects of SNF care. Before adding measures based on changes in patient condition, however, patient assessment information should be gathered at admission and discharge, so that the measures will be unbiased.

We also recommend that CMS improve the public reporting of the post-acute care quality indicators. CMS should:

- add the rates of community discharge and potentially avoidable rehospitalization to their publicly reported indicators;
- revise the pain, delirium, and pressure sore measures that are currently reported so they are more accurate and evaluate only the care furnished during the SNF stay (and not during the preceding hospitalization); and
- gather patient assessment information at admission and discharge so that the quality measures based on patient assessment information reflect the care furnished to all SNF patients and not just the smaller subset who stay long enough to have a second assessment completed for them.
Home health services

Our indicators for home health are positive. Beneficiaries continue to have widespread access to care. Ninety-nine percent of beneficiaries live in an area served by at least one home health agency, and the number of agencies continues to grow faster than the number of Medicare enrollees. The share of FFS beneficiaries using the home health benefit continues to increase, as does the average number of episodes per home health user. Quality trends are mostly unchanged from previous years. The number of beneficiaries who show improvement in walking, bathing, pain management, transferring, and medication management has increased slightly. However, the rate of unplanned emergency department use by home health patients has not improved, and the number of patients hospitalized has increased slightly. The continuing entry of new agencies and the acquisitions of existing agencies by national home health companies suggest that agencies have adequate access to capital. We project that agency margins will equal 11.4 percent in 2008.

The data on access, quality, volume, and financial performance suggest that most agencies should be able to accommodate cost increases without an increase in base payments. Therefore, the Commission recommends that the Congress should eliminate the update for home health agencies in 2009.

Inpatient rehabilitation facility services

Our assessment of payment adequacy for inpatient rehabilitation facilities (IRFs), which provide intensive rehabilitation services in an inpatient setting, reflects two related changes in Medicare policy that significantly affect the volume of and access to IRF services. The first change was CMS’s renewed enforcement of the 75 percent rule, which requires IRFs to have 75 percent of admissions with one or more of a specified list of conditions; CMS began a phase-in of the renewed enforcement of the rule in 2005. The second change was that the Congress rolled back the 75 percent rule, setting the compliance threshold permanently at 60 percent, in one of several provisions of the Medicare, Medicaid, and SCHIP Extension Act of 2007 related to IRF services.

The supply of IRFs increased after the prospective payment system (PPS) was implemented and has remained generally stable through 2006. The number of cases and Medicare spending both increased rapidly after the introduction of the PPS in 2002; Medicare spending for IRF services increased at almost 14 percent per year from 2002 to 2004. Discharges and spending then decreased with renewed enforcement of the 75 percent rule. For the same reason, the average case mix and payments per case increased from 2004 to 2006 as the patients who were admitted to IRFs had more complex conditions. While we have no direct measures of beneficiaries’ access to care, an assessment of hospital discharge patterns to post-acute care suggests that beneficiaries who no longer qualify for admission to IRFs as a result of the 75 percent rule are able to obtain rehabilitation care in other settings. Between 2004 and 2007, quality indicators for Medicare IRF patients improved. Most IRFs are hospital-based units that access capital through their parent institutions, which have good access to capital. However, freestanding IRFs’ access to capital is less clear. Despite the decrease in cases and increase in costs, IRF Medicare margins for 2006 were 12.4 percent. We are projecting IRF Medicare margins for 2008 to be 8.4 percent.

Our recommendation for the IRF payment update balances beneficiary access to care with fiscal constraint. IRFs had begun to adapt to existence under the 75 percent rule, with growth in cost per Medicare case now slightly lower than the growth in Medicare payments for the majority of IRFs. The projected margin should be sufficient to accommodate cost increases in 2009. Therefore, the Commission recommends that the update to the payment rates for inpatient rehabilitation facility services should be eliminated for fiscal year 2009.

Long-term care hospital services

Assessing current payment adequacy for long-term care hospital (LTCH) services is challenging. On the one hand, the growth in LTCH facilities has slowed substantially and the number of LTCH cases has decreased. On the other hand, spending per FFS beneficiary and payments per case have continued to increase and use per FFS beneficiary has been steady. The result was no growth in Medicare spending for LTCH services from 2005 to 2006. The evidence on quality is also mixed. Risk-adjusted mortality rates and readmission to acute care hospitals have fallen. Patients also experienced fewer postoperative pulmonary embolisms and deep vein thromboses. However, patients experienced more decubitus ulcers, infections due to medical care, and postoperative sepsis. LTCHs’ access to capital is difficult to judge, with analysts divided in their assessments and expectations for the industry.

In addition, it is difficult to determine when use of LTCH services is appropriate and necessary. Frequently, LTCHs
entering the program locate in market areas where LTCHs already exist, raising questions about whether there are sufficient numbers of very sick patients to support the number of LTCHs in the community. Seen in this light, recent slowing in growth of facilities, cases, and Medicare spending may indicate that the industry is approaching equilibrium after a period of explosive growth spurred by overpayment and inappropriate admissions.

The Medicare margin for LTCHs based on 2006 cost reports was 9.4 percent. CMS has since made a number of policy changes that reduce payments for LTCHs. These payment policy changes include recalibrating relative weights in 2007, making adjustments for coding improvements, finding new ways to reimburse LTCHs for patients with the shortest lengths of stay, and reducing aggregate payments for high-cost outliers. Due to these changes, we estimate LTCHs’ aggregate Medicare margin will be between –1.4 percent and –0.4 percent in 2008. This range is based on different assumptions about LTCHs’ behavior in response to the 25 percent rule—which limits the percentage of patients an LTCH can receive from a host hospital.

Although the interpretation of payment adequacy indicators is complicated, our estimated Medicare margin for 2008 suggests that LTCHs may not be able to accommodate growth in the cost of caring for Medicare beneficiaries in 2009 without an increase in the base rate. Therefore, the Commission recommends that the Secretary update payment rates for LTCH services by the market basket index, less the Commission’s adjustment for productivity growth.

**Update on Medicare private plans**

The Commission supports private plans in the Medicare program. Medicare beneficiaries should have a choice between the FFS Medicare program and the alternative delivery systems that private plans can provide. Private plans may use care management techniques that are not present in traditional FFS, and—if paid appropriately—they have incentives to innovate and be efficient. The Commission supports financial neutrality between payment rates for the FFS program and the MA program. Financial neutrality means that Medicare should pay the same amount, adjusting for risk, regardless of which option a beneficiary chooses. Neutrality is important to spur efficiency and innovation.

However, as we discuss in Chapter 3, MA payments are projected to be 113 percent of expected FFS expenditures for similar beneficiaries in 2008. These added expenditures contribute to the worsening long-range financial sustainability of the Medicare program. In addition, plan bids for the traditional Medicare benefit package are projected at 101 percent of FFS, which means that MA plans, on average, are less efficient than the traditional Medicare program.

Even though we use the FFS Medicare spending level as a measure of parity for the MA program, the Commission does not think that FFS Medicare is an efficient delivery system in most markets. In fact, much of our work is devoted to identifying inefficiencies in FFS Medicare and suggesting improvements in the program. Well-managed systems that coordinate care and select efficient providers should be at least as efficient as traditional Medicare and in most cases should be more efficient.

Payment policy is a powerful signal of what we value. The original conception (in the 1980s) for private plans in Medicare was that they would be a mechanism for introducing innovation into the program while saving money for Medicare (they were paid 95 percent of FFS). To compete effectively with Medicare, private plans would be compelled to do things that traditional Medicare found difficult or that would be difficult to impose on all beneficiaries and providers—for example, selective contracting with efficient providers and effective management and coordination of care. By increasing payment to levels significantly above traditional Medicare, we have changed the signal we are sending to the market: Instead of efficiency-enhancing innovation, we are getting plans (e.g., private FFS) that are much like traditional Medicare, except at a higher cost.

In fact, enrollment data show rapid growth in private plans. At the end of 2007, about 20 percent of Medicare beneficiaries were enrolled in MA plans, and all beneficiaries have access to an MA plan in 2008, with an average of 35 plans available in each county. However, the growth comes mostly from two types of plans of concern to us—private FFS plans, which have no requirement to coordinate care or report quality measures, and SNPs, which have not yet been fully evaluated.

In addition, although plans are being paid more, clinical quality measures show disappointing results. Commercial and Medicaid plans improved more in clinical measures over the past year than Medicare plans. New plans in Medicare—those entering the program in 2004 or later—show poorer performance than older plans on clinical indicators of quality. Moreover, some plan types
many other aspects of health, have a high risk of hospitalization or other significant adverse health outcomes, and require specialized delivery systems. CMS has not explicitly defined which chronic conditions are appropriate for SNPs to target. Not all chronic condition SNPs are sufficiently specialized to warrant targeted delivery systems and disease management strategies and the unique ability to limit enrollment to certain beneficiaries.

The Congress should require dual-eligible SNPs within three years to contract, either directly or indirectly, with states in their service areas to coordinate Medicaid benefits. Dual-eligible SNPs are not required to coordinate benefits with Medicaid programs, and many dual-eligible SNPs operate without state contracts. Without a contract with states to cover Medicaid benefits, it is unclear that a dual-eligible SNP is different from a regular MA plan.

The Congress should require SNPs to enroll at least 95 percent of their members from their target population. The law now requires that SNPs enroll people from their target population. However, SNPs can apply for a waiver permitting them to enroll others. The way CMS has applied that provision is to permit SNPs to enroll anyone, picking and choosing who they want, so long as the target population is a higher percentage of the plan’s population than it is of the Medicare population nationally.

The Congress should eliminate dual-eligible and institutionalized beneficiaries’ ability to enroll in MA plans, except SNPs with state contracts, outside of open enrollment. They should continue to be able to change plans during special election periods triggered by life events and also continue to be able to disenroll and return to FFS at any time during the year. Dual-eligible and institutionalized Medicare beneficiaries now can enroll and disenroll from MA plans monthly. We have heard reports that this provision contributes to plan marketing abuses.

The Congress should extend the authority for SNPs that meet the conditions specified in the above recommendations for three years. SNPs’ authority to limit enrollment will expire December 2009. In light of SNPs’ rapid growth in number and enrollment, we call for a rigorous evaluation to inform any decision to recommend them as a permanent MA option.
The Commission is concerned that CMS has not made drug claims data available to congressional support agencies and selected executive branch agencies. Because of the lack of data, there are fundamental questions that the Commission and other organizations cannot answer about how Part D is operating, such as:

- which prescription drugs enrollees are using most widely;
- how much, on average, enrollees are paying out of pocket for their medicine; and
- how many beneficiaries are entering Part D’s coverage gap.

Without Part D claims data, it is also very difficult to assess efficiency and quality in the overall delivery of health care (Part A, Part B, and Part D). Therefore, the Commission recommends that the Congress should direct the Secretary to make Part D claims data available regularly and in a timely manner to congressional support agencies and selected executive branch agencies for purposes of program evaluation, public health, and safety.

Increasing participation in the Medicare Savings Programs and the low-income drug subsidy

Although the Medicare Savings Programs (MSPs) and the LIS provide significant financial benefits to enrollees with limited incomes, most eligible beneficiaries do not participate. There are many reasons why individuals might choose not to take advantage of these programs, but researchers have found that the main barriers to enrollment are beneficiaries’ lack of knowledge of the programs and the complexity of the application processes. Those eligible but not enrolled in MSPs are more likely than those enrolled in MSPs to report that they did not receive needed health care because of cost. Beneficiaries enrolled in MSP programs are deemed eligible for LIS.

Chapter 5 includes three recommendations to increase participation in programs designed to aid beneficiaries with limited incomes:

- First, Medicare beneficiaries, particularly those who are hard to reach, prefer to receive information from personal contact. The State Health Insurance Assistance Programs (SHIPs) are the only part of the National Medicare Education program that provides personal counseling to beneficiaries—but their resources are limited. Increased funding for SHIPs,
which provide this one-on-one counseling, will give more beneficiaries access to programs for which they are eligible. Therefore, the Commission recommends the Secretary should increase SHIP funding for outreach to low-income Medicare beneficiaries.

- Second, federal minimum MSP income and asset levels have not been revised since the programs were established. If MSP criteria were aligned with LIS levels, beneficiaries could apply for both programs at one time. Beneficiaries would find the process simpler and states and the federal government would realize administrative savings. Therefore, the Commission recommends the Congress should raise MSP income and asset criteria to conform to LIS criteria.

- Third, the Social Security Administration (SSA) is responsible for determining LIS eligibility for those individuals who are not automatically deemed eligible for the subsidy. If MSP and LIS eligibility were based on the same criteria, SSA could screen and enroll beneficiaries for both programs simultaneously, providing MSP access to eligible beneficiaries who have not heard of it but have heard of LIS. The Commission recommends the Congress should change program requirements so that the SSA screens LIS applicants for federal MSP eligibility and enrolls them if they qualify.
Context for Medicare payment policy
Context for Medicare payment policy

Chapter summary

Medicare and other purchasers of health care in our nation face enormous challenges for the future. As growing health care costs challenge individuals and private and public payers, quality frequently falls short of patients’ needs. The Commission has recommended a number of measures to increase the value of care, such as pay for performance, measuring resource use, and comparative effectiveness. The increasing spending and variation in use and quality of care in the current system suggest that opportunities exist for reducing waste and improving quality for beneficiaries, but realizing them requires addressing the myriad factors that drive the current health care system.

Another difficult challenge relates to financing. As is true for other purchasers of health care, Medicare’s spending has been growing much faster than the economy. Our substantial national income, the availability of newer medical technologies, and health insurance are thought to account for much of this long-term growth, and some of those forces will likely push future spending higher. Medicare will have the additional challenge of higher enrollment associated with retiring...
baby boomers, which will affect program spending as well as the demand for federal resources for other programs that benefit the elderly, such as Social Security and Medicaid.

Because of these forces, the Medicare trustees and others warn of a serious mismatch between the benefits and payments the program currently provides and the financial resources available for the future. If Medicare benefits and payment systems remain as they are today, the trustees note that over time the program will require major new sources of financing. Projected levels of spending could also impose a significant financial liability on Medicare beneficiaries, who must pay premiums and cost sharing.

The program’s shaky financial outlook is a strong impetus for change. As is true for other purchasers of health care services in the United States, Medicare’s spending is growing much faster than the U.S. economy. In addition, CMS began Medicare’s new outpatient prescription drug program, Part D, in 2006. This program added an important benefit to Medicare but greatly expanded the program’s need for resources. Finally, the leading edge of the baby boomers will become Medicare beneficiaries after 2010, which will also accelerate Medicare spending. These factors will lead Medicare to require an unprecedented share of our gross domestic product.

Moreover, because of the retirement of the baby boom generation, other federal programs such as Social Security and long-term care services financed through Medicaid will require greater resources at the same time that Medicare spending expands. Some analysts point out that growth in our nation’s economy has historically been large enough to finance expansion of both health and nonhealth spending (Chernew et al. 2003). Other analysts disagree, saying long-term economic growth alone will not be sufficient to bring the country’s fiscal position into balance (Bernanke 2007). According to this point of view, fiscal stability will likely require a sizable slowdown in the growth rate of spending on health care and may also require a substantial increase in taxes as a share of our nation’s economy (CBO 2005).
Addressing a challenge of this magnitude will require an extended effort, and analysts have urged policymakers to take immediate action to address Medicare’s finances. They argue that major changes to these programs should be phased in to allow beneficiaries, providers, and taxpayers time to adapt to major alterations. However, Medicare’s financial challenge is already growing more acute. For example, in 2004, expenditures for the Hospital Insurance trust fund, which funds inpatient stays and other post-acute care, began to exceed its annual income from taxes. Since 2004, Part A has remained solvent due to existing trust fund balances and interest income. As cost inflation continues to outstrip revenue and the retirement of the baby boom generation begins, the time for phasing in major changes is growing shorter.

Examining Medicare in a broader context is useful for understanding the choices facing policymakers. This chapter begins with a review of Medicare eligibility and financing and then discusses the factors that are increasing spending for Medicare and the health care system.
Introduction

Medicare fills a critical role in our society—ensuring that the elderly and disabled have access to medically necessary care. Along with other payers in our health care system, the program has helped to finance important strides in medical technology. For the sake of its beneficiaries, we must preserve those aspects of the Medicare program. However, Medicare is not unique in struggling to control costs and improve quality. While Medicare is unique in its financing and eligibility relative to other health care programs, many of the factors that increase spending for other health care payers also increase Medicare spending (Aaron 2007).

Eligibility and financing for Medicare

Medicare shifted much of the financial liability for health care spending from the elderly to taxpayers through a hybrid system with three major parts—A, B, and D—that had different eligibility requirements and different financing mechanisms. Part A, the Hospital Insurance (HI) program, covers stays in hospitals and skilled nursing facilities, hospice care, and some home health care. The Congress designed Part A as a compulsory social insurance program tied to employment in work covered by Social Security, currently financed through a dedicated 2.9 percent payroll tax. Part A essentially finances health care expenses through payroll taxes on current workers, with the promise of future benefits to those workers.

The Congress also established Part B, Supplementary Medical Insurance (SMI), covering services such as physician visits and outpatient hospital care. Part B is voluntary and available to anyone aged 65 or older. Beneficiary premiums finance about 25 percent of Part B program spending, and general revenues finance the remainder, which currently requires about 10 percent of all personal and corporate income tax revenue. Beneficiaries also pay cost-sharing requirements for a portion of their services, described in the following section.

In 2006, the Medicare prescription drug benefit, known as Part D, began operation. Like Part B, the drug benefit is voluntary and funded through a mixture of beneficiary premiums and a general fund contribution. Premiums cover about 11 percent of Part D costs, and the general fund pays for about 78 percent of spending. States make payments to offset some of the costs of their Medicaid-eligible beneficiaries who receive Part D benefits.

Beneficiaries may opt to receive their benefits through private plans that have contracted with Medicare under Part C, also known as Medicare Advantage. Payments to these plans are funded through the HI and SMI trust funds. Beneficiaries must be eligible for both Part A and Part B to enroll in Medicare Advantage.

Most beneficiaries become eligible for Medicare when they turn 65, but there are two major exceptions. Individuals who qualify for disability payments from the Social Security disability program are eligible for Medicare after they complete a 24-month waiting period. Individuals with end-stage renal disease are eligible regardless of age.

Benefit design and cost sharing

Medicare places some financial responsibility for health spending on beneficiaries through cost-sharing requirements at the point where they receive medical services. Medicare’s original benefit package left certain services uncovered; for example, until 2006 Medicare did not cover outpatient prescription drugs. These factors have led most Medicare beneficiaries to obtain supplemental coverage, primarily through individual medigap policies or employer-based retiree coverage. Medicaid provides supplemental coverage for lower income Medicare beneficiaries.

The proportion of spending for Medicare-covered services paid through cost sharing has remained fairly stable. Part A cost-sharing requirements generally increased at the same rate as payment updates for Part A services. Cost sharing for many Part B services is proportional to allowed charges (typically 20 percent coinsurance). Before 2005, lawmakers rarely increased Part B’s annual deductible. However, in 2005 they raised it to $110, and it now increases at the same rate as growth in Part B spending per person (in 2008, the deductible is $135).

Most Medicare beneficiaries have supplemental coverage to fill in some or all of Medicare’s gaps in cost sharing and coverage. In 2004, about 91 percent of Medicare beneficiaries obtained supplemental coverage through former employers (33 percent), medigap policies (26 percent), Medicare Advantage plans (13 percent),
Medicaid (17 percent), or other programs (2 percent) (MedPAC 2007). Supplemental coverage often allows enrollees better predictability of their out-of-pocket spending. In return for paying an annual premium, beneficiaries receive supplemental coverage, such as medigap policies, that reduces their cost sharing to zero or nearly zero from the time they begin using health services each year.

Some protection against high out-of-pocket spending is desirable, but such coverage may reduce beneficiaries’ sensitivity to costs. Individuals with supplemental coverage tend to use services more than those with similar health status and no supplemental coverage. One estimate based on data from the mid-1990s suggests that Medicare spending ranges from 17 percent higher for those with employer coverage to 28 percent higher for those with medigap policies (Christensen and Shinogle 1997). Other analysts believe that when supplemental coverage encourages beneficiaries to adhere to medical therapies that prevent hospitalizations or the use of other services, higher levels of Medicare spending may be more modest than this (Chandra et al. 2007). However, while many supplemental plans cover all or nearly all of Medicare’s cost-sharing requirements, they do not cover medical services that have better evidence of preventing hospitalizations any more selectively than they cover services that tend to be used inappropriately. Another line of research suggests that the responsiveness of beneficiaries to cost sharing is varied, and the effects of supplemental coverage are more modest for individuals in poorer health (Remler and Atherly 2003).

Policymakers created the Medicaid program at the same time as Medicare to address the health care needs of low-income individuals. The federal government, along with the states, assumes nearly all the cost of health care for beneficiaries who meet means and asset tests, and the federal share is financed with general revenues (like Part B). The presence of Medicare and Medicaid creates certain challenges for serving individuals eligible for both programs (called dual eligibles). Federal and state policy goals for the programs sometimes conflict, and current policies toward dual eligibles create incentives to shift costs between payers, often hinder efforts to improve quality and coordinate care, and may reduce access to care (MedPAC 2004a). Medicaid has become the primary public payer for long-term care, with many beneficiaries gaining eligibility and qualifying for benefits through medical indigence (Moore and Smith 2005). The intersection of the two programs’ payment policies has created particular problems related to shifting costs among payers for beneficiaries’ post-acute and long-term care needs.

There are myriad federal programs, some funded through Medicaid, to help low-income beneficiaries with their Medicare costs, such as the low-income drug subsidy (LIS) and the Medicare Savings Programs. These programs help beneficiaries pay their premiums and, in some cases, their copays and deductibles. Eligibility for these programs is based on income and assets. Despite the protection these programs offer, only a fraction of eligible beneficiaries enroll in them. For example, despite considerable publicity, participation for LIS remains limited. As of January 2007, about 9.5 million beneficiaries were receiving the drug subsidy. Of these, about 7 million were deemed automatically eligible because they were dual eligibles (Kaiser Family Foundation 2007). Another 2.3 million, or 17 percent of the eligible population, applied for LIS and were found eligible by the Social Security Administration. Of those beneficiaries not automatically enrolled in LIS, the National Council on Aging estimates that between 35 percent and 42 percent of those eligible have enrolled. A number of concerns, including complex program requirements, lack of awareness of the program, and the challenges of communicating with hard-to-reach populations, have been faulted as hindering enrollment (see Chapter 5 for discussion of Medicare programs for low-income enrollees).

Today’s concerns about Medicare

As is true for other purchasers of health care, Medicare’s spending is growing much faster than the economy (Figure 1-1). Projections of continued rapid growth in spending in the health care system combined with the retirement of the baby boom population foreshadow accelerated growth in Medicare outlays in 2010 and beyond. At the same time, the Medicare program spends widely different amounts per beneficiary across geographic regions, much of which can be attributed to differences in practice patterns rather than to differences in underlying health status. There are also wide geographic disparities in the quality of care beneficiaries receive, with no relationship or a negative relationship between quality of care and spending (Fisher et al. 2003).
Projections of Medicare’s long-term financing needs

In their most recent report, the Medicare trustees project that the assets of the HI trust fund will be exhausted in 2019. Income from payroll taxes collected in that year would cover 79 percent of projected benefit expenditures. In the future, the share of benefit expenditures covered by payroll tax collections would fall as health care cost inflation exceeds growth in payroll; by 2080, payroll tax collections at current levels would cover only 29 percent of projected Part A expenditures. Medicare will have no authority to pay the remainder of Part A benefits due. The SMI trust fund is financed automatically with general revenues and beneficiary premiums, but the trustees point out that SMI financing would have to increase sharply to match the expected growth in spending. Such rapid growth would have repercussions on beneficiaries as well as on the availability of funds for other federal priorities.

The status of Medicare trust funds does not give a complete picture. If Medicare benefits and payment systems remain as they are today, the trustees note that over time the program will require major new sources of financing for Part A and will automatically require increasing shares of general tax revenues for Part B and Part D (see text box, pp. 10–11). The trustees project that dedicated payroll taxes will make up a smaller share of Medicare’s total revenue and that a large deficit between spending for Part A (HI) and revenue from dedicated payroll taxes will develop (Figure 1-2, p. 12).

To finance the projected deficit through 2080, the trustees estimate that Medicare’s payroll tax would need to increase immediately from 2.9 percent to 6.44 percent of

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Note: GDP (gross domestic product). These projections are based on the trustees’ intermediate set of assumptions.

Source: 2007 annual report of the Boards of Trustees of the Medicare trust funds.

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FIGURE 1-1

Trustees project Medicare spending to increase as a share of GDP

Note: GDP (gross domestic product). These projections are based on the trustees’ intermediate set of assumptions.

Source: 2007 annual report of the Boards of Trustees of the Medicare trust funds.
In making long-term projections of Medicare’s costs, a critical assumption is the growth rate in program spending per person, exclusive of impacts due to the changing age and gender mix of the population. Growth rates vary depending on the time period for which one calculates them. Nevertheless, on average, real rates of increase in our nation’s health expenditures have risen faster than real growth in the economy over the past six decades (2004 Technical Review Panel on the Medicare Trustees Report).

Before their 2001 report, the Medicare trustees assumed that long-range spending would grow at about the same rate as gross domestic product (GDP) per person, in recognition of the practical inability of growth in health spending to exceed economic growth indefinitely. This assumption was adopted in the mid-1980s (when 75-year projections were first included in the annual trustees report) as a way to highlight the long-term impact of demographic changes on Medicare costs, and the assumption was found to be “not unreasonable” by the independent 1992 Medicare Technical Review Panel. In recognition of the continuing significant growth differential, however, the Medicare trustees asked the 2000 Medicare Technical Review Panel to consider this assumption. The 2000 panel recommended that the trustees assume that long-range Medicare program spending per person would grow at a rate of GDP plus 1 percentage point, excluding effects resulting from the population’s age and gender mix (which they model separately). The panel arrived at this unanimous recommendation after consideration of several different approaches and based the assumption principally on the expected ongoing effects of new medical technology. Their recommendation was adopted by the Medicare Boards of Trustees in 2000 and again in 2001 and was first implemented with the 2001 annual report. The 2004 Medicare Technical Review Panel concurred with its continued use. Both expert panels also recommended further research into the relationship between the health sector and the overall economy and how this relationship would change in the future.

For their 2006 report, the Medicare trustees refined their assumptions based on an economic model developed by the Office of the Actuary at the Centers for Medicare & Medicaid Services. This model incorporates the expected future societal trade-off between health care and nonhealth consumption, as the cost of health care continues to require a growing share of national income. It also reflects the potential for new medical technology to reduce costs versus continuing (on average) to increase costs. The new approach was reviewed and approved by an independent panel of health economists and actuaries and was adopted as a minor refinement of the “GDP + 1 percent” assumption. (Because the model parameters could not be uniquely estimated based on past data, they were selected to be consistent with calculations of 75-year Hospital Insurance actuarial balances under an assumption of growth rates of GDP plus 1 percentage point.) The key impact of the new forecasting model is a more gradual transition from current rates of growth to an assumption that Medicare growth rates ultimately will equal GDP growth. For example, the model projects that per capita growth rates in Medicare spending for 2030 will be 1.4 percentage points above GDP growth, declining gradually to GDP plus 0.8 percent in 2050 and to about GDP plus 0.2 percent in 2080 (Boards of Trustees 2007). The Medicare Trustees anticipate that cost growth will be slowed, even in the absence of legislative changes, by factors such as private and public health plans’ limits on payment for new technology, individuals’ ability to afford health

continued next page
Projecting Medicare growth (cont.)

insurance premiums or cost-sharing payments, and a
greater focus by payers, physicians, and other providers
on more efficient, outcome-oriented practice standards.

The Congressional Budget Office (CBO) has developed
an alternative projection of long-term spending that has
a higher assumption about the long-term rate of excess
growth (CBO 2007). CBO’s projection includes all health
care spending, both public and private sector, and it uses
the same approach for modeling excess growth in these
sectors. Between 2008 and 2017, the projection follows
the spending for Medicare and Medicaid that CBO uses
for its budget baseline. After 2018, CBO’s projection
assumes the rate of excess growth will gradually slow
to prevent a decline in real per capita spending for non–
health care goods and services. In effect, the projection
assumes that consumers will allow excess growth to
continue at the historical rate as long as it does not
reduce income by so much that they have to reduce the
consumption of non–health care goods in real terms.

CBO’s projections assume that the private sector
will begin to act to curb excess growth as it threatens
to shrink per capita non–health care spending. The
projection does not assume implementation of any
particular set of reforms to slow growth, but the
assumption is that payers, providers, and consumers
will begin to behave in a more cost-sensitive manner
in the face of higher costs. For example, plans may
raise cost sharing or limit the services they cover. Some
of these changes may spur health care providers to
change their practice patterns. The net effect of these
changes would be to slow health care spending so it
does not reduce the inflation-adjusted level of spending
for non–health care goods. Under this assumption, per
capita excess growth for the private sector and federal
programs besides Medicare and Medicaid would
decline from 2 percent in 2018 to 0.1 percent in 2082.

The projection assumes that a “spillover effect” from
the slowdown in private sector excess growth, increases
in beneficiary cost sharing, and regulatory action by
Medicare will curb costs in the future, but that excess
growth will fall at a slower rate compared with that for
private payers. Specifically, for Medicare the decreases
in excess growth will be equal to a quarter of the size
of the decrease for non-Medicare and non-Medicaid
health care spending. CBO assumes a smaller decline
for Medicare because the private sector should have
more flexibility to implement major changes, and CBO
did not assume that legislative changes that reduce
Medicare spending would occur. Consequently,
the rate of excess spending will not fall by the same
amount as the rest of health care spending. Over the
period from 2018 to 2082, CBO assumes excess growth
will decline from 2.4 in 2018 to 1.1 in 2082. CBO’s
projections, by assuming that consumers will not allow
real non–health care spending to decline, reflect one
estimate of a spending slowdown. However, even with
this slower rate, CBO finds that Medicare spending as a
percentage of GDP could grow from 3 percent in 2018
to almost 17 percent in 2082.

Compared with the trustees’ methodology, CBO’s
methodology produces a higher rate of excess growth
for Medicare in the long run, with an average of 1.7
percent for 2018 to 2082. The differences between
the two projections materialize gradually, and the two
projections have nearly identical spending projections
through 2037. Over 75 years, however, the CBO
projection is higher. In 2082, Medicare spending as a
percentage of GDP equals about 11 percent under the
trustees’ projection, while in CBO’s projection it will
be about 17 percent.

The 45 percent trigger

Medicare’s problems with long-term financing will
become more visible to policymakers over the next
few years because of a warning system established in
the Medicare Prescription Drug, Improvement, and
Modernization Act of 2003 (MMA) known as the 45
percent trigger. Lawmakers included this provision to

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even though Part D now covers a portion of their spending
on prescription drugs, growth in Medicare premiums and
cost sharing for SMI services will require more of their
incomes, which could lead to financial hardship for some;
in 2004, roughly half of all Medicare beneficiaries had
family incomes of less than 200 percent of the federal
poverty level (MedPAC 2007).³
spark debate on balancing national priorities between Medicare and other uses for general revenue financing.

Each year, the Medicare trustees are required to project the share of Medicare outlays that are financed with general revenues in the current and six succeeding fiscal years. Under the warning system, if two consecutive annual reports project that general revenue will fund 45 percent or more of Medicare outlays in any year of the seven-year projection window, then the President must propose and the Congress must consider legislation to bring Medicare’s spending below this threshold. However, the provision does not require the Congress to pass legislation. In their 2006 report, the Medicare trustees projected that the program would hit this 45 percent trigger in 2012, the last year of the seven-year window (Boards of Trustees 2006). The trustees released a similar finding for their 2007 report, so policymakers will need to consider changes to Medicare’s benefits, payments, and financing by the spring of 2008.

The trigger has been criticized as an arbitrary mechanism that limits options for responding to Medicare’s financial problems (Moon 2005). For example, it is not clear why limiting Medicare’s general fund contribution to 45 percent is appropriate. However, the trigger raises an issue that policymakers must confront: How much of the federal government’s general fund should be devoted to Medicare? General fund financing has always been a part of Medicare, but the level required in future years will...
grow substantially. In addition to balancing Medicare’s funding needs with other federal priorities, policymakers will need to assess the burden of Medicare’s funding on taxpayers and beneficiaries. Measures of solvency should not dictate the choices of policymakers, but the underlying questions they raise about Medicare’s sustainability cannot be avoided.

**Increasing financial liability for beneficiaries**

Rapid growth in Medicare spending has implications for beneficiaries as well as taxpayers, since both groups finance the program. Although the premiums Medicare beneficiaries pay (primarily for Part B and Part D) are projected to make up a steady 12 percent to 13 percent of total program revenue, the dollar amounts of those premiums will require growing shares of beneficiaries’ incomes. Part B premiums for 2008 are $96.40 per month (or almost $1,157 for the year), a $2.90 per month increase (3.1 percent) over the 2007 amount. This is a much smaller increase than expected—the lowest since 2000. The small increase is attributable to the discovery of an accounting error that misallocated Part A benefits to Part B and to lower-than-anticipated growth in Part B spending. In addition to projected increases in Part B spending, the need to ensure an adequate financial reserve to cover unanticipated increases in expenditures accounted for a portion of the increase. The additional financial reserve should serve as a cushion if policymakers act to override the planned decrease in physician payments; similar decreases have been reversed in each of the last five years. The MMA also created a Part B income-related premium; CMS estimates that about 5 percent of Part B enrollees will pay higher premiums based on income (CMS 2006). The highest income beneficiaries will pay premiums of about $238 in 2007, more than double the standard premium.

Between 2000 and 2007, Medicare beneficiaries faced average annual increases in the Part B premium of nearly 11 percent. Meanwhile, monthly Social Security benefits, which averaged around $900 per month in 2005, grew by about 3 percent annually over the same period. Under hold-harmless policies, Medicare Part B premiums cannot increase by a larger dollar amount than the cost-of-living increase in an individual’s Social Security benefit. The dollar amount of recent increases in Part B premiums has absorbed 20 percent to 40 percent of the dollar increase in the average Social Security benefit. Part D premium increases are not subject to a hold-harmless provision.

Medicare has provided important financial protection to beneficiaries, but they still need to cover some of the costs through cost sharing. In 2002, about half of beneficiaries had incomes of about $20,000 or less (MedPAC 2007). Eighteen percent had incomes less than the poverty level (defined then as $9,060 for people living alone and $11,430 for married couples), and 49 percent had incomes at 200 percent of the poverty level or below (MedPAC 2007). In 2005, Social Security payments were 50 percent or more of annual income for about 65 percent of elderly recipients (SSA 2007).

Early analysis of Part D suggests that more beneficiaries have prescription drug coverage but that drug costs remain a problem for some enrollees. The number of seniors without prescription drug coverage has dropped from 33 percent to 10 percent (Neumann et al. 2007). However, enrollees in stand-alone Part D plans may face higher costs than those in employer-sponsored plans or seniors with access to the drug benefit available from the Department of Veterans Affairs. Only 8.1 percent of enrollees in employer drug benefits reported not filling a prescription because of cost, while 15.6 percent of enrollees in Part D plans reported not filling a prescription for the same reason. The differences, however, may not be surprising because the standard Part D benefit includes a coverage gap that significantly increases beneficiary liability. This coverage gap was included to lower the cost of the Part D benefit for the federal government, and consequently the design of the Part D benefit is less generous than a typical employer-sponsored plan (Moon 2006). Beneficiaries enrolled in the Part D LIS are not subject to the coverage gap and report lower rates of skipping prescriptions and lower out-of-pocket spending (see Chapter 4 for a discussion of the Medicare prescription drug benefit).

Even with the expansion of Medicare’s benefits to include prescription drugs, growth in Medicare premiums and cost sharing will continue to absorb an increasing share of Social Security income. With the introduction of Part D, the average cost of SMI premiums and cost sharing for Part B and Part D absorbs about 30 percent of Social Security benefits. However, this amount is likely to be less than what beneficiaries spent on premiums and cost sharing for Part B and prescription drugs before 2006. On balance, even though most beneficiaries get relief from out-of-pocket spending because of Part D, growth in health care spending eventually will outpace growth in Social Security benefits (Figure 1-3, p. 14). At the same time, Medicare’s lack of a catastrophic cap on cost sharing
under Part A and Part B means that some beneficiaries could face extremely high out-of-pocket expenses.

Projections such as these highlight the importance of finding ways to slow growth in Medicare spending (Figure 1-4). If policymakers do not act quickly, Medicare’s need for financing will place an increasing liability on beneficiaries through their premiums and cost sharing, crowd out resources for other federal priorities, and potentially affect the federal budget deficit, the level of federal taxation and debt, and economic growth.

The broader U.S. health care system

Medicare is a very large program with projected expenditures of $431 billion in 2007 (HHS 2007). Even so, it is just one part of an expansive and growing U.S. health care system. That system includes a broad array of private and public purchasers, insurers, providers, manufacturers, and suppliers. Combined expenditures on health care services in the United States totaled nearly $2.1 trillion in 2005, or 16 percent of our economy (Catlin et al. 2007) (Figure 1-5, p. 16).

Private versus public financing in the U.S. health care system

Currently, public financing—federal, state, and local programs—makes up about 45 percent of all U.S. health care spending, with private sources providing the rest. The public share will rise by a few percentage points to nearly 50 percent by 2016 (Poisal et al. 2007). In 2004, employers were the largest source of health insurance,
covering about 60 percent of individuals residing in the United States (Fronstin and Collins 2005).

The United States uses private health insurance extensively because of the country’s tax policies and economic history. During the World War II era, larger U.S. companies began offering health insurance to provide higher compensation to a relatively scarce labor force while avoiding wage and price controls. The federal government did not consider such fringe benefits subject to wage controls, and health insurance contributions paid by employers were not considered taxable income (Helms 2005). At the time, the health insurance industry was in its infancy. Since then, the use of employer-sponsored health insurance and the broader market for private insurance have grown substantially. For 2004, the exemption of employer-paid health insurance from payroll and individual income taxes reduced federal revenues by about $160 billion—about 6.6 percent of federal revenues (OMB 2007).

Some analysts believe that, if one considered the value of tax subsidies for employer-paid health insurance, the public share of health care spending would be closer to 60 percent (Woolhandler and Himmelstein 2002). A counterargument is that a wide variety of tax policies affect decisions about the mix of goods and services the country produces and consumes, yet generally we do not include the value of those tax subsidies in any of our national accounts. The exemption of employer-paid health insurance from payroll and individual income taxes is one reason our nation uses private health insurance so extensively.
Higher spending in the United States

Health care spending in the United States is far higher than in other countries—about $6,400 per person in 2005, or more than twice the median of member countries of the Organisation for Economic Co-operation and Development (OECD) (OECD 2007). Though all industrialized nations have seen cost growth in excess of gross domestic product (GDP), there is some evidence that health care spending has grown faster in the United States than in other countries. One recent analysis suggests that this higher growth rate remains even after adjusting for changes in demographics and differences in the rate of growth in the economies of industrialized nations (White 2007). The increase in health care costs exceeded the annual growth in GDP by 2 percent for the United States in the period from 1970 to 2002, while excess growth was only 1.1 percent for the other OECD nations. Several factors, such as differences in the availability of insurance and the structure of health financing, may account for these differences. However, the finding of excess growth may be sensitive to the way it is measured. As many countries continue to experience significant growth, it is not clear that this differential in growth rates will continue.

Another study found that the United States has higher spending even after adjusting for differences in wealth and disease prevalence (McKinsey Global Institute 2007). The analysis estimated how much the United States would have spent based on per capita income. It found that the United States spent $477 billion more, or $1,645 per capita, even after accounting for the United States’ higher per capita income. The increased incidence in disease accounted for only $25 billion of the difference.
The remainder was attributable to higher utilization, higher input costs for labor and capital, and administrative and operational costs. The analysis suggests that the inefficiencies that increase costs are spread throughout the system, and any reform will require multiple strategies.

Other estimates have suggested that the rates of diagnosis and treatment (“rate of treated disease”) are much higher for many common conditions in the United States (Thorpe et al. 2007). For example, the rate of chronic lung disease among individuals age 50 or older in the United States is almost double that among the same age group in certain European countries. Among those with this diagnosis, almost twice as many individuals in the United States reported receiving medication associated with this condition compared with people in Europe. Thorpe concluded that if the United States had the same rate of treated disease for the studied conditions as the selected European countries, aggregate expenditures on health care in the United States would have been 13 percent to 19 percent lower in 2003. Thorpe did not examine how health outcomes varied for the selected conditions, but other analysts have found that the quality of care in the U.S. health care system often lags behind Europe (Davis and Schoen 2007).

Because the organizational structure of financing health care is more fragmented in the United States, providers may use their market power to negotiate more favorable payments and higher incomes than providers in other countries (Bodenheimer 2005). By being more monopsonistic or exerting regulatory power to a greater degree, other governments may lower or restrain growth in payment rates for providers and prices for other services. The tactics of those governments include using a single-purchaser approach, allowing multiple purchasers to bargain collectively, and using global budgets (Reinhardt et al. 2004).

The health care systems of other countries may not be clearly preferable to ours. A recent survey of patients in the United States and six other countries found that patient satisfaction and access to care varied, and no country clearly outperformed the others (Schoen et al. 2007). For example, the wait time for elective surgery was shortest in Germany and longest in the United Kingdom. However, more patients in Germany reported forgoing doctor visits for financial reasons. The United States ranked second after Germany in short wait times, but the share of patients opting to forgo care was nearly double that in Germany. Each health care system reflects the social, economic, and political circumstances of its country, and as a result each system has a mixture of strengths and weaknesses. Comparison with other countries may provide useful information for benchmarking performance, but it is not clear that any one country’s system is preferable.

Some analysts believe the high levels of spending in U.S. health care are largely attributable to paying higher prices for the same services than other countries do, including higher administrative costs. Data from the mid-1990s suggest that U.S. physicians had considerably higher incomes than physicians in other OECD countries (Reinhardt et al. 2002). However, the United States has a wider distribution of compensation for all workers. For skilled health professionals, labor costs are higher because they would otherwise enter other fields that offer high compensation. The organizational structure of providers and the regulation of health services in other countries also affect salaries. Countries with public systems that provide care directly often contract with general practitioners at salaries negotiated centrally with physicians’ associations. Other countries make risk-adjusted, capitated payments to general practitioners for each patient they add to their list, thereby putting insurance risk on those physicians for the volume of care they provide. A few countries mix salary with capitated payments (Docteur and Oxley 2003).

Is higher spending worth it?

Advances in medical technology have led, on average, to improvements in our health and gains in life expectancy. Recently, Cutler and colleagues concluded that, on average across all ages, increases in medical spending between 1960 and 2000 (attributed largely to advances in medical care) provided reasonably good value, with an average cost per life-year gained of $19,900 (Cutler et al. 2006).

However, when focused on real spending adjusted for inflation and life expectancy for individuals age 65 or older, the same research found that the incremental cost of an additional year of life rose from $46,800 in the 1970s to $145,000 in the 1990s. These estimates suggest that the value of health care spending for the elderly has been decreasing, and the authors suggest that their estimates for the 1990s would fail many cost-benefit criteria.

More recent research suggests that survival gains have stagnated since 1996 for patients with acute myocardial infarction (AMI) (Skinner et al. 2006). Skinner and colleagues found that the survival rate for AMI has not improved since 1996, even though spending for patients with this condition has increased. These trends suggest that higher spending is not yielding better outcomes. These
authors also compared regional differences in spending for AMI and found that areas with higher spending did not have better health outcomes.

Research on the wide geographic variation in health care spending suggests that we waste resources (Fuchs 2005). Some payment systems contribute to the problem of wasteful spending by rewarding inefficient or low-quality care as much as—if not more than—high-quality care delivered by efficient providers. Given questions about Medicare’s sustainability, the Commission has called for distinguishing between high-quality care and care of more questionable value (MedPAC 2004b).

Despite spending more than other countries, the U.S. health care system does not consistently deliver higher quality care (Schoen et al. 2006). For example, the United States has a higher death rate for diseases that are amenable to medical care than the three leading industrialized nations. The United States also had a higher rate of medical errors than other industrialized countries. This disparity between spending and quality raises questions about the value for patients and health care payers of the higher level of spending in the United States.

**Rapid growth in health care spending among all payers**

For each of the past several decades, the United States has spent an expanding share of its resources on health care. In 1960, for example, national health expenditures made up about 5 percent of the GDP by 2005. That share grew to 16 percent, and CMS projects that it will make up 19.6 percent by 2016 (Figure 1-5, p. 16) (Poisal et al. 2007). All payers in the U.S. health care system—public (including Medicare and Medicaid) and private—are facing similar upward pressures on spending.

Although rates of growth in per capita spending for Medicare and private insurance often differ from year to year, over the long term they have been quite similar (Pauly 2003). When comparing spending for benefits that private insurance and Medicare have in common—notably excluding prescription drugs—Medicare’s per enrollee spending grew at a rate about 1 percentage point lower than that for private insurance from 1970 to 2002. However, the comparison is sensitive to the endpoints of time one uses for calculating average growth rates (Figure 1-6). Differences have been more pronounced since 1985, when Medicare began introducing the prospective payment system for hospital inpatient services (Levit et al. 2004). Some analysts believe that, since the mid-1980s, Medicare—with its larger purchasing power—has had greater success than private payers at containing cost growth (Boccuti and Moon 2003). Others maintain that benefits offered by private insurers have expanded as cost-sharing requirements declined over the entire period and enrollment in managed care plans grew during the 1990s. The comparison is thus problematic, since Medicare’s benefits changed little over the same period (Antos and King 2003).

Although often disputed by economists, many analysts contend that certain health care sectors are able to shift costs by charging some payers higher prices to compensate for changes in the administered prices of other payers. Many hospital and other health industry executives are convinced that limits on Medicare and Medicaid payment rates lead to higher prices for private payers (Ginsburg 2003). Cost shifting could occur only when providers have sufficient market power to raise their prices. If such a phenomenon occurs, it underscores the need for public and private payers to collaborate with one another on payment policy, since both sets of payers face similar upward pressures on spending in the long term.

**Drivers of growth in health spending**

One main driver of growth in spending is growth in income. Some analysts believe that, as our country’s standard of living grows, we should expect to spend more on health care (Hall and Jones 2007). As individuals become better off and their consumption increases, the incremental value of buying more commodities (e.g., another television or more clothing) falls. By contrast, the marginal value to them of an extended life span does not diminish as quickly. Similarly, the marginal value of procedures that are not life saving but that may improve the quality of life (e.g., joint replacements or cosmetic surgery) may increase relative to other goods. Hall and Jones suggested that, because of our underlying preferences, it is reasonable to expect health care spending to reach 30 percent of GDP by the middle of this century.

Many analysts point to the rates of development and diffusion of new technologies as another major driver of growth in health care spending (Fuchs 2005, Newhouse 1992). Many technologies reduce the invasiveness, serious side effects, discomfort, or recovery time associated with the therapies they replace, thereby lowering nonmonetary obstacles to beneficiaries as they decide whether to seek treatment. When procedures, drugs, or devices become available, a base of evidence may not exist to help providers decide how newer therapies compare with older
ones. When providers recommend newer therapies that are covered by Medicare or other insurance, patients do not face the full cost of their care and may not be concerned about the comparative value of those therapies. Although some medical technologies lead to savings by reducing lengths of hospital stays or avoiding hospitalizations, most technologies tend to expand the demand for health care and increase spending. In some cases, providers may use new technologies inappropriately or more broadly than intended.

This uncertainty about the efficacy of new technology is compounded under fee-for-service payment systems. Because these payment systems tie reimbursement to the volume of services provided, new technologies can create opportunities for providers to increase their volume and revenues. Many of the additional services may be beneficial, but fee-for-service payment encourages providers to pursue the technologies that result in higher volume and payment regardless of value. This can bolster the “arms race” mentality that providers must pursue the latest technologies to remain financially successful relative to their peers (Berenson et al. 2006). Under alternative systems, such as capitation or value-based approaches that tie payments to a measure of a procedure’s clinical efficacy, the rewards for additional volume are diminished. Providers under these systems would have less financial incentive to pursue the volume opportunities associated with new technology.

Research highlights the important role of health insurance in fueling growth in spending. Finkelstein found that Medicare had a much more pronounced effect on hospital spending than estimates of insurance effects on an individual’s behavior would suggest (Finkelstein 2007). According to Finkelstein, the broad increase in

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**FIGURE 1–6**

Changes in spending per enrollee for Medicare and private health insurance

![Graph showing changes in spending per enrollee for Medicare and private health insurance](image)

**Average annual percent change by period:**

<table>
<thead>
<tr>
<th>Period</th>
<th>Medicare</th>
<th>PHI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970–2005</td>
<td>8.9</td>
<td>9.8</td>
</tr>
<tr>
<td>1970–2003</td>
<td>10.8</td>
<td>12.0</td>
</tr>
<tr>
<td>1993–1997</td>
<td>6.1</td>
<td>2.8</td>
</tr>
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<td>1997–1999</td>
<td>1.3</td>
<td>4.4</td>
</tr>
<tr>
<td>1999–2002</td>
<td>5.9</td>
<td>8.5</td>
</tr>
<tr>
<td>2002–2005</td>
<td>6.6</td>
<td>8.0</td>
</tr>
</tbody>
</table>

**Note:** PHI (private health insurance). This figure compares services covered by Medicare and PHI, including hospital services, physician and clinical services, and durable medical products.

**Source:** CMS, Office of the Actuary, National Health Statistics Group, 2007.
demand for hospital services that occurred after the start of Medicare led to greater incentives for hospitals to enter markets, purchase new equipment and facilities, and adopt new practice styles. Extrapolating from her Medicare findings, she suggested that about half of the increase in per capita health spending between 1950 and 1990 could be attributable to the spread of health insurance. Other analysts have noted that small changes in assumptions behind Finkelstein’s extrapolation to all health care spending would lead to much smaller effects (Ellis 2006).

Our nation’s underlying health status and changes in clinical treatment thresholds also affect spending. Recent work by Thorpe and Howard suggests that, between 1987 and 2002, nearly all the growth in health care spending for Medicare beneficiaries can be attributed to patients being treated for five or more conditions (Thorpe and Howard 2006). In 2002, about 50 percent of all Medicare beneficiaries were being treated for five or more conditions, compared with about 31 percent of beneficiaries in 1987. At the same time, a larger proportion of patients being treated for five or more conditions reported that they were in excellent or good health—60 percent in 2002 compared with 33 percent in 1987. The authors concluded that medical professionals are treating healthier patients, treatments are improving health outcomes, or both are occurring.

Thorpe and Howard also suggest that the rising prevalence of obesity plays a part in the increased number of beneficiaries with multiple comorbidities. Obesity in the elderly is associated with increased risk of diabetes mellitus, cardiovascular disease, hypertension, stroke, lipid abnormalities, osteoarthritis, and some cancers. The prevalence of obesity doubled among Medicare beneficiaries between 1987 and 2002 (reaching 23 percent), and obese individuals accounted for 25 percent of spending in 2002. While the share of spending for the obese is approximately proportional to their share of the population, 90 percent of the spending for the obese in 2002 was attributable to the 14 percent of beneficiaries with five or more comorbidities. To the extent that obesity has contributed to an increase in the number of beneficiaries with multiple comorbidities, the rise in obesity has increased Medicare spending. Higher weight, however, does not necessarily result in higher Medicare costs. Medicare beneficiaries who are classified as overweight but not obese have lower spending than obese individuals and have longer life expectancy relative to those in other weight classifications.

Medicare spending is concentrated among relatively few beneficiaries, but some evidence suggests that the concentration has fallen. For example, the most costly 1 percent of beneficiaries accounted for 15.5 percent of Medicare expenditures in 2004. However, recent analysis of long-term per beneficiary spending trends has found that the concentration of spending for Medicare beneficiaries has fallen (Riley 2007). In 1975, the top 5 percent of beneficiaries accounted for 54 percent of spending, while in 2002 they accounted for 43 percent of spending. The trend suggests higher treatment intensities for a broader range of patients. The balance of spending among services has also changed over time for all beneficiaries, not just the most costly. For example, in 1975 hospital services accounted for about 69 percent of the annual expenditures for a beneficiary. In 2004, hospital expenditures fell to 43 percent of annual spending, while the share for physician and outpatient services increased. Despite these changes, significant concentration does remain, and hospital services are still the largest single category of expenditures. However, the rise in spending for less costly beneficiaries and the growth in nonhospital spending suggest that improving the efficiency of health care delivery will require interventions that consider multiple categories of services and consider the changing concentration of beneficiary spending.

Recent years have also seen the consolidation of health care providers and health plans. These consolidations may result in new efficiencies that lower costs, but they can also lead to lower quality and higher prices (Vogt and Town 2006). The concern is that the primary motivation for much of this consolidation is to capture more market share and to leverage this market share for more favorable payments. Similarly, insurers seek market share to push providers for lower rates. This consolidation has resulted in some markets being served by a few dominant plans and providers, and depending on the characteristics of the local market it can sometimes result in cooperation to achieve system improvements (Ginsburg and Lesser 2006). In markets where collaboration takes place, consolidation may unify local delivery systems around common goals such as improving quality. However, markets with few plans and providers may lack sufficient competition to spur needed improvements in efficiency and innovation. Some analysts have found that providers do not compete on price and efficiency in many markets; instead, they compete to increase their market share of the most profitable business lines (Berenson et al. 2006). This can lead to an increase in the supply and volume of medical
services, but this type of competition does not necessarily address quality or efficiency concerns.

**Consequences of rapid growth in health spending**

Rapid growth in health spending has wide-ranging effects. The U.S. health care sector has produced many medical innovations that lengthen or improve the quality of life. At the same time, some employers argue that the rising cost of health care premiums affects their ability to compete in the world marketplace. However, most economists contend that growth in health premiums paid by employers has no long-term effect on the competitive position of firms (Fuchs 2005). Instead, a firm’s costs for health premiums substitute for cash compensation that it would otherwise pay to workers, in the same way that retirement and other benefits substitute for higher wages. Long-term contracts with workers may prevent some firms from keeping their full compensation package in line with their productivity. As would be the case with any other cost, rapid growth in health premiums can make apparent firms’ need for greater productivity. To achieve productivity gains quickly, firms sometimes take disruptive steps and redistribute income and health coverage for workers and retirees.

Other distributional issues arise from rapid growth in spending on health care. In response to rapid increases in premiums, many employers have raised cost-sharing requirements for their employees, asked them to pay a larger share of premiums, or—particularly for smaller firms—reduced the availability of coverage. The percentage of nonelderly individuals with employer-based health insurance fell from 67 percent in 2000 to 62 percent in 2005, which analysts attribute to the rising cost of providing health benefits (Fronstin 2006). Since required premium contributions by enrollees have risen faster than income, some workers choose to forgo coverage (Ginsburg 2004). During 2006, nearly 47 million people, or 15.8 percent of the U.S. population, were uninsured at some point in time (DeNavas-Walt et al. 2007).

Increases in the numbers of people without private health insurance raise demand for public coverage. In addition, those who cannot secure coverage may receive uncompensated care, and providers may seek higher payments for insured patients to cover losses. The costs of caring for the uninsured do not fall equally on all providers, since the uninsured often postpone care until their condition becomes more serious. In turn, providers that bear more of those costs sometimes seek public subsidies or limits on the competition they face. Rising costs put upward pressure on the financing needs of public and private health care programs for the beneficiaries who already have coverage. Some analysts believe that higher health care costs may also lead to greater fragmentation of risk pools in the health care market, as healthier people search for insurance alternatives that are less costly (Glied 2003).

New insurance products have emerged in response to rapid growth in spending on health care. Employers are beginning to offer health plans that combine a health reimbursement or savings account with a high-deductible insurance policy. Although more employers are beginning to offer these products to their workers, thus far enrollment is low. Enrollees in these newer products generally accept higher cost sharing at the point of service. The intent is to make them more cost conscious when they seek care. In return, they pay lower premiums (Tollen et al. 2004). The law allows employers to make nontaxable contributions to certain health savings accounts (HSAs), and contributions by individual account holders are tax deductible. Current Medicare beneficiaries cannot establish HSAs, but as individuals enroll in Medicare, they may use tax-free distributions from existing HSAs to pay for Medicare premiums or the retiree share of premiums for employment-based retiree health insurance. Medicare beneficiaries may use a similar type of product if they choose: medical savings accounts, a type of high-deductible plan that is combined with a savings account offered by several private organizations within Medicare Advantage.

A recent review of the literature on high-deductible plans suggested that the current evidence on the effectiveness of such plans is mixed (Beeuwkes Buntin et al. 2006). Individuals who selected such plans were often more wealthy and healthier than beneficiaries who opted for other products in the selected studies (GAO 2006, Fronstin and Collins 2005). Enrollees generally had lower costs and lower cost growth, but Beeuwkes Buntin cautioned that further study of this issue with more robust methods is necessary. The results for the effect of such plans on quality of care were mixed. Some studies have found that beneficiaries receive more of certain preventive procedures and are better about following medication regimes (Downey 2004, Humana 2005). Other studies have found that the cost consciousness that plans emphasize led enrollees to forgo care for less serious conditions and skip some medical visits (Agrawal et al. 2005, Davis et al. 2005). It may be too early.
to draw conclusions about the prospects for these plans. Beeuwkes Buntin and colleagues noted that the current literature reflects that the experience of “early adopters” is limited to a few case studies and needs more rigorous analysis of the population differences.

Addressing the quality and efficiency challenges will require a robust long-term effort, and reaching agreement on reform will likely prove challenging. Adding to the challenge, social, economic, and technological changes will continue to alter the health care system. Long-term success will require continuous intervention that adapts to future changes in the financing and delivery of care. However, even small improvements in productivity could yield significant gains for payers.
1 As Robert Myers, the Social Security Administration’s Chief Actuary in 1965, put it, designing a two-part program resulted from a “legislative process [that] was a matter of political compromise and was not by any means dictated by actuarial principles” (Myers 2000).

2 Aside from the direct method of increasing the payroll tax rate, a number of changes over the years have increased revenue to the HI trust fund. Certain employment groups were not included in the Social Security system and were added, expanding the payroll tax base. For example, self-employed physicians were not covered under Social Security until 1965. State and local government employees and federal civil servants were also excluded from the set of workers covered under Social Security (and therefore were not paying HI payroll taxes) until the 1980s. While the Social Security portion of the payroll tax has an upper limit of yearly earnings that are taxable ($97,500 for 2007, having gradually increased from the 1966 level of $6,600), the upper limit on HI contributions was removed in 1994 so that all earnings are subject to the HI tax. The age of Medicare entitlement for the nondisabled remains 65, but raising the “normal retirement” for Social Security—the age at which beneficiaries can receive unreduced retirement benefits—also increases the pool of workers contributing to the HI trust fund to the extent that individuals 62 or older continue to work. Provisions that make Medicare the secondary payer in relation to other insurers have also reduced expenditures for Medicare. An additional source of funds for Medicare is the income tax on Social Security benefits that is designated for the HI trust fund.

3 In 2004, 200 percent of the federal poverty level equals about $18,000 for individuals and $22,000 for married couples.

4 One exception is funding for the HI trust fund. CBO assumed that Medicare would continue to pay all benefits due for Part A, even after the trust fund becomes insolvent in 2019.

5 Individuals with modified adjusted gross incomes (MAGIs) of $82,000 or more and married couples with MAGIs of $164,000 or more will receive less than the 75 percent subsidy that all other Part B enrollees receive. CMS is phasing in higher premiums over a three-year period. By the end of that time, higher income individuals will pay monthly premiums equal to 35 percent, 50 percent, 65 percent, or 80 percent of Medicare’s average Part B costs for aged beneficiaries, depending on their income. All other individuals pay premiums equal to 25 percent of average costs for aged beneficiaries. Whether higher premiums will affect beneficiaries’ willingness to remain enrolled in Part B remains to be seen.

6 Social Security recipients received a 3.3 percent increase for 2007.

7 The standard Part D benefit for 2007 includes a $265 deductible and 25 percent coinsurance up to $2,400 in total drug costs, followed by the coverage gap where enrollees pay 100 percent of drug costs until they have $5,451 in total drug costs ($3,850 from their own pocket). Beyond this level, Medicare pays 95 percent of drug costs and the enrollee pays 5 percent. Many Part D plans offer benefits that vary from the standard benefit, but all Part D plans must be actuarily equivalent to the standard benefit, and most plans include a coverage gap (Kaiser Family Foundation 2007).

8 Medical insurance premiums and cost sharing will make up a lower percentage—just under 20 percent—for those beneficiaries who do not enroll in Part D.

9 For example, when calculating how much we spend on children, we would not include the value of personal exemptions from individual income tax for dependent minors.

10 Dollar amounts are adjusted for purchasing power parity—differences in the cost of living across countries—by comparing prices for a fixed basket of goods. OECD’s adjustment is a broad-based basket, not one specific to health costs.

11 The model uses data from OECD countries to estimate the predicted relationship between per capita income and per capita health care consumption. The authors then compare the estimated health care spending for the United States based on the model with actual health care spending and arrive at a variance of $477 billion between actual and predicted spending.

12 In 2005, about 10 percent of privately insured, nonelderly adults were enrolled in high-deductible health plans (Fronstin and Collins 2005). Nevertheless, such plans have attracted considerable attention. Supporters believe that higher cost sharing will lead members to lower their use of unnecessary services, thereby slowing growth in health spending. Other analysts expect that this new type of product will encourage risk segmentation, since healthier enrollees might find lower premiums attractive while sicker individuals would likely stay with more comprehensive coverage. A recent review of the literature on these products suggests that, at this early stage, the evidence is not sufficient to draw firm conclusions. Nevertheless, early studies show modest favorable selection into consumer-directed health plans, some evidence that such plans may help lower costs and cost increases, and mixed effects on quality with evidence of both appropriate and inappropriate changes in use of services (Beeuwkes Buntin et al. 2006).
References


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

Section 2A: Hospital inpatient and outpatient services

2A-1 The Congress should increase payment rates for the acute inpatient and outpatient prospective payment systems in 2009 by the projected rate of increase in the hospital market basket index, concurrent with implementation of a quality incentive payment program.

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

2A-2 The Congress should reduce the indirect medical education adjustment in 2009 by 1 percentage point to 4.5 percent per 10 percent increment in the resident-to-bed ratio. The funds obtained by reducing the indirect medical education adjustment should be used to fund a quality incentive payment program.

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

Section 2B: Physician services

2B The Congress should update payments for physician services in 2009 by the projected change in input prices less the Commission’s adjustment for productivity growth. The Congress should enact legislation requiring CMS to establish a process for measuring and reporting physician resource use on a confidential basis for a period of two years.

COMMISSIONER VOTES: YES 13 • NO 2 • NOT VOTING 1 • ABSENT 1

Section 2C: Outpatient dialysis services

2C The Congress should update the composite rate in calendar year 2009 by the projected rate of increase in the end-stage renal disease market basket index less the Commission’s adjustment for productivity growth. The Commission reiterates its recommendation that the Congress implement a quality incentive program for physicians and facilities that treat dialysis patients.

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

Section 2D: Skilled nursing facility services

2D-1 The Congress should eliminate the update to payment rates for skilled nursing facility services for fiscal year 2009.

COMMISSIONER VOTES: YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2
RECOMMENDATIONS

2D-2 The Congress should establish a quality incentive payment policy for skilled nursing facilities in Medicare.

COMMISSIONER VOTES: YES 10 • NO 3 • NOT VOTING 2 • ABSENT 2

2D-3 To improve quality measurement for skilled nursing facilities, the Secretary should:
• add the risk-adjusted rates of potentially avoidable rehospitalizations and community discharge to its publicly reported post-acute care quality measures;
• revise the pain, pressure ulcer, and delirium measures currently reported on CMS’s Nursing Home Compare website; and
• require skilled nursing facilities to conduct patient assessments at admission and discharge.

COMMISSIONER VOTES: YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

Section 2E: Home health services

2E The Congress should eliminate the update to payment rates for home health care services for calendar year 2009.

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

Section 2F: Inpatient rehabilitation facility services

2F The update to the payment rates for inpatient rehabilitation facility services should be eliminated for fiscal year 2009.

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

Section 2G: Long-term care hospital services

2G The Secretary should update payment rates for long-term care hospitals for rate year 2009 by the projected rate of increase in the rehabilitation, psychiatric, and long-term care hospital market basket index less the Commission’s adjustment for productivity growth.

COMMISSIONER VOTES: YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1
Assessing payment adequacy and updating payments in fee-for-service Medicare

Chapter summary

The Commission makes payment update recommendations annually for fee-for-service 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. To determine an update, we first assess the adequacy of Medicare payments for efficient providers in the current year (2008). Next, we assess how those providers’ costs are likely to change in the year the update will take effect (the policy year—2009). Finally, we make a judgment as to what, if any, update is needed. When considering whether payments in the current year are adequate, we account for policy changes (other than the update) that are scheduled to take effect in the policy year under current law. This year we make update recommendations in eight sectors: hospital inpatient, hospital outpatient, physician, outpatient dialysis, skilled nursing facility, home health, inpatient rehabilitation facilities, and long-term care hospitals. The analyses of payment adequacy by sector are in the sections that follow.

In this chapter

- Are Medicare payments adequate in 2008?
- What cost changes are expected in 2009?
- Limitations to payment adequacy analysis across post-acute care settings
- How should Medicare payments change in 2009?
- Further examination of payment adequacy
The goal of Medicare payment policy is to get good value for the program’s expenditures. This means maintaining beneficiaries’ access to high-quality services while encouraging efficient use of resources. 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 steps should maintain Medicare beneficiaries’ access to high-quality care while getting the best value for taxpayers’ and beneficiaries’ resources.

To help determine the appropriate level of aggregate funding for a given payment system, we consider:

- Are payments at least adequate for efficient providers in 2008?
- How will efficient providers’ costs change in 2009?

Taking into account those two factors, we then determine how Medicare payments should change in 2009.

**FIGURE 2-1**

**Key questions**
- Are current payments adequate?
- What cost changes are expected in the coming year?

**Indicators**
- Beneficiary access
- Capacity/supply
- Access to capital
- Payments and costs
- Volume
- Quality
- Change in:
  - Economy-wide productivity
  - Input prices

**Recommendation**
- How should Medicare payments change in 2009?

Efficient providers use fewer inputs to produce quality outputs. In the first part of our adequacy assessment, we judge whether Medicare payments are too high or too low compared with efficient providers’ costs in the current year—2008. In the second part, we assess how we expect efficient providers’ costs to change in the policy year—2009. Within a given level of funding, we may also consider changes in payment policy that would affect the distribution of payments and improve equity among providers or improve equity and access to care for beneficiaries. We then recommend updates and other policy changes for 2009. This analytic process is illustrated in Figure 2-1.

**Are Medicare payments adequate in 2008?**

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
- changes in the capacity and supply of providers
- changes in the volume of services
- changes in the quality of care
- providers’ access to capital
- Medicare payments and providers’ costs for 2008
Some measures focus on beneficiaries (i.e., access to care) and some focus on providers (i.e., the relationship between payments and costs in 2008). We consider multiple measures because the direct relevance, availability, and quality of each type of information vary among sectors, and no one 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. (Poor access could indicate payments are too low; good access could indicate payments are adequate or more than adequate.) However, other factors unrelated to Medicare’s payment policies may also affect access to care. These factors include coverage policy, beneficiaries’ preferences, supplemental insurance, transportation difficulties, and the extent to which Medicare is the dominant payer for the service.

The measures we use to assess beneficiaries’ access to care depend on the availability and relevance of information in each sector. For example, using results from several surveys, we assess physicians’ willingness to serve beneficiaries and beneficiaries’ opinions about their access to physician care. For home health services, using information on the CMS website, we examine whether communities are served by providers.

**Changes in the capacity of providers**

Rapid growth in the capacity of providers to furnish care may 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 the capacity to provide certain services.

Substantial increases in the number of providers may suggest that payments are more than adequate and could raise concerns about the value of the services being furnished. For instance, rapid growth in the number of home health agencies (HHAs) could suggest that Medicare’s payment rates are at least adequate and potentially more than adequate. 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.

**Changes in the volume of services**

An increase in the volume of services beyond that expected for the increase in the number of beneficiaries could suggest that Medicare’s payment rates are too high. 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. However, changes in the volume of services are often difficult to interpret because increases and decreases could be explained by other factors, such as incentives in the payment system, population changes, changes in disease prevalence among beneficiaries, technology, practice patterns, and beneficiaries’ preferences. Explicit decisions about service coverage can also influence volume. For example, in 2004 CMS redefined arthritis conditions it thought appropriate for treatment in inpatient rehabilitation facilities (IRFs), a decision that contributed to a reduction in IRF volume. Changes in the volume of physician services must be interpreted particularly cautiously because some evidence suggests that volume may also go up when payment rates go down—the so-called volume offset. Whether this phenomenon exists in other settings depends on how discretionary the services are and on the ability of providers to influence beneficiary demand for the services.

**Changes in the quality of care**

The relationship between changes in quality and Medicare payment adequacy is not direct. Many factors influence quality, including beneficiaries’ preferences and compliance with providers’ guidance and providers’ adherence to clinical guidelines. Medicare’s payment systems are not generally connected to 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. The influence of Medicare’s payments on quality of care may also be limited when Medicare is not the dominant payer. However, the program’s quality improvement activities can influence the quality of care for a sector. Changes in quality are thus a limited indicator of Medicare payment adequacy. In addition, increasing payments through an update for all providers in a sector regardless of their individual quality may not be an appropriate response to quality problems in a sector, particularly if other factors point to adequate payments.
The Commission supports linking payment to quality to hold providers accountable for the care they furnish, as discussed in our March 2005 and 2004 reports (MedPAC 2005b, 2004). Specifically, the Commission recommended that pay-for-performance programs be implemented for hospitals, physicians, dialysis facilities and physicians furnishing services to dialysis patients, HHA’s, and Medicare Advantage plans. For hospitals and dialysis providers, measures are already available for such a program. For physicians, we described a two-step process that starts with measures of information technology function and moves on to process of care and other measures. In this report, the Commission also recommends that pay for performance be adopted for skilled nursing facilities (SNFs).

The Commission developed four principles for Medicare’s pay-for-performance programs.

- The program should reward providers based on improving care and achieving absolute better performance to have the broadest effect on providers’ incentives and thus beneficiaries’ care.
- The program should be funded by setting aside, initially, a small proportion of payments (e.g., 1 percent to 2 percent of payments) to minimize possible disruption to beneficiaries and providers.
- The program should be budget neutral. It should distribute all withheld dollars every year; pay for performance is a way to improve quality of care, not to realize savings.
- The program should have a process to update the measures to reflect changes in quality measurement and practice patterns. We provide a detailed description of the type of entity we envision for this task in our March 2005 report (MedPAC 2005b).

**Payments and costs for 2008**

For most payment sectors, we estimate aggregate Medicare payments and costs for the year preceding the policy year. In this report, we estimate payments and costs for 2008 to inform our update recommendations for 2009.

For providers that submit cost reports to CMS—acute care hospitals, SNFs, HHA’s, outpatient dialysis facilities, IRFs, and long-term care hospitals (LTCHs)—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 payments less costs divided by payments.

To estimate payments, we first apply the annual payment updates specified in law for 2007 and 2008 to our 2006 base data. We then model the effects of other policy changes that will affect the level of payments, including those—other than payment updates—that are scheduled to go into effect in 2009. This method allows us to consider whether current payments would be adequate under all applicable provisions of current law. Our result is an estimate of what payments in 2008 would be if 2009 payment rules were in effect. To estimate 2008 costs, we generally assume that the cost per unit of output will increase at the rate of input price inflation. As appropriate, we adjust for changes in the product (i.e., changes within the service provided, such as fewer visits in an episode of home health care) and trends in key indicators, such as historical cost growth, productivity, 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 (i.e., SNF or home health services). When a facility provides services that are paid for in multiple payment systems, however, our measures of payments and costs for an individual sector may become distorted because of allocation of overhead costs or cross subsidies among services. In these instances, we assess—to the extent possible—the adequacy of payments for the whole range of Medicare services the facility furnishes. For example, a hospital might furnish some combination of inpatient, outpatient, SNF, home health, psychiatric, and rehabilitation services (each of which is paid under a different Medicare payment system). We compute an overall hospital margin encompassing Medicare-allowed costs and payments for all the sectors.

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. Medicare payments should relate 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 aggregate Medicare margin to inform our judgment about whether total Medicare payments cover efficient providers’ costs. 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 by their teaching status (major teaching, other teaching, or nonteaching).

Multiple factors can contribute to the difference between current payments and costs, including changes in the efficiency of providers, unbundling of the services included in 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 the difference may help in deciding how much to change payments.

Finally, the Commission makes a judgment when assessing the adequacy of payments relative to costs. No single standard governs this relationship. It varies from sector to sector and depends on the degree of financial risk individual providers face, which can change over time.

Appropriateness of current costs

Our assessment of the relationship between Medicare’s payments and providers’ costs is influenced by whether costs reflect provider efficiency. Measuring 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 kinds of visits in a home health episode changed significantly after the home health prospective payment system (PPS) was introduced. In other systems, coding may change. For example, the hospital inpatient PPS is phasing in a patient classification system that will result in more accurate payments but is also predicted to result in higher payments because of improved provider coding. Any kind of rapid change can make it difficult to measure costs per unit of a 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. We generally expect average growth in unit costs to be somewhat below the forecasted increase in input prices because of productivity improvements. The federal government should benefit from providers’ productivity gains, just as private purchasers of goods in competitive markets benefit from the productivity gains of their suppliers.

Other payers and market conditions also may affect providers’ efficiency. In a sector where Medicare is not dominant, if other payers do not promote cost containment, providers may have higher growth in cost than they would have if Medicare were dominant. Lack of cost pressure would be more common in markets where a few providers dominate and have negotiating leverage over payers. Providers that are under cost pressure generally have managed to slow their growth in cost more than those facing less cost pressure (MedPAC 2005b, Gaskin and Hadley 1997).

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 have more rapid growth in cost than others, we might question whether those increases are appropriate.
Changes in the product can significantly affect unit costs. Returning to the example of home health, substantial reductions in the number of visits in home health episodes would be expected to reduce the growth in per episode costs. If costs per episode instead increased at the same time as the number of visits decreased, one would question the appropriateness of the cost growth.

Accurate reporting is important for determining costs. When data are obtained from unaudited cost reports, costs could be understated or overstated. In some instances, some portion of costs has been found to be unallowable after CMS contractors audited facilities’ cost reports. We would like audits of cost reports to ensure the accuracy of the reporting. At the same time, we need to use what information is available to us to measure financial performance.

What cost changes are expected in 2009?

The second part of the Commission’s approach to developing payment update recommendations is to account for anticipated cost changes in the next payment year. For each sector, we review evidence about the factors that are expected to affect providers’ costs. A major factor is changes in input prices, as measured by the applicable CMS price index. For most providers, we use the forecasted increase in an industry-specific index of national input prices, called a market basket index. For physician services, we use a similar index of input price changes—the Medicare Economic Index (before it is adjusted for productivity). Forecasts of these indexes approximate how much providers’ costs would rise in the coming year if the quality and mix of inputs they use to furnish care remained constant. Any errors in the forecast are taken into account in future years while judging payment adequacy.

Another factor that may affect providers’ costs in the coming year is improvement in productivity. Competitive markets demand continual improvements in productivity from workers and firms. These workers and firms pay the taxes used to finance Medicare. Medicare’s payment systems should encourage providers to produce a unit of service as efficiently as possible while maintaining quality. Consequently, the Commission may choose to apply an adjustment to the update to encourage this efficiency. The Commission begins its deliberations with the assumption that all providers can achieve efficiency gains similar to the economy at large (the 10-year average of productivity gains in the general economy, currently 1.5 percent). But the Commission may alter that assumption depending on the circumstances of a given set of providers in a given year. This factor links Medicare’s expectations for efficiency to the gains achieved by the firms and workers who pay taxes that fund Medicare.

Limitations to payment adequacy analysis across post-acute care settings

Medicare provides coverage for beneficiaries in four post-acute care (PAC) settings: SNFs, HHAs, IRFs, and LTCHs. Prospective payment systems for each setting were developed and implemented separately to control growth in spending and encourage more efficient provision of services in each setting.

While we assess the adequacy of payments under each of these PPSs, these separate systems encompass their own incentives (both positive and negative) that may distort the provision of PAC. The Commission previously stated that the individual “silos” of PAC do not function as an integrated system; there is no common patient instrument used to assess patient care needs and guide placement decisions, payments reflect each setting rather than the resource needs of the patients, and outcomes do not gauge the value of the care furnished. Several barriers inhibit the integration of the current systems and undermine the program’s ability to purchase high-quality care in the least costly PAC setting consistent with the care needs of the beneficiary. These barriers include:

- inaccurate case-mix measurement,
- incomparable data on the quality and outcomes of care, and
- lack of evidence-based standards.

Inaccurate case-mix measurement

In three of the four PAC settings, case-mix measures do not accurately reflect the resources used to treat certain types of patients; as a result, the measures do not track differences in the costs of care. For example, the SNF PPS includes strong incentives for facilities to furnish therapy but does not adjust payments for differences in the need for nontherapy ancillary services (e.g., drugs). As a
result, the case-mix system encourages providers to admit rehabilitation patients and discourages them from treating beneficiaries who need a high level of medical care. In another example, a recent study of the LTCH PPS found that variations in profitability by case-mix group result from a systematic understatement of the costs for cases that use relatively more ancillary services (RTI 2006). Refining the case-mix weights could correct this bias.

**Incomparable quality and outcome data**

An overarching limitation in moving toward a more integrated PAC system is the lack of comparable information across settings. The PAC settings do not use a common patient assessment tool to gather information about the functional status, diagnoses, comorbidities, and cognitive status of patients. Medicare requires three of the four settings to use a patient assessment tool, but each setting uses a different one. As a result, the program cannot compare costs, quality of care, and patient outcomes while controlling for differences in the mix of patients treated. In short, the program cannot measure the value it gets from PAC purchases.

Even within a setting, the case-mix, quality, and outcome data that are gathered make it difficult, if not impossible, to make comparisons among provider types. For example, our ability to assess the quality of care that SNFs provide to beneficiaries is limited because few quality measures focus specifically on the care provided during a short-term post-acute stay. Although the Commission uses two risk-adjusted measures to evaluate SNF care—the rate of preventable rehospitalizations and the rate of discharges to the community—CMS does not track either measure. And because SNFs do not assess patients at admission or discharge, patient progress during a stay—such as changes in functional status—cannot be directly evaluated (Chapter 2D).

The Deficit Reduction Act of 2005 (DRA) requires CMS to conduct a demonstration that supports PAC payment reform across settings. CMS has taken steps to respond to the mandate. Its contractor, RTI, developed a PAC assessment instrument and piloted it in the Chicago area in hospitals, LTCHs, IRFs, HHAs, and SNFs. A cost and resource use data collection tool was also developed and tested in various settings in the Boston area. Data collection will begin in the first market in March 2008 and in nine additional markets beginning in April 2008. A report on that demonstration is due to the Congress in 2011. Thus, while CMS envisions an integrated system and has taken a key step toward developing one, implementation is years away.

**Lack of evidence-based standards**

The lack of evidence-based standards of care (to identify which patients need how much care) results in large variations in practice and costs, with no way to discern the appropriate level of care. Beneficiaries may not receive medically necessary, high-quality care in the least costly PAC setting consistent with their clinical conditions. Although the program has some patient and facility criteria to match patient care needs to the treatment setting, there is some overlap in the types of patients treated across settings. For example, patients who need wound care or who require rehabilitation after hip surgery are treated in various PAC settings, with very different cost implications for the program.

The lack of evidence-based standards also means that, even within a setting, we do not know which treatments are necessary for which types of patients. Guidelines do not exist for many conditions to delineate how much care is typically needed, when more care is likely to result in better outcomes, and when patients are unlikely to improve with additional treatment.

**Implications for financial performance**

The barriers that undermine the integration of care across PAC settings—inaccurate case-mix measurement, incomparable quality and outcome information, and lack of evidence-based standards of care—also limit our ability to assess differences in financial performance across providers in the same setting. Without an adequate case-mix adjuster, observed differences in costs could reflect differences in the mix of patients treated rather than efficiency. Differences in costs could also be attributable to variations in the quality of care furnished and the outcomes patients achieve.

Within each PAC setting, provider performance varies considerably and some providers consistently perform better than others. In examining differences in Medicare margins, the Commission reported that size, case mix, location, and ownership explained very little of the variation across HHAs (MedPAC 2005a). Across all four PAC settings, Medicare margins varied by ownership, raising questions about how good performance can be achieved. In recent years, PAC providers with consistently better financial performance generally had lower resource use, lower unit costs, and slower growth in cost. Before concluding that low-cost providers are efficient, we need to know if they compromised the quality of care they furnished or if they selected certain types of patients.
To become a value-based purchaser, Medicare needs to know whether paying more for care buys better patient outcomes.

Broad PAC reform that the Commission favors—and that the post-acute demonstration mandated by the DRA envisions—has begun but is several years away until results are available. In the meantime, services furnished in PAC settings will likely continue to be paid for under the respective PPSs. Within each setting, then, the program must continue to ensure that payments are adequate, while discouraging patient selection and encouraging providers to furnish high-quality services.

**How should Medicare payments change in 2009?**

The Commission’s judgments about payment adequacy and expected cost changes result in an update recommendation for each payment system. Coupled 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 for pay for performance are one example of distributional changes that will affect providers differentially based on their performance.

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. 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.

**Further examination of payment adequacy**

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 alarmed by the trend in Medicare spending—a growth rate 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. If unchecked, the growth in spending, combined with retirement of the baby boomers and Medicare’s prescription drug benefit, will result in the Medicare program absorbing unprecedented shares of the gross domestic product and of federal spending. Slowing the increase in Medicare outlays is important; indeed, it is urgent. Medicare’s rising costs, coupled with the projected growth in the number of beneficiaries, will significantly burden taxpayers.

The financial future of Medicare prompts us to look at payment policy in a different way 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. We believe these policies should help improve the Medicare payment system. Policies such as pay for performance that link payments to the quality of care providers furnish should be implemented. To reduce unwarranted variation in volume and expenditures, Medicare should collect and distribute information about how providers’ practice styles and use of resources compare with those of their peers. Ultimately, this information could be used to adjust payments to providers. 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 good-quality care and effective use of resources. These ideas for broad system reform have little, or no, current implementation in the Medicare program and face wide opposition from provider and interest groups. If these reforms are enacted and providers are still in opposition, it may be necessary to create payment adjustments to encourage movement toward—and wider use of—these policies.

As we examine each of the payment systems, we also look for opportunities to develop policies that would 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. Future Commission work will examine innovative policies for the fee-for-service program.

We will continue to focus on how to reward the efficient provider. That will require identifying who those providers are, how they are efficient, and how to change the current Medicare payment system to reward their better provision of service. Currently, Medicare pays all health care providers without differentiating on the basis of quality or resource use across providers and over time. In fact, Medicare often pays more when poor care results in complications that require additional treatment. Paying more for the efficient provider would reverse incentives in the Medicare payment system that often reward providers for lower quality care.

Until we can pay appropriately for the efficient provider, Medicare should exert continued financial pressure on providers to control their costs, much as would happen in a competitive marketplace. We have found, for example, that hospitals under financial pressure from the private sector tend to control their costs and cost growth better than those with non-Medicare revenues that greatly exceed costs (MedPAC 2007). The private sector is not the only potential source of financial pressure on hospitals; Medicare payment rates can also influence cost growth (Gaskin and Hadley 1997). In recent years, Medicare inpatient payments have increased at a rate higher than the hospital market basket, but payments have not risen to a level that fully accommodates the rapid increase in hospital costs. By not fully accommodating growth in hospital costs, Medicare can place some pressure on hospitals to constrain costs. Many stakeholders have expressed concerns about negative Medicare margins; however, negative Medicare margins have not affected providers’ investment in new capital or other expansion projects. In a policy world that is constantly changing, even negative margin projections can reverse. In light of this information, it may be important for the Commission to take a more aggressive look at adequacy indicators for providers and set a more demanding standard in determining which providers qualify for a payment update each year.
References


Hospital inpatient and outpatient services
2A-1 The Congress should increase payment rates for the acute inpatient and outpatient prospective payment systems in 2009 by the projected rate of increase in the hospital market basket index, concurrent with implementation of a quality incentive payment program.

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

2A-2 The Congress should reduce the indirect medical education adjustment in 2009 by 1 percentage point to 4.5 percent per 10 percent increment in the resident-to-bed ratio. The funds obtained by reducing the indirect medical education adjustment should be used to fund a quality incentive payment program.

COMMISSIONER VOTES: YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1
Hospital inpatient and outpatient services

Section summary

Most of our indicators of payment adequacy for hospital services are positive. More Medicare-participating hospitals have opened than closed each year from 2003 on, and the number of facilities closing in 2006 was less than one-sixth the peak in 1999. Further, the proportion of hospitals offering specialty services such as cardiac catheterization and MRI rose more in 2005 than in any of the previous seven years. These data suggest continued access to care for Medicare beneficiaries. Inpatient and outpatient service volume per beneficiary continues to increase, and the quality of care hospitals provide to Medicare beneficiaries is generally improving. Mortality rates have dropped while CMS’s indicators of clinical effectiveness have improved, although more adverse event rates have increased than decreased.

Spending on hospital construction has risen substantially—with increases averaging almost 20 percent in the past two years. In 2006, the value of construction permits per capita (adjusted for inflation) reached a level not seen since 1969 when the Hill-Burton program and the advent of Medicare and Medicaid fueled the industry’s first
construction boom. The value of debt for hospitals with upgraded credit ratings far exceeds the value of those with downgrades in 2007, continuing the trend from 2006. Finally, for the second year in a row, the median values of many financial indicators (e.g., days cash on hand and measures of debt service coverage) were among the best ever recorded.

One indicator of payment adequacy is negative—the overall Medicare margin for hospitals paid under prospective payment declined from –3.0 percent in 2004 to –4.8 percent in 2006. We project a margin of –4.4 percent in 2008 (reflecting 2009 policy other than payment updates). The slight improvement for 2008 reflects an expectation that policy and operational changes, coupled with the payment effect from improvements in coding and medical records documentation exceeding the legislated payment offsets, will provide some increase in payments.

If all hospitals were providing Medicare services efficiently, a margin of –4.4 percent would be a major source of concern. However, hospital costs and Medicare profitability vary widely. Hospitals under high financial pressure would be expected to exert great effort to control their costs. These hospitals had much lower standardized costs in 2006 (a median of about $5,500) than hospitals under low financial pressure (a median of $6,200). Hospitals with costs significantly above the national average also generally are not as efficient as competitors in their own markets.

Balancing these considerations, we conclude that an update of market basket is appropriate for inpatient and outpatient services, with this increase implemented concurrently with a quality incentive payment program. The Commission’s reasoning is that given the mixed picture of indicators, an individual hospital’s quality performance should determine whether its net increase in payments is above or below the market basket increase. Our finding that hospitals’ costs are strongly related to the financial pressure they are under from non-Medicare sources suggests that Medicare should put pressure on hospitals to control their costs, rather than accommodate the current rate of cost growth.
CMS’s current projection of the market basket increase for fiscal year 2009 is 3.0 percent. However, this estimate is revised on a quarterly basis, so the actual update percentage may be different. We estimate that our recommendation for reducing the adjustment for indirect medical education (IME), discussed below, would generate the first percentage point of the withhold pool for pay for performance. For a larger pool, the additional amount would be taken from the base rates.

Last year the Commission undertook an extensive analysis of the IME adjustment and recommended that the Congress reduce the adjustment when the prospective payment system rates are adjusted for severity of illness (MedPAC 2007a). In 2006, IME payments to teaching hospitals totaled more than $5.8 billion. In addition, IME payments are highly concentrated, with fewer than 300 hospitals receiving three-quarters of the payments. The current IME adjustment substantially exceeds the estimated relationship between teaching intensity and costs per case, contributing to a wide gap in Medicare margins between teaching and nonteaching hospitals.

The Commission recommends that the Congress reduce the IME adjustment by 1 percentage point to 4.5 percent per 10 percent increment in the resident-to-bed ratio. The savings should be used to provide at least part of the funding for the quality incentive payment policy noted above for all hospitals.
An important feature of the Commission’s recommendations for updating payments and redistributing a portion of IME payments is their implementation concurrent with a pay-for-performance program. The two recommendations should be viewed as a package that would improve the accuracy of Medicare’s payments for acute inpatient services while creating a strong incentive for improving the quality of care. Rates of central line infections, ventilator-assisted pneumonia in intensive care units, and adverse events such as decubitus ulcers and postoperative sepsis are examples of quality dimensions for which current performance suggests that hospitals have room to improve.
Background

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 and emergency rooms. In addition, many hospitals provide home health, skilled nursing facility, psychiatric, or 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 its payment rates.

Medicare spending on hospitals

Medicare fee-for-service (FFS) payments for acute inpatient and outpatient services account for more than 90 percent of Medicare spending on hospitals covered by the inpatient prospective payment system (PPS) (Figure 2A-1). From 2000 through 2005, Medicare FFS payments for hospital inpatient and outpatient services increased at a rate of 8.5 percent per year (Figure 2A-2). In 2006, however, total spending for those services grew at a much slower rate of 1.9 percent. The primary reason for the relatively slow growth from 2005 to 2006 is that a large number of beneficiaries switched from traditional FFS Medicare to the Medicare Advantage (MA) program. Adjusting for this decline in FFS beneficiaries, spending per beneficiary increased by 4.5 percent in 2006. Looking forward, CMS’s Office of the Actuary projects that FFS spending on hospital services will resume its strong growth and increase by 6.8 percent per year from 2006 to 2016 (OACT 2007).

Medicare’s payment systems for inpatient and outpatient services

This section provides a brief overview of the acute inpatient and outpatient PPSs, which have a similar basic construct (a base rate modified for differences in type of case or service as well as geographic differences in wages) but somewhat different sets of payment adjustments.
Acute inpatient payment system

Medicare’s acute inpatient PPS pays hospitals a predetermined amount for each discharge. 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 portion of the payment rate is further adjusted by the hospital wage index to account for differences in area wages. Payment rates are updated annually.

Until 2007, patient classification was based on the diagnosis related group (DRG) system. In 2008, CMS began replacing the DRG system and its 538 groups with Medicare severity DRGs (MS–DRGs) with 745 groups. In the MS–DRG system, patients are assigned to 335 base DRGs that reflect similar principal diagnoses and procedures. Most base DRGs are further subdivided based on whether patients have no complication or comorbidity (CC), one or more CCs, or one or more major CCs. CMS is phasing in MS–DRGs, with payment weights equal to a 50/50 blend of DRGs and MS–DRGs in 2008. Payment will be based entirely on MS–DRG weights in 2009.

Until 2007, the DRG relative weights were based on hospital charges, but CMS is eliminating charge-based weights and phasing in cost-based weights. In 2008, weights are one-third charge based and two-thirds cost based, with weights entirely cost based in 2009.

The acute inpatient PPS includes policy adjustments to payments for certain cases and to hospitals with specific characteristics. An adjustment for indirect medical education (IME) accounts for the higher costs of patient care in teaching hospitals, and hospitals that treat an unusually large share of low-income patients receive disproportionate share payments. Payments are reduced for cases with unusually short stays that are transferred to a post-acute care setting and for hospitals that do not report specified quality data. Outlier payments are made for cases with unusually high costs, and add-on payments are made for cases using specified technologies. Finally, special payments are made to rural hospitals.
(sole community and Medicare-dependent hospitals), and hospitals with up to 25 beds may qualify for cost-based payment as critical access hospitals (CAHs).


Hospital outpatient payment system
The outpatient PPS pays hospitals a predetermined amount per service. CMS assigns each outpatient service to 1 of approximately 800 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 visit to a midlevel clinic. A conversion factor translates relative weights into dollar payment amounts. A more detailed description of the outpatient PPS can be found on MedPAC’s website at www.medpac.gov/documents/MedPAC_Payment_Basics_07_OPD.pdf.

Are Medicare payments adequate in 2008?
Each year, the Commission makes payment update recommendations for hospital inpatient and outpatient services for the coming year. In our framework, we address whether payments for the current year (2008) are adequate to cover the costs efficient hospitals incur and then how much efficient providers’ costs should change in the coming year (2009). To make these judgments, we consider beneficiaries’ access to care, changes in the volume of services, changes in the quality of care, hospitals’ access to capital, and the relationship between Medicare’s payments and hospitals’ costs. In addition, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) requires that we consider the efficient provision of services in recommending updates.

Beneficiaries’ access to care and supply of providers
We assess beneficiaries’ access to care through measures of the number of hospitals participating in the Medicare program, including CAHs in rural areas, and the proportion of hospitals offering certain specialty and outpatient services. We found no indication of significant change in hospitals’ capacity to provide services to Medicare beneficiaries.

In each year from 2003 on, more Medicare-participating hospitals opened than closed. In 2006, 34 hospitals joined the Medicare program and 16 dropped out, for a net gain of 18 (Figure 2A-3). The closures in 2006 were less than one-sixth the peak of 93 in 1999.

More than 80 percent of the closures in 2006 were in urban areas. On average, the closing facilities operated at 37 percent occupancy in their last year of operation and were located only nine miles from the nearest other PPS hospital. Thus, closures did not appear to have serious implications for beneficiaries’ access to care in surrounding communities.

More than 1,100 hospitals converted to CAH status between 1998 and 2006 (of 1,285 converting since the beginning of the program), but the conversions slowed to 5 in 2006. Another 63 have converted to long-term care hospitals since 1998, including 6 in the last year. These facilities are no longer paid under the acute inpatient PPS but are still available to provide care to beneficiaries.

We examined a set of 11 specialized services and found that the share of hospitals offering most of them increased from 1998 to 2005 (Table 2A-1, p. 52). The proportion offering trauma center services (level 1, 2, or 3) grew from 26 percent to 33 percent and the share offering burn care increased from 3 percent to 5 percent, even though trauma and burn care services are often considered unprofitable for hospitals. The expansion of service capacity in 2005 was the largest in 7 years, with the share of hospitals providing each service increasing compared with 2004 in 7 of the 11 categories. We observed a small decrease in psychiatric services.

The percentage of hospitals offering outpatient and emergency services has been fairly stable (Table 2A-2, p. 52). A small increase in the share of hospitals providing outpatient care followed introduction of the outpatient PPS in August 2000. The only notable change since 2001 was a small increase in the percentage of hospitals offering outpatient surgery.

Changes in volume of services
Both inpatient and outpatient volume have increased in recent years, with particularly strong growth on the outpatient side. We use the number of discharges per FFS beneficiary and average length of stay as indicators of inpatient volume, while we measure outpatient volume by number of services per FFS beneficiary.
Hospital inpatient and outpatient services: Assessing payment adequacy and updating payments

Inpatient volume

Medicare FFS discharges grew a cumulative 9.8 percent from 2001 to 2005, with increases in the number of beneficiaries accounting for most of this growth (Figure 2A-4). In 2006, discharges dropped by 1.8 percent. This was attributable primarily to a decline in the number of FFS beneficiaries, as they shifted to the MA program. While total FFS discharges fell, the number of discharges per beneficiary continued to increase in 2006, contributing to steady growth in this measure—a cumulative increase of 2.4 percent—from 2001 to 2006.

The average length of stay of Medicare beneficiaries fell approximately 30 percent during the 1990s. The rate of decline has since slowed, yielding a cumulative decline of 8.9 percent since 1998 (Figure 2A-5). In 2006, average length of stay dropped by 1.0 percent. The cumulative decline in length of stay for Medicare patients has been more than three times that of all payers.

Outpatient volume

We measure the volume of outpatient care as the number of services provided because the outpatient PPS generally pays for individual services. Service volume in FFS Medicare grew from 2001 (the first full year of the PPS) through 2005, but the rate of increase declined each year. In 2006, the volume of FFS outpatient services actually declined slightly (Figure 2A-6, p. 54). This small decrease was attributable to a drop in the number of beneficiaries in FFS Medicare because of more beneficiaries enrolling in the MA program. The volume of services per FFS beneficiary increased steadily from 2004 through 2006, averaging 2.5 percent per year during that period. Much of the overall growth in service volume from 2001 to 2006 was due to increases in the number of services per beneficiary receiving services rather than to increases in the number of beneficiaries served.

### Table 2A-1

<table>
<thead>
<tr>
<th>Service</th>
<th>1998</th>
<th>2001</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neonatal intensive care</td>
<td>19%</td>
<td>20%</td>
<td>21%</td>
<td>21%</td>
</tr>
<tr>
<td>Burn care</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Transplant services</td>
<td>6</td>
<td>9</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Open heart surgery</td>
<td>20</td>
<td>22</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>Trauma center (level 1 to 3)</td>
<td>26</td>
<td>32</td>
<td>32</td>
<td>33</td>
</tr>
<tr>
<td>Cardiac catheterization</td>
<td>37</td>
<td>38</td>
<td>36</td>
<td>39</td>
</tr>
<tr>
<td>Angioplasty</td>
<td>24</td>
<td>26</td>
<td>27</td>
<td>30</td>
</tr>
<tr>
<td>Hemodialysis</td>
<td>N/A*</td>
<td>27</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Psychiatric services</td>
<td>50</td>
<td>47</td>
<td>47</td>
<td>46</td>
</tr>
<tr>
<td>Radiation therapy</td>
<td>N/A**</td>
<td>N/A**</td>
<td>20</td>
<td>23</td>
</tr>
<tr>
<td>MRI</td>
<td>50</td>
<td>55</td>
<td>58</td>
<td>61</td>
</tr>
</tbody>
</table>

Note: N/A (not available). Data are for services provided directly by community hospitals, which include critical access hospitals in addition to those covered by the acute inpatient and outpatient prospective payment systems.

* Not collected on the 1998 survey.

** Not collected in comparable form prior to 2004.

Source: American Hospital Association annual survey of hospitals.

### Table 2A-2

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Outpatient services</td>
<td>93%</td>
<td>94%</td>
<td>94%</td>
<td>94%</td>
</tr>
<tr>
<td>Outpatient surgery</td>
<td>81</td>
<td>84</td>
<td>86</td>
<td>86</td>
</tr>
<tr>
<td>Emergency services</td>
<td>92</td>
<td>93</td>
<td>92</td>
<td>91</td>
</tr>
</tbody>
</table>

Note: Includes services provided or arranged by short-term hospitals, excluding critical access hospitals.

Source: MedPAC analysis of Provider of Services file from CMS.
Changes in quality of care

Trends in the quality of care hospitals provide to Medicare beneficiaries continue to show that quality is generally improving. Mortality rates dropped and CMS’s indicators of clinical effectiveness and appropriateness of care also showed improvement. But the results for adverse events continue to be mixed, with rates increasing for some measures and decreasing for others.⁴

The Agency for Healthcare Research and Quality (AHRQ) developed the measures of mortality and adverse events we used in our analysis. To assess safety in hospitals, we examined in-hospital mortality and mortality 30 days after admission to the hospital as well as the incidence of potentially preventable adverse events resulting from inpatient care. AHRQ chose these indicators after an extensive literature review, discussions with clinical and measurement experts, and empirical testing to explore the frequency and variation of the indicators and their potential biases.

We calculated the mortality and patient safety indicators based on all Medicare inpatient claims with specified conditions or procedures in CMS’s Medicare Provider Analysis and Review (MedPAR) file. We used an AHRQ methodology to risk-adjust the data on mortality and adverse events.

In-hospital and 30-day mortality declined from 1998 to 2006 for each of the eight conditions or procedures we measured. In-hospital mortality rates provide a measure of hospital performance on inpatient care. The 30-day rate is somewhat more difficult to interpret strictly as a quality measure for hospital care, because it reflects care experienced in post-acute and outpatient settings along with the in-hospital experience.

The rate of adverse events increased for five of the nine most common measures from 1998 to 2006 (Table 2A-3, p. 54). These events are rare, often with rates of fewer than 100 per 10,000 eligible discharges, making it difficult to interpret changes in these small numbers of cases. The most common adverse event is decubitus ulcer (bed sores), for which the rate increased from 2005 to 2006, continuing a trend seen since 1998. The second most common event is failure to rescue, which results in death. The rate for this measure decreased from 2005 to 2006 as well as over
the longer period. This is consistent with the decline in mortality rates.

CMS reports quality performance data on the CMS Hospital Compare website. Most of these measures reflect hospital performance in delivering recommended care to Medicare beneficiaries with heart attack, heart failure, and pneumonia. The data suggest that rates improved between 2004 and 2006 for 22 of the 23 clinical effectiveness indicators for which comparisons can be made. In 2009, hospitals will be required to report data on 27 indicators or receive a 2 percent reduction in their payments.

Although many of our quality measures show improvement, we are concerned about the trend for the patient safety indicators. The increase in some adverse events coupled with the gap between actual and recommended care reflected in the Hospital Compare measures indicate that further efforts to improve quality are needed, including linking payment to quality performance. As we discussed in our March 2005 report, the Commission recommends that the Congress establish a quality incentive payment policy for hospitals that participate in Medicare (MedPAC 2005). In November 2007, CMS issued a report presenting the agency’s proposal for a value-based purchasing program. This program would link incentive payments under the acute inpatient PPS to hospitals’ quality scores based on many of the same measures we use in evaluating trends in quality.

**Hospitals’ access to capital**

Access to capital allows hospitals to maintain and modernize their facilities and capabilities for patient care. If hospitals were unable to access capital, it might in part reflect problems with the adequacy of Medicare payments, as Medicare represents about 40 percent of hospital revenues. Payments from other payers, changes in uncompensated care, management actions concerning the hospital and related businesses, and investors’ perception of the regulatory environment (including potential changes in federal and state hospital payment policies) also influence access to capital.

**Indicators suggest that access to capital is good**

The trend in spending on hospital construction suggests that access to capital for the overall sector is good. Hospital construction has increased steadily since 1999 (in both real and nominal dollars), and the Census...

**Table 2A–3**

Patient safety indicators show mixed indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Change in rate 1998 to 2006</th>
<th>Events 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decubitus ulcer</td>
<td>Worse</td>
<td>156,781</td>
</tr>
<tr>
<td>Failure to rescue</td>
<td>Better</td>
<td>59,965</td>
</tr>
<tr>
<td>Postoperative PE or DVT</td>
<td>Worse</td>
<td>46,220</td>
</tr>
<tr>
<td>Puncture/laceration</td>
<td>Worse</td>
<td>38,576</td>
</tr>
<tr>
<td>Infection due to medical care</td>
<td>Better</td>
<td>16,817</td>
</tr>
<tr>
<td>Postoperative respiratory failure</td>
<td>Worse</td>
<td>12,221</td>
</tr>
<tr>
<td>Iatrogenic pneumothorax</td>
<td>Better</td>
<td>10,350</td>
</tr>
<tr>
<td>Postoperative hemorrhage</td>
<td>Better</td>
<td>7,183</td>
</tr>
<tr>
<td>Postoperative sepsis</td>
<td>Worse</td>
<td>6,643</td>
</tr>
</tbody>
</table>

Note: PE (pulmonary embolism), DVT (deep vein thrombosis). "Worse" indicates that the risk-adjusted rate per 10,000 eligible discharges has increased; "better" indicates that this rate has fallen.

Bureau projects that it will increase another 16 percent in 2007 to more than $30 billion (Figure 2A-7) (Census Bureau 2007). We have looked at the long-term trends in spending on hospital construction and found that the value of construction has grown to a level not seen since 1969. We have also explored the implications of this spending for Medicare policy (see text box, p. 56). The three major bond rating agencies report that the capital spending ratio—the ratio of capital spending to depreciation and amortization—increased to 1.5 or more in 2006, implying that hospitals are going beyond merely replacing worn-out plant and equipment (FitchRatings 2007; Moody’s 2007a; S&P 2007a, 2007b). For multistate health care systems, Moody’s reports the capital spending ratio was 2.0 (Moody’s 2007a).

Tax-exempt municipal bond issuances for nonprofit and government hospitals increased from the 2000 level of less than $15 billion to more than $33 billion in 2005 and reached about $24 billion in the six months through June 2007 (Thomson 2007). Overall, bond ratings in this sector have either improved or remained stable from the previous year. In the Fitch ratings, more bond issues were upgraded than downgraded in the first half of 2007, continuing the trend from 2006. The most important trend, however, is stability, with more than 80 percent of ratings unchanged (FitchRatings 2007). While Moody’s reports that downgrades exceeded upgrades by a ratio of 1.3 in the first three quarters of 2007, most ratings were unchanged. In addition, the amount of debt upgraded ($9.3 billion) far exceeded the amount downgraded ($5.4 billion) (Moody’s 2007b).

Recent trends in the cost of capital are mixed. For example, although the interest rate on AAA insured 30-year tax-exempt hospital bonds was higher in November 2007 than a year earlier, rates on 10-year bonds were unchanged (Cain 2007a). Uncertainty in credit markets and risk aversion since the collapse of the subprime mortgage bond market have also increased the risk premium that lower rated bonds have to pay over higher rated bonds. Concerns about bond insurers, who

Note: Spending is for nonfederal hospital construction. Data are deflated to 2006 dollars using the McGraw-Hill construction cost index. Construction in 2007 is a census projection based on data through August of 2007.


**FIGURE 2A–7** Spending on hospital construction continues to grow

<table>
<thead>
<tr>
<th>Calendar year</th>
<th>Dollars (in billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>14.4</td>
</tr>
<tr>
<td>2000</td>
<td>15.1</td>
</tr>
<tr>
<td>2001</td>
<td>16.4</td>
</tr>
<tr>
<td>2002</td>
<td>19.5</td>
</tr>
<tr>
<td>2003</td>
<td>20.7</td>
</tr>
<tr>
<td>2004</td>
<td>21.2</td>
</tr>
<tr>
<td>2005</td>
<td>22.6</td>
</tr>
<tr>
<td>2006</td>
<td>26.9</td>
</tr>
<tr>
<td>2007</td>
<td>30.6</td>
</tr>
</tbody>
</table>
Hospital construction trends

In the late 1960s, the combination of the Hill-Burton program, the creation of Medicare and Medicaid, and the entrance of hospitals into the municipal bond market combined to fuel rapid growth in hospital construction (Kinkead 1984). The nation’s first building boom peaked in the late 1960s; 40 years later, we are in the midst of a second building boom. In 2006, the value of construction permits per capita (adjusted for inflation) grew to a level not seen since 1969 (Figure 2A-8). Just as hospital construction doubled from 1960 to 1966 (data not shown), the value of construction permits doubled from 2000 to 2006 (Maffetone 2007, Kinkead 1984).

In the most recent building boom, roughly 85 percent of the construction is for new facilities and expansions of existing hospitals. The remainder is for remodeling existing buildings. Constructing a whole new facility may be the easiest way to incorporate evidence-based design. This new design paradigm incorporates features that have been shown to promote patient healing, safety, and worker satisfaction. It includes tenets such as increased use of natural light, standardized patient rooms, larger single rooms for patients and larger rooms for procedures, and putting nurses closer to patients. Adding these features to a hospital’s design increases construction costs by about 5 percent. But many argue that the additional costs will be recouped by improved patient safety and shorter patient stays. There may also be benefits from increased worker retention and putting the hospital in a better competitive position (McCarthy 2004).

**Figure 2A–8**

Value of hospital construction permits per capita at highest level since 1969

Note: Construction permit values are all inflated to 2006 dollars. The hospital category of construction includes ambulatory surgical centers and imaging centers, which account for less than 10 percent of construction in the hospital category. Hill-Burton was a federal program providing grants and loans to hospitals to fund construction and renovation projects.

Hospital construction trends (cont.)

(continued from previous page)

From the perspective of Medicare, there are two key questions to investigate. First, is the growth in construction desirable or does it reflect a “medical arms race” where some spending is not driven by patient needs? Second, how should Medicare policy respond to the costs of the building boom?

At least part of the increase in construction is due to the increasing demand for health care services. As countries become wealthier they spend a larger share of gross domestic product (GDP) on health care (Reinhardt et al. 2004). From 1996 to 2006, the share of GDP spent on health care increased in the United States from 13.7 percent to 16 percent and the share spent on construction of health care facilities increased from 0.2 percent to 0.3 percent of GDP (BEA 2007, Census Bureau 2007, CMS 2007). Construction projects may also be catching up from low levels of building in the late 1980s and 1990s when construction was moderated due to declines in the length of stay, a shift to outpatient care, and managed care pressures. Because of low levels of construction in the 1990s, hospitals were primed to start building once they obtained rapid increases in payments and profits from private payers. Given the growth in national income and the recent increase in hospitals’ total profit margins, it should not be surprising that hospital construction is growing rapidly.

However, some have argued that the construction is not simply a function of communities’ demand for new hospitals with single-occupancy rooms but may represent a “medical arms race” among providers (Bazzoli et al. 2006, Berenson et al. 2006). In some cases, the construction represents duplicative capacity in a market—for example, duplication of existing service lines such as cardiac surgery or outpatient imaging. Increasing capacity may lead to higher volumes without necessarily improving patient outcomes (Dartmouth Atlas 2007, Nallamouthu et al. 2007, Cram et al. 2005).

Looking forward, the next question is how should Medicare policy respond to the costs of the building boom? New construction leads to higher capital costs. Capital represents roughly 10 percent of hospitals’ costs. Therefore, if capital costs increased by 20 percent, total hospital costs would rise by roughly 2 percent. Unless the new facilities generate some offsetting efficiency gains, overall costs will increase—either because of increased costs per discharge or because of increased volume. Volume of supply-sensitive services may increase as capacity expands (Dartmouth Atlas 2007). The policy question will be whether Medicare payments should rise to accommodate the potential increases in volume and the cost per unit of service.

provide insurance guarantees to issuers of municipal debt, may also be lowering bond prices (WSJ 2007).

For the second year in a row, many of the median financial indicators, such as days cash on hand and debt service coverage, are among the best ever recorded (FitchRatings 2007). This improvement occurs at the same time hospitals have been making larger capital investments and borrowing more money. Few ratings have been lowered, implying that hospitals’ operating results and the increase in the market value of their investments have been sufficient to offset higher debt and preserve key measures the ratings industry uses. Some analysts see this as the high point for many indicators and foresee more uncertainty in the years ahead. Moody’s, for example, sees overall softening in volumes and operating performance and states that the outlook in 2008 and 2009 is uncertain (Moody’s 2007a).

For-profit hospitals have had good access to capital, in some instances using their strong cash flows to support debt that has been used to fund acquisitions, buyouts, and special dividends to shareholders. For example:

- Community Health Systems acquired Triad for $6.8 billion, creating the largest publicly traded hospital company in the United States (S&P 2007c).
• A consortium of private capital firms and management bought out Hospital Corporation of America (HCA) stockholders in a transaction estimated at about $32 billion (Cain 2007b).

• Health Management Associates, which primarily runs rural hospitals, issued bonds to fund a special dividend of $10 a share, increasing interest expenses approximately fourfold (S&P 2007d).

The HCA and Health Management Associates deals alone added more than $1.5 billion of annual interest expense to the income statements of the companies (HCA 2007, S&P 2007d). To date, strong cash flows and the selective sale of hospitals have allowed these large for-profit chains to absorb the higher interest expenses and remain profitable.

Looking forward, investors in this sector have some of the same concerns as those in the nonprofit sector about volume growth, bad debt, charity care, and the ability or willingness of payers, particularly Medicaid, to continue to increase payments over the longer term. Bad debt and the delayed recognition of bad debt are causing concern in this sector, particularly for firms with facilities concentrated in areas of the country with high rates of self-pay patients. However, increases in Medicare PPS rates and strong increases in commercial reimbursement rates are expected to provide some financial support for hospitals (Morgan Stanley 2006).

**Hospitals expect access to capital to remain good**

Hospitals plan to continue to add capacity and increase capital spending, implying that they expect to have continued access to capital. A recent survey of nonprofit hospitals found the following (BoA 2007):

- Nearly 84 percent of hospitals plan to add capacity over the next two years. About 80 percent intend to add outpatient capacity, 50 percent intend to add inpatient capacity, and 46 percent intend to add both.

- The mean forecasted increase in 2007 capital spending over the previous year is 13 percent.

- The top three capital spending priorities were diagnostic equipment (cited by 79 percent of respondents), clinical information systems (72 percent of respondents), and maintenance spending (71 percent of respondents). It is possible that these intentions will not be carried out; for example, insufficient return on investment may delay capital investment in information technology (IT) systems. That said, 62 percent of respondents expect to increase IT budgets materially.

**Table 2A–4**

<table>
<thead>
<tr>
<th>Measure</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Medicare</td>
<td>–1.3%</td>
<td>–3.0%</td>
<td>–3.0%</td>
<td>–4.8%</td>
</tr>
<tr>
<td>Inpatient</td>
<td>2.2</td>
<td>–0.3</td>
<td>–0.6</td>
<td>–2.6</td>
</tr>
<tr>
<td>Outpatient</td>
<td>–11.5</td>
<td>–10.7</td>
<td>–9.2</td>
<td>–11.0</td>
</tr>
</tbody>
</table>

Note: Data are for all hospitals covered by Medicare acute inpatient prospective payment system in 2006. 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) and home health, and inpatient psychiatric and rehabilitation services, plus graduate medical education.

Source: MedPAC analysis of Medicare Cost Report file from CMS.
Some believe this substantial increase in building and capacity could result in higher costs for the health care system. The Center for Studying Health System Change, for example, has reported an ongoing building boom and expansion of both inpatient and outpatient capacity in the 12 health care markets it tracks (HSC 2005). The Center reports that much of the added capacity is located in suburban areas and in particular specialties, raising the possibility that health care costs will increase without significantly improving access to services in lower income areas.

**Improvements may be closing the credit gap**

Some in the industry are concerned about a divergence in access to capital between “haves” and “have-nots” and fear that hospitals with weaker credit will languish. However, one agency reports that hospital systems with speculative grade bond ratings are continuing to access debt markets to finance projects and notes a recent $735 million debt issue from one system as an example (S&P 2007a). Analysts also point out that hospitals that cannot put money into capital spending may merge or be acquired by a stronger hospital or health system. Although mergers might affect competition within market areas, they do not necessarily result in a decline in access to hospital care for Medicare beneficiaries. Some hospitals without investment grade bond ratings have alternative sources of financing—for example, loans from commercial lenders such as banks and private placement of tax-exempt bonds. Hospitals may also lease equipment instead of using capital to purchase it outright. The leasing market for health care equipment is projected to reach $8 billion in 2007 (HFMA 2006).

**Payments and costs for 2008**

In assessing payment adequacy, the Commission considers the estimated relationship between Medicare payments and hospitals’ costs in the current year, fiscal year 2008. We assess the adequacy of Medicare payments for the hospital as a whole, and thus our indicator of the relationship between payments and costs is the overall Medicare margin. This margin includes payments and costs for the six largest services that hospitals provide to Medicare patients, plus graduate medical education. We take this approach because hospitals allocate large amounts of overhead across service lines, particularly between inpatient and outpatient care. Only by combining data for all major services can we estimate Medicare costs without the influence of how overhead costs are allocated.

<table>
<thead>
<tr>
<th>Hospital group</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>All hospitals</td>
<td>–1.3%</td>
<td>–3.0%</td>
<td>–3.0%</td>
<td>–4.8%</td>
</tr>
<tr>
<td>Urban</td>
<td>–0.9</td>
<td>–2.9</td>
<td>–3.0</td>
<td>–4.8</td>
</tr>
<tr>
<td>Rural</td>
<td>–3.9</td>
<td>–3.4</td>
<td>–3.1</td>
<td>–5.1</td>
</tr>
<tr>
<td>Major teaching</td>
<td>6.6</td>
<td>5.0</td>
<td>5.0</td>
<td>2.8</td>
</tr>
<tr>
<td>Other teaching</td>
<td>–1.5</td>
<td>–3.2</td>
<td>–3.6</td>
<td>–5.4</td>
</tr>
<tr>
<td>Nonteaching</td>
<td>–5.3</td>
<td>–7.0</td>
<td>–6.8</td>
<td>–8.5</td>
</tr>
</tbody>
</table>

Note: Data are for all hospitals covered by the Medicare acute inpatient prospective payment system in 2006. 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) and home health, and inpatient psychiatric and rehabilitation services, plus graduate medical education.

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

**Trend in Medicare margins**

The overall Medicare margin has trended downward since 1997 (Figure 2A-9). The margin was unchanged at –3.0 percent going from 2004 to 2005, but it declined to –4.8 percent in 2006 (Table 2A-4). The difference between these two rates of change resulted from policy changes that increased payments in 2005 and decreased them in 2006.

In 2004 and 2005, the gap between the inpatient and outpatient margins (components of the overall Medicare margin) narrowed by 5 percentage points. This was due primarily to inpatient costs per discharge rising faster than outpatient costs per service, as is discussed further in the next section. Policy changes affected both inpatient and outpatient services in 2006, causing the two margins to fall by almost equal amounts.

Conversions to CAH status and MMA provisions aimed at helping rural PPS hospitals closed the gap between the margins of rural and urban PPS hospitals in 2005, and the rural margin remained only slightly lower in 2006 (Table 2A-5). CAHs are not included in our margin calculations, but the overall Medicare margin went up slightly when poorly performing rural facilities left the acute inpatient PPS for CAH status. Nonteaching hospitals, most of which are in urban areas, had the poorest financial performance.
A number of payment policy changes, including some scheduled to be implemented in 2009, affect our projection of the 2008 margin under 2009 policy. These changes affect Medicare’s payments for acute inpatient and outpatient services as well as hospital-based post-acute care services, including home health, skilled nursing facility, and inpatient rehabilitation services. The provisions affecting inpatient and outpatient payments are summarized below, and provisions affecting the post-acute services are described in other chapters.

Inpatient payments

CMS implemented major changes to the acute inpatient prospective payment system (PPS) in 2008. In response to a Commission recommendation, it introduced a new patient classification system that incorporates severity adjustment. Medicare severity diagnosis related groups (MS–DRGs) will replace DRGs as the method for grouping patients for payment of per discharge payments. CMS is phasing in MS–DRGs, with payment based entirely on MS–DRGs in 2009. CMS and the Commission anticipate that hospitals will respond to the incentives of the MS–DRG system by improving coding and medical records documentation, which will result in assignment of cases to higher weighted MS–DRGs. Since this assignment will increase payments without an accompanying increase in resources used, it will inappropriately increase payments. CMS will reduce payments in 2008 and 2009 to ensure that implementation of MS–DRGs is budget neutral. The Medicare, Medicaid, and SCHIP Extension Act of 2007 (MMSEA)—a bill to extend transitional medical assistance, the abstinence education program, and the Qualifying Individuals program—set a schedule for these reductions of 0.6 percent in 2008 and an additional 0.9 percent in 2009.

Changes in the indirect medical education (IME) adjustment paid to teaching hospitals reduced inpatient payments in 2007 but will increase payments in 2008 and beyond.

Hospitals may qualify for reclassification to a different labor market for purposes of the wage index. Section 508 of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 gave eligible hospitals an opportunity for one-time reclassification to a different labor market and allowed this change to increase their payments. Expiration of Section 508 at the end of 2007 returned these hospitals to the wage index of the area where they are located and removed

We estimate that the overall Medicare margin in 2008 will be –4.4 percent, an improvement of 0.4 point over 2006. Our projection reflects the effects of policy changes occurring between 2006 and 2008 as well as 2009 payment policy changes other than updates. These policy changes are summarized in the text box. Several offsetting factors lie behind this projection.

On the negative side, several 2008 or 2009 policy changes—notably two cuts in inpatient capital payments (capital IME and an add-on for large urban hospitals), the sunsetting of a special geographic reclassification program (Section 508), and elimination of outpatient hold-harmless payments for certain small rural hospitals—will reduce payments. In addition, preliminary data from a Census Bureau survey and six for-profit chains suggest that hospitals’ rate of cost growth will edge up in 2007 and exceed the forecasted increase in the hospital market basket. This higher cost growth may reflect a lack of financial pressure and the effects of the current surge in construction spending but could also reflect spending on health IT and continued pressure on wages from shortages of professional personnel such as nurses and pharmacists. Hospitals in markets with growing populations experience more pressures to expand facilities and staffing.

However, the effects of four factors increasing payments will more than offset the factors decreasing payments:

- The MMA increased disproportionate share (DSH) and hospital-based payments for Medicare-dependent hospitals.
Our simulations suggest that fewer discharges will be affected by the post-acute transfer policy under MS–DRGs relative to the current DRGs.

DSH payments will increase due to rising low-income shares, most likely caused by the combination of Section 1115 waivers expanding Medicaid eligibility and court cases liberalizing the count of Medicaid days.

We expect the payment increases resulting from improvements in coding and medical records documentation after MS–DRGs were introduced to exceed the legislated payment offsets for coding effects. These offsets are 0.6 percent in 2008 and 0.9 percent in 2009, totaling 1.5 percent.

The Medicare, Medicaid, and SCHIP Extension Act of 2007 (MMSEA) extended the Section 508 reclassification program through fiscal year 2008. Although we estimate that this will raise the overall Medicare margin by 0.2 percent in 2008, we have not reflected the increased revenue in our margin forecast because the program is scheduled to sunset in 2009. As we describe in Section 2F, the MMSEA also increased payments for hospital-based rehabilitation units by requiring that 60 percent rather than the previous requirement of 75 percent of patients come from prescribed diagnostic categories. This change is reflected in our forecast, although the effect is small because rehabilitation units are responsible for only about 3 percent of hospitals’ Medicare revenue.

When first proposing the MS–DRG system in April 2007, CMS estimated that coding refinements and improved
documentation of medical records would increase payments by 2.4 percent in each of 2008 and 2009, based on the experience of the Maryland rate-setting agency in implementing severity-adjusted DRGs for all payers. Based on our own analysis of data from Maryland hospitals, we recommended a payment offset of 1.7 percent in each of 2008 and 2009—about a third less than CMS proposed. Therefore, we assumed that payments will rise a combined 3.4 percent over this two-year period, while the Congress will take back only 1.5 percent with coding offsets. Consequently, our margin projection assumes a net increase in payments of 1.9 percent.

No one can definitively predict the effects of the coding and medical record changes, but the experience of Maryland hospitals, CMS’s documentation of the effects of previous changes in the patient classification systems upon which facility-based payments are based, and the specific design features of the MS–DRG system all support the conclusion that the effects will be larger than the legislated offsets. The most important design feature in this regard is not DRG restructuring but redefinition of CCs that CMS implemented simultaneously. Under the MS–DRG system, the presence of any one CC in most cases will qualify the patient for a higher payment rate, and the presence of a major CC will result in an even higher payment. For example, the base payment for a patient with a major large bowel procedure is $8,983; a CC raises the rate to $14,114 and a major CC raises it to $21,980.

Congestive heart failure (CHF), one of the most common secondary diagnoses for the elderly, provides an excellent example of the payment effect that changing CC definitions can have. Under the old DRG system, coding "CHF not otherwise specified" qualified the case as having a CC, although the payment system usually did not provide a higher payment rate for such patients. Under the MS–DRG system, CHF not otherwise specified no longer qualifies as a CC—instead, 1 of 13 specific types of CHF (e.g., chronic diastolic heart failure) must be coded. In 2005, 93 percent of the 2.2 million cases coded with CHF as a secondary diagnosis would not have qualified as a CC under the new system. We do not know how many of these patients actually had 1 of the 13 types of CHF, but either the physician did not record the necessary detail in the medical record or the coder did not pick it up. In the future, hospitals will have a strong incentive to make sure more specific codes are used when the patient’s condition warrants it, and payment increases will undoubtedly result from hospitals adopting these appropriate coding refinements.

Cost growth has moderated in recent years

The weighted average of Medicare inpatient and outpatient costs—unadjusted for changes in case mix—increased by 5.3 percent in 2004, 5.1 percent in 2005, and 4.3 percent in 2006 (Table 2A-6). Much of these increases was due to the rising complexity of patients treated (for which Medicare pays). After accounting for reported case-mix increases, the weighted average cost increase was 4.3 percent in 2004 and 3.8 percent in 2006. The 3.8 percent rate of cost growth was close to the average market basket update hospitals received from Medicare in 2006 for operating and capital payments.

Looking at inpatient costs separately, unadjusted inpatient costs per discharge increased by 5.2 percent in 2005 and 4.8 percent in 2006. Case-mix-adjusted inpatient costs
rose 4.2 percent in 2005 and 3.9 percent in 2006 (Table 2A-6). Inpatient complexity, as measured by case mix, increased by 1.0 percent in 2004, 1.0 percent in 2005, and 0.9 percent in 2006.

Medicare outpatient cost per unit of service (adjusted for case-mix change) has been slightly lower, increasing by 2.8 percent in 2005 and 3.2 percent in 2006 (Table 2A-6). Outpatient complexity of services has been inconsistent. The service-mix index for outpatient services increased by 1.7 percent in 2005 and decreased by 0.5 percent in 2006. We calculate the service-mix index as the sum of the relative weights of all outpatient PPS services divided by the volume of all services. The concept is similar to the case-mix index for inpatient services.

The growth in outpatient volume could explain why outpatient costs grew more slowly than inpatient costs in recent years. First, outpatient service volume for Medicare patients increased about 2.5 percent per year from 2004 through 2006, allowing hospitals to spread fixed costs over more services. Much of this growth is due to increases in the number of services patients received on each day they visited the hospital outpatient department, which had an average annual increase of 1.7 percent from 2004 through 2006. As patients receive more services per trip to the outpatient department, the cost per service should decline.

Looking forward to 2007, we expect the rate of growth in hospital costs per unit of service to edge up. While 2007 Medicare cost report data are not available, we do have partial year data from the Census Bureau through June 2007 and from certain hospital systems with publicly traded stock or bonds for the nine months ending in September 2007. These data suggest that cost growth will be roughly 5 percent in 2007, before any case-mix adjustment.

**Factors influencing cost growth and financial performance**

In this section, we discuss the relationship between the financial pressure hospitals face in their private sector operations and their growth in Medicare costs and financial performance under Medicare. We first address this relationship over time for the industry as a whole, and then we contrast the cost and financial outcomes in recent years of hospitals facing the most and least financial pressure.

**Industrywide financial pressure and cost growth**

In recent years, hospital costs per discharge have risen faster than the rate at which input prices and Medicare payments have increased. This has been possible primarily because of improving profits on private payer patients. The level of private payer profits has been cyclical. During the first cycle (1986 through 1992), most insurers still 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 (Figure 2A-10). In the mid-1990s, HMOs and other private insurers began to negotiate much harder 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. The payment-to-cost ratio for private payers declined by 17 percentage points from 1993 through 1999.

By 2000, hospitals had regained the upper hand in price negotiations due to hospital consolidations and consumer backlash against managed care. Rates for private payers rose rapidly and their payment-to-cost ratio consequently increased 11 percentage points from 2000 to 2004. In 2005 and 2006, private payer profit margins began to level off. This suggests that private payers are toughening in their negotiations with hospitals.

While private payer payments remain more than 20 percent above costs, they are no longer rising faster than
costs. This excess growth in payment previously enabled hospitals to fund cost growth above the increase in input prices or the market basket increases on which Medicare payment updates are based. However, hospitals’ “other operating revenue” increased about 17 percent in 2006, essentially serving the same purpose as double-digit increases in private payer payments in earlier years. This surge in other operating revenue (which generally includes income from activities other than direct patient care) was the largest increase in nearly a decade and may reflect an expansion of joint ventures with physician or other provider groups.

When we examine cost growth during the same three periods, we see that the rate of increase tended to follow trends in private payer profitability. From 2001 to 2004, increases in private payer profitability were accompanied by hospital costs rising at a rate faster than the market basket (Figure 2A-11). In 2005, private payer profit margins leveled off and (as discussed previously) cost growth returned to a level close to the market basket increase.

**Hospital-level financial pressure and hospital costs** The effect of financial pressure on costs is not only evident over time, it is also evident when comparing hospitals under differing 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 Medicare costs, while others face losses if they do not constrain costs and generate profits on Medicare patients. To test the relationship between financial pressure and hospitals’ costs, we divided hospitals into three levels of financial pressure: high, medium, and low. We tested whether hospitals under high levels of financial pressure from 2001 to 2005 ended up with lower standardized inpatient costs per discharge in 2006. The question is whether financial pressure leads to lower costs.

We defined high-pressure hospitals as those that meet the following two criteria:

- Median non-Medicare profit margins of 1 percent or less from 2001 to 2005, covering both inpatient and outpatient services. Non-Medicare margins reflect the sum of net profit (or loss) on private pay, Medicaid, self-pay, and charity cases, as well as nonpatient revenues and costs.
- Net worth would have grown by less than 1 percent per year from 2001 to 2005 if the hospitals’ Medicare profits had been zero. In other words, high-pressure hospitals depend on Medicare profits to grow their net worth.

In contrast, low-pressure hospitals can grow their net worth even if they suffer Medicare losses. We deemed a hospital low pressure if it met the following two criteria:

- Median non-Medicare margins greater than 5 percent from 2001 to 2005, and
- Net worth would have grown by more than 1 percent per year if its Medicare profits were zero. In other words, low-pressure hospitals do not depend on Medicare profits to grow their net worth.

The medium-pressure hospitals fall into neither the high-pressure nor the low-pressure category. They consist of hospitals that either have modest non-Medicare profit margins in the 1 percent to 5 percent range or tended to have losses on their non-Medicare business but received large transfers or restricted gifts for buildings that caused the hospital’s net worth to increase. Some nonprofit hospitals generate losses but still experience increases in net worth because of transfers, unrealized investment...
gains, or gifts for buildings that are not recorded as income, but these gains and gifts are recorded on the balance sheet as increases in net worth. The results are not sensitive to small changes in the cutoffs used to define the pressure groups. We find similar results if we use a 4 percent or a 7 percent margin as the upper bound for medium pressure.  

The comparison of hospital groups (low pressure to high pressure) confirms the three-period analysis showing that

<table>
<thead>
<tr>
<th>TABLE 2A-7</th>
<th>Financial pressure leads to lower costs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level of financial pressure 2002 to 2005</strong></td>
<td><strong>High pressure</strong></td>
</tr>
<tr>
<td>(non-Medicare margin &lt;1%)</td>
<td></td>
</tr>
<tr>
<td>(non-Medicare margin &gt;5%)</td>
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</tbody>
</table>

**Financial characteristics, 2006**

- Non-Medicare margin (private, Medicaid, uninsured)
  - High pressure: -1.1%
  - Medium pressure: 6.3%
  - Low pressure: 13.6%

<table>
<thead>
<tr>
<th></th>
<th>High pressure</th>
<th>Medium pressure</th>
<th>Low pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median of for profit and nonprofit</td>
<td>$5,500*</td>
<td>$5,800</td>
<td>$6,200</td>
</tr>
<tr>
<td>Nonprofit hospital</td>
<td>5,500*</td>
<td>5,800</td>
<td>6,200</td>
</tr>
<tr>
<td>For-profit hospital</td>
<td>5,600*</td>
<td>5,600</td>
<td>5,800</td>
</tr>
<tr>
<td>Annual growth in cost per discharge 2003 to 2006</td>
<td>4.6%*</td>
<td>5.4%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Overall 2006 Medicare margin</td>
<td>3.7*</td>
<td>-3.3</td>
<td>-10.8</td>
</tr>
</tbody>
</table>

**Patient characteristics (medians)**

- Total hospital discharges in 2006: 5,495*
- Medicare share of inpatient days: 47%
- Medicaid share of inpatient days: 13%*
- Medicare case-mix index: 1.26*
- Nonprofit hospital: 5,500*
- For-profit hospital: 5,600*
- Annual growth in cost per discharge 2003 to 2006: 4.6%*
- Overall 2006 Medicare margin: 3.7*

**Hospital characteristics**

<table>
<thead>
<tr>
<th></th>
<th>High pressure</th>
<th>Medium pressure</th>
<th>Low pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>All hospitals</td>
<td>911</td>
<td>427</td>
<td>1,529</td>
</tr>
<tr>
<td>Rural hospitals</td>
<td>284</td>
<td>113</td>
<td>483</td>
</tr>
<tr>
<td>For-profit hospitals</td>
<td>184</td>
<td>69</td>
<td>335</td>
</tr>
<tr>
<td>Major teaching hospitals</td>
<td>149</td>
<td>47</td>
<td>49</td>
</tr>
<tr>
<td>All hospitals</td>
<td>32%</td>
<td>15%</td>
<td>53%</td>
</tr>
<tr>
<td>Rural hospitals</td>
<td>31</td>
<td>13</td>
<td>55</td>
</tr>
<tr>
<td>For-profit hospitals</td>
<td>31</td>
<td>12</td>
<td>57</td>
</tr>
<tr>
<td>Major teaching hospitals</td>
<td>61</td>
<td>19</td>
<td>20</td>
</tr>
</tbody>
</table>

Note: Standardized costs are adjusted for hospital case mix, wage index, outliers, transfer cases, interest expense, and the effect of teaching and low-income Medicare patients on hospital costs. The sample includes all hospitals that had complete cost reports on file with CMS by August 31, 2007.

* Indicates significantly different from low-pressure hospitals using p=0.01 and a Wilcoxon rank test. A Wilcoxon rank test is used to limit the influence of the few hospitals that report very large costs per discharge.

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

high levels of financial pressure lead to lower standardized costs. Hospitals under high levels of financial pressure have median Medicare standardized costs of $5,500 per discharge on average (Table 2A-7).  

In contrast, hospitals with low levels of financial pressure had standardized costs more than 10 percent higher at $6,200 per discharge. The effect of financial pressure on costs is greater for nonprofit hospitals. When the financial pressure is low, nonprofits’ operating costs rise to a higher level than for-
Hospital inpatient and outpatient services: Assessing payment adequacy and updating payments

profits’ operating costs on average. As discussed earlier, strong cash flows at for-profit hospitals have been used for other purposes in recent years, including capital expansion, leveraged buyouts, and special dividends. On average, hospitals under financial pressure tend to be smaller, have lower case-mix levels, and depend slightly more on Medicaid, but there are a wide variety of hospitals in all three financial pressure categories.

**Hospital-level variation in costs** We examined the variation in hospital costs per discharge after standardizing for geographic, patient-level, and some hospital characteristics that can affect cost, such as area wages, case mix, outlier cases, transfer cases, interest expense, and the cost of teaching residents. After adjusting for these factors, costs are no longer correlated with rural versus urban location or teaching versus nonteaching status. Rural, urban, teaching, and nonteaching hospital categories all have median standardized costs of about $5,900 per discharge. For-profit hospitals have a slightly lower standardized cost ($5,700 per discharge) than nonprofit hospitals ($5,900) or government hospitals ($6,000). However, within each category of hospitals there is a wide distribution of costs. In 2006, roughly one-third of hospitals had standardized costs below $5,600 per discharge and roughly one-third had standardized costs above $6,300 per discharge. Cost differences drove margin differences. Low-cost hospitals had a median Medicare margin of 5.1 percent, while high-cost hospitals had a median margin of –15.6 percent.

When we examine individual hospital costs over time, we see that certain hospitals consistently have low costs and others consistently have high costs. From 2004 through 2006, roughly 20 percent of hospitals had costs in the bottom third for three years in a row and roughly 20 percent of hospitals had costs in the top third for three years in a row. Many low-cost hospitals are under financial pressure to constrain costs, but the low-cost hospital group also includes hospitals that choose to keep their costs low despite having high non-Medicare margins. The performance and competitiveness of hospitals in the low-cost and high-cost groups differ dramatically (Table 2A-8). Hospitals with consistently low standardized costs had a median cost of $5,000 per discharge in 2006. In contrast, hospitals with costs consistently in the highest third of all hospitals had a median standardized cost of $7,000 in 2006 and had costs more than 10 percent above those of competing hospitals located within 15 miles. While some market-level factors affect the costs of all hospitals in a market, even within a single market the high-cost hospitals have a cost structure significantly higher than that of neighboring hospitals.

Hospitals with consistently high costs contribute to lowering the overall Medicare margin. The 2006 aggregate overall Medicare margin would be more than 3 percentage

<table>
<thead>
<tr>
<th>Hospital characteristic</th>
<th>Lower third for three years</th>
<th>Upper third for three years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of hospitals</td>
<td>22%</td>
<td>21%</td>
</tr>
<tr>
<td>Annual percent change in:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicare length of stay, 1997–2006</td>
<td>–1.5</td>
<td>–0.7</td>
</tr>
<tr>
<td>Inpatient cost per case, 2003–2006</td>
<td>3.9</td>
<td>6.4</td>
</tr>
<tr>
<td>Median standardized costs at:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low-cost and high-cost hospitals</td>
<td>$5,000</td>
<td>$7,000</td>
</tr>
<tr>
<td>Hospitals within 15 miles of low-cost or high-cost hospitals</td>
<td>5,600</td>
<td>6,200</td>
</tr>
<tr>
<td>Average Medicare margin</td>
<td>6.7%</td>
<td>–21.4%</td>
</tr>
</tbody>
</table>

Note: Per case costs are standardized for wages, case mix, severity, outlier cases, interest expense, low-income shares, and teaching intensity. Median values shown.

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

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**Table 2A-8** Characteristics of consistently low- and high-cost hospitals
points higher (–1.7 percent) if the hospitals with standardized costs in the top third every year from 2004 to 2006 were excluded from the margin calculation. The lack of financial pressure at certain hospitals can lead to higher costs and in turn bring down the overall Medicare margin for the industry.

**How should Medicare payments change in 2009?**

When we consider whether Medicare’s aggregate payments are adequate, we look at the six largest hospital service lines—acute inpatient, outpatient, rehabilitation, home health, psychiatric, and skilled nursing facility (including swing beds). In this section, we provide update recommendations for services covered by Medicare’s operating inpatient and outpatient PPSs. For both the acute inpatient and outpatient PPSs, the update in current law for fiscal year 2009 is the forecasted increase in the hospital market basket index.

**Changes in input prices**

CMS measures price inflation for the goods and services hospitals use in producing inpatient and outpatient services with the hospital operating market basket index. CMS’s latest forecast of this index for fiscal year 2009 is 3.0 percent, but it will update the forecast twice before using it to update payments in 2009.

**Productivity**

One of the Commission’s key policy principles is that Medicare’s payment systems should encourage efficiency. Hospitals and other health care providers should be able to reduce the quantity of inputs required to produce a unit of service by at least a modest amount each year while maintaining quality of care. The Commission’s approach links the adjustment for improving efficiency to the gains achieved by firms and workers who pay the taxes and premiums that fund Medicare benefits. Our adjustment is set equal to the Bureau of Labor Statistics’ estimate of the 10-year average growth rate of multifactor productivity in the general economy, which is currently 1.5 percent.

**Technology**

Much of hospitals’ spending for new devices, drugs, and equipment has the potential to improve their productivity—that is, reduce costs with constant or improving quality—and fixed payment rates provide a strong financial incentive for hospitals to adopt these technologies. Providers have less incentive to adopt quality-enhancing technologies that increase costs, but Medicare’s inpatient and outpatient PPSs provide direct payment for certain technologies used in delivering patient care that meet certain criteria. In addition, Medicare can support the adoption of IT through a quality incentive payment policy.

**Payment system mechanisms addressing technology**

Since fiscal year 2003, new technology payments have supplemented the base DRG payment rates in the acute inpatient PPS. These payments are in addition to the MS–DRG payment and are not budget neutral. They provide transitional funding (for two to three years) to assist hospitals in adopting technologies that will increase their costs. New technology payments improve hospitals’ accountability by providing extra funds only when a new technology meets certain criteria, is in place, and is being used to treat patients. CMS approved three technologies for inpatient add-on payments in 2006, accounting for about $84 million in payments.

CMS’s criteria for approving technologies for payment require that they must be new, offer substantial clinical improvement, and have a major impact on costs. Base payments already have funding for technology, and small improvements to existing technologies usually do not have significant independent cost implications. In addition, there have been instances in which the clinical benefit of new technologies is later questioned (e.g., drug-eluting stents), increasing the importance of the new technology review process. Finally, additional payment should not be made when the technology reduces costs over time or substitutes for existing technologies of approximately equal cost.

CMS reviews DRG definitions annually (MS–DRG definitions in the future) to ensure that each group contains cases with clinically similar conditions requiring comparable amounts of inpatient resources. Manufacturers and providers may apply to CMS to have certain cases moved from one MS–DRG to another if use of a new technology increases the cost of care. This increases payment and complements new technology add-on payments as a way to address the costs of new technologies.
Use of new technologies often shifts patients into higher-weighted MS–DRGs, which increases payment for cases using the new technologies and the hospitals that treat them. This provides an additional source of funds for users of new technologies.

Medicare’s outpatient PPS makes new technology add-on payments similar to those in the inpatient PPS, although these payments are budget neutral. But the outpatient PPS also creates new technology APCs, which cover completely new services for which CMS does not yet have adequate data to establish payment rates. The new technology APCs generate a new payment for each service rendered, resulting in an increase in total Medicare payments. New technology APCs accounted for about $300 million in outpatient payments in 2006.

**Information technology considerations**

While add-on payments and new technology APCs address new technologies in patient care, they do not provide direct funding for investment in IT, such as computerized physician order entry systems and electronic medical records. IT systems are expensive, but IT is reflected in the historical cost base that Medicare’s DRG and APC payment are designed to cover, including medical records and data-processing costs as well as depreciation for past purchases of computer systems and software. For the increment above what base payments will cover, we believe productivity improvements should provide an adequate return on investment in the long run.

A pay-for-performance program provides a better mechanism than the update for encouraging hospitals to invest in IT. Paying for the use of IT through a pay-for-performance program will likely target payments to hospitals that actually install quality-improving IT systems. Increasing the update, in contrast, does not provide Medicare with any tool for ensuring that hospitals spend the additional payment on performance-improving IT. Because IT has the potential to improve the quality of patient care, we have recommended that the Congress direct CMS to include measures of functions supported by the use of IT in pay-for-performance measures (MedPAC 2005). Pay for performance will help give providers the business case to adopt IT and reap rewards from payments for improvements in quality that flow from better clinical information.

As discussed earlier in the chapter, hospitals appear able to support large increases in their capital expenditures. Spending for construction alone was expected to surpass $30 billion in 2007 (Figure 2A-7, p. 55). Moody’s estimates that investments in clinical and other IT account for 15 percent to 20 percent of hospitals’ capital expenditures, and the share is growing (Moody’s 2005). Further, 46 percent of community hospitals reported moderate or high use of health IT in 2006, up from 37 percent in 2005, and more than two-thirds of hospitals had fully or partially implemented electronic health records in 2006 (AHA 2007).

**Pay for performance**

The Commission has concluded that Medicare should take the lead in developing incentives for high-quality care. To that end, our March 2005 report recommended that the Congress establish a quality incentive payment policy for hospitals under Medicare (MedPAC 2005). Recent research finds that most hospitals appear capable and willing to move forward into a pay-for-performance environment (Felt-Lisk and Laschober 2006).

A number of accepted quality measures are available—including process measures, measures of safe practices, and mortality measures. These measures would enable CMS to implement the program fairly quickly and then to enhance and expand the set of measures in future years. One targeted approach would implement and expand pay for performance focusing on specific conditions or services (e.g., central line infections or ventilator-assisted pneumonia in intensive care units) where evidence suggests that quality improvement initiatives have the most impact.

Pay for performance would result in a larger share of payments going to hospitals that achieve high quality scores or improve their quality substantially from one year to the next. Funding for the pool should come from existing Medicare hospital payments. Our recommended update and the pay-for-performance program would replace the provision in current law that reduces a hospital’s payments by 2 percent if it fails to report required quality data to CMS. On November 26, 2007, CMS released a mandated report to the Congress presenting the agency’s proposal for a value-based purchasing program for hospitals. The report describes the quality incentive payment program CMS would implement, pending congressional action to authorize it, in fiscal year 2009. The Commission believes it is critical that the Congress authorize CMS to implement a quality pay-for-performance system in 2009.
Update recommendation

This section presents our update recommendation covering acute inpatient and outpatient payments along with a summary of our rationale and the implications of the recommendation.

Recommendation 2A-1

The Congress should increase payment rates for the acute inpatient and outpatient prospective payment systems in 2009 by the projected rate of increase in the hospital market basket index, concurrent with implementation of a quality incentive payment program.

Rationale 2A-1

Most of the Commission’s indicators of payment adequacy are positive. Access to care remains strong, as indicated by more hospitals opening than closing as well as the share of hospitals offering many services rising. Volume of both inpatient and outpatient services is growing, quality of care is generally improving, and access to capital is, by some measures, at an all-time high. On the other hand, while Medicare margins are not expected to fall between 2006 and 2008, they will remain low. Our analysis of hospital costs and financial pressure showed that hospitals with low non-Medicare profit margins have below-average standardized costs. Most of these facilities have positive overall Medicare margins.

Balancing these considerations, we conclude that an update of market basket is appropriate for both inpatient and outpatient services, with this increase implemented concurrently with a quality incentive payment program.12 The Commission’s reasoning is that, given the mixed picture of indicators, an individual hospital’s quality performance should determine whether its net increase in payments is above or below the market basket increase. Our finding that hospitals’ costs are strongly related to the financial pressure they are under from non-Medicare sources suggests that Medicare should put pressure on hospitals to control their costs rather than accommodate the current rate of cost growth.

CMS’s current projection of the market basket increase for fiscal year 2009 is 3.0 percent. However, this estimate is revised on a quarterly basis, so the actual update percentage may be different.

Implications 2A-1

Spending

- This recommendation would have no effect on federal baseline program spending.

Beneficiary and provider

- This recommendation should have no impact on beneficiary access to care and is not expected to affect providers’ willingness and ability to provide care to Medicare beneficiaries. There is a potential for improved quality of care for beneficiaries.

Indirect medical education adjustment

Last year the Commission undertook an extensive analysis of the IME adjustment and recommended that the adjustment be reduced when the PPS rates are adjusted for severity differences (MedPAC 2007a).

The IME adjustment is a percentage add-on to the PPS rates that varies with the number of residents a hospital trains. In 2008, payments increase approximately 5.5 percent for each 10 percent increment in resident intensity, measured by the ratio of residents to hospital beds. A hospital’s IME payments are therefore tied to its volume and mix of PPS cases as well as to the number of residents it trains.

In 2006, IME payments to hospitals totaled about $5.8 billion, and about 30 percent of hospitals paid under the acute inpatient PPS received an IME adjustment.13 IME payments go to 41 percent of urban hospitals compared with just 7 percent of rural hospitals, and the payments are highly concentrated. Major teaching hospitals—those with more than 25 residents per 100 hospital beds—account for a little more than a quarter of all teaching hospitals but receive almost three-quarters of IME payments, averaging almost $14 million per hospital.

The current IME adjustment, however, substantially exceeds the estimated relationship between teaching intensity and costs per case. Our analysis found that Medicare inpatient costs per case (operating and capital costs combined) increase about 2.2 percent for every 10 percent increase in the ratio of residents to hospital beds (MedPAC 2007a). Therefore, the current adjustment is set at more than twice what can be justified empirically, directing more than $3 billion in extra payments to teaching hospitals with no accountability for how the funds are used.
Having the adjustment set considerably above what is empirically justified contributes substantially to the large disparities in Medicare financial performance between teaching and nonteaching hospitals (see Table 2A-5, p. 59). Overall Medicare margins for major teaching hospitals, for example, were 2.8 percent in 2006 compared with −8.5 percent for nonteaching hospitals, a difference of about 11 percentage points.\textsuperscript{14}

Moving the IME adjustment closer to the empirical cost relationship would help to reduce these margin differences. Cutting the IME adjustment to 4.5 percent per 10 percent increment in teaching intensity would narrow the gap in overall Medicare margin between major teaching and nonteaching hospitals by about 2 percentage points. The disparity in financial performance would be cut in half if the adjustment were reduced to the empirical level. The difference in financial performance is not eliminated because a large proportion of disproportionate share payments, which have little relationship to patient care costs, goes to major teaching hospitals.

If the IME adjustment were reduced, the payments could be redirected in various ways. The funds could be returned to the inpatient base rate, so that all PPS hospitals benefit proportionately. This would reduce the gap in financial performance between teaching and nonteaching hospitals. Alternatively, the funds could be used to finance a pay-for-performance program to reward high-quality care and quality improvement. Under this approach, teaching hospitals would compete with all other hospitals for the payment set-aside based on their performance on selected quality measures.

A third possible use of the funds obtained from reducing IME payments is to support initiatives to emphasize a new set of skills and knowledge in residency training. Alternatively, a new funding source (outside of Medicare) might be directed to spurring changes in medical school curricula. This new focus could include integrating geriatric training, using evidenced-based medicine more effectively, measuring performance against quality benchmarks, and working in interdisciplinary teams. Finally, the IME funds could be removed from the inpatient PPS altogether and taken as savings. The Commission discussed all these options and concluded that the funds should be used to reward high-quality hospitals and those that improve in quality over time.

### Recommendation 2A-2

The Congress should reduce the indirect medical education adjustment in 2009 by 1 percentage point to 4.5 percent per 10 percent increment in the resident-to-bed ratio. The funds obtained by reducing the indirect medical education adjustment should be used to fund a quality incentive payment program.

### Rationale 2A-2

IME payments currently exceed the effect of teaching on Medicare costs, which contributes to the large differences in financial performance under Medicare between teaching and nonteaching hospitals. These funds are provided to teaching hospitals with no accountability for how they are used, and a better use of the funds is desired. The Commission therefore recommends that the IME adjustment be reduced from 5.5 percent to 4.5 percent per 10 percent increment in the resident-to-bed ratio. We also recommend that the funds obtained from reducing the IME adjustment be used as part of the funding for a quality incentive payment program. The Commission recommended a pay-for-performance program for hospitals in its March 2005 Report to the Congress, and CMS recently published a report outlining the pay-for-performance program it plans for 2009, although this would require congressional action.

### Implications 2A-2

**Spending**
- This recommendation would have no impact on federal program spending because it is intended to be budget neutral.

**Beneficiary and provider**
- The recommendation would reduce IME payments to teaching hospitals but would redistribute payments to all hospitals (including teaching hospitals) that perform well under a quality incentive payment program. There is potential for improved quality of care for beneficiaries.
In 2006, states lost the ability to declare hospitals necessary providers eligible to participate in the CAH program (MedPAC 2005). Consequently, the number of CAHs only increased from 1,283 in June 2006 to 1,285 in June 2007.

A service in our volume measure is identified by a Healthcare Common Procedure Coding System (HCPCS) code that is payable under the outpatient PPS. HCPCS definitions can change over time, which can have some effect on annual changes in volume.

Each year, a number of drugs and implantable devices are paid separately from the services for which they are used. We do not include these items in our analysis of outpatient volume because the list of separately paid drugs and devices has changed widely from year to year throughout the history of the outpatient PPS. Including separately paid drugs and devices in our analysis can result in substantial changes in volume simply because of changes in the list of separately paid drugs and devices.

The mortality, patient safety, and process measures we have considered in this analysis are the most comprehensive public data available to indicate changes in the quality of care provided to Medicare beneficiaries in hospitals over time and across the country. These indicators rely on administrative data such as patients’ secondary diagnoses from claims, which may be prone to changes in coding, or they rely on self-reported data that may not be adequately audited. This may reduce their accuracy.

A margin is calculated as the difference between payments and costs divided by payments. The services included in the overall Medicare margin are acute inpatient, outpatient, skilled nursing facility (including swing beds), home health care, inpatient psychiatric, and inpatient rehabilitation.

Our forecast is for 2008, but we considered the policy environment hospitals will be operating under in 2009 as we deliberated the appropriate update for that year. Therefore, the forecast estimates what payments would have been in 2008 if 2009 policy (other than the 2009 update) had been in effect at the time.

Under the provisions of the Deficit Reduction Act, CMS can retrieve any overpayment occurring in fiscal years 2008 and 2009 that it documents as attributable to coding improvement exceeding the legislated coding offset. Hospitals would pay back the overpayment in the form of reduced payment rates in 2010, 2011, or 2012.

The most recent cost growth data available at the time the Commission voted on the proposed update were for the nine months ending September 30, 2007, from certain for-profit systems that report quarterly results. We compared 2006 and 2007 costs for HCA, Community Health Systems, Lifepoint, Health Management Associates, and Tenet.

This measurement of change in other operating revenue was based on unpublished data from the 2006 American Hospital Association annual survey of hospitals. Examples of other operating revenue are services such as parking and cafeteria, revenue from real estate transactions, rent from owned property, and income from joint ventures when the hospital has less than 50 percent ownership.

We also found similar differences in standardized costs among pressure groups when using different case-mix adjustments, wage indexes, and other factors used to standardize costs.

Costs per discharge are standardized to account for regional differences in wages using the MedPAC wage index (MedPAC 2007b), case mix, transfer cases, outliers, differences in interest expense, and the empirically estimated cost of medical education and serving a disproportionate share of low-income Medicare beneficiaries.

The inpatient update would apply to fiscal year 2009, and the outpatient update would apply to calendar year 2009.

Medicare IME payments to hospitals for FFS patients totaled $5.1 billion, and IME payments to hospitals for MA patients totaled almost $0.8 billion in 2006.

The gap is wider for inpatient margins because the IME adjustment is made on inpatient payments. Medicare inpatient margins for major teaching hospitals, for example, were 9.2 percent in 2006, compared with –8.0 percent for nonteaching hospitals, a difference of 17 percentage points.
References


Physician services
The Congress should update payments for physician services in 2009 by the projected change in input prices less the Commission’s adjustment for productivity growth. The Congress should enact legislation requiring CMS to establish a process for measuring and reporting physician resource use on a confidential basis for a period of two years.

COMMISSIONER VOTES: YES 13 • NO 2 • NOT VOTING 1 • ABSENT 1
Physician services

Section summary

Our analysis of payment adequacy finds that most of our indicators are positive and stable; thus most beneficiaries obtain quality physician care on a timely basis. The volume of physician services provided per beneficiary continues to grow significantly. The Commission recommends that the Congress update payments in 2009 for physician services by the projected change in input prices less the Commission’s adjustment for productivity growth. Based on current estimates of input cost changes and the Commission’s productivity adjustment, this recommendation would result in a 2009 update of 1.1 percent. However, CMS revises the input cost projections on a quarterly basis, so the actual update percentage may change.

The Commission also recommends that the Congress enact legislation requiring CMS to measure and report physician resource use confidentially for two years. Using results for physician education would provide CMS with experience applying the measurement tool and allow the agency to work with physicians and other stakeholders on any refinements. After experience is gained, Medicare could use the results

In this section

- Are Medicare payments for physician services adequate in 2008?
- How should Medicare payments for physician services change in 2009?
- Update recommendation
- Additional comments
for payment—for example, as a component of a pay-for-performance program or to create other financial incentives to improve efficiency and quality.

**Recommendation 2B**

The Congress should update payments for physician services in 2009 by the projected change in input prices less the Commission’s adjustment for productivity growth. The Congress should enact legislation requiring CMS to establish a process for measuring and reporting physician resource use on a confidential basis for a period of two years.

The Commission is not satisfied with the current physician payment update mechanism. The existing sustainable growth rate formula is flawed and continues to call for substantial consecutive negative updates through 2016. We are concerned that repeated annual reductions in physician payment rates would threaten beneficiaries’ access to physician services. We are especially concerned about the impact repeated negative updates would have on access to primary care services. Medicare should be actively encouraging, not hindering, access to these services given their potential to improve the quality and efficiency of health care delivery. Our concerns are discussed in detail in *Assessing Alternatives to the Sustainable Growth Rate System* (MedPAC 2007b).

The Commission is also concerned that the distribution of Medicare physician payments is distorted by incentives that encourage the overuse of some services and underuse of others. Medicare’s fee-for-service payment system does not systematically reward physicians who provide higher quality care or care coordination, and it offers higher revenues to physicians who furnish the most services—regardless of whether they add value.

The Commission has said that Medicare’s physician payment system should include incentives for physicians to provide better quality of care, to coordinate care across settings and medical conditions, and to use resources judiciously. The Commission’s recommendations in past reports and the physician resource use measurement and reporting recommendation in this report are intended to keep Medicare moving toward those goals. Providing physicians with information on their practice patterns is one way to engage
the physician community in a dialog to change the negative incentives in the payment system.

As with other provider sectors, our approach for recommending updates for 2009 first considers payment adequacy from the most currently available data and then assesses the factors that will affect efficient providers’ costs in the coming year. Following is a summary of our findings from this analysis for physician services:

**Beneficiary access**—Results from a MedPAC-sponsored survey of beneficiaries conducted in August and September 2007 indicate that beneficiary access to physicians is generally good, with no statistically significant changes from last year’s survey. Most beneficiaries reported that they never had to wait for an appointment to see their doctor (75 percent reported never waiting for a routine care appointment; 82 percent reported never waiting for an appointment to treat an illness or injury). However, as in past years, the survey results also show that small percentages of beneficiaries report difficulty with access to physician services. Among the 10 percent of beneficiaries who reported that they looked for a new primary care physician, 70 percent reported no problem finding one who would treat them. About 30 percent of this group reported having at least some difficulty finding a new primary care physician. Among the 15 percent of beneficiaries who reported seeking a new specialist in the previous year, 85 percent reported no problem finding one. About 15 percent of this group reported having at least some difficulty finding one.

**Supply of physicians accepting and providing services to Medicare beneficiaries**—We also analyze whether physicians are accepting new Medicare patients and treating Medicare patients. Newly available results from the 2006 National Ambulatory Medical Care Survey show that 93 percent of office-based physicians who receive 10 percent or more of their practice revenue from Medicare were accepting new Medicare patients in 2006. Our analysis of 2006 Medicare claims data, the most recent available, shows that
the number of physicians providing services to fee-for-service Medicare beneficiaries has kept pace with growth in the total beneficiary population.

*Private insurer rates compared with Medicare*—We also compare the trend in Medicare’s physician fees relative to private insurer fees. If Medicare’s payment rates fall relative to the rates paid by private payers, some physicians may decide to stop accepting Medicare patients and instead focus their practices on privately insured patients. Averaged across all services and areas, the ratio of Medicare fees to private payers’ fees was 81 percent in 2006, the most recent year for which these data are available. The 2006 ratio is lower than the 83 percent ratio in 2005, which may be at least partially attributable to the zero percent fee schedule conversion factor update in 2006. The ratio of Medicare to private fees varies substantially by geographic area and by type of physician service (e.g., primary care services vs. specialty care services).

*Ambulatory care quality*—We analyze trends in 38 claims-based ambulatory care quality indicators to assess changes in the quality of care for Medicare beneficiaries. Most of the quality indicators improved or were stable from 2004 to 2006, the most recent year for which detailed claims data are available. A few indicators showed a statistically significant decline, and for 9 of the 38 measures, fewer than two-thirds of beneficiaries received services that are indicated as a standard of care for their diagnosed condition.

*Volume growth*—We analyze changes in the growth per beneficiary of the volume and intensity of physician services, both in total and by major service types. Service volume per beneficiary continued to grow in 2006, albeit at a slower rate of growth than in the previous year. Overall volume (reflecting both service units and intensity) grew 3.6 percent per beneficiary. Volume growth rates varied among broad categories of services—evaluation and management (2.8 percent), imaging (6.2 percent), major procedures (2.7 percent), other procedures (2.5 percent), and tests (6.9 percent)—but all were positive. ■
Background

Physician services include office visits, surgical procedures, and a broad range of other diagnostic and therapeutic services. These services are furnished in all settings, including physician offices, hospitals, ambulatory surgical centers, skilled nursing facilities, other post-acute care settings, hospices, outpatient dialysis facilities, clinical laboratories, and beneficiaries’ homes. Physician services are billed to Medicare Part B. Medicare fee-for-service (FFS) payments for physician services were $58.4 billion in 2006 and $57.7 billion in 2005, accounting for about 15 percent of total Medicare spending (MedPAC 2007a). Per beneficiary enrolled in FFS Medicare, incurred expenditures for physician services were $1,765 in 2006, an increase of 4.4 percent from the 2005 amount of $1,691 (Boards of Trustees 2007). Aggregate spending grew more slowly from 2005 to 2006 due to a significant shift in enrollment from FFS Medicare to Medicare Advantage (MA) plans in 2006. Medicare also pays for physician services provided to Medicare beneficiaries enrolled in MA plans through its payments to those plans. Medicare beneficiaries also pay a portion of total payments received by physicians, through beneficiary cost-sharing liabilities.

In the FFS program, Medicare pays for physician 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 payments. In general, Medicare updates payments for physician services by increasing or decreasing the conversion factor. For further information, see MedPAC payment basics: Physician services payment system at http://www.medpac.gov/documents/MedPAC_Payment_Basics_07_Physician.pdf.

By law, the physician fee schedule conversion factor update is determined by a formula—called the sustainable growth rate (SGR)—set forth in the Balanced Budget Act of 1997. It ties physician payment updates to a number of factors, including growth in input costs, growth in Medicare FFS enrollment, and growth in the volume of physician services relative to growth in the national economy. Over the last several years, physician fees were slated to decrease in accordance with the SGR formula, and in 2002 the fee schedule conversion factor was reduced by 5.4 percent.

Since 2003, however, the Congress has passed and the President has signed laws that have prevented further reductions in the conversion factor from occurring. In most cases, the new laws did not completely eliminate the negative updates but deferred them to later years. The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) required a 1.5 percent update to the conversion factor in 2004 and 2005. The Deficit Reduction Act of 2005 (DRA) held 2006 payment rates at 2005 levels (technical refinements to the fee schedule resulted in an actual overall update of 0.2 percent in 2006).

The Tax Relief and Health Care Act of 2006 (TRHCA) effectively held 2007 payments at 2006 levels through a conversion factor bonus. TRHCA also prevented the elimination of a floor on the work geographic practice cost index (GPCI) that was originally imposed by the MMA (the elimination of the floor would reduce payments to geographic areas, primarily rural areas, where physician practice costs are relatively lower).1 TRHCA also directed additional spending to physicians in 2007 and 2008 through the Physician Quality Reporting Initiative, through which physicians are eligible for a 1.5 percent bonus on all their allowed charges if they meet specified quality reporting requirements.

At the end of December 2007, the Medicare, Medicaid, and SCHIP Extension Act of 2007 (MMSEA) replaced what would have been a 10.1 percent reduction in the physician fee schedule conversion factor with a 0.5 percent increase, effective January 1 through June 30, 2008. The MMSEA also extended the GPCI floor through June 30, 2008, and extended through June 30, 2008, a provision of the current system that makes 5 percent bonus payments to physicians practicing in designated physician shortage areas.

Notwithstanding all the update adjustments and other payment enhancements enacted since 2003, the SGR mechanism remains in current law and it is projected by the Medicare actuaries to result in substantially negative conversion factor updates from 2009 through at least 2016. For 2009, CMS estimates that the conversion factor update will be –5.0 percent under the SGR mechanism, absent a change in current law. This reduction would follow a conversion factor reduction of about 10.6 percent.
scheduled to take place on July 1, 2008, unless the Congress takes further action to change current law.

The Commission is not satisfied with the current physician payment update mechanism. The existing SGR formula is flawed and the Commission is concerned that repeated annual reductions in physician payment rates could threaten beneficiaries’ access to physician services. We are especially concerned about the impact repeated negative updates would have on access to primary care services, the increased use of which Medicare should be actively encouraging, not hindering, given the potential of primary care to improve the quality and efficiency of health care delivery.

The Commission is also concerned that the current distribution of Medicare physician payments is distorted by incentives that encourage the overuse of some services and underuse of others. Medicare’s FFS payment system does not systematically reward physicians who provide higher quality care or care coordination, and it offers higher revenues to physicians who furnish the most services—regardless of whether they add value.

The Commission examined several alternative approaches to improving the current physician payment system in a March 2007 report to the Congress, Assessing Alternatives to the Sustainable Growth Rate System (MedPAC 2007b). In addition to presenting alternatives for reforming the SGR itself, that report provides suggestions for other physician payment policy approaches that would change the current system to improve the accuracy of Medicare’s payments, create incentives for physicians to provide better quality of care and coordinate care across settings and medical conditions, and use resources judiciously. The Commission’s recommendations in past reports and the physician resource use measurement and reporting recommendation in this report are intended to keep Medicare moving toward those goals. Providing physicians with information on their practice patterns is one way to engage the physician community in a dialog to change the negative incentives in the current payment system.

Are Medicare payments for physician services adequate in 2008?

The Commission’s framework for assessing payment adequacy for physician services relies on several indicators.

We cannot look at financial performance of physicians directly because they are not required to report their costs to Medicare, as is required of other providers such as hospitals and home health agencies. Instead, we consider other available indicators. We analyze information on beneficiary access to physician care, including beneficiary and physician survey information and physician supply data. We also compare Medicare’s reimbursement levels with those of the private sector and examine changes in the volume and quality of physician services.

Access to physician services: Beneficiary indicators

Physicians are often the most important link between Medicare beneficiaries and the health care delivery system. According to national survey data from the 2003 Medicare Current Beneficiary Survey, about 85 percent of noninstitutionalized beneficiaries report that a doctor’s office or a doctor’s clinic is their usual source of care (CMS 2003). Beneficiary access to physicians, therefore, is an important indicator of access to health care generally as well as of Medicare payment adequacy.

To assess beneficiary access to physician services, this section examines results from beneficiary and physician surveys and reviews data on physician supply. By design, many of the surveys’ questions rely on respondents’ views. For example, respondents use their own judgment when determining whether they are able to schedule timely appointments. Subjective responses can be useful measures for tracking beneficiary experience and perceptions over time, but perceptions of concepts such as “timeliness” may vary among individuals and subpopulations.

Additionally, it is difficult to determine what the appropriate level of access should be. Beneficiaries judge access to physicians in an environment where most of them have supplemental insurance against out-of-pocket costs. This coverage effectively lowers their out-of-pocket costs for physician visits, thereby diminishing the likelihood that cost will temper demand. Some economists might argue that a payment policy goal of no, or almost no, beneficiaries reporting access problems is inefficient or unattainable. Even so, monitoring for changes in access is crucial for the Medicare program.

We find access measures most useful, therefore, when looking for trends across years. They help us observe changes in beneficiaries’ access to physicians over time and supplement our analysis of payment adequacy.
However, our access measures do not necessarily inform us about the quality or content of physician–patient encounters. We use a separate set of quality measures to assess the quality of physician care delivered to Medicare beneficiaries (see discussion on p. 90).

**MedPAC’s 2007 beneficiary survey on access to physicians**

To obtain the most current access measures possible, the Commission sponsors a telephone survey each year of a nationally representative, random sample of about 2,000 Medicare beneficiaries age 65 or older, and about 2,000 individuals age 50 to 64 who have private health insurance. By surveying both groups, we can assess the extent to which access problems, such as delays in scheduling an appointment or difficulty in finding a new physician, are unique to the Medicare population. Our survey does not distinguish Medicare FFS enrollees from those in MA plans, because of the technical difficulty in obtaining reliable self-identification of FFS or MA enrollment from surveyed individuals. The results from this telephone survey are weighted to be nationally representative with respect to basic demographic variables. We do not survey Medicare beneficiaries younger than age 65 because of limited sample size.2

**Most beneficiaries report few or no access problems in 2007**

Results from our 2007 survey indicate that most beneficiaries have reliable access to physician services, with most reporting few or no access problems. Most beneficiaries are able to schedule timely medical appointments and find a new primary care or specialist physician when needed, but small subsets of beneficiaries report problems in making appointments with their physician or finding a new physician. The 2007 survey results are consistent with what we found in our 2005 and 2006 surveys, indicating that access to physician services is stable. However, in light of a possible negative payment update in the second half of 2008 and in 2009, the Commission plans to closely monitor trends in beneficiary access over the next year.

**Getting timely appointments**

Most Medicare beneficiaries have one or more doctor appointments in a given year. Therefore, one access indicator we examine each year is their ability to schedule timely appointments. In the 2007 survey, most Medicare beneficiaries (75 percent) and most privately insured individuals age 50 to 64 (67 percent) reported never having to wait longer than they wanted to get an appointment for routine care (Table 2B-1, p. 84). Another 18 percent of Medicare beneficiaries reported that they sometimes had to wait longer than they wanted for a routine appointment, compared with 24 percent of privately insured individuals. The differences between the Medicare and privately insured populations in their “never” and “sometimes” response rates were statistically significant, suggesting that Medicare beneficiaries on average are more satisfied with the timeliness of their appointments.3 Only 6 percent to 7 percent of either group reported that they usually or always had to wait longer than they wanted to get a routine care appointment.

As expected, reported rates of getting appointments without delay in cases of illness or injury were more common for both groups, but Medicare beneficiaries reported fewer difficulties getting timely appointments in these cases, too. Among those who scheduled an appointment for an illness or injury, 82 percent of Medicare beneficiaries and 76 percent of privately insured individuals said they never experienced a delay, while 13 percent of Medicare beneficiaries reported sometimes having to wait longer than they wanted, compared with 17 percent for privately insured individuals. These differences are statistically significant.

**After-hours care for urgent medical conditions**

In addition to monitoring access to doctors’ appointments for routine care and illness or injury, this year’s survey included a series of questions about beneficiaries’ access to their doctors for an urgent medical condition during nonregular working hours. The survey found little difference by insurance type in the percentage of beneficiaries reporting that their physician gave them instructions about what to do if this situation arose, roughly another third reported being told to call their doctor’s office or answering service, and 25 percent said they were not given any instructions for this circumstance (the remainder did not know).

We also wanted to find out what respondents actually did when they thought they needed care for an urgent medical condition during nonregular working hours. Among the 12 percent of the sample who faced such circumstances, Medicare beneficiaries were more likely to go to the emergency room without first trying to contact their doctor (38 vs. 28 percent) and less likely to call their
Table 2B-1
Access to physicians remains stable for Medicare beneficiaries age 65 and older and privately insured persons age 50 to 64, 2005–2007

<table>
<thead>
<tr>
<th>Survey question</th>
<th>Medicare (Age 65 and older)</th>
<th>Private insurance (Age 50-64)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unwanted delay in getting an appointment:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Among those who needed an appointment, “How often did you have to wait longer than you wanted to get a doctor’s appointment?”</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>For routine care</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>74%</td>
<td>75%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>21%</td>
<td>18%</td>
</tr>
<tr>
<td>Usually</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Always</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td><strong>For illness or injury</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>82%</td>
<td>84%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>15%</td>
<td>11%</td>
</tr>
<tr>
<td>Usually</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Always</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Getting a new physician:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Among those who tried to get an appointment with a new primary care physician or a new specialist, “How much of a problem was it finding a primary care doctor/specialist who would treat you? Was it…”</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Primary care physician</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No problem</td>
<td>75%</td>
<td>76%</td>
</tr>
<tr>
<td>Small problem</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>Big problem</td>
<td>13%</td>
<td>14%</td>
</tr>
<tr>
<td><strong>Specialist</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No problem</td>
<td>89%</td>
<td>80%</td>
</tr>
<tr>
<td>Small problem</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>Big problem</td>
<td>5%</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Not accessing a doctor for medical problems:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“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”)</td>
<td>7%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Note: Numbers may not sum to 100 percent due to rounding. Missing responses (“Don’t Know” or “Refused”) are not presented. For “Unwanted delay in getting an appointment,” 2007 survey n=4,061 (2,036 Medicare; 2,025 privately insured), 2006 survey n=4,029 (2,005 Medicare; 2,024 privately insured), and 2005 survey n=4,021 (2,012 Medicare; 2,009 privately insured). For “Getting a new physician,” 2007 survey primary care physician n=333 (165 Medicare and 188 privately insured) and specialist n=626 (304 Medicare and 322 privately insured); 2006 survey primary care physician n=394 (197 Medicare and 197 privately insured) and specialist n=699 (309 Medicare and 390 privately insured); and 2005 survey primary care physician n=429 (155 Medicare and 174 privately insured) and specialist n=769 (353 Medicare and 416 privately insured). All samples include fee-for-service and managed care enrollees. * Indicates a statistically significant difference between the Medicare and privately insured populations in 2007 at a 95% confidence level.

doctor’s office or answering service (45 vs. 54 percent) than privately insured individuals. It is possible that the differences in these response rates reflect differences in health status or the urgency of the medical conditions experienced by individuals in the two groups. While the number of respondents is too small to show statistically significant differences, we found that when Medicare beneficiaries did call their doctors first, they were more likely than the privately insured to be told to go to the emergency room. In addition, when they went directly to the emergency room, they were slightly more likely to be met there by their doctor.

**Finding a new physician**

Our survey also monitors Medicare beneficiaries’ and 50- to 64-year-old privately insured individuals’ ability to find a new physician. In both cases, the survey results are based on the experiences of a relatively small number of individuals, which means the differences we see across years and between privately insured and Medicare respondents often are not statistically significant. In the 2007 survey, about 10 percent of Medicare beneficiaries and privately insured individuals reported having tried to find a new primary care physician in the preceding year; a higher percentage (about 15 percent) reported seeking a new specialist.

Of the 10 percent of Medicare beneficiaries who looked for a new primary care physician in 2007, 70 percent reported no problem in finding one, compared with 76 percent in the 2006 survey. The difference in these percentages is not statistically significant because of the small number of beneficiaries surveyed in this part of the sample. However, the percentage of privately insured individuals who reported no problem finding a new primary care physician (82 percent) was significantly higher than the percentage of Medicare beneficiaries reporting no problem in finding a new primary care physician (70 percent).

As in the previous two years, we found that beneficiaries seeking a new specialist reported problems finding one less frequently than those seeking access to a new primary care physician. Eighty-five percent of the Medicare beneficiaries and 79 percent of the privately insured individuals who said they were looking for a new specialist reported no problem finding one. In contrast to the results for primary care physicians, a slightly greater percentage of Medicare beneficiaries reported no problem finding a new specialist in 2007 compared with 2006, and the rates of those with a small or big problem finding a specialist were lower (but not statistically different) for Medicare beneficiaries than for privately insured individuals. This result in 2007 is the opposite of the findings in the 2006 survey, underscoring the year-to-year volatility in these figures based on small sample sizes.

It is important to understand that the results of our surveys of beneficiaries’ experiences in finding a new physician may not be representative of the experience of the entire Medicare population because of the small numbers of respondents in this part of the survey. The survey results are based on the experiences of about 200 Medicare beneficiaries who reported seeking a new primary care physician (about 10 percent of the total sample) and about 300 beneficiaries who reported seeking a new specialist (about 15 percent of the total sample) from a sample that was randomly selected from across the United States. Experiences of beneficiaries in particular geographic areas may vary significantly from the reported national survey results. Also, the reported rates of difficulty may reflect experiences of beneficiaries in the FFS program or in MA plans, because the survey does not distinguish between those two types of Medicare beneficiaries. Nevertheless, it is important to monitor the trends in survey responses over time, especially if there are significant year-to-year changes in the percentage of beneficiaries reporting difficulty finding a new physician or reporting problems at a higher rate than the privately insured comparison group.

Research published by the Center for Studying Health System Change (HSC), although based on information that is somewhat dated, has compared access rates by geographic area, with particular attention to the difference between Medicare and private insurer fees in each area (Trude and Ginsburg 2005). This research found that, despite differences in Medicare and commercial payment rates across markets, the proportion of Medicare beneficiaries reporting problems with access to care in markets with the widest payment rate gaps did not vary significantly from the proportion reporting problems in markets with more comparable payment rates. In addition, privately insured people age 50 to 64 did not appear to gain better access to care relative to Medicare beneficiaries in markets with higher commercial payment rates. These findings suggest that developments in local and national health systems—for example, if there is an overall shortage of primary care physicians or certain types of specialists in areas of the country where the total population is growing rapidly—may be more important.
influences on access for both Medicare beneficiaries and the privately insured. These conditions may affect beneficiary access as much as or more than Medicare payment levels.

Within the Medicare physician payment system, the Commission remains concerned about how the current distribution of payments undervalues primary care services, which may be contributing to some of the access problems for primary care physicians being reported by a small number of beneficiaries in MedPAC’s annual beneficiary access survey. Another paper published recently by HSC researchers noted that the “flip side of physicians’ responsiveness to financial incentives is their avoidance of providing services they perceive as undervalued,” including favoring more highly valued procedures over cognitive primary care services (Pham and Ginsburg 2007). In a later section of this chapter, we discuss the Commission’s ongoing work to improve how Medicare values physician services under the Medicare fee schedule, which, along with pay for performance and other quality improvement incentives, is part of the Commission’s effort to align payment incentives to create a high-quality, efficient, and patient-centered health care delivery system for Medicare beneficiaries.

Few beneficiaries report access delays attributed to Medicare coverage status

To get specifically at the question of whether a beneficiary’s Medicare coverage was cited as a reason for difficulty in accessing physician care, our 2005, 2006, and 2007 surveys asked a follow-up question to those beneficiaries who indicated they had a problem (big or small) finding a new physician (specialist or primary care physician, or both). This question asked if anyone from the doctor’s office told them that their problem finding a doctor was because they were covered by Medicare. Fourteen percent of these beneficiaries answered “yes” to this question in 2007, compared with 11 percent in 2006 and 27 percent in 2005. None of these year-to-year differences is statistically significant, primarily because the share of our sample answering “yes” to this question amounts to less than 1 percent of the entire Medicare sample.

Another set of questions in our survey examines reasons respondents give for not seeing a physician for their medical problems. As in previous years, Medicare beneficiaries report better access than privately insured people on this measure, and the difference between the two is statistically significant. The 2007 survey found that 10 percent of Medicare beneficiaries and 12 percent of privately insured individuals thought they should have seen a doctor for a medical problem in the past year but did not. Within this small subset, just 8 percent of the Medicare beneficiaries, compared with 15 percent of the privately insured people, listed physician availability issues (getting an appointment time or finding a doctor) as the problem. The remaining reasons they gave included low perceived seriousness of the problem at the time of the illness, procrastination, and cost concerns.

Access to physician services: Physician indicators

For our payment adequacy analysis, we also consider physician survey information and other physician indicators, such as trends in physician supply. Due to data collection limitations, our physician survey and supply indicators usually lag one year behind the results from our beneficiary access survey, but they still provide useful information about the direction and magnitude of changes in physicians’ willingness and availability to treat Medicare patients. Most of the data presented in this section capture physician indicators as they stood in 2006, the most recent year for which these data are available. As of that year, MedPAC’s physician survey and indicators from other sources both found that most physicians accepted all or most new Medicare beneficiaries. Our analysis of 2006 Medicare claims data shows that the number of physicians providing services to FFS Medicare beneficiaries has kept pace with growth in the total beneficiary population.

Physician surveys report high rates of Medicare patient acceptance

The most recent available results from the National Ambulatory Medical Care Survey (NAMCS)—a national survey of office-based physicians in clinical practice, conducted annually by the National Center for Health Statistics—also shows that a large majority of physicians accept some or all new Medicare patients. For 2006, the NAMCS found that, among physicians with at least 10 percent of their practice revenue coming from Medicare, 93 percent accepted at least some new Medicare patients (Cherry 2007). The NAMCS also found that a greater percentage of physicians accepted new Medicare patients than privately insured patients in capitated and non-capitated health plans. Importantly, both the overall and Medicare patient acceptance rates remained relatively steady in the 2003, 2004, and 2005 surveys. We also analyzed Medicare acceptance rates separately for
physicians in primary care and all other specialties (also among physicians with at least 10 percent of their practice revenue coming from Medicare), and found that just over 90 percent of primary care physicians and about 95 percent of physicians in all specialties accepted at least some new Medicare patients in 2006.\(^4\)

MedPAC sponsored its own large survey of physicians in 2006, and its results presented a mostly positive but somewhat mixed picture of physician willingness to accept new Medicare FFS patients (MedPAC 2007d, Schoenman et al. 2006).\(^5\) Most physicians (97 percent) were accepting at least some new Medicare FFS patients, with a smaller share (80 percent) accepting all or most. Acceptance of new Medicare FFS patients compared favorably with Medicaid and HMO patients but was a little lower than for private non-HMO patients. More physicians were concerned about reimbursement for Medicare FFS patients than for private non-HMO patients. Many physicians reported recent changes to their practice to increase revenue. Increasing service volume, for example, may be an important factor, as most physicians report that their own productivity is a “very important” determinant of their individual compensation—to a greater extent than quality and patient satisfaction.

A 2007 study by researchers at HSC, based on somewhat older data, found two trends in the composition of the physician workforce that may underlie the relative stability of these observed access indicators: 1) a growing proportion of female physicians, who disproportionately choose primary care, and 2) continued reliance on international medical graduates, who now account for nearly a quarter of all U.S. primary care physicians. The authors found that between 1996–1997 and 2004–2005, a 40 percent increase in the female primary care physician supply helped to offset a 16 percent decline in the male primary care physician supply relative to the U.S. population. In addition, nearly one-fourth of the primary care physician workforce in 2004–2005 consisted of international medical graduates, whose share of the primary care workforce remained stable at just above 24 percent since 2000–2001, after increasing from just under 21 percent in the late 1990s (Tu and O’Malley 2007).

**Number of physicians billing Medicare has kept pace with enrollment growth**

Our analysis of Medicare FFS claims data shows that the number of physicians providing services to Medicare beneficiaries has kept pace with growth in the beneficiary population in recent years. In this analysis, Unique Physician Identification Numbers are used as a proxy for individual physicians; identification numbers with extraordinarily large caseload sizes (in the top 1 percent) are excluded from the analysis because they may represent multiple providers billing under one identification number.

Comparing growth in the number of physicians with growth in the Medicare population, we see that, from 2001 to 2006, the number of physicians who billed Medicare grew faster than Medicare Part B enrollment. During this time, Part B enrollment grew 6.9 percent. In comparison, the number of physicians with 15 or more Medicare patients grew 8.7 percent (Table 2B-2, p. 88).\(^6\) The number of physicians with 200 or more Medicare patients grew even faster at 12.9 percent, indicating the ratio of physicians per 1,000 beneficiaries grew more rapidly for physicians with larger Medicare caseloads. This growth reflects increases in the share of physicians seeing more Medicare patients. The number of unique physicians billing Medicare for FFS beneficiaries actually grew faster between 2005 and 2006 than indicated in Table 2B-2, since enrollment growth in FFS Medicare was negative from 2005 to 2006 because of the rapid growth of MA enrollment in 2006.

Despite the overall increase in physicians who regularly saw Medicare FFS beneficiaries, the supply of physicians was somewhat dynamic, with small shares of them either starting or stopping their regular Medicare practice. These changes affect existing patient–physician relationships and could contribute to the small, but persistent, share of beneficiary complaints about access problems.

The small share of physicians who leave the Medicare market, or who report reluctance to serve Medicare beneficiaries, may be responding to a variety of factors other than, or in addition to, payment adequacy. These other factors may relate to local conditions such as physician supply, demand for physician services, and insurance market conditions. Also factoring into physicians’ decisions to accept Medicare patients may be their dependence on referrals, the size of their Medicare patient caseload, the amount of time they are willing to devote to patient care, and their personal retirement decisions. Disentangling these other factors from Medicare payment adequacy is difficult. To some extent, comparing physicians’ willingness to accept Medicare patients with their willingness to accept all patients helps to control for non-Medicare factors.
Physician services: Assessing payment adequacy and updating payments

Claims assignment and physician participation rates are stable at high levels. 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 allowed charges for which physicians accept assignment) and physician participation rates (the share of physicians signing Medicare participation agreements). Our analysis of Medicare paid claims data shows that 99.4 percent of allowed charges for physician services were assigned in 2006 (Figure 2B-1). That is, for almost all allowed services last year, physicians agreed to accept the Medicare fee schedule amount as payment in full for the service. 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 nonphysician providers who bill Medicare agree to participate in Medicare—93.3 percent in 2007, the same percentage as in 2006. Participating physicians agree to accept assignment on all allowed claims in exchange for a 5 percent higher payment on allowed charges. Participating physicians 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. Participating physicians 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 (medigap) status. Medicare’s physician participation agreement does not require physicians to take Medicare patients. While 96.7 percent of allowed charges in 2006 were for services provided by participating physicians, another 2.7 percent were for

### Table 2B-2

Number of physicians billing Medicare has kept pace with enrollment growth, 2001–2006

<table>
<thead>
<tr>
<th>Number of Medicare patients in caseload</th>
<th>&gt;1</th>
<th>&gt;15</th>
<th>&gt;50</th>
<th>&gt;100</th>
<th>&gt;200</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>535,834</td>
<td>457,292</td>
<td>411,424</td>
<td>364,023</td>
<td>286,862</td>
</tr>
<tr>
<td>2002</td>
<td>544,615</td>
<td>466,299</td>
<td>419,269</td>
<td>370,144</td>
<td>291,593</td>
</tr>
<tr>
<td>2003</td>
<td>544,922</td>
<td>470,213</td>
<td>424,684</td>
<td>374,721</td>
<td>292,183</td>
</tr>
<tr>
<td>2004</td>
<td>561,514</td>
<td>483,945</td>
<td>440,462</td>
<td>393,730</td>
<td>315,398</td>
</tr>
<tr>
<td>2005</td>
<td>566,629</td>
<td>492,131</td>
<td>449,524</td>
<td>402,451</td>
<td>322,643</td>
</tr>
<tr>
<td>2006</td>
<td>569,461</td>
<td>497,072</td>
<td>453,822</td>
<td>405,504</td>
<td>323,877</td>
</tr>
</tbody>
</table>

Percent growth, 2001–2006: 6.3% 8.7% 10.3% 11.4% 12.9%

#### Number of physicians per 1,000 beneficiaries

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>14.2</td>
<td>14.3</td>
<td>14.1</td>
<td>14.4</td>
<td>14.3</td>
<td>14.1</td>
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<tr>
<td></td>
<td>12.1</td>
<td>12.3</td>
<td>12.2</td>
<td>12.4</td>
<td>12.4</td>
<td>12.3</td>
</tr>
<tr>
<td></td>
<td>10.9</td>
<td>11.0</td>
<td>11.0</td>
<td>11.3</td>
<td>11.3</td>
<td>11.3</td>
</tr>
<tr>
<td></td>
<td>9.7</td>
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<td>9.7</td>
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<td>10.1</td>
<td>10.1</td>
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<tr>
<td></td>
<td>7.6</td>
<td>7.7</td>
<td>7.6</td>
<td>8.1</td>
<td>8.1</td>
<td>8.0</td>
</tr>
</tbody>
</table>

Note: Calculations include physicians (allopathic and osteopathic). Nurse practitioners, physician assistants, psychologists, and other health care professionals are not included in these calculations. Medicare enrollment includes beneficiaries in fee-for-service Medicare and Medicare Advantage, on the assumption that physicians are providing services to both types of beneficiaries. Physicians are identified by their Unique Physician Identification Number (UPIN). UPINs with extraordinarily large caseload sizes (in the top 1 percent) are excluded because they may represent multiple providers billing under the same UPIN.

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 also did not accept assignment.

**Physician workforce and access to primary care**

While the Commission traditionally has not examined workforce issues in the context of our update analyses, we indicated in our March 2007 report that we plan to study this issue, especially with respect to the supply of primary care providers. Although currently we do not see overall problems with physician supply, the aging of the baby boomers will increase the demand for physician services over the next several decades, while baby boomer physicians will begin to retire. As noted above, other researchers have found that significant changes in the composition of the primary care and specialist physician workforces have already occurred since the mid-1990s, changes that raise concerns about the longer term implications for access to primary care and specialty services (Tu and O’Malley 2007). We plan to continue examining research and analysis on future workforce projections for both physicians and nonphysician practitioners. Among the workforce issues to consider will be the factors that influence the choices medical students and residents make about their career specialty.

**Private payer payment rates for physician services**

Another measure of Medicare payment adequacy that we use is a comparison of the trend in Medicare’s physician fees relative to private insurer fees. If Medicare’s payment rates fall relative to the rates paid by private payers, some physicians may decide to stop accepting Medicare patients and instead focus their practices on privately insured patients. The comparison of Medicare and private rates is based on an analysis of paid claims for two large national private insurers. In addition to physician fee comparisons, the analysis estimates average annual fees based on private enrollment trends for different types of plans, including HMOs, preferred provider organizations (PPOs), point-of-service plans, high-deductible health plans (HDHPs), and traditional indemnity insurance.

**Ratio of Medicare to private payer rates was lower in 2006 than in 2005**

Averaged across all services and areas, 2006 Medicare rates were 81.3 percent of extrapolated private rates. In 2005, we found a slightly higher ratio, 82.6 percent. Looking specifically at evaluation and management (E&M) services, Medicare’s payment rates are closer to the private

---

**FIGURE 2B-1**

Physician participation and claims assignment rates are stable at high levels

<table>
<thead>
<tr>
<th>Year</th>
<th>Participation rate</th>
<th>Assignment rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Participation rate is the percentage of physicians and nonphysician providers signing Medicare participation agreements. Assignment rate is the percentage of allowed charges paid on assignment. The assignment rate for 2007 is not shown; it requires calculations from claims not yet available.

commercial rates (Figure 2B-2). This year’s analysis of 2006 data (the most recent available) showed that some types of private plans increased their physician payment rates between 2005 and 2006, while Medicare’s payment rates increased only slightly. Continuing a trend begun in the early 2000s, there also was a small shift in the distribution of enrollees in each plan type, from plan types with lower payment rates, such as HMOs, to those with higher payment rates, such as PPOs and HDHPs (Kaiser Family Foundation HRET 2007). The combination of enrollment shifts and changes in payment differences resulted in the change observed in the aggregate relationship between private plan and Medicare rates.

Changes in the quality of ambulatory care

Our physician payment adequacy analysis also examines the quality of ambulatory care through Medicare claims data. Using a set of indicators, the Medicare Ambulatory Care Indicators for the Elderly (MACIEs), we measure the provision of necessary care and rates of potentially avoidable hospitalizations over time (see text box for a discussion of quality-related payment incentives for physicians). Our analysis shows mostly small improvements and stability in these measures, yet, for several measures, fewer than two-thirds of beneficiaries received the services indicated as the basic standard of care for their condition.

Most quality-of-care indicators improved or were stable from 2004 to 2006

Comparing 2006 with 2004, we find that most of the indicators we measured remained steady or showed improvements (Table 2B-3). Specifically, among 38 measures, 21 showed improvement and 11 were stable. This finding suggests that beneficiaries with the selected conditions were either more likely or at least not less likely in 2006 than in 2004 to receive the indicated services for their condition and avert potentially avoidable hospitalizations related to their condition. Further, we see improvements on the MACIEs outcome measures that are correlated with improvements in the process measures for the same conditions.

We found a decline in quality in 6 of the 38 quality measures between 2004 and 2006:

- There were statistically significant declines in two measures of clinically indicated imaging for patients with an initial diagnosis of breast cancer. We are

### Table 2B-3

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Improved</th>
<th>Stable</th>
<th>Worsened</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>21</td>
<td>11</td>
<td>6</td>
<td>38</td>
</tr>
<tr>
<td>Anemia</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>CAD</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Cancer</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>CHF</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>COPD</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Depression</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Diabetes</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Hypertension</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Stroke</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

Note: CAD (coronary artery disease), CHF (congestive heart failure), COPD (chronic obstructive pulmonary disease).

Source: MedPAC analysis of Medicare Ambulatory Care Indicators for the Elderly (MACIEs) from the Medicare 5 percent Standard Analytic Files.
Quality-related payment incentives for physicians

In past reports to the Congress and public testimony, the Commission has recognized the importance of implementing pay-for-performance (P4P) initiatives in Medicare but also acknowledged the challenges associated with performance measurement at the physician level. The Institute of Medicine (IOM) and MedPAC have stated that, ideally, measures should be developed and applied to all physicians to create equitable incentives to provide better quality care (IOM 2007, MedPAC 2005). However, we do not have well-established measures for all providers of physician services.

Given the state of the art in performance measurement, the Commission has noted that, at least initially, policymakers might consider prioritizing the implementation of some physician P4P measures over others. Focusing measures on high-cost, widespread, chronic conditions to maximize benefits to the Medicare program and to beneficiaries might be a good short-term strategy. Performance measures for which success requires communication and coordination between parts of the health care delivery system (e.g., hospitals and physicians) may improve patient outcomes and reduce Medicare costs. For example, P4P incentives associated with congestive heart failure may reduce hospital admissions through better ambulatory care before an admission would otherwise occur. They may also lower readmission rates through improved post-discharge communication between physicians, patients, and hospitals (MedPAC 2007d). The Commission intends for any P4P initiatives to be implemented in a budget-neutral manner.

Evaluating whether these declines may be related to a shift in providers’ use of imaging modalities that are not captured in our current indicators or to a drop in the rates for any imaging.

- There was a decline in a measure of the rate for colonoscopy or barium enema within one month before or three months after an initial diagnosis of iron deficiency anemia, which may be a symptom of colon cancer. The overall rate at which the clinically indicated procedure is performed remained less than 30 percent.

- There were slight declines in two measures of clinical assessments for beneficiaries with diabetes or chronic obstructive pulmonary disease. In both of these cases the declines were very small (although statistically significant) and occurred in measures where there was a very high rate of performance (more than 96 percent).

- There was a decline in a measure of the use of X-ray imaging for beneficiaries with a diagnosis of heart failure. The observed decline in this rate could be the result of a shift among imaging technologies (e.g., greater use of computed tomography scans instead of X-ray imaging), a decline in the use of any imaging in these cases, or a combination of factors.

Measures of potentially avoidable hospitalizations improved or were stable

Six of the MACIEs measure the occurrence of potentially avoidable hospitalizations or emergency department visits for selected chronic conditions. Five of these measures improved and one remained stable between 2004 and 2006. For example, in 2006, a smaller share of beneficiaries with congestive heart failure (CHF) had CHF-related inpatient hospitalizations, and a smaller share of beneficiaries with diabetes were hospitalized for serious short-term (e.g., diabetic coma) or long-term (e.g., non-traumatic amputations) complications.

We found that, for several conditions, declines in potentially avoidable hospitalizations occur concurrently with increases in the use of clinically necessary services for the same condition. For example, for diabetes we found decreases in the rate of diabetes-related hospitalizations over the same time period when we found increases in the use of diagnostic testing and follow-up. Therefore, we see improvements in outcome measures (lower rates of short-term and long-term complications) concurrent with improvements in process measures (higher rates of necessary care, such as lipid and hemoglobin testing).
Physician services: Assessing payment adequacy and updating payments

Many beneficiaries not receiving care indicated for their conditions

In addition to measuring change from 2004 to 2006, we evaluated the underlying percentages of beneficiaries receiving the indicated care for their conditions. For 2006, we found that, for 23 of the 32 process measures, at least two-thirds of beneficiaries received the indicated care for their condition. For the other nine measures, fewer than two-thirds of beneficiaries received the specified care for their condition. Among these low-performing indicators, four improved between 2004 and 2006, one remained stable, and four worsened. The four indicators that worsened are the ones described above: two indicators of imaging rates after an initial breast cancer diagnosis, an indicator for rate of gastrointestinal diagnostic testing after a first-time diagnosis of anemia, and an indicator of the rate of use of X-ray imaging for beneficiaries with a diagnosis of heart failure.

Changes in the volume of physician services used

Changes in the volume of services are another indicator of the adequacy of Medicare’s payments for physician services. Increases in service volume could indicate that payments are at least adequate. Nonetheless, such data must be interpreted cautiously; there is evidence that volume goes up for some services when payment rates go down, the so-called volume offset (Codespote et al. 1998), which makes it difficult to interpret volume increases alone as a payment adequacy indicator.

The volume of services also has implications for the value of Medicare. First, rapid growth in volume may be a signal that some services in the physician fee schedule are mispriced. Second, the volume of services includes new diagnostic and therapeutic services that have disseminated into medical practice without physicians or other providers knowing whether they outperform existing services. Third, research comparing geographic areas has shown that the volume of services varies widely and that more care is not necessarily better care. We address each of these issues after the following discussion of volume growth and payment adequacy.

Volume growth as an indicator of payment adequacy

Using claims data from 2001 through 2006, we calculated per beneficiary growth in the units of service beneficiaries used as furnished by physicians and other professionals billing under Medicare’s physician fee schedule. We then weighted the units of services used by each service’s RVUs from the physician fee schedule. The result is a measure of growth—or volume—that accounts for changes in both the number of services and the complexity, or intensity, of those services. We thus distinguish growth in volume from growth in units of service: Volume growth includes an adjustment for change in intensity; unit-of-service growth does not. Compared with analyzing growth in spending, measuring growth in volume removes the effects of price changes (see text box, p. 94).

The volume of physician services beneficiaries received continued to grow in 2006 (Table 2B-4). There are two implications of this volume growth. First, physicians can realize increased revenues from Medicare even when fees per service are restrained. Second, however, the ability to generate volume (and thus revenue) varies significantly based on the types of services a physician provides. For example, physicians who predominantly provide office visits and major procedures have less ability to increase the volume of those services than physicians who predominantly provide imaging and diagnostic tests.

Across all services, volume grew 3.6 percent per beneficiary. Excluding a drop in the volume of outpatient rehabilitation, all-services volume grew by 4.1 percent. Among broad categories of services—E&M, imaging, major procedures, other procedures (nonmajor procedures and outpatient therapies), and tests—volume growth rates varied (from about 2.5 percent to 6.9 percent), but all were positive.11 Per capita volume for tests grew the most. From 2005 to 2006, the volume of tests grew at a rate of 6.9 percent. The growth rate for imaging was next highest, at 6.2 percent. The categories with the lowest growth rates are E&M (2.8 percent), major procedures (2.7 percent), and other procedures (2.5 percent). However, excluding the drop in outpatient rehabilitation volume, the growth rate for other procedures was 4.6 percent.

The 6.2 percent rate of growth in the volume of imaging services, while higher than the all-services average, is not as high as the growth in previous years (from 2001 to 2005, imaging volume grew at an average annual rate of 9.1 percent). CMS also has reported that imaging growth declined in 2006 after the agency and the Congress took steps to control spending on imaging services (Kuhn 2007). Starting on January 1, 2006, payments for certain imaging services were reduced for second and subsequent studies when performed during the same session on contiguous body parts. These reductions were required
Use of physician services per fee-for-service beneficiary continues to increase

<table>
<thead>
<tr>
<th>Type of service</th>
<th>Average annual 2001–2005</th>
<th>2005–2006</th>
<th>Change in volume*</th>
<th>Percent of total volume*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All services</strong></td>
<td><strong>4.5%</strong></td>
<td><strong>0.9%</strong></td>
<td><strong>5.2%</strong></td>
<td><strong>3.6%</strong></td>
</tr>
<tr>
<td>All services excluding outpatient rehab</td>
<td>3.4</td>
<td>2.1</td>
<td>4.9</td>
<td>4.1</td>
</tr>
<tr>
<td><strong>Evaluation and management</strong></td>
<td><strong>1.7%</strong></td>
<td><strong>1.1%</strong></td>
<td><strong>3.3%</strong></td>
<td><strong>2.8%</strong></td>
</tr>
<tr>
<td>Office visit—established patient</td>
<td>1.7</td>
<td>1.5</td>
<td>3.1</td>
<td>2.8</td>
</tr>
<tr>
<td>Hospital visit—subsequent</td>
<td>1.3</td>
<td>2.1</td>
<td>2.6</td>
<td>3.0</td>
</tr>
<tr>
<td>Consultation</td>
<td>3.1</td>
<td>-6.7</td>
<td>4.7</td>
<td>-0.7</td>
</tr>
<tr>
<td>Emergency room visit</td>
<td>1.9</td>
<td>-0.7</td>
<td>4.8</td>
<td>1.6</td>
</tr>
<tr>
<td>Nursing home visit</td>
<td>1.1</td>
<td>3.9</td>
<td>2.8</td>
<td>15.5</td>
</tr>
<tr>
<td>Hospital visit—initial</td>
<td>0.6</td>
<td>-0.3</td>
<td>1.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Office visit—new patient</td>
<td>0.4</td>
<td>-0.2</td>
<td>0.6</td>
<td>1.4</td>
</tr>
<tr>
<td><strong>Imaging</strong></td>
<td><strong>5.5%</strong></td>
<td><strong>3.2%</strong></td>
<td><strong>9.1%</strong></td>
<td><strong>6.2%</strong></td>
</tr>
<tr>
<td>Advanced—CT: other</td>
<td>12.1</td>
<td>10.2</td>
<td>15.3</td>
<td>11.6</td>
</tr>
<tr>
<td>Standard—nuclear medicine</td>
<td>8.9</td>
<td>2.1</td>
<td>12.6</td>
<td>3.8</td>
</tr>
<tr>
<td>Echography—heart</td>
<td>7.5</td>
<td>4.6</td>
<td>9.5</td>
<td>5.5</td>
</tr>
<tr>
<td>Advanced—MRI: other</td>
<td>14.6</td>
<td>8.0</td>
<td>15.7</td>
<td>8.5</td>
</tr>
<tr>
<td>Standard—musculoskeletal</td>
<td>4.0</td>
<td>1.8</td>
<td>4.6</td>
<td>2.3</td>
</tr>
<tr>
<td>Advanced—MRI: brain</td>
<td>8.8</td>
<td>4.3</td>
<td>10.1</td>
<td>4.0</td>
</tr>
<tr>
<td>Echography—other</td>
<td>7.0</td>
<td>7.4</td>
<td>11.1</td>
<td>7.7</td>
</tr>
<tr>
<td>Imaging/procedure—other</td>
<td>12.4</td>
<td>2.3</td>
<td>10.8</td>
<td>13.5</td>
</tr>
<tr>
<td>Standard—breast</td>
<td>11.2</td>
<td>6.9</td>
<td>5.2</td>
<td>5.2</td>
</tr>
<tr>
<td>Standard—chest</td>
<td>1.1</td>
<td>-0.6</td>
<td>0.5</td>
<td>-1.4</td>
</tr>
<tr>
<td>Echography—carotid arteries</td>
<td>5.6</td>
<td>3.5</td>
<td>9.5</td>
<td>6.4</td>
</tr>
<tr>
<td>Advanced—CT: head</td>
<td>6.3</td>
<td>6.8</td>
<td>7.8</td>
<td>8.3</td>
</tr>
<tr>
<td><strong>Major procedures</strong></td>
<td><strong>0.4%</strong></td>
<td><strong>2.4%</strong></td>
<td><strong>2.9%</strong></td>
<td><strong>2.7%</strong></td>
</tr>
<tr>
<td>Cardiovascular—other</td>
<td>-3.3</td>
<td>1.4</td>
<td>0.8</td>
<td>3.7</td>
</tr>
<tr>
<td>Orthopedic—other</td>
<td>6.6</td>
<td>5.9</td>
<td>7.4</td>
<td>6.2</td>
</tr>
<tr>
<td>Knee replacement</td>
<td>10.0</td>
<td>2.5</td>
<td>11.0</td>
<td>3.3</td>
</tr>
<tr>
<td>Coronary artery bypass graft</td>
<td>-6.5</td>
<td>-7.5</td>
<td>-7.2</td>
<td>-8.1</td>
</tr>
<tr>
<td>Coronary angioplasty</td>
<td>3.9</td>
<td>2.1</td>
<td>3.9</td>
<td>1.5</td>
</tr>
<tr>
<td>Explore, decompress, or excise disc</td>
<td>5.7</td>
<td>3.4</td>
<td>6.2</td>
<td>3.9</td>
</tr>
<tr>
<td>Hip replacement</td>
<td>2.7</td>
<td>0.8</td>
<td>3.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Hip fracture repair</td>
<td>-1.4</td>
<td>0.0</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Cardiovascular—pacemaker insertion</td>
<td>8.7</td>
<td>-3.5</td>
<td>9.9</td>
<td>-3.7</td>
</tr>
<tr>
<td><strong>Other procedures</strong></td>
<td><strong>8.9%</strong></td>
<td><strong>-2.2%</strong></td>
<td><strong>6.9%</strong></td>
<td><strong>2.5%</strong></td>
</tr>
<tr>
<td>Other procedures excluding outpatient rehab</td>
<td>3.5</td>
<td>4.7</td>
<td>5.5</td>
<td>4.6</td>
</tr>
<tr>
<td>Minor—other, including outpatient rehab</td>
<td>19.0</td>
<td>-8.3</td>
<td>15.4</td>
<td>-8.9</td>
</tr>
<tr>
<td>Without outpatient rehab</td>
<td>15.9</td>
<td>10.1</td>
<td>21.1</td>
<td>-13.0</td>
</tr>
<tr>
<td>Outpatient rehab only</td>
<td>20.4</td>
<td>-13.7</td>
<td>21.1</td>
<td>-13.0</td>
</tr>
<tr>
<td>Oncology—radiation therapy</td>
<td>0.4</td>
<td>3.9</td>
<td>9.6</td>
<td>10.9</td>
</tr>
<tr>
<td>Ambulatory procedures—skin</td>
<td>4.0</td>
<td>5.0</td>
<td>4.5</td>
<td>4.0</td>
</tr>
<tr>
<td>Minor procedures—skin</td>
<td>2.3</td>
<td>4.7</td>
<td>4.2</td>
<td>6.0</td>
</tr>
<tr>
<td>Cataract removal/lens insertion</td>
<td>2.5</td>
<td>-2.2</td>
<td>2.7</td>
<td>-1.9</td>
</tr>
<tr>
<td>Minor procedures—musculoskeletal</td>
<td>7.4</td>
<td>8.2</td>
<td>10.6</td>
<td>11.1</td>
</tr>
<tr>
<td>Colonoscopy</td>
<td>5.2</td>
<td>0.3</td>
<td>5.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Oncology—other</td>
<td>6.6</td>
<td>2.2</td>
<td>6.0</td>
<td>3.9</td>
</tr>
<tr>
<td>Cystoscopy</td>
<td>2.4</td>
<td>2.1</td>
<td>5.6</td>
<td>6.9</td>
</tr>
<tr>
<td>Upper gastrointestinal endoscopy</td>
<td>2.6</td>
<td>4.0</td>
<td>2.5</td>
<td>3.9</td>
</tr>
<tr>
<td><strong>Tests</strong></td>
<td><strong>6.1%</strong></td>
<td><strong>-0.9%</strong></td>
<td><strong>7.6%</strong></td>
<td><strong>6.9%</strong></td>
</tr>
<tr>
<td>Other tests</td>
<td>12.1</td>
<td>-7.9</td>
<td>13.4</td>
<td>8.0</td>
</tr>
<tr>
<td>Without allergy tests</td>
<td>10.1</td>
<td>7.1</td>
<td>13.3</td>
<td>10.1</td>
</tr>
<tr>
<td>Allergy tests only</td>
<td>16.4</td>
<td>-35.7</td>
<td>15.8</td>
<td>-3.9</td>
</tr>
<tr>
<td>Electrocardiogram</td>
<td>2.2</td>
<td>1.3</td>
<td>1.6</td>
<td>2.4</td>
</tr>
<tr>
<td>Cardiovascular stress tests</td>
<td>6.8</td>
<td>3.3</td>
<td>8.2</td>
<td>4.8</td>
</tr>
<tr>
<td>Electrocardiogram monitoring</td>
<td>4.0</td>
<td>4.5</td>
<td>2.9</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Note: CT (computed tomography). To put service use in each year on a common scale, we used the relative weights for 2006. For billing codes not used in 2006, we imputed relative weights based on the average change in weights for each type of service. Some low-volume categories and services are not shown on the table but are included in the summary calculations. One such category includes all positron emission tomography services that would otherwise appear in disparate other categories.

*Volume is measured as units of service multiplied by each service’s relative weight (relative value units) from the physician fee schedule.

Source: MedPAC analysis of claims data for 100 percent of Medicare beneficiaries.
Measuring changes in use of physician services

MedPAC measures changes in use of physician services as changes in the volume of services. Volume in this context is the sum of units of service billed and paid for under the physician fee schedule multiplied by the fee schedule’s relative value unit (RVU) for each service.

Because there are so many discrete services billable under the physician fee schedule—about 6,700—we group similar services into categories using CMS’s Berenson-Eggers Type of Service (BETOS) classification system. For each type of service in BETOS, volume is equal to two numbers multiplied together: total units of service and the weighted average of RVUs for each of the services in the category. Thus, volume changes for a type of service when units of service change. Volume can also change if the weighted average of RVUs per service changes. A change in RVUs per service is often called a change in service mix or complexity or a change in the intensity of services.

With changes in intensity, services can exhibit changes in units of service and changes in volume that differ markedly. The service category called “Other tests—other” provides an example. Here, units of service per beneficiary from 2005 to 2006 fell by 7.9 percent, but volume per beneficiary went up by 8.0 percent. The difference—an increase in intensity of 17.3 percent—is due in part to a large drop (−35.7 percent) in the number of relatively low-RVU allergy tests billed and paid for in 2006. Meanwhile, units of service for other, higher RVU services in this type of service, such as nerve conduction tests and sleep tests, continued to grow. One explanation for the decrease in allergy skin tests may be that CMS instituted a set of coding edits that limited the number of such tests that are payable when furnished during a single patient encounter.

Changes in the volume of physician visits in nursing homes provide another example. From 2005 to 2006, units of service went up by 3.9 percent, and volume went up by 15.5 percent, for an 11.2 percent increase in intensity. One explanation for the increase in intensity may be that payment policy for a related type of service—consultation—changed in 2006. As discussed elsewhere in this chapter, some consultation billing codes were deleted in 2006 because other codes are available to more accurately bill for the services involved. Some of those codes, in turn, are for nursing home visits. Thus, a change in billing—from consultations to nursing home visits—could have led to an increase in intensity for the nursing home visit type of service. In addition, the increase in intensity accompanied implementation of new billing codes—and service definitions—for nursing home visits in 2006.

by the DRA and recommended by the Commission (MedPAC 2005).

Although all broad categories of service increased in volume in 2006, some individual services decreased. For instance, the largest volume decrease (8.1 percent) was for coronary artery bypass graft (CABG). We have seen decreases in CABG volume previously, and they likely represent continued substitution of less invasive services for this procedure. There was also a 5.3 percent decline in volume in the “minor other procedures” category that includes outpatient rehabilitation. Annual spending limits on outpatient rehabilitation—referred to as the “therapy caps”—went into effect on January 1, 2006, and volume for these services decreased 13.0 percent. Consultation is another noteworthy type of service. While the decrease in consultation volume was small (0.7 percent), units of service went down by 6.7 percent. The decrease is primarily due to deletion of certain billing codes in this category, which were deleted because they were often used incorrectly and because other codes are available for billing the services involved (McKenzie and Baker 2006).

Volume growth and policies to improve the value of physician services

Our analysis of volume growth for this payment adequacy analysis shows that per capita service use is increasing for the vast majority of services, suggesting that beneficiaries are able to access Medicare-covered services. In a recent report, the Government Accountability Office (GAO)
also found growth in both the share of beneficiaries using services and the volume of services they used (GAO 2006). GAO concluded that increases in utilization and complexity of services demonstrate that beneficiaries are able to access physician services. GAO also stated that the implications of these utilization trends for the long-term fiscal sustainability of the Medicare program require careful examination.

Some observers have hypothesized that growth in volume of physician services is spurred by new technology, demographic changes, and shifts in site of service. Changes in medical protocols and a rise in the prevalence of certain conditions may also play a role. Volume growth of some services may be desirable, but analyses by MedPAC and others have found that much of the rise in volume is unexplained by factors such as the demographic characteristics of the beneficiary population and new technology (Beeuwkes Buntin et al. 2004; MedPAC 2004a; Fisher et al. 2003a, 2003b). Moreover, it is difficult to determine whether broad-based growth in volume is improving the health and well-being of Medicare beneficiaries; greater use of evidence-based services can improve the quality of care, but unnecessary services can harm rather than help beneficiaries. In addition, rapid growth in volume and expenditures directly affects beneficiaries’ out-of-pocket costs by driving up Part B cost sharing and premiums as well as increasing supplemental insurance premiums.

To help ensure that Medicare spending is giving good value, the Commission has addressed several issues related to the volume of physician services. First, rapid volume growth may be a sign that some prices in the physician fee schedule are inaccurate. To improve the accuracy of those prices, the Commission has recommended steps the Secretary can take, such as establishing an expert panel that would help CMS identify potentially overvalued services. Second, the volume of services includes many new diagnostic and therapeutic services that have disseminated quickly into medical care without providers knowing whether they outperform existing services. The Commission has recommended that the Congress charge an independent entity with sponsoring credible research on the comparative effectiveness of health care services and disseminating this information to patients, providers, and public and private payers. Third, research comparing geographic areas has shown that the volume of services varies widely and that more care is not necessarily better care. Here, the Commission has recommended that CMS measure physicians’ resource use and share the results with physicians.

**Volume growth as a signal for mispriced fee schedule services**

Fee-schedule mispricing may be one factor contributing to the disparity in volume growth among services. In previous work, MedPAC has made recommendations on improving the accuracy of fee schedule payments to prevent market distortions for physician services (discussed in more detail in the text box on p. 97). For example, work RVUs for rapidly growing services may need to be revalued if physicians’ increased proficiency in performing a service means that less work effort is required to perform it. Practice expense RVUs may be subject to distortions over time due to data lags and equipment pricing assumption issues.

Rapid volume growth for specific services may signal that Medicare’s payment for those services is too high relative to the cost of furnishing them. Specifically, the physician work component of a given procedure may be overvalued if physicians (or their staff) are able to perform the procedure considerably more quickly than they did when it was first introduced. Consequently, physicians can increase their volume of these procedures with little change in the number of hours they work. As these procedures become increasingly profitable, physicians face clear financial incentives to favor them over services that may be less profitable.

Beneficiary access to undervalued services may be threatened if providers are confronted with incentives to avoid furnishing them relative to more profitable services. E&M services, for example, may have less opportunity for productivity gains because the clinician’s face-to-face time with the patient is a major component of the service. It is difficult for a physician to perform an office visit faster or fit more of them into a day’s schedule, in contrast to some procedure-based services. Facing these incentives, new physicians may be less willing to choose specialties that frequently provide undervalued services, resulting in reduced access to certain physicians and certain services.

In the future, the Secretary could play a lead role in identifying misvalued services by conducting analyses that calculate changes in the productivity of individual services. Such analyses could begin by examining specialties that show rapid volume increases per physician over a given time period. Volume calculations would need to take into account changes in the number of physicians
furnishing the service to Medicare beneficiaries and the hours those physicians work. Analyses would also need to consider how changes in practice inputs (e.g., nonphysician staff and equipment) may change the output of physician services.

CMS could use the results from these analyses to flag services for closer examination by CMS, specialty societies, or the American Medical Association Relative Value Scale Update Committee (RUC). The RUC could also conduct such volume analyses when making its work value recommendations to CMS, but the RUC’s current review schedule (every five years) may not be timely enough to capture services that enjoy rapid productivity gains. Alternatively, the Secretary could automatically adjust the RVUs for services that do and do not involve physician work, and the RUC would review the changes during its regular five-year review process.

To illustrate, we analyzed data for 2001 to 2006 and identified the physician services growing most rapidly (Table 2B-5). While spending for all physician services grew at an average annual rate of 6 percent, spending growth for the top 10 services ranged from 30 percent to 55 percent annually. Checking the history of the RUC’s review of RVUs for these services, we see that either they have never been reviewed or they have not been reviewed in the last 10 years—since 1997. Such services are examples of those that could be considered during a more timely review process for adjustment by the Secretary or as part of an automatic adjustment policy.

Corrections to the practice expense (PE) values may also be in order. In its June 2007 report, the Commission examined how CMS determines PE payment rates in the physician fee schedule; PE payments accounted for close to half of the $58 billion Medicare spent under the fee schedule in 2005 (MedPAC 2007). Beginning in 2007, CMS is using new methods to calculate direct and indirect PE RVUs, using the same approach to calculate PE RVUs for services that do and do not involve physician work, and using more current practice cost data to calculate indirect PE RVUs for eight specialty groups. Effects of these new PE methods and data are a reminder that changes in payment policy often redistribute payments across services. When CMS fully implements the PE changes in 2010, PE RVUs will increase by 7 percent for E&M services and by 3 percent for other (nonmajor) procedures and tests. By contrast, PE RVUs will decrease by 8 percent for major procedures and by 9 percent for imaging services.

### Table 2B-5: Physician services with high spending growth, 2001–2006

<table>
<thead>
<tr>
<th>HCPSC</th>
<th>Description</th>
<th>First year in fee schedule</th>
<th>Most recent review of work RVUs</th>
<th>Change in work RVUs</th>
<th>Year</th>
<th>2006 (in millions)</th>
<th>Average annual percent change 2001–2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>53850</td>
<td>Prostatic microwave thermotherapy</td>
<td>1998</td>
<td>—</td>
<td>—</td>
<td>2006</td>
<td>$136.8</td>
<td>55%</td>
</tr>
<tr>
<td>64483</td>
<td>Injection, anesthetic agent and/or steroid</td>
<td>2000</td>
<td>—</td>
<td>—</td>
<td>100.2</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>64475</td>
<td>Injection, anesthetic agent and/or steroid</td>
<td>2000</td>
<td>—</td>
<td>—</td>
<td>83.3</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>95811</td>
<td>Sleep testing, polysomnography</td>
<td>1998</td>
<td>—</td>
<td>—</td>
<td>123.4</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>66982</td>
<td>Cataract surgery, complex</td>
<td>2001</td>
<td>—</td>
<td>—</td>
<td>81.4</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>35476</td>
<td>Angioplasty, therapeutic component</td>
<td>1992 1997</td>
<td>—</td>
<td>0</td>
<td>129.0</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>27245</td>
<td>Repair thigh fracture</td>
<td>1993</td>
<td>—</td>
<td>—</td>
<td>82.4</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>76005</td>
<td>Fluoroscopic guidance for spinal injection</td>
<td>2000</td>
<td>—</td>
<td>—</td>
<td>88.5</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>72194</td>
<td>CT, pelvis</td>
<td>1992 1997</td>
<td>—</td>
<td>0</td>
<td>64.8</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>74183</td>
<td>MRI, abdomen</td>
<td>2001</td>
<td>—</td>
<td>—</td>
<td>81.9</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

Note: HCPSC (Healthcare Common Procedure Coding System), RVU (relative value unit), CT (computed tomography). Eligible codes had allowed charges of at least $10 million in 2001. If no year is listed for review, service has not been reviewed.

Making payments for PE more accurate could include changing the fee schedule’s adjustment of payments to account for geographic differences in practice costs. As discussed in the Commission’s June 2007 report, payments for PE would be more accurate if the adjustment excluded costs that do not vary geographically, such as equipment and supplies (MedPAC 2007). In addition, the Commission discussed reasons why CMS should revisit how it estimates the per service price of equipment, in particular the assumption that all equipment is operated half the time that practices are open for business.

Producing comparative-effectiveness information about physician services

With a resource-based payment system such as Medicare’s physician fee schedule, physicians and other providers have an incentive to adopt new services into their practices—particularly those that are profitable—without knowing whether they outperform existing diagnostic and therapeutic services. The payment system accounts for only the number of billable services furnished to Medicare beneficiaries and the resources consumed in furnishing those services. The result is that more resources are consumed with no assurance that they improve value.

To counter these forces, comparative-effectiveness information can help health care providers and patients make informed decisions about alternative services for diagnosing and treating most common conditions. It can also reveal services that are needed but underused. As we discuss on p. 98, options exist for using comparative-effectiveness information in payment policy as a way to improve value.
With little available information that compares the effectiveness of a service with its alternatives, the Commission has recommended that the Congress charge an independent entity with producing credible, empirically based information on comparative effectiveness, information that would help providers and patients make informed decisions about alternative services for diagnosing and treating common clinical conditions. The entity would:

- be independent and have a secure and sufficient source of funding;
- produce objective information and operate under a transparent process;
- seek input on agenda items from patients, providers, and payers;
- re-examine the comparative effectiveness of interventions over time;
- disseminate information to providers, patients, and public and private payers; and
- have no role in making or recommending coverage or payment decisions for payers.

Such an investment could lead to future use of comparative-effectiveness information in Medicare’s payment policies. Options for doing so include:

- creating a tiered cost-sharing structure that costs patients less for services that show more value to the program;
- not paying the additional cost of a more expensive service if evidence shows that it is clinically comparable to its alternatives; and
- requiring manufacturers to enter into a risk-sharing agreement, which links actual beneficiary outcomes to the payment of a service based on its comparative effectiveness.

In addition, comparative-effectiveness information could inform the level of payment. For instance, a new set of budget-neutral RVUs could be established in the fee schedule. These RVUs would go beyond the current RVUs, which only account for differences among services in resource costs. The new RVUs would be value-based RVUs that would be greater than zero if evidence shows that a service is more effective relative to available alternatives, and zero otherwise.

Some uncertainty would accompany development of such a new set of RVUs. Very little information on comparative effectiveness is currently available. Developing this information would be a significant undertaking, and the number of services for which such RVUs could be developed may turn out to be small. In addition, many services—for example, office visits—are used in diagnosing and treating a broad range of conditions. Developing comparative-effectiveness information for discrete physician services may be very difficult, if not impossible.

**Measuring and providing feedback on physician resource use**

Medicare beneficiaries in regions of the country where physicians and hospitals deliver many more health care services do not experience better quality of care or outcomes, nor do they report greater satisfaction with their care (Fisher et al. 2003a, 2003b). Thus, the nation could potentially spend less on health care, without sacrificing quality, if physicians whose practice styles are more resource intensive reduced the intensity of their practice.

In the March 2005 Report to the Congress, the Commission recommended that CMS measure physicians’ resource use over time and share the results with physicians (MedPAC 2005). Physicians would then be able to assess their practice styles, evaluate whether they tend to use more resources than their peers or what evidence-based research (when available) recommends, and revise their practice styles as appropriate. Moreover, when physicians are able to use this information in tandem with information on their quality of care, they will have a foundation for improving the value of care beneficiaries receive.

Private insurers increasingly measure resource use to contain costs and improve quality (MedPAC 2004b). Evidence on measuring the effectiveness of resource use in containing private sector costs is mixed and varies depending on how the results are used. Providing feedback on use patterns to physicians alone has been shown to have a statistically significant, but small, downward effect on resource use (Balas et al. 1996, Schoenbaum and Murray 1992), but, when paired with additional incentives, the effect on physician behavior can be considerably larger (Eisenberg 2002).

Medicare’s feedback on resource use may be more successful than previous experience in the private sector. As Medicare is the single largest purchaser of health care, its reports should command greater attention. In
addition, because Medicare’s reports would be based on more patients than private plan reports, they might have greater statistical validity and acceptance from physicians. Confidential feedback of the results to physicians might be sufficient to induce some change. Many physicians are highly motivated individuals who strive for excellence and peer approval (Tompkins et al. 1996). If identified by CMS as having an unusually resource-intensive style of practice, some physicians may respond by reducing the intensity of their practice. However, confidential information alone may not be sufficient to have a sustained, large-scale impact on physician behavior.

Input price increases

To measure input price inflation for physician services, we use information that CMS collects from various data sets and surveys. CMS provides a weighted average of price changes for inputs used to provide physician services. For 2009, CMS forecasts that input prices for physician services will increase by 2.6 percent. This forecast includes an estimated 2.7 percent increase in physician work compensation (2.4 percent for wages and salaries and 3.5 percent for nonwage compensation) and practice expense cost increases of 2.4 percent (Table 2B-6, p. 100). This forecast excludes productivity adjustments that are calculated by CMS and integrated into the publicly released Medicare Economic Index (MEI); thus, it is higher than CMS’s publicly released MEI.

Productivity adjustment

The productivity adjustment reflects the Commission’s policy principle that Medicare’s payment systems should encourage efficiency in the provision of Medicare services. The Commission’s approach links the adjustment for improving efficiency to the productivity gains achieved by the firms and workers who pay the taxes and premiums that fund Medicare benefits. Our productivity adjustment is set equal to the Bureau of Labor Statistics’ estimate of the 10-year average growth rate of multifactor productivity in the general economy, which is currently 1.5 percent. CMS uses a similar method for adjusting input costs when calculating the MEI.

Update recommendation

The Commission’s recommendation is that for 2009 the Congress should increase the physician fee schedule conversion factor by the projected change in input prices less the Commission’s adjustment for productivity growth. With the current estimate of input cost changes in 2009 of 2.6 percent and the Commission’s productivity adjustment of 1.5 percent, the Commission’s recommended 2009
update would be 1.1 percent. CMS revises the input cost projections on a quarterly basis, so the actual update percentage may change.

The Commission is not satisfied with the current physician payment update mechanism, for reasons we discussed in our March 2007 report, *Assessing Alternatives to the Sustainable Growth Rate System* (MedPAC 2007b). The existing SGR formula continues to call for substantial consecutive negative updates through 2016, and the Commission continues to be concerned that repeated annual reductions in physician payment rates would threaten beneficiaries’ access to physician services. We are especially concerned about the impact that repeated negative updates would have on access to primary care services, the increased use of which Medicare should be actively encouraging, not hindering, given the potential of primary care to improve the quality and efficiency of health care delivery.

The Commission is also concerned about how the distribution of Medicare physician payments is distorted by incentives that encourage the overuse of some services and underuse of others. Medicare’s FFS payment system does not systematically reward physicians who provide higher quality care or care coordination, and it offers higher revenues to physicians who furnish the most services—whether or not the services add value.

The Commission examined several alternative approaches to improving the current physician payment system in *Assessing Alternatives to the Sustainable Growth Rate System* and said that Medicare’s physician payment system should include incentives for physicians to provide better quality of care, to coordinate care across settings and medical conditions, and to use resources judiciously. The Commission has made specific recommendations in its past reports to move the payment system toward these goals, and the second part of our payment policy recommendations in this chapter is intended to keep Medicare moving toward those goals.

Specifically, the Commission recommends that the Congress enact legislation requiring CMS to establish a process for measuring and reporting physician resource use on a confidential basis starting in 2009 for a period of two years, after which data on physician resource use should be made public. The Congress should also direct

### Table 2B-6: Forecasted input price increases and weights for physician services for 2009

<table>
<thead>
<tr>
<th>Input component</th>
<th>Price increases for 2009</th>
<th>Category weight</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td><strong>2.6%</strong></td>
<td><strong>100.0%</strong></td>
</tr>
<tr>
<td><strong>Physician work</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wages and salaries</td>
<td>2.4</td>
<td>42.7</td>
</tr>
<tr>
<td>Fringe benefits (nonwage compensation)</td>
<td>3.5</td>
<td>9.7</td>
</tr>
<tr>
<td><strong>Physician practice expense</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonphysician employee compensation</td>
<td>2.9</td>
<td>18.7</td>
</tr>
<tr>
<td>Wages and salaries</td>
<td>2.9</td>
<td>13.8</td>
</tr>
<tr>
<td>Fringe benefits (nonwage compensation)</td>
<td>2.8</td>
<td>4.8</td>
</tr>
<tr>
<td>Office expense</td>
<td>2.1</td>
<td>12.2</td>
</tr>
<tr>
<td>Professional liability insurance</td>
<td>2.3</td>
<td>3.9</td>
</tr>
<tr>
<td>Medical equipment</td>
<td>0.7</td>
<td>2.1</td>
</tr>
<tr>
<td>Drugs and supplies</td>
<td>3.0</td>
<td>4.3</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>1.7</td>
<td>2.3</td>
</tr>
<tr>
<td>Medical materials and supplies</td>
<td>3.9</td>
<td>2.0</td>
</tr>
<tr>
<td>Other professional expense</td>
<td>2.1</td>
<td>6.4</td>
</tr>
</tbody>
</table>

Note: Forecasts price changes for individual components are calculated by multiplying the component’s weight (as listed in the Medicare Economic Index) by its price proxy. Forecasted price changes are not adjusted for productivity. Numbers may not total exactly due to rounding.

that, at the end of this two-year period, CMS should be positioned to implement physician payment rate adjustments based on physician resource use information. The Congress should allocate sufficient administrative resources to CMS to achieve this policy goal within the recommended two-year time frame.

**Recommendation 2B**

The Congress should update payments for physician services in 2009 by the projected change in input prices less the Commission’s adjustment for productivity growth. The Congress should enact legislation requiring CMS to establish a process for measuring and reporting physician resource use on a confidential basis for a period of two years.

**Rationale 2B**

Access, supply, and volume measures suggest that most Medicare beneficiaries are able to obtain physician services with few or no problems. Ambulatory quality measures are generally stable and improving. Our analysis of the most recently available data finds that Medicare payments for physician services are adequate. However, the negative fee schedule update in 2009 required under current law could reduce access to physician services for Medicare beneficiaries. Thus, we recommend that the Congress change current law to update the physician fee schedule conversion factor for 2009 by the projected change in input prices in 2009 less the Commission’s adjustment for productivity growth.

The second part of our recommendation is intended to improve the value of physician services purchased by Medicare, by directing CMS to measure and report Medicare resource use attributable to physicians for two years on a confidential basis. It will take time for CMS to develop the infrastructure and work constructively with stakeholders to implement accurate and actionable resource use measurement and reporting systems. CMS should begin the operational development process now to be prepared to use it for public reporting and for payment policy if and when authorized to do so by the Congress.

**Implications 2B**

**Spending**

- Our estimates indicate that the update recommendation for 2009 would increase federal program spending by more than $2 billion in the first year and by more than $10 billion over five years, relative to current law. Enactment of any positive update for 2009 would increase spending relative to current law, because current law calls for substantial negative updates from 2009 through 2016 under the current SGR system.

**Beneficiary and provider**

- Relative to current law, the update recommendation would increase the monthly Part B premium and per service coinsurance amounts paid by Medicare beneficiaries (or paid on their behalf by state Medicaid programs, in the case of dual eligibles).

**Additional comments**

In this chapter, we have discussed three opportunities for improving the value of Medicare—using volume growth as an indicator of services that may be misvalued, producing information on comparative effectiveness, and measuring physician resource use. In future reports, the Commission will pursue other ways to use physician payment policy to improve value. The Commission intends to continue its consultations with physicians and other important stakeholders as it analyzes and discusses these policy options, and CMS also should continue to engage the physician community in its initiatives. One option that both the Commission and CMS are exploring are “medical home” programs, which, if designed carefully, may be a way to improve the value of physician and other health care services. Important design issues remain if Medicare is to implement a medical home program. Our next step will be to explore these design issues, moving forward from the Commission’s previous work on care coordination (MedPAC 2006).

Another concern is that Medicare FFS payment reinforces a fragmented health care delivery system that discourages coordination of care between physicians and hospitals and does not hold providers accountable for quality and resource use. Bundling payments—for care provided around a hospitalization, for example—could improve incentives and foster greater “systemness.” The Commission is considering ways to implement bundling in Medicare and may make recommendations to the Congress in this area later this year.
Physician services: Assessing payment adequacy and updating payments

Endnotes

1 TRHCA allowed the 2007 conversion factor to be cut by 5 percent as directed by the SGR but then funded a 5 percent bonus to the 2007 conversion factor through Medicare’s Supplementary Medical Insurance (Part B).

2 In past years, our physician payment adequacy analysis has included data from other surveys of beneficiaries, such as the Consumer Assessment of Healthcare Providers and Systems for Medicare FFS (CAHPS®–FFS) and the Targeted Beneficiary Survey (TBS), both sponsored by CMS. Data from the 2006 CAHPS–FFS were not available in time for inclusion in this report, and the most recent TBS was conducted in 2003 and 2004 so the results were deemed out of date for purposes of the payment adequacy analysis in this report.

3 Statistical significance is measured at a 95 percent confidence interval (p≤0.05) by a two-tailed t-test.

4 For this analysis, we excluded certain types of specialties that do not typically serve most Medicare beneficiaries, such as all pediatric specialties, obstetrics/gynecology, and medical genetics. Physicians with specialties of anesthesiology, radiology, and pathology are excluded by the NAMCS sampling frame.

5 More information on the results of MedPAC’s 2006 survey of physicians is available in Chapter 2B of our March 2007 Report to the Congress (MedPAC 2007d).

6 We conservatively categorized physicians who saw fewer than 15 patients under the assumption that they did not regularly serve FFS beneficiaries and provided services to beneficiaries for only a short time during the year or only on an emergency or temporary basis while covering for colleagues.

7 The method used for the comparison involves calculating a price index for each type of private plan (HMO, point of service, preferred provider organization (PPO), and indemnity). Each price index is a weighted average of service-level price comparisons between Medicare and private payment rates, using Medicare’s volume in each service as the weight. The plan-specific estimates are then weighted based on the Kaiser Family Foundation and Health Research and Educational Trust yearly estimates of private enrollment in each type of plan for 2006 (Kaiser Family Foundation HRET 2007). To address enrollment in high-deductible health plans (HDHPs), we classified them as PPOs for enrollment distribution and payment rate purposes, because health plan industry sources indicate that 90 percent of HDHP enrollees are offered these options off of a PPO “platform.”

8 Our analysis relies on data from two national insurers, but—like all insurers—they face different market conditions in different areas. In a particular area, for example, there may be one dominant insurer that is better able to negotiate lower prices with providers, while other insurers have to pay higher rates. Although the data we use for our analysis from the two national insurers have a wide and diverse geographic distribution, we may not be able to fully capture the variation in private payment rates in different areas that results from local competitive circumstances. Our estimate of the ratio of Medicare to private payment levels is likely to be lower than the actual ratio in certain markets across the nation.

9 A text box on p. 96 of MedPAC’s March 2006 Report to the Congress describes development of the MACIEs in more detail (MedPAC 2006).

10 CMS is currently sponsoring a demonstration project called the Medicare Physician Group Practice Demonstration that includes comprehensive performance measures for large medical groups. Many of the measures focus on high-cost widespread diseases, such as congestive heart failure and diabetes.

11 These estimates include only services paid for under the physician fee schedule. The estimates would be higher if they included the volume of other services in CMS’s broader definition of physician services, such as Medicare Part B drugs and laboratory services. The Commission has found, for example, that the volume of chemotherapy drugs increased 12 percent from 2003 to 2004 and the volume of erythropoietin (for patients without end-stage renal disease) grew 36 percent (Hogan 2005).

12 The outpatient therapy cap policy in effect in 2006 and 2007 included a routine, automated exceptions process.

13 Potential changes in practice style could include not only modifying the number and types of services provided and the sites of those services but also using more nonphysician, less-expensive resources to reduce spending and use of costly services.

14 MedPAC identified this trend in a series of interviews conducted with health plans and consultants. Nearly all plans and purchasers mentioned measuring resource use as central to their cost-containment and quality-improvement strategies. Some collected information and gave it back to patients or providers, while others used it as a basis to pay bonuses to providers, and still others used it to select providers to be in preferred tiers or limited network plans.
To measure input price inflation for physician services, CMS first estimates the share, or weight, of physicians’ practice revenues attributable to each input, based primarily on data supplied by the American Medical Association (AMA). CMS then uses a contractor to obtain estimates of price changes for each input. Currently, CMS attributes 52.5 percent of physician revenues to physician work and 47.5 percent to practice expense, which includes a professional liability insurance weight of 3.9 percent. In 2004, CMS updated its input category weights based on 2000 survey data from the AMA. Rebasing these weights resulted in a decrease in the share of revenues going toward physician work and an increase in the share of revenues going toward practice expense. AMA is fielding a new survey that can help CMS update the Medicare Economic Index category weights. The new survey was initially fielded in April 2007, but the response rate was much lower than expected. AMA has since redesigned and refielded the survey and extended the field period through 2008.
References


Cherry, D., National Center for Health Statistics, Department of Health and Human Services. 2007. E-mail messages to MedPAC staff. October 9 and 15.


Outpatient dialysis services
The Congress should update the composite rate in calendar year 2009 by the projected rate of increase in the end-stage renal disease market basket index less the Commission’s adjustment for productivity growth. The Commission reiterates its recommendation that the Congress implement a quality incentive program for physicians and facilities that treat dialysis patients.

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

Section summary

Each year, the Commission makes a payment update recommendation for outpatient dialysis services for the coming year. The Congress has charged the Commission to judge whether payments for the current year (2008) are adequate to cover the costs efficient dialysis providers incur and how much Medicare’s payments should change in the coming year (2009).

Most of our indicators of payment adequacy are positive. The growth in the number of dialysis facilities and treatment stations has kept pace with the growth in the number of dialysis patients, suggesting continued access to care for most dialysis beneficiaries. The growth in the number of dialysis treatments—one indicator of the volume of services—has kept pace with patient growth between 2005 and 2006. The volume of most dialysis drugs administered grew between 2004 and 2006 but more slowly than in the past because of statutory and regulatory changes that lowered the payment rate for most of them.

In this section

- Recent regulatory and legislative changes to dialysis payment policies
- Are Medicare payments adequate in 2008 and how should they change in 2009?
- Update recommendation
- Creating incentives to improve dialysis quality and providers’ efficiency
Some measures of quality of care are improving. Use of the recommended type of vascular access—the site on the patient’s body where blood is removed and returned during hemodialysis—has improved since 2000. More patients receive adequate dialysis and have their anemia under control. Some researchers have raised concerns about the health risks associated with the overuse of erythropoietin, the drug used to treat anemia. A payment bundle that includes all dialysis drugs, a policy that the Commission has recommended, might encourage more efficient drug use.

Other measures suggest that improvements in dialysis quality are still needed. Patients’ nutritional status has not improved during the past five years. At the end of this chapter, we discuss potential ways to improve nutritional status and vascular access care.

Recent evidence about trends in the increase in the number of dialysis facilities suggests that providers have sufficient access to capital. Both the large dialysis organizations and smaller chains have obtained private capital to fund acquisitions.

The Medicare margin for composite rate services and dialysis drugs was 5.9 percent in 2006. The two largest dialysis organizations realized a higher Medicare margin than all other providers (7.6 percent vs. 2.0 percent). We project the overall Medicare margin will be 2.6 percent in 2008. This estimate reflects the update to the composite rate effective April 1, 2007, and the add-on payment in 2007 and 2008.

In summary, most of our payment adequacy indicators are positive. Providers have sufficient capacity to furnish care, growth in the volume of dialysis treatments is keeping pace with the growth in the number of beneficiaries, the quality of care is improving for some measures, and providers have sufficient access to capital. Therefore, the recommendation is to update the composite rate in 2009 by the projected rate of increase in the end-stage renal disease (ESRD) market basket less the Commission’s adjustment for productivity growth. We base our productivity adjustment on the 10-year
moving average of multifactor productivity in the economy as a whole, which is 1.5 percent for our 2009 deliberations. Under the current forecast of the ESRD market basket (2.5 percent), the Commission’s recommendation would update the composite rate by 1.0 percent in 2009. CMS revises the input cost projections on a quarterly basis, so the actual update percentage may change as a result of those revisions.

Concomitant with the update recommendation, the Commission is reiterating its recommendation to link Medicare payment for providers treating dialysis patients to the quality of care they furnish (MedPAC 2004a). The outpatient dialysis sector is a ready environment for linking payment to quality. Credible measures are available that are broadly understood and accepted. Obtaining information to measure quality will not pose an excessive burden and measures can be adjusted for case mix so providers are not discouraged from taking more complex patients.

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**Recommendation 2C**

The Congress should update the composite rate in calendar year 2009 by the projected rate of increase in the end-stage renal disease market basket index less the Commission’s adjustment for productivity growth. The Commission reiterates its recommendation that the Congress implement a quality incentive program for physicians and facilities that treat dialysis patients.

**COMMISSIONER VOTES:**

YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1
**Background**

End-stage renal disease (ESRD) is a chronic illness characterized by permanent 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 undergone kidney transplantation and have a functioning kidney transplant. Because of the limited number of kidneys available for transplantation, 70 percent of all ESRD patients undergo dialysis. Patients receive additional items and services during their dialysis treatments, including drugs to treat conditions resulting from the loss of kidney function (e.g., anemia and renal-related bone disease).

The 1972 amendments to the Social Security Act extended Medicare benefits to people with ESRD who are eligible for Social Security benefits, even those under age 65 years. This disease-specific entitlement is unique in Medicare. Beneficiaries entitled to Medicare due to ESRD alone (i.e., people under age 65 and not disabled) have the same benefits as other Medicare beneficiaries.

Medicare coverage does not begin until the fourth month after the start of dialysis for patients entitled to benefits due to ESRD alone. Exceptions to this statutory provision are patients who have undergone a kidney transplant or who receive training to perform dialysis at home. In 2006, there were about 109,000 new dialysis patients. About half of all new ESRD patients are under age 65 and thus are entitled to Medicare only because they have chronic renal failure.

If an employer group health plan (EGHP) covers a patient at the time of ESRD diagnosis, then the EGHP is the primary payer for the first 33 months of care. Medicare is the secondary payer during this time. EGHPs include health plans that patients were enrolled in through their own employment or through a spouse’s or parent’s employment before they became eligible for Medicare due to ESRD.

In 2006, Medicare covered more than 325,000 dialysis patients. About one-quarter of all newly diagnosed ESRD patients were entitled to Medicaid benefits and about one-quarter were covered by an EGHP (USRDS 2007). For both freestanding and hospital-based dialysis facilities, Medicare spending for dialysis and dialysis-related drugs totaled $8.4 billion in 2006, an increase of 6 percent compared with 2005. Medicare expenditures for composite rate services and separately billable dialysis drugs averaged about $26,000 per patient in 2006.

**Recent regulatory and legislative changes to dialysis payment policies**

Since 1983, Medicare has paid dialysis facilities a predetermined payment for each dialysis treatment. Under the prospective payment—the composite rate—Medicare pays for services that are associated with dialysis treatment, including nursing, dietary counseling, and other clinical services; dialysis equipment and supplies; social services; and certain laboratory tests and drugs. In addition, Medicare pays separately for certain drugs and laboratory tests that have become a routine part of care since 1983. MedPAC’s Payment Basics provides more information about Medicare’s method for paying for outpatient dialysis services (http://www.medpac.gov/documents/MedPAC_Payment_Basics_07_dialysis.pdf).

These payment policies remained relatively unchanged until the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA), which increased the payment rate for dialysis treatments and decreased the payment rate for separately billable dialysis drugs. First, the MMA mandated paying providers an add-on payment in addition to the composite rate in 2005. The law funded this add-on payment by shifting some of the payments previously associated with separately billable dialysis drugs to the composite rate and mandated that these changes occur in a budget-neutral manner.

Second, the MMA lowered the payment rate for most dialysis drugs to a rate closer to the prices providers paid. In 2005, CMS paid dialysis providers their acquisition cost—set at the average acquisition payment—for most (but not all) dialysis drugs. In 2006, CMS revised this policy by paying average sales price (ASP) plus 6 percent for all dialysis drugs. These changes have resulted in Medicare’s drug payment no longer being as profitable for most providers as it was before 2005, when the program paid either average wholesale price, reasonable cost, or a set (statutory) rate. As we discuss later, a recent study by the Office of Inspector General (OIG) concludes that dialysis drugs remained profitable for most dialysis facilities in 2006 (OIG 2007).

However, the MMA did not change the two-part structure of the payment system. Providers still receive the composite rate for each dialysis treatment and separate payment for certain dialysis drugs, such as erythropoiesis-stimulating agents (ESAs), which include erythropoietin and darbepoetin alpha, iron, and vitamin D analogs, and
Laboratory tests that were not available when Medicare implemented the composite rate.

As intended by policy, the composite rate increased from about $126 per treatment in 2004 to $151 per treatment in 2006. At the same time, the drug payment per treatment declined from about $92 per treatment to $79 per treatment between 2004 and 2006. Per legislative and regulatory actions outlined in Table 2C-1, the composite rate (including the add-on payment) increased to about $152 per treatment in 2007.

### TABLE 2C-1
Legislative and regulatory changes to the outpatient dialysis payment method

<table>
<thead>
<tr>
<th>Legislation or regulation</th>
<th>Change in composite rate payment</th>
<th>Change in payment for separately billable drugs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare Prescription Drug, Improvement, and Modernization Act of 2003</td>
<td>• Increased the base composite rate by 1.6 percent in 2005.* • Created the add-on payment to the composite rate to account for the reduction in drug payment rate in 2005. • Required CMS to annually increase the add-on updated due to increased use and prices in separately billable drugs beginning in 2006. • Required CMS to adjust composite rate for case mix in 2005. • Gave authority to CMS to update the wage index.</td>
<td>Reduced payment for separately billable drugs in 2005 by requiring that Medicare set payment based on providers’ acquisition cost.</td>
</tr>
<tr>
<td>Deficit Reduction Act of 2005</td>
<td>Increased the base composite rate by 1.6 percent in 2006.</td>
<td></td>
</tr>
<tr>
<td>Tax Relief and Health Care Act of 2006</td>
<td>Increased the base composite rate by 1.6 percent effective April 1, 2007.</td>
<td></td>
</tr>
<tr>
<td>CMS regulation</td>
<td>In 2005: Set the add-on payment at 8.7 percent of the composite rate. Adjusted payment based on age and two measures of body mass.</td>
<td>Payment based on average acquisition payment, which was based on a survey—sponsored by the Office of Inspector General—of providers’ average acquisition cost.</td>
</tr>
<tr>
<td></td>
<td>In 2006: Updated the add-on payment by 1.4 percent, thus increasing the add-on payment to 14.5 percent of the composite rate.** Began phasing in an updated wage index.</td>
<td>Payment set at average sales price plus six percent. Eliminated differences in drug payment between freestanding and hospital-based facilities.</td>
</tr>
<tr>
<td></td>
<td>In 2007: Updated the add-on payment by 0.5 percent, thus increasing the add-on payment to 14.9 percent. Continued to phase in changes to wage index.</td>
<td>No change.</td>
</tr>
<tr>
<td></td>
<td>In 2008: Updated the add-on payment by 0.5 percent, thus increasing the add-on payment to 15.5 percent. Continued to phase in changes to wage index.</td>
<td>No change.</td>
</tr>
</tbody>
</table>

Note: *The base composite rate in 2005 was $128.35 for freestanding facilities and $132.41 for hospital-based facilities. **In addition, CMS moved to a payment method based on average sales price in 2006, which lowered the payment rate for dialysis drugs and required CMS to shift more drug profits, thereby increasing the add-on payment.

Source: MedPAC review of federal legislation and CMS regulations.
Are Medicare payments adequate in 2008 and how should they change in 2009?

Each year, the Commission makes a payment update recommendation for outpatient dialysis services for the coming year. In our framework, we address whether payments for composite rate services and dialysis drugs in the current year (2008) are adequate to cover the costs of efficient dialysis providers and how much efficient providers’ costs should change in the coming year (2009). Information we examine to assess payment adequacy includes beneficiaries’ access to care, changes in the volume of services, and the relationship between Medicare’s payments and providers’ costs for composite rate services and dialysis drugs. In addition, the MMA requires that we consider the efficient provision of services in recommending updates.

Most of our indicators of payment adequacy are positive:

- The proportion of providers furnishing the different types of dialysis remains unchanged between 1997 and 2007.
- Providers have sufficient capacity to meet demand.
- The number of facilities—particularly for profit—continues to increase.
- The growth in the number of dialysis treatments generally kept pace with the growth in the number of dialysis patients during the past decade.
- Spending on dialysis drugs grew between 2004 and 2006 but more slowly than in the past because of statutory and regulatory changes that lowered the payment rate for most dialysis drugs. The use of dialysis drugs continued to increase after 2004 but at a slower rate than in previous years.
- Quality is improving for some but not all measures.
- Providers’ access to capital is good.
- The Medicare margin for composite rate services and dialysis drugs was 5.9 percent in 2006. We project the Medicare margin for composite rate services and dialysis services will be 2.6 percent in 2008.

Beneficiaries’ access to care
To assess beneficiaries’ access to care, we monitor changes in patients’ ability to obtain different types of dialysis methods and examine whether certain beneficiary groups face systematic problems in accessing care.

Access to the different types of dialysis
Access to specific types of dialysis—in-center hemodialysis, peritoneal dialysis (usually done in patients’ homes), and home hemodialysis—shows little change over time. Between 1997 and 2007, at least 96 percent of all facilities offered in-center hemodialysis and 45 percent offered some type of peritoneal dialysis—continuous cycle peritoneal dialysis or continuous ambulatory peritoneal dialysis. The proportion of facilities offering home hemodialysis increased between 2006 and 2007. In 2003 and 2006, about 12 percent of facilities offered home hemodialysis (these data are not available before 2003); in 2007, 16 percent of facilities offered this type of dialysis.

Fewer patients overall are receiving dialysis in their homes. Most recent data from the United States Renal Data System (USRDS) show that, between 1996 and 2005, the number of patients receiving hemodialysis in facilities increased by 6 percent per year. By contrast, the number of patients treated at home (using peritoneal dialysis) declined by 1 percent per year. In 2005, most dialysis patients (91 percent) received hemodialysis in a facility, while 8 percent received peritoneal dialysis and 1 percent received home hemodialysis. Home dialysis offers several advantages related to quality of life and satisfaction to those patients who are able to dialyze at home. Compared with in-center hemodialysis, home dialysis is more convenient for patients because they can dialyze on their own schedule. MedPAC’s 2006 and 2007 March reports to the Congress discuss this topic more completely.

Clinical factors, such as the patients’ health problems, and nonclinical factors, such as training of physicians and patients’ preferences, can affect the choice of dialysis. In addition, Medicare’s payment policies might affect the use of home dialysis. In particular, the profitability of dialysis drugs before 2005 may have given some providers an incentive to furnish in-center dialysis instead of home dialysis. In-center patients on average use more dialysis drugs per treatment (as measured by payments) than home patients. The Commission will continue to monitor the use of home dialysis.

Did providers change the mix of patients they treated between 2005 and 2006?
We examined whether providers stopped treating certain types of patients by comparing the demographic and clinical characteristics of beneficiaries. This analysis
focuses on certain groups, such as the elderly and African Americans, who are disproportionately affected by renal disease. Our analysis looked at the differences by the following provider types: affiliated with the two largest national chains, which we refer to as the largest dialysis organizations (LDOs); not affiliated with the LDOs; freestanding; and hospital based. As shown later in this chapter, some of these groups overlap; for example, the LDOs operate about 70 percent of all freestanding facilities.

Figure 2C-1 presents, for each type of provider, the proportion of patients in 2006 who were elderly, female, African American, Hispanic, and dually eligible for Medicaid. Across the different provider types, the proportion of patients with these characteristics does not differ by more than 1 percentage point between 2005 and 2006 (data not shown for 2005). This analysis suggests that providers, including the LDOs, which account for about 60 percent of all facilities, did not change the mix of patients they cared for in 2005 and 2006.

This analysis also shows that in 2005 and 2006, freestanding facilities were more likely than hospital-based facilities to treat African Americans and dual eligibles. As mentioned later in the section, freestanding facilities account for more than 85 percent of all dialysis facilities.

**Do certain beneficiary groups face systematic problems in accessing care?**

In general, the supply of facilities is increasing: In 2006, providers’ capacity to furnish care improved with a net increase of 201 hemodialysis stations. But as in prior years, we wanted to see whether the types of patients using new, continuing, and closed facilities suggest some access differences. Specifically, we compared the characteristics of patients treated by facilities that were open in 2005 and 2006, that newly opened in 2006, and that closed in 2005.
Some of our findings are consistent with long-term trends we have seen in supply. Compared with facilities that remained open, facilities that closed in 2005 were more likely to:

- have less capacity (averaging 13 stations vs. 18 hemodialysis stations),
- be hospital based,
- be nonprofit, and
- be less profitable than facilities that remained open as measured by the Medicare margin.

Even though we see that closed facilities had a higher share of African-American and dual-eligible patients, we find that facilities that remained open also served many of these patients. Compared with facilities that opened in 2006, closed facilities treated a larger proportion of African Americans (54 percent vs. 30 percent) and dual eligibles (43 percent vs. 40 percent). At the same time, however, these groups have good access to facilities that remained open in both years. The proportion of African Americans and dual eligibles treated in facilities that remained open in 2005 and 2006 closely matches the share of these groups among all dialysis patients. Facility closures may not necessarily result in access problems as long as other facilities are available to treat patients.

We found no substantial differences in the mix of patients by age, sex, or disease severity (measured by a comorbidity scale, the Charlson index) among provider types. Closures do not disproportionately affect rural patients; 13 percent of closed facilities were in rural areas, compared with 25 percent of those that stayed open in 2005 and 2006.

Together, these findings suggest that most beneficiaries do not face systematic problems in obtaining care. Nonetheless, we will continue to monitor beneficiaries’ access to care among different provider types. We are particularly interested in tracking whether facility closures may disproportionately affect certain patient groups, such as African Americans and dual eligibles.

**What types of providers furnish dialysis care?**

During the past 15 years, an increasing proportion of dialysis providers are freestanding, are bigger, are owned by publicly traded companies, are operated by a chain, and operate for profit (Table 2C-2 (p. 118) and Figure 2C-2 (p. 119)). Moreover, the dialysis sector has evolved into an oligopoly, in which a small number of firms furnish most of the care. In 2005 and 2006, the four largest dialysis chains merged into two chains. These two for-profit chains (Fresenius and DaVita) together account for about 60 percent of all facilities and about 70 percent of all freestanding facilities (Figure 2C-2). These trends in the profit status, size, and consolidation of dialysis providers suggest that the dialysis industry is an attractive business to for-profit providers with the potential for efficiencies and economies of scale in providing dialysis care.

Between 1997 and 2007, freestanding facilities increased from 77 percent to 87 percent of all facilities, while for-profit facilities increased from 71 percent to 80 percent of all facilities (Table 2C-2). The absolute number of hospital-based facilities decreased (from 731 to 601, respectively) during this time. Most (91 percent) freestanding facilities are for profit. Most (94 percent) hospital-based facilities are nonprofit (data not shown).

Dialysis facilities are bigger in 2007 than in 1997; the average number of treatment stations increased from 15.5 stations to 17.5 stations during the past decade. This trend is consistent with the findings that freestanding facilities are bigger than hospital-based facilities (18.1 stations vs. 13.5 stations in 2007) and chain-affiliated facilities are bigger than facilities not operated by a chain (18.0 stations vs. 15.2 stations in 2007 (data not shown)).

Most freestanding dialysis facilities (87 percent) are affiliated with a chain; most hospital-based facilities (81 percent) are not. As mentioned earlier, the two largest chains account for about 60 percent of all facilities. The next largest chain (Dialysis Clinic Inc.) operates 4 percent of all facilities. Facilities not operated by these chains are:

- 58 percent for-profit and 42 percent nonprofit facilities,
- 67 percent freestanding and 33 percent hospital based, and
- 44 percent chain affiliated and 56 percent not affiliated with a chain.

The 3 largest chains operate facilities in 26 to 45 states. Most of the other 89 chains operate in fewer than 5 states. Five chains operate in up to 21 states.
Do providers have the capacity to meet patient demand?

Our analysis of the growth in the number of hemodialysis treatments, facilities, and patients suggests that the growth in capacity appears to have kept up with the demand for care during the past decade. Between 1997 and 2007, the total number of dialysis facilities and hemodialysis stations grew at annual rates of 4.2 percent and 5.5 percent, respectively, keeping up with the 5 percent per year growth in the number of dialysis patients (Table 2C-2).

Another indicator that suggests providers are able to meet the demand for care is “same-store growth”—the change in the number of hemodialysis treatments provided in consecutive years by a given provider. Facilities can increase the number of treatments they furnish by treating more patients, by providing more treatments to existing patients, and by increasing the number of shifts per day that they dialyze patients. Between 2004 and 2005, facilities increased the total number of hemodialysis treatments they furnished by 4.0 percent. Since 2000, annual same-store growth has ranged from 3.8 percent to 4.8 percent.

Volume of services

Between 1996 and 2006, the growth in the number of in-center hemodialysis treatments generally kept pace with the growth in the number of dialysis patients. The number of dialysis treatments increased, on average, by 6.5 percent annually; in comparison, the number of dialysis patients increased, on average, by about 5 percent.

Freestanding facilities treat most dialysis patients and account for nearly 90 percent of spending (about $7.5 billion in 2006) for composite rate services and dialysis drugs (Table 2C-3, p. 120). Recently, total payments to freestanding dialysis providers grew more slowly than in the past. Aggregate expenditures increased by about 10 percent per year between 1996 and 2004 but then slowed to a 6 percent increase between 2004 and 2006.

Between 2004 and 2006, total payments increased but at a slower rate than in the past because drug spending fell. As a result of changes due to law and regulations:

- Drug payments to freestanding dialysis providers declined by 5 percent per year (from $2.8 billion to $2.6 billion) between 2004 and 2006. By contrast,
between 1996 and 2004, dialysis drug expenditures grew by 15 percent per year, from $951 million to $2.8 billion.

- Payments for composite rate services increased by 13 percent between 2004 and 2006, while spending for these services increased 8 percent annually between 1996 and 2004.

The decline in spending on dialysis drugs is due to the change in policy that lowered Medicare’s payment rate for these drugs. As mentioned earlier, Medicare paid freestanding facilities either 95 percent of the average wholesale price or a statutory rate for dialysis drugs in 2004. The MMA required that CMS base drug payment amounts on providers’ acquisition costs and, in 2006, the agency paid 106 percent of the ASP for dialysis drugs. Between 2004 and 2006, Medicare’s payment rate for erythropoietin (the leading dialysis drug based on payments) dropped by 5 percent. We computed the percentage by which the 2006 payment rate is below the pre-MMA payment amounts for the leading dialysis drugs available in 2004 and 2006. When weighted by the 2006 payments to freestanding facilities for each drug, overall payment rates for the leading dialysis drugs declined by about 14 percent during this period.6

Despite the decrease in the payment rate, the volume of most dialysis drugs increased during this period. We assessed changes in the volume of the leading dialysis drugs by holding the drug payment rate constant and looking at the dollar change in the total volume of services for the top 11 dialysis drugs in 2004. We found that the volume of dialysis drugs increased by 5 percent per year between 2004 and 2006, an annual rate of growth that is slower than in the year that preceded the change in the payment method.

The volume of three injectable drugs—sodium ferric gluconate, calcitriol, and levocarnitine—declined between 2005 and 2006. Providers replaced sodium ferric gluconate and calcitriol with other injectable drugs that treat the same comorbidities (iron deficiency and low blood calcium, respectively).

Providers might be replacing injectable levocarnitine, which Part B covers, with oral levocarnitine, which Part D covers. Part D data are not available to confirm oral levocarnitine use among dialysis patients (we call for release of these data in Chapter 4). Using oral levocarnitine for dialysis patients is inconsistent with the product’s Food and Drug Administration (FDA) label. The FDA has approved only the injectable form for dialysis patients, not the oral form.7 We also checked whether the injectable form of levocarnitine is profitable. Like most other dialysis drugs, Medicare’s payment rate for injectable levocarnitine declined between 2005 and 2006 (from $13.63 per gram in 2005 to an average of $9.65 per gram in 2006); the OIG reports that freestanding facilities were able to purchase levocarnitine for an average of 23 percent below Medicare’s payment rate in the third quarter of 2006 (OIG 2007).8

To detect changes in erythropoietin volume, we also looked at the number of units administered per treatment between 2003 and 2006. We found that the units per treatment increased by 7 percent per year between 2003 and 2004 and remained relatively constant between 2004
and 2005 (declining slightly by 0.6 percent). Between 2005 and 2006, units per treatment increased by 2 percent.

Finally, to assess the impact on beneficiaries’ outcomes, we looked at the proportion of beneficiaries receiving adequate dialysis and with their anemia under control between 2003 and 2006. For this analysis, we used data on dialysis adequacy and anemia status that providers are required to report on their dialysis and erythropoietin claims, respectively. The proportion of patients receiving adequate dialysis (i.e., patients who had a urea reduction ratio greater than 65 percent) has remained relatively constant since 2003 (94 percent in 2003, 95 percent in 2004 and 2005, and 94 percent in 2006). The proportion of patients whose anemia was under control (defined as patients with a hemoglobin concentration greater than 11 grams per deciliter (g/dL)) increased from 86 percent in 2003 to 89 percent in 2004, 90 percent in 2005, and 89 percent in 2006. As we discuss later (p. 123), the current FDA label recommends that patients’ hemoglobin levels range from 10 g/dL to 12 g/dL.

**Clinical effectiveness and payment method explain increasing use of dialysis drugs**

The volume of dialysis drugs has grown partly because they are new and effective. Researchers have shown that these new drugs have benefited patients. However, the financial incentives of the current dialysis payment method have also contributed to the use of dialysis drugs; overuse of services can have negative clinical consequences. For example, Singh and colleagues (2006) reported that cardiovascular events (congestive heart failure, myocardial infarction, and stroke) were more frequent among patients with chronic kidney disease maintained on higher doses of erythropoietin. Thus, the Medicare program needs to balance the tension between providing patients access to new and effective drugs and services and setting the payment rates so that providers do not overfurnish them, which could lead to negative clinical effects.

The FDA approved many of the drugs—including erythropoietin, vitamin D agents, and iron injectables—beginning in the late 1980s. Since then, the National Kidney Foundation (NKF) has advocated using them in its clinical guidelines. These medications have enhanced the quality of care furnished to dialysis beneficiaries. For example, erythropoietin has reduced the proportion of dialysis patients with anemia, which contributes to morbidity if not treated effectively. Medicare’s coverage decisions also affect the use of these drugs. For example, CMS made a national coverage decision to cover injections of levocarnitine for patients with ESRD beginning January 1, 2003.9

Second, paying according to the number of units administered gives providers greater profits from larger doses than from smaller doses (as long as Medicare’s payment rate exceeds providers’ costs). The profitability of certain dialysis drugs under the old (pre-MMA) payment method gave providers the incentive to use more of them. As intended by the statute, CMS lowered the drug payment rate in 2005 and 2006, but this change did not eliminate the profitability of drugs (as mentioned previously).
In 2006, CMS began paying all dialysis facilities 106 percent of the ASP for all dialysis drugs. CMS calculates ASP based on actual transaction prices from data drug manufacturers submit quarterly. Paying based on ASP lowered the payment rate for all but one of the leading dialysis drugs in 2006. Although the payment rate dropped for most dialysis drugs, a recent OIG report concluded that dialysis drugs are profitable for most providers as of the third quarter of 2006 (OIG 2007). For freestanding facilities, the OIG reported that:

- Overall drug acquisition costs were, on average, 10 percent below the Medicare payment rate in the third quarter of 2006.
- Freestanding facilities could purchase 9 of the 11 leading dialysis drugs below the Medicare payment rate. For the remaining two drugs (alteplase and iron dextran, 50 milligrams), average acquisition costs ranged from 3 percent to 9 percent above the Medicare payment rate.
- Freestanding chain facilities purchased 8 of the 11 dialysis drugs at rates lower than freestanding facilities not operated by a chain.

Some policymakers are concerned about the use of ASP to pay for sole source drugs and biologics (sole source means that one manufacturer produces the drug). The text box (p. 122) summarizes the issues about using ASP for sole source drugs and biologics.

Historical trends in the use of erythropoietin demonstrate the concerns with paying for profitable services on a per unit basis. After CMS changed its method for paying for erythropoietin—from a relatively fixed payment per dose between 1989 and 1991 to a per unit basis after 1991—per patient use of the drug escalated 8 percent annually between 1991 and 2004 (from 7,100 units per week to 20,100 units per week) (USRDS 2007). Before 1991, providers received $40 per dose for doses under 10,000 units and $70 per dose for doses over 10,000. Under the pre-1991 payment method, the dose of erythropoietin (about 2,700 units per treatment) was much lower than on a per unit basis (Greer et al. 1999). CMS has tried to address the increasing per patient use of erythropoietin through a monitoring payment policy for ESAs (see text box, p. 124).

Some researchers have suggested that providers could provide erythropoietin more efficiently and that appropriate use of intravenous iron could reduce erythropoietin dose requirements. Fishbane (2006) analyzed existing clinical trials and estimated that the erythropoietin dose could be lowered by 27 percent to 75 percent of the current average dosage with appropriate iron management. Pizzi and colleagues (2006) estimated a net savings to Medicare of $257 per patient per month if providers followed the NKF anemia guideline. Data from the USRDS show some variation in spending for erythropoietin and intravenous iron among providers. Spending varied from $522 to $698 per patient per month for erythropoietin and from $54 to $92 for intravenous iron across the freestanding chains and hospital-based facilities (USRDS 2007). Among patients with similar hemoglobin levels, erythropoietin use varies considerably across

**ESA use varies considerably across providers and the FDA addressed some safety issues in 2007**

Medicare could better achieve its objectives of providing incentives for controlling costs and promoting access to quality services if all dialysis-related services, including drugs, were bundled under a single payment. The Commission previously recommended that the Congress broaden the dialysis payment bundle and implement pay for performance for both physicians and facilities who treat dialysis patients (MedPAC 2004a, 2003, 2001). These steps should improve the efficiency of the payment system, better align incentives for providing cost-effective care, and reward providers for furnishing high-quality care.
Concerns about the method Medicare uses to set payments for single source dialysis drugs and biologics

Paying according to the average sales price (ASP) has improved the accuracy of Medicare’s method for paying for dialysis drugs by reducing the difference between Medicare’s payment rate and providers’ acquisition costs. Nonetheless, concerns remain that ASP may not appropriately pay for single source drugs and biologics without clinical alternatives (GAO 2006). The ASP method relies on market forces to achieve a favorable payment rate for Medicare—that is, one that is sufficient to maintain beneficiary access but not overly generous for providers and therefore wasteful for taxpayers. In principle, under ASP when two or more clinically similar products exist in a market, market forces could bring prices down, as each manufacturer competes for its own product’s market share. In contrast, when a product is available through only one manufacturer and no clinically similar product exists, Medicare’s rate may lack the moderating influence of competition.

For this reason, ASP may not be appropriate to set the payment for biologics and sole source drugs without clinical alternatives. The two erythropoiesis-stimulating agents (ESAs)—erythropoietin and darbepoetin—prescribed to dialysis patients are manufactured by the same company and have no competitor products in the dialysis market.12 ESA spending by Medicare for dialysis patients in 2006 was substantial—$2.1 billion—with erythropoietin spending, which totaled about $1.9 billion, accounting for nearly all of it.

By contrast, in the European Union, a competitive market exists, with the availability of ESAs manufactured by more than one company. Some countries in Europe have national contracting for ESA products, which puts pressure on ESA suppliers to offer competitive pricing (Macdougall 2007).

A recent change to the alphanumeric code assigned to erythropoietin has lowered Medicare’s payment rate for this biologic. Before July 2007, CMS used two codes to pay for erythropoietin—one for dialysis use and another for nondialysis use. Historically, the payment rate for erythropoietin has been higher for dialysis use than for nondialysis use. (The nondialysis erythropoietin market is more competitive than the dialysis market because two companies market it.) Beginning in July 2007, CMS changed the coding of erythropoietin and began using one payment code (Healthcare Common Procedures Codes) for erythropoietin for both dialysis and nondialysis use. Since the coding change, the payment rate for erythropoietin for dialysis patients has decreased—from $9.58 per 1,000 units before the coding change (in the second quarter of 2007) to $9.10 per 1,000 units and $9.06 per 1,000 units after the coding change (in the third and fourth quarters of 2007, respectively).

The dialysis ESA market may become competitive if follow-on (generic) products become available in 2012, when the manufacturer’s patents on erythropoietin expire.13 One issue that may impede the availability of follow-on (generic) biologics, including erythropoietin, is the lack of an abbreviated process by the Food and Drug Administration (FDA) to approve them. Unlike drugs, manufacturers of follow-on biologics have to conduct clinical trials to show safety and efficacy. By contrast, manufacturers of generic drugs have to demonstrate only that their drug is equivalent to the sole source drug that they are copying. In 1984, the Hatch-Waxman Act created a process for the FDA to approve generic drugs after a sole source drug loses its patent protection. A statutory change would enable the FDA to create a biogenerics-approval pathway. The European Union is ahead of the United States in dealing with these issues; a follow-on erythropoietin will be available in 2008 (Macdougall 2007). Having an abbreviated biogenerics approval process is urgently needed because many of the most innovative and costly products entering the market are biologics. The availability of follow-on biologics will lead to increased competition, which in turn will improve the accuracy of Medicare’s payment method and the value of Medicare spending.
providers. The USRDS reported that, among patients with hemoglobin levels of 12 g/dL, the average weekly erythropoietin dose ranged from 22,463 units to 34,046 units in 2005 (USRDS 2007). Even after adjustment for differences in case mix, the weekly erythropoietin dose varied among providers (Thamer et al. 2007).

A recent clinical trial reported more adverse health events among patients who received higher erythropoietin doses to achieve higher hemoglobin levels. Singh and colleagues (2006) reported that a higher target hemoglobin value (13.5 g/dL compared with 11.3 g/dL) was associated with increased risk of death, myocardial infarction, congestive heart failure, and stroke among patients with chronic kidney disease. Improvements in patients’ quality of life were similar in both groups. On the basis of these results, the researchers recommended using a lower target hemoglobin level because of the increased risk, likely increased cost, and lack of quality-of-life benefit from maintaining a higher target hemoglobin level.

In 2007, the FDA reviewed the safety of ESAs and dosage instructions for treating anemia among patients with chronic renal failure, patients with cancer, and patients with human immunodeficiency virus undergoing zidovudine therapy. In March 2007, the FDA issued warnings for clinicians to prescribe ESAs more carefully. Specifically, the FDA included a new “black box” warning on the product’s label and modified the dosing instructions. The new warning advised clinicians to monitor patients’ levels of red blood cells and to use the lowest possible ESA dose to avoid the need for blood transfusions. The FDA previously revised the product labeling for ESAs in 1997, 2004, and 2005 to reflect new safety information.

In November 2007, the agency again revised the boxed warnings and made other safety-related product labeling changes. The revised label incorporated advice from the FDA advisory committees and expanded on labeling changes made in March 2007. For patients with chronic renal failure, the boxed warning states that ESAs should maintain a hemoglobin level between 10 g/dL and 12 g/dL. The boxed warning states that maintaining higher hemoglobin levels increases the risk for death and for serious cardiovascular effects such as stroke, heart attack, and heart failure. The new labeling provides instructions for dosage adjustments and hemoglobin monitoring for patients with chronic kidney failure who do not respond to ESA treatment with an adequate increase in their hemoglobin levels.

More evidence may be needed for providers to achieve optimal outcomes in the most efficient way

Some of the variability we see in the use of ESAs may reflect the lack of clinical evidence about their use. Notwithstanding the randomized comparative trials on ESA use among predialysis and dialysis patients, some clinicians contend that there are limited data on how best to achieve hemoglobin targets (Kasiske 2007). Lazarus and Hakim (2007) assert that there is no scientific evidence that a hemoglobin value of 12 g/dL is the threshold level above which there is significant health risk in dialysis patients. Weiner and Levey (2007) argue that the current clinical guidelines are unable to offer more than a loose framework of opinion-based guidance for erythropoietin administration and utilization. The latest NKF clinical guideline, updated in 2007, recommends that the target hemoglobin level should generally range from 11 g/dL to 12 g/dL and that it should not exceed 13 g/dL. This recommendation differs from the FDA label that advises ESA dosing in patients with renal failure to achieve and maintain hemoglobin levels within the range of 10 g/dL to 12 g/dL.

The many unanswered questions concerning the use of ESAs suggest the need for more evidence from randomized comparative-effectiveness trials. Cotter and colleagues (2006) recommended public sponsorship of clinical trials that would elucidate both physiological and clinical responses to erythropoietin administered at different dosages. Such trials could address not only outcomes but also how to achieve outcomes more cost effectively (Kasiske 2007). The Secretary might consider sponsoring the trials since Medicare is the largest purchaser of erythropoietin in the United States—total Medicare spending in 2006 included $2 billion for dialysis patients and $850 million for other patients, primarily cancer patients undergoing chemotherapy treatments. Medicare expenditures for ESAs account for the highest percentage of Medicare Part B drug spending. A federal government role may be warranted because several researchers have shown that industry-sponsored studies were significantly more likely to reach conclusions favorable to the sponsor than non-industry-sponsored studies (Bekelman et al. 2003). The Commission recommended that the Congress should charge an independent entity to sponsor credible research on comparative effectiveness of health care services and disseminate this information to patients, providers, and public and private payers (MedPAC 2007a). Finally,
CMS has developed a number of policies for paying for erythropoiesis-stimulating agents (ESAs) since it began to cover erythropoietin in 1989. CMS has based its policies on the hematocrit or hemoglobin level reported on erythropoietin claims. Both measures assess a patient’s anemia status by determining the percentage of red blood cells in the bloodstream. Higher hematocrit and hemoglobin values suggest that a patient’s anemia is under control.

Initially, CMS used the hemoglobin target range of 10 grams per deciliter (g/dL) to 11 g/dL, recommended by the Food and Drug Administration (FDA) as its cutoff for payment. In 1994, CMS adjusted its payment policy to reflect the FDA-approved labeled indication that broadened its recommended hemoglobin target range to 10 g/dL to 12 g/dL. Between 1991 and 1997, payments for erythropoietin grew from $246 million to $735 million. This rise in spending was related to increased use of erythropoietin and not to a price effect. During this time, providers increased the mean dose per administration and furnished erythropoietin to a larger proportion of patients (Greer et al. 1999). In 1994, Medicare’s payment rate decreased from $11 to $10 per 1,000 units.

To address the rapid growth in erythropoietin use, CMS implemented a payment policy in August 1997 that did not pay providers for the last month’s dosage of the drug if a patient’s hemoglobin exceeded about 12.2 g/dL for a three-month average. The agency also eliminated physicians’ ability to make exceptions to its hematocrit guidelines. During the next few months, the average patient hematocrit level stopped rising, and the average patient erythropoietin dose leveled off. CMS then increased the upper limit to 12.5 g/dL in 1998, and the average patient dose began to rise again.

Between 1997 and 2005, Medicare spending for erythropoietin increased from $735 million to nearly $1.9 billion. In April 2006, CMS implemented a new monitoring policy and revised it in October 2006 and July 2007. CMS made these changes partly in response to concerns about the risks to patients from receiving large doses of ESAs (CMS 2007a). In the latest revision, CMS will reduce payments (by 50 percent) if the facility reports that the beneficiary’s hemoglobin has exceeded 13 g/dL for three consecutive months including the current billed month. Under the revised policy Medicare will not pay for dosages of erythropoietin that exceed 400,000 units per month or darbepoetin alpha in excess of 1,200 micrograms per month. Dosages at these levels are unlikely and are generally the result of typographical errors rather than accurate dosage reports.
In addition, use of the recommended type of vascular access—an arteriovenous fistula—has improved since 2000. All hemodialysis patients require vascular access—the site on the patient’s body where blood is removed and returned during dialysis. CMS is leading a national quality initiative—Fistula First—to increase the use of fistulas. CMS’s current goal is to have fistulas placed in at least half of all new hemodialysis patients and to have a minimum of 66 percent of all patients who continue dialysis using a fistula.

Other measures suggest that improvements in dialysis quality are still needed. The proportion of dialysis patients with low serum albumin levels has remained unchanged. Patients with low serum albumin levels, a measure of increased risk of malnutrition, are at increased mortality risk. Since 1995, overall rates of hospitalization have remained steady at about two admissions per patient year. Although overall mortality rates have decreased (from 213 deaths per 1,000 patients to 200 deaths per 1,000 patients), first-year adjusted mortality rates among dialysis patients have remained relatively unchanged during this time. About one-quarter of all patients died during the first year of hemodialysis (USRDS 2007). At the end of this section, we discuss potential ways to improve the quality of nutritional and vascular access care.

As the Commission has recommended in the past, linking payment to the quality of care provided by physicians and facilities treating dialysis patients is one way to improve dialysis quality (MedPAC 2004a). A Medicare program that rewards quality would send the strong message that it values the care beneficiaries receive and encourages investments in improving care. The dialysis sector is ready for pay for performance: Evidence-based measures are available, providers can improve on these measures, data are available to risk-adjust the measures, and systems are available to collect the information. CMS already collects some clinical information—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 (ESRD).

**Access to capital**

Recent financial information and evidence about trends in the increase in the number and capacity of dialysis facilities suggest that providers have sufficient access to capital, which they need to improve their equipment and to
open new facilities to accommodate the growing number of patients requiring dialysis.

Both small and large for-profit chains appear to have adequate access to capital, as demonstrated by the willingness of private investors to fund their acquisitions. For example:

- Fresenius’s third-quarter 2007 profits exceeded analysts’ predictions by increasing 30 percent compared with 2006 levels. A senior executive did not foresee problems in obtaining access to capital, stating that “[T]he banks have already signaled readiness to lend us money to finance acquisitions” (Reuters 2007). Fresenius had sufficient access to capital to acquire Renal Solutions, Inc., a medical device company with a technology for tap water purification for home dialysis.

- DaVita purchased a large amount of its stock, which suggests that it has good access to capital. In addition, DaVita acquired a majority stake in HomeChoice Partners Inc., a company that provides infusion therapy services, for approximately $65 million in cash. Finally, DaVita entered into a multiyear agreement with NxStage Medical to expand the availability of home hemodialysis in the United States. Under the agreement, DaVita purchased $20 million (7 percent) of NxStage stock.

- Dialysis Corporation of America announced its listing on the NASDAQ global market.

- DSI Holding Company received private equity to purchase 105 facilities, 3 home dialysis programs, and 1 renal acute program for approximately $511 million from Fresenius and Renal Care Group. Centre Partners, a leading private equity firm, is backing DSI.

- National Renal Alliance received a commitment of $100 million in private equity, which it will use to finance capital needs for acquisitions, to finance new facilities, and to provide working capital. National Renal Alliance doubled in size in each of the past two years.

- Renal Advantage, the fourth largest dialysis chain, purchased a clinical laboratory, RenaLab, from Fresenius.

Another indicator of adequate access to capital is growth in the number of dialysis facilities. Among the top 10 chains, the number of facilities grew by 7 percent between 2006 and 2007. Based on our analysis of CMS Dialysis Facility Compare data, these top 10 chains accounted for 70 percent of all dialysis facilities. Nearly all the growth has come from the smaller chains rather than from the two largest ones. These smaller chains, which currently operate between 26 and 198 units, grew by 46 percent between 2006 and 2007. One of the chains, National Renal Alliance, was named one of the 500 fastest-growing private companies in the United States (Inc. 2007).

The two largest national chains have, in large part, enjoyed positive ratings from financial analysts in 2007. Investor analysts note that the sector benefits from recurring revenues from dialysis treatments. Between 2000 and 2006, total revenues of dialysis facilities grew faster than revenues for the entire health care and social assistance services sector (11 percent vs. 7 percent per year, respectively) (Census Bureau 2007).

Investor analysts have also pointed out that the earnings of dialysis providers are sensitive to the coverage and payment policies of both private payers and Medicare. Although about three-quarters of these chains’ patients are insured by Medicare as the primary payer, the proportion of revenues from Medicare represents about 55 percent of revenues for these chains. Revenues from commercial payers represent about 35 percent of revenues for these chains.

### Payments and costs for 2006

We assess freestanding providers’ costs and the relationship between Medicare’s payments and freestanding providers’ costs by considering whether current costs approximate what efficient providers would spend on delivering high-quality care. We also consider the accuracy of the data freestanding providers include in their cost reports. We first examine two indicators of the appropriateness of current costs:

- trends in the growth of cost per treatment for composite rate services and dialysis drugs, and
- differences in cost per treatment for composite rate services between audited and unaudited cost reports for the same facilities.

We then present our calendar year 2008 projection of the Medicare margin for composite rate services and dialysis drugs for freestanding providers. The latest and most complete data available on freestanding providers’ costs are from 2006.14
In modeling 2008 payments, we incorporate policy changes that went into effect between 2006 (the year of our most recent data) and 2009. In 2007 and 2008, CMS pays providers ASP plus 6 percent for all dialysis drugs. The MMA requires that CMS, beginning in 2006, annually increase the add-on payment based on the estimated growth in drug spending from the previous year. The 2007 add-on payment of 14.9 percent of the composite rate includes an update of 0.5 percent. The 2008 add-on payment of 15.5 percent also includes an update of 0.5 percent. Finally, we also incorporated the increase in the composite rate in 2007. For the first quarter of 2007, the composite rate payment remained at the 2006 level. Beginning in April 2007, CMS updated the composite rate by 1.6 percent, as mandated by the Tax Relief and Health Care Act of 2006.

**Appropriateness of current costs**

Because the composite rate is set prospectively, providers have an incentive to restrain their costs for composite rate services. In contrast, because Medicare pays for dialysis drugs on a per unit basis, providers have an incentive to negotiate lower drug prices but have little incentive to restrain drug volume. At issue is whether aggregate dialysis costs provide a reasonable representation of costs that efficient providers would incur in furnishing high-quality care.

Between 2000 and 2006, the cost per treatment for composite rate services and drugs rose by 2.7 percent per year. The variation in cost growth across freestanding dialysis facilities shows that some facilities are able to hold their cost growth well below others. For example, per treatment costs increased by 1.3 percent per year for facilities in the 25th percentile of cost growth and by 4.2 percent for facilities in the 75th percentile.

The growth in the cost per treatment between 2000 and 2006 partly stems from rising general and administrative costs, which increased by 10 percent per year and accounted for about 30 percent of the total cost per treatment in 2006. By contrast, capital and labor costs increased by 2 percent per year while other direct costs decreased by 2 percent per year between 2000 and 2006. Capital, labor, and other direct costs accounted for 19 percent, 40 percent, and 11 percent, respectively, of the total cost per treatment in 2006.

We looked at whether facility-level characteristics and the mix of patients that facilities treat affect their costs. We estimated a cost function (using ordinary least-squares regression) to examine the determinants of costs at the level of the dialysis facility.15

Providers’ costs were significantly associated with economies of scale. The LDOs and facilities that provided more dialysis treatments exhibited lower costs relative to their counterparts. A number of patient case-mix variables were significantly associated with facility costs. An increasing proportion of diabetic patients lowered a facility’s costs. Higher facility costs were associated with an increasing proportion of the number of days patients were hospitalized. The number of inpatient days may be a proxy for patients’ severity of illness. In addition, facilities with a higher total number of inpatient days probably incur, on average, greater costs per treatment because they have to spread their fixed costs across fewer total treatments (Medicare’s payment to the hospital covers the dialysis provided to hospitalized patients).

**Auditing dialysis cost reports**

For dialysis providers, the Commission has corrected providers’ costs based on CMS’s auditing efforts. For last year’s report, we used 2001 audited cost report data and calculated the ratio of allowable costs to reported costs for the same facilities—94.5 percent for the cost per dialysis treatment. We then applied this correction to the costs of composite rate services for facilities for which CMS had not yet settled their cost reports in last year’s analysis (MedPAC 2007b).

We made this correction because MedPAC’s analysis of current costs uses only Medicare-allowable costs. In addition, audited cost reports are available for this sector. In the Balanced Budget Act of 1997, the Congress mandated that the Secretary audit cost reports of dialysis providers once every three years. The Commission’s predecessor—the Prospective Payment Assessment Commission (ProPAC)—raised concerns about the reliability of dialysis cost reports and the need to have an accurate measure of the cost of providing dialysis services (ProPAC 1997).

This year, we updated our analysis by assessing the effect—that is, the difference between reported and allowed costs—of CMS’s most recent auditing efforts of 2004 and 2005 cost reports. For the same facilities, we calculated the cost per treatment before and after CMS audited their cost reports in 2004.16 We then replicated this analysis using 2005 data.
We find that the difference between reported and allowed costs has narrowed between 2001 and 2005. We calculated that the ratio of allowable cost to reported cost per dialysis treatment for facilities with audited cost reports was 94.5 percent in 2001, 97.8 percent in 2004, and 99.8 percent in 2005.

Because the difference between reported and allowable costs narrowed between 2001 and 2005, we will not correct providers’ costs in this year’s analysis based on CMS’s auditing efforts. Next year, we will re-evaluate whether to correct for the audit by updating this analysis if CMS audits 2006 cost reports.\(^{17}\)

The Medicare margin for freestanding providers

The Commission assesses current 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. The latest and most complete data available on freestanding providers’ costs are from 2006.

For 2006, we estimate that the aggregate Medicare margin for composite rate services and dialysis drugs is 5.9 percent (Table 2C-5). The distribution of margins in 2006 shows wide variation in performance among freestanding dialysis facilities as well as variation by groups. One-quarter of all facilities had margins at or below –0.9 percent, but half of all facilities had Medicare margins of at least 6.9 percent, and one-quarter of facilities had Medicare margins of at least 14.6 percent. As in earlier years, we continue to see higher margins for facilities affiliated with the largest two chains. This finding stems from differences in the composite rate cost per treatment and drug payment per treatment. Compared with their counterparts, the composite rate cost per treatment was lower and the drug payment per treatment was higher for the two largest chains.

In addition, margins vary based on the location of a facility. Consistent with our past findings, urban facilities have a greater Medicare margin than rural facilities. Although urban facilities have higher costs per treatment than rural facilities, urban facilities have higher payments per treatment than rural facilities.

Based on 2006 payment and cost data, we estimate that the 2008 aggregate margin is 2.6 percent. This estimate reflects the 1.6 percent composite rate update, effective April 1, 2007, legislated in the Tax Relief and Health Care Act of 2006. This estimate also reflects the 0.5 percent updates to the composite rate’s add-on payment in 2007 and in 2008.

Update recommendation

On the basis of our review of payment adequacy for outpatient dialysis services and expected cost changes in the coming year, the Commission recommends that the Congress update the composite rate in 2009 by the ESRD market basket index less the Commission’s adjustment for productivity growth (1.5 percent). Based on the current projection of the ESRD market basket (2.5 percent), this recommendation would update the composite rate by 1.0 percent.

R E C O M M E N D A T I O N 2 C

The Congress should update the composite rate in calendar year 2009 by the projected rate of increase in the end-stage renal disease market basket index less the Commission’s adjustment for productivity growth. The Commission reiterates its recommendation that the Congress implement a quality incentive program for physicians and facilities that treat dialysis patients.

R A T I O N A L E 2 C

Most of our indicators of payment adequacy are positive, including beneficiaries’ access to care, volume of services, and access to capital. The Medicare margin trended upward between 2000 and 2006. The Commission previously recommended linking the payment to physicians and facilities treating dialysis patients to the...
quality of care they furnish. The dialysis sector is ready for pay for performance: evidence-based measures are available, providers can improve on these measures, data are available to risk-adjust the measures, and systems are available to collect the information.

**IMPLICATIONS 2C**

**Spending**

- Because there is no provision in current law to change the composite rate in 2009, this recommendation will increase federal program spending relative to current law by between $50 million and $250 million for calendar year 2009 and by less than $1 billion over five years.

**Beneficiary and provider**

- This recommendation increases beneficiary cost sharing but will ensure access to care. Although beneficiary cost sharing will increase under this recommendation, we do not anticipate any negative effects on beneficiary access to care. This recommendation is not expected to affect providers’ willingness and ability to provide quality care to beneficiaries. A payment incentive program should improve quality for beneficiaries and result in some providers receiving higher payments or lower payments.

Some dialysis providers help financially needy patients pay for Part B premiums and medigap policies through a fund administered by the American Kidney Fund. In addition, Medicare reimburses dialysis providers for bad debt incurred from furnishing composite rate services.

**Creating incentives to improve dialysis quality and providers’ efficiency**

Dialysis quality has improved for some measures. Other measures suggest that improvements in dialysis quality are still needed. The focus of this section is to begin to explore ways to improve quality and providers’ efficiency. Specifically, we discuss the potential for selected services—nutritional care and vascular access care—to improve dialysis quality and providers’ efficiency.

In addition to reviewing the literature, we convened an expert panel composed of 10 providers (facilities and physicians) who treat dialysis patients. We asked them to discuss the effectiveness of different strategies to improve patients’ nutritional standing and options for decreasing the frequency of vascular access complications.

**Improving nutritional care**

Protein energy malnutrition is common among dialysis patients and is one of the strongest predictors of hospitalizations and mortality. Surveys suggest that up to 70 percent of dialysis patients have protein energy malnutrition (NKF 2007). Serum albumin level is a marker for patients being at increased risk for malnutrition; patients with a lower serum albumin level have a higher risk for malnutrition than patients with a higher serum albumin level. The mean serum albumin level of hemodialysis patients remained unchanged in 1997 and 2005 (averaging 3.8 g/dL in both years). The NKF practice guideline recommends a serum albumin of 4.0 g/dL.

About two-thirds of hemodialysis patients had a serum albumin level lower than 4.0 g/dL in 2005 (CMS 2007b).

The etiology of malnutrition is complex and may include many factors (NKF 2000), such as inadequate food intake, loss of nutrients during the dialysis process, inadequate dialysis, dietary restrictions, anorexia, loss of blood due to gastrointestinal bleeding and frequent blood sampling, and conditions associated with chronic renal failure that may induce a chronic inflammatory state. Many factors may cause poor food intake such as anorexia and nausea and vomiting due to uremic toxicity. In addition, some patients do not eat enough because they have limited means to purchase food recommended by their practitioners or they have difficulty preparing their meals because of post-dialysis fatigue or disability.

Researchers have shown that patients with lower serum albumin values have increased risk of hospitalization and mortality. In a study of 12,000 hemodialysis patients, the adjusted risk ratio for mortality increased progressively as serum albumin level decreased (Lowrie and Lew 1990). Patients with serum albumin levels at or lower than 3.5 g/dL have a three- to sixfold higher risk of mortality than patients with albumin levels of 4.0 g/dL or more (Owen et al. 1993). The strongest predictor of hospitalization rates was a lower serum albumin level, and the mean number of hospitalized days increased as serum albumin levels decreased (Rocco et al. 1996).

Dialysis patients can prevent malnutrition by eating healthy diets, getting dietary counseling, and receiving an adequate dose of dialysis (Kopple 1999). Treatment options discussed by the panel to improve patients’ nutritional status included consuming oral supplements...
and administering intradialytic parenteral nutrition (IDPN)—a solution of amino acids, dextrose, and, if needed, lipids, that providers administer directly into the bloodstream during dialysis. Table 2C-6 summarizes Medicare’s coverage policies and issues associated with each option.

According to the panel, eating healthier diets would clearly benefit dialysis patients, but many patients have limited financial resources and state policies for food assistance are complex. Using Medicaid as a proxy for having a lower household income, we find that dialysis patients are more likely to be dually eligible for Medicaid than the general Medicare population (36 percent vs. 17 percent in 2004, respectively, based on data from CMS’s denominator file for dialysis patients and the Medicare Current Beneficiary Survey for all patients).

Medicare requires that the attending physician and a dietitian evaluate patients’ nutritional needs. The dietitian is responsible for assessing the nutritional and dietetic needs of each patient, recommending therapeutic diets, counseling patients and their families on prescribed diets, and monitoring adherence and response to diets. In a national survey of 951 renal dietitians, respondents most frequently cited the following obstacles in carrying out their responsibilities: 1) lack of tools (e.g., food models, calipers, and computers); 2) lack of time (low dietitian to patient ratio); and 3) lack of support in the dialysis unit.

Table 2C-6

<table>
<thead>
<tr>
<th>Nutritional service</th>
<th>Part B</th>
<th>Part D</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietitian</td>
<td>Providing dietetic services is required under Medicare’s condition for coverage.</td>
<td>N/A</td>
<td>Three most frequently reported reasons why renal dietitians did not implement the NKF’s nutrition guidelines are: 1) lack of tools (e.g., food models, calipers, and computers); 2) lack of time (low dietitian to patient ratio); and 3) lack of support in the dialysis unit.</td>
</tr>
<tr>
<td>Food and oral supplements</td>
<td>Not covered. OIG antikickback provisions limit providers’ ability to furnish service free or at reduced cost.</td>
<td>Not covered.</td>
<td>Some concern that patients may aspirate food eaten during dialysis. Some patients tire of the supplements and will not continue. If providers send patients home with supplements, some concern that patients may give supplements to needy family member.</td>
</tr>
<tr>
<td>Intradialytic parenteral nutrition</td>
<td>Coverage is limited to patients with permanent dysfunction of the digestive tract.</td>
<td>Covered by some plans when dietary counseling and oral supplements do not improve patients’ nutritional status</td>
<td>It may not provide sufficient calories and protein to support long-term daily needs because it is administered during dialysis three times a week; it does not change patients’ food behavior or encourage them to eat more healthy meals; and it is more costly than oral supplements.</td>
</tr>
</tbody>
</table>

Note: N/A (not applicable), NKF (National Kidney Foundation), OIG (Office of Inspector General).

supplements is about $600 per year, assuming patients received a supplement during dialysis administered three times per week (Amazon 2007). A recent study used clinical data from severely malnourished patients—those with a serum albumin level of 3.5 g/dL or lower—treated by the largest dialysis provider to estimate the impact on outcomes and Medicare spending by improving nutritional status for all dialysis patients. The authors modeled that improving the nutritional status for the U.S. dialysis population (who are severely malnourished) would save about 1,400 lives, avert 6,300 hospitalizations, and reduce Medicare spending by $36.3 million due to averted hospitalizations (Lacson et al. 2007).  

Including oral supplements in a broader dialysis payment bundle that includes separately billable dialysis drugs might improve dialysis quality. Under a broader bundle, the cost of including oral supplements might be offset by the more efficient administration of dialysis drugs by providers.

The panel thought that a negligible proportion (1 percent to 2 percent) of dialysis patients would benefit from IDPN. Coverage of IDPN is severely restricted under Part B but some Part D plans pay for it. The panel believed that more dialysis patients are getting IDPN than need it.

Evidence about the use of nutritional treatments

The NKF has published practice guidelines on nutritional care based on a structured review of the medical literature and, where insufficient evidence exists, on expert opinion (NKF 2000). Because there are no large-scale randomized prospective clinical trials evaluating the effects of nutrition support in dialysis patients, the NKF based its recommendations on the experience of nonrenal patients as well as current information about nutrition and metabolism of dialysis patients. Most of the studies of nutritional therapies have been small and observational.

The NKF guideline recommends that all dialysis patients receive intensive nutritional counseling based on an individualized plan of care that is developed before or at the time of starting dialysis, modified frequently based on the patient’s medical and social conditions, and updated every three months to four months. Patients should receive nutritional counseling at the start of dialysis and thereafter every one month to two months, or more frequently if inadequate nutrient intake or malnutrition is present. These recommendations were based on expert opinion.

The guideline recommends that dialysis patients who are unable to meet their protein and energy requirements with food intake for about two weeks should receive nutrition support. The guideline recommends fortifying patients’ diet with oral nutrition (i.e., energy and protein supplements). If oral nutrition is not adequate, the guideline recommends either tube feeding (if medically appropriate), or, if enteral tube feedings are not used, IDPN for hemodialysis patients or intraperitoneal amino acids (IPAA) for peritoneal dialysis patients. IDPN and IPAA involve administering nutrients (amino acids, glucose, and lipids) during dialysis. If the combination of these interventions does not meet a patient’s protein and energy requirements, the guideline suggests that providers consider parenteral nutrition.

Finally, the NKF highlighted the need for randomized clinical trials that compare oral nutritional supplements, tube feeding, and IDPN in malnourished dialysis patients. Such trials should measure survival, hospitalization rates, and patients’ quality of life.

Measures to monitor nutritional status of patients

CMS does not measure nutritional status at either the facility level or the physician level. Instead, the agency has monitored national trends in patients’ nutritional status in an annual survey beginning in 1993. As a part of this survey, the agency obtains serum albumin levels from the medical records of a sample of dialysis patients. The sample size of this survey does not permit facility-level measurement. (The sample of patients from each facility is too small to assess facility-level care.)

No single measure provides a comprehensive indication of protein energy nutritional status. Although researchers and clinicians use serum albumin as an indicator of nutritional status, other conditions, such as acute or chronic inflammation, can affect a patient’s albumin level. Consequently, the panel suggested that providers could use several clinical measures to identify patients with malnutrition who might benefit from oral supplements. These measures include serum albumin concentrations, C-reactive protein levels, and some measure of weight loss (e.g., a 5 percent to 10 percent weight loss) over time. Patients with low C-reactive protein and albumin levels could be candidates for oral nutritional supplements. Routinely assessing patients’ nutritional and inflammatory status using the malnutrition inflammation score is another option to consider. Researchers have shown that the malnutrition inflammatory score is associated with malnutrition and inflammation among dialysis patients and
is predictive of hospitalization and mortality (Kalantar-Zadeh et al. 2001). The score assesses patients’ weight, dietary intake, gastrointestinal symptoms, functional capacity, comorbidities, fat stores, muscle wasting, body mass index, serum albumin, and serum total iron binding capacity.

**Examples of other programs that covered oral nutrition therapies**

Between 1998 and 2001, CMS’s ESRD managed care demonstration enrolled dialysis patients to assess whether an integrated system of care was feasible and efficient and able to produce outcomes comparable to the fee-for-service system. The two participating plans furnished nutritional supplements (along with other additional benefits) to meet the demonstration’s requirement of providing 5 percent extra benefits above Medicare’s fee-for-service program.

Beneficiaries in the demonstration reported significantly more satisfaction with their ability to obtain nutritional supplements than a matched fee-for-service population. The plans’ cost of providing the nutritional supplements ranged from $7 per member per month to $11 per member per month between 1998 and 2000 (Dykstra et al. 2003). The evaluation of the demonstration did not specifically analyze nutritional outcomes but it did show that:

- Compared with the statewide (control) population, the adjusted mortality rate was significantly lower at one of the sites (Kaiser in California) and not statistically different at the other site (Health Options Inc. in Florida).
- Relative to comparison patients in California and Florida, adjusted hospitalization rates were not statistically different for either demonstration site (Lewin Group 2002).

Medicare’s current ESRD management demonstration offers an opportunity to assess the effectiveness of providing oral nutritional supplements to enrolled patients. As part of the demonstration, Fresenius Medical Care health plan is providing oral protein supplements to enrollees who meet the clinical criterion (a serum albumin level of less than 3.8 g/dL and a physician order).

Some states have implemented programs specific to chronic renal disease and at least two of them (Pennsylvania and Delaware) cover nutritional supplements. For example, Pennsylvania’s Chronic Renal Disease Program, which assists qualifying ESRD patients with the costs of dialysis services, medications, and transportation, covers nutritional supplements for patients who meet specific clinical criteria. Specifically, physicians submit an exception form indicating the need for nutritional supplements along with laboratory results that verify that the patient’s albumin level has been 3.5 g/dL or lower for two months. Approved patients receive a prescription for specific supplements and are required to cover the $9 copayment for a month’s supply from a pharmacy. Patients must be reapproved every six months to continue nutritional therapy. No data are available to measure patients’ clinical outcome and satisfaction with care.

**Improving vascular access care**

All hemodialysis patients need a vascular access—the site on the patient’s body where blood is removed and returned during dialysis. Vascular access care is a clinical area in which substantial improvements in quality are needed. Vascular access complications accounted for about 15 percent of dialysis patients’ hospital admissions in 2005 (USRDS 2007). Using data from CMS and USRDS, we estimate that Medicare spending for vascular access services was $1.5 billion in 2005 (which represents about 8 percent of total dialysis spending). For most patients, clinical guidelines consider an arteriovenous (AV) fistula a better type of vascular access than an AV graft or a catheter. AV fistulas last a long time and have a lower complication rate than other types of vascular access (NIDDK 2007). As a result, annual Medicare spending for patients with an AV fistula ($58,000) was lower than spending for patients maintained on a catheter ($75,000) or a graft ($67,000) (USRDS 2007).

According to CMS, the use of AV fistulas has increased during this decade. About 54 percent of all new patients used a fistula in 2005 compared with 27 percent in 2000. Use of catheters has remained about the same (about 36 percent in each year), while graft use has decreased during this time (CMS 2007b).

In 2004, CMS announced the “Fistula First” quality initiative. The goal of this initiative is to increase the use of AV fistulas. CMS, collaborating with other groups including the 18 ESRD networks, providers, and beneficiary groups, is promoting the use of fistulas by providing training resources on fistula placement to clinicians, training health care professionals in the appropriate use and care of fistulas, and educating patients about the value of fistulas.
Panelists and the literature generally agreed that:

- Reducing the number of patients with a catheter is key to reducing vascular access complications. CMS reported that in 2005 about 36 percent of new patients and 27 percent of all patients used a catheter (CMS 2007b). Reducing catheter use could be accomplished by switching most patients to an AV fistula within the first 90 days of dialysis and by increasing the proportion of patients with an AV fistula when they start dialysis. The panel raised an access to care issue. Some patients under age 65 with chronic renal failure have no insurance before they start dialysis and may have difficulty obtaining needed health care. Medicare coverage does not begin until the 91st day after starting dialysis for these patients.

- Better coordination of vascular access care might decrease urgent events such as procedures to remove a clot (thrombectomies). Some panelists thought that having a vascular access coordinator would improve care. Key responsibilities of a coordinator include providing ongoing patient support, oversight, and education related to vascular access; assessing vascular access needs for each patient; collaborating with dialysis staff in developing strategies to prevent complications; coordinating services for the patient in the dialysis facility, outpatient clinic, and inpatient setting; and facilitating communication among nephrologists, surgeons, interventional radiologists, hospitals, and dialysis facilities. CMS does not require facilities to employ a vascular access coordinator in either its current or proposed conditions for coverage.

- Early identification of vascular access complications may reduce the morbidity and costs of repairing or replacing vascular accesses and improve patient outcomes (McCarley et al. 2001). In 2005, about one-third of patients with a graft or fistula did not have their accesses routinely monitored for vascular access problems—stenosis (narrowing in the width of a blood vessel) and thrombosis (clotting of a blood vessel) (CMS 2007b). An important component of care is training dialysis technicians to physically evaluate the vascular access site. In addition to physical examination, regular use of tests that gauge how well vascular accesses are working and can detect problems—such as those that measure access blood flow and venous pressures—may be associated with improved patient outcomes. Patients treated at facilities that used a variety of tests to monitor vascular accesses weekly or more often had lower rates of all-cause hospitalization than patients treated at facilities that monitored vascular accesses less frequently or never (Plantinga et al. 2006). Plantinga and colleagues also found that patients treated at facilities with more frequent monitoring were more likely to undergo procedures to repair an access problem (stenosis or thrombosis), suggesting that access dysfunctions may be detected more often when monitoring is performed more frequently.

Measures to assess vascular access care at the nephrologist and facility level include the proportion of patients with a catheter 90 days after starting dialysis, the rate of thrombectomies, and the rate of vascular-access-related hospitalizations. CMS reports national trends on the proportion of patients with a catheter at 90 days or later but does not report this information by facility. The panel was split about holding dialysis facilities and nephrologists accountable for vascular access outcomes. Some panelists thought that a pay-for-performance program should hold both physicians and facilities equally accountable. Others thought that physicians should be more accountable than facilities. They argued that facilities have less influence over the placement of AV fistulas than physicians.

Still other panelists thought that providers other than nephrologists and facilities have a greater bearing on vascular access care. They argued that:

- Surgeons have more influence than nephrologists and dialysis facilities in determining the type of vascular access created for a patient.

- Some patients do not see a nephrologist until they require dialysis. These patients are more likely to start dialysis using a catheter than a fistula because fistulas require more time to be ready for use than catheters. A MedPAC-sponsored analysis showed that 28 percent of dialysis patients did not see a nephrologist until they started dialysis and 17 percent saw one less than 4 months before they started dialysis (MedPAC 2004b). ■
The two types of dialysis—hemodialysis and peritoneal dialysis—remove wastes from a patient’s bloodstream differently. During hemodialysis, a machine removes wastes from the bloodstream; it is usually performed in a dialysis facility. By contrast, peritoneal dialysis uses the lining of the patient’s abdomen as a filter to clear wastes and extra fluid and is usually performed in the patient’s home.

EGHPs are usually the primary payer for 33 months—the 3-month waiting period plus the 30-month coordination period.

In 2005, Medicare used three different ways to pay for dialysis drugs: 1) For the top 10 dialysis drugs, which accounted for the greatest payment in 2004, Medicare paid freestanding providers using a method called the average acquisition payment. To calculate this rate, CMS used the acquisition costs the Office of Inspector General collected in a 2003 survey of freestanding providers. 2) For all other dialysis drugs furnished by freestanding providers, CMS used a different method: average sales price. This method uses the prices manufacturers report to the agency each quarter. CMS set the 2005 rates for these drugs at average sales price plus 6 percent. 3) Unlike freestanding providers, CMS paid hospitals their reasonable costs for all dialysis drugs except erythropoietin. CMS paid the same average acquisition payment rate as that of freestanding providers.

USRDS reports that the number of in-center hemodialysis patients increased from 190,090 in 1996 to 312,057 in 2005. By contrast, the number of peritoneal dialysis patients decreased from 29,647 in 1996 to 25,932 in 2005.

Facilities can increase the number of treatments provided to a given patient by: 1) improving patients’ compliance in attending their thrice-weekly hemodialysis treatments, and 2) reducing the number of days that patients are hospitalized. CMS pays for three hemodialysis treatments per week.

Leading drugs available in 2004 and 2006 and included in this analysis are erythropoietin, calcitriol, doxercalciferol, iron sucrose, levocarnitine, paricalcitol, sodium ferric gluconate, darbepoetin alfa, alteplase, and vancomycin.

In addition, the product’s FDA label warns about safety concerns with the prolonged use of high doses of the oral form in dialysis patients.

Freestanding nonchains were able to purchase levocarnitine at a rate lower than freestanding chains ($5.40 per unit vs. $7.14 per unit, respectively).

Levocarnitine supplements the loss of carnitine, a naturally occurring body substance that helps transport long-chain fatty acids for energy production by the body. Patients on hemodialysis can have carnitine deficiencies from dialytic loss, reduced renal synthesis, and reduced dietary intake. Patients must show improvement from the levocarnitine treatment within six months of initiation of treatment for Medicare to continue to pay for the treatment.

The FDA approved erythropoietin in 1989. A typical starting dose of erythropoietin is 50 to 100 units per kilogram of body weight. A patient weighing 150 pounds (about 68 kilograms) might receive a dose between 3,400 units and 6,800 units three times a week. Physicians titrate the dose based on the patient’s response to therapy.

Some providers contend that erythropoietin is predominantly furnished intravenously because patients experience less discomfort than when it is furnished subcutaneously. In addition, the development of red cell aplasia has been principally associated with subcutaneous administration in Europe.

A third ESA exists but is not marketed for dialysis because of a comarketing agreement between the respective companies.

At least one company (Hospira) announced its intent to launch an anemia follow-on (generic) biologic in the United States in 2012 (Kelly 2007).

We do not include hospital-based providers in the margin analysis because cost data for dialysis drugs are missing from the cost reports for most of these providers.

The dependent variable was the natural log of total Medicare composite rate and dialysis drug costs.

Each cost report includes an indicator reporting its status: as submitted, settled without an audit, settled with an audit, or reopened.

CMS audited about 20 percent of 2001 cost reports and 10 percent of 2004 and 2005 cost reports. It does not appear that CMS has begun auditing 2006 audits, as the agency has audited less than 1 percent of them.

The authors based this projection on the assumption that 50 percent of severely malnourished patients responded to a serum albumin increase of 0.2 g/dL. The authors also modeled other scenarios that assumed different response rates (25 percent and 75 percent) and different improvements in serum albumin (0.1 g/dL and 0.3 g/dL).
19 C-reactive protein is not a nutritional parameter but may be used to identify the presence of inflammation in individuals with a low serum albumin level.

20 Similarly, Delaware’s Chronic Renal Disease Program covers nutritional supplements if a physician or a certified nurse practitioner certifies that they are necessary. Certification must be done upon initial referral and at least every six months. The program requires lab values and other information related to the patient’s nutritional status to determine initial and ongoing eligibility.
Outpatient dialysis services: Assessing payment adequacy and updating payments

References


Skilled nursing facility services
## Recommendations

2D-1 The Congress should eliminate the update to payment rates for skilled nursing facility services for fiscal year 2009.

**COMMISSIONER VOTES:** YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

2D-2 The Congress should establish a quality incentive payment policy for skilled nursing facilities in Medicare.

**COMMISSIONER VOTES:** YES 10 • NO 3 • NOT VOTING 2 • ABSENT 2

2D-3 To improve quality measurement for skilled nursing facilities, the Secretary should:
- add the risk-adjusted rates of potentially avoidable rehospitalizations and community discharge to its publicly reported post-acute care quality measures;
- revise the pain, pressure ulcer, and delirium measures currently reported on CMS’s Nursing Home Compare website; and
- require skilled nursing facilities to conduct patient assessments at admission and discharge.

**COMMISSIONER VOTES:** YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2
Skilled nursing facility services

Section summary

Our indicators of the adequacy of Medicare payments to cover the costs of skilled nursing facility (SNF) services to beneficiaries are generally positive. Beneficiaries continue to have good access to these services. The supply of SNFs remained essentially constant—increasing 0.3 percent over 2006. Covered days increased just over 4 percent and covered admissions increased almost 3 percent per fee-for-service enrollee between 2005 and 2006. Case mix continued to shift to higher payment case-mix groups—the ultra and very high rehabilitation groups and the rehabilitation plus extensive services case-mix groups. While access was good for most beneficiaries, those needing expensive services may experience delays in being placed in SNFs. Two quality measures for SNFs showed mixed trends. Rates of discharge to the community continued to increase to the level last reached in 2000 (indicating improved quality), while rates of potentially avoidable rehospitalizations continued to increase (indicating worse quality). Access to capital was good until late summer, when trends in the broader lending market made borrowing more expensive and more restrictive. Although access to capital is expected to be tighter, this is

In this section

- Are Medicare payments adequate in 2008 and how should they change in 2009?
- Update recommendation
- Paying for performance in SNFs
- Pay-for-performance recommendation
- Improving the measurement of skilled nursing facility quality
- Quality measures recommendation
related to changes across the capital market and is not a reflection of the adequacy of Medicare payments. Medicare continues to be a preferred payer.

For the sixth consecutive year, aggregate Medicare margins for freestanding SNFs were above 10 percent: In 2006, the aggregate margin was 13.1 percent. Medicare margins are estimated to be 11.4 percent in 2008. Because all access indicators are positive and SNF payments appear to be more than adequate to accommodate anticipated cost growth, MedPAC recommends that the Congress eliminate the update to payment rates for SNF services for fiscal year 2009.

**Recommendation 2D-1**

The Congress should eliminate the update to payment rates for skilled nursing facility services for fiscal year 2009.

The Commission has analyzed the readiness of this setting for value-based purchasing and concluded that, for certain measures, CMS should move forward with quality-incentive payments. Two measures—rates of community discharge and potentially avoidable rehospitalization—capture key goals for SNF patients (to be discharged back to the community and to avoid rehospitalization), are well accepted, have robust risk adjustment, and avoid the numerous problems associated with the measures CMS currently reports on its Nursing Home Compare website. Using rehospitalization rates as one performance measure represents a step toward having multiple providers and settings mutually accountable for lowering the number of potentially avoidable rehospitalizations. We expect CMS to add to the two measures over time to reflect other aspects of SNF care. However, until patient assessment information is gathered at discharge, CMS should avoid measures based on changes in patient condition, which, due to the timing of the data collection, misses many patients.
We also recommend that CMS improve the public reporting of the post-acute care quality indicators on its Nursing Home Compare website. For the past several years, the Commission has used two measures—rates of community discharge and potentially avoidable rehospitalization—to track the quality of SNF care. The Commission has not relied on CMS’s publicly reported measures because of their considerable limitations, including the bias in the data underlying the measures and problems with the way the measures are defined. We recommend that CMS add the rates of community discharge and potentially avoidable rehospitalization to their publicly reported indicators. So that the currently reported measures are more accurate, we also recommend that CMS improve the definitions of the measures of pain, delirium, and pressure sores. Finally, so that the quality measures based on patient assessment information reflect the care furnished to all SNF patients (and not just the smaller subset who stay long enough to have a second assessment completed for them), the Commission recommends that CMS require SNFs to conduct patient assessments at admission and discharge.

To improve quality measurement for skilled nursing facilities, the Secretary should:
• add the risk-adjusted rates of potentially avoidable rehospitalizations and community discharge to its publicly reported post-acute care quality measures;
• revise the pain, pressure ulcer, and delirium measures currently reported on CMS’s Nursing Home Compare website; and
• require skilled nursing facilities to conduct patient assessments at admission and discharge.
Background

Beneficiaries who need short-term skilled nursing or rehabilitation services on an inpatient basis are eligible to receive covered services in skilled nursing facilities (SNFs). Per spell of illness, Medicare covers up to 100 days of SNF care after a medically necessary hospital stay of at least three days. Covered SNF services include skilled nursing care, rehabilitation services (physical and occupational therapy and speech–language pathology services), and other ancillary services such as respiratory therapy and medications. For services to be covered, the SNF must meet Medicare’s conditions of participation and agree to accept Medicare’s payment rates. For beneficiaries who qualify for a covered stay, Medicare pays 100 percent of the payment rate for the first 20 days of care—after that point, beneficiaries are responsible for copayments (in 2008 the copayment will be $128 per day). Each year, about 3 percent of beneficiaries use SNF services at least once.

The most common diagnosis for a SNF admission in 2005 was a major joint and limb reattachment procedure of the lower extremity (typically a hip or knee replacement (Table 2D-1). The 10 most frequent conditions accounted for about 37 percent of all SNF admissions. Freestanding, hospital-based, for-profit, and nonprofit facilities had the same top 10 diagnoses, although the rank orderings of the top 4 conditions differed slightly. Freestanding and for-profit facilities treated more cases with pneumonia and heart failure and shock than patients recovering from hip and knee replacements.

Medicare spending on skilled nursing facility services

In fiscal year 2007, spending for SNF services was $21 billion, up more than 9 percent from 2006 (Figure 2D-1, p. 146). This rate of growth was slightly slower than the average annual growth of 10.8 percent between 2000 and 2007. Total spending has slowed in part because fee-for-service (FFS) enrollment has declined, while enrollment in Medicare Advantage plans, whose spending on SNFs is not included in this total, has expanded. When put on a per-FFS-enrollee basis, spending since 2005 increased faster than overall program spending rates. Between 2006 and 2007, spending per FFS enrollee increased from $539 to $595.

Between 2006 and 2007, the pace of total program spending on SNF services increased, due in part to implementation in 2006 of nine new highest-paying case-mix groups for patients with rehabilitation and extensive service care needs. Modest volume growth also contributed to the increase.

<table>
<thead>
<tr>
<th>Diagnosis code from hospital stay</th>
<th>Diagnosis</th>
<th>Share of SNF admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>209</td>
<td>Major joint and limb reattachment of lower extremity</td>
<td>5.6%</td>
</tr>
<tr>
<td>089</td>
<td>Simple pneumonia and pleurisy, age &gt;17, with CC</td>
<td>5.3</td>
</tr>
<tr>
<td>127</td>
<td>Heart failure and shock</td>
<td>4.9</td>
</tr>
<tr>
<td>210</td>
<td>Hip and femur procedures except major joint, age &gt;17, with CC</td>
<td>3.8</td>
</tr>
<tr>
<td>014</td>
<td>Intracranial hemorrhage and stroke with infarction</td>
<td>3.6</td>
</tr>
<tr>
<td>416</td>
<td>Septicemia, age &gt;17</td>
<td>3.6</td>
</tr>
<tr>
<td>320</td>
<td>Kidney and urinary tract infection, age &gt;17, with CC</td>
<td>3.2</td>
</tr>
<tr>
<td>296</td>
<td>Nutritional and miscellaneous metabolic disorders, age &gt;17, with CC</td>
<td>2.6</td>
</tr>
<tr>
<td>079</td>
<td>Respiratory infections and inflammations, age &gt;17, with CC</td>
<td>2.4</td>
</tr>
<tr>
<td>316</td>
<td>Renal failure</td>
<td>2.2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>37.2</td>
</tr>
</tbody>
</table>

Note: SNF (skilled nursing facility), CC (complication or comorbidity). The diagnosis code from the hospital stay is the discharge diagnosis.

How does Medicare pay for SNF services?

Medicare’s prospective payment system for SNFs pays to cover the per day costs of nursing, ancillary services, and capital. The base rates are updated annually for inflation based on the projected increase in the SNF market basket index, a measure of the national average price for the goods and services SNFs purchase to provide care. Each daily payment has three components:

- a nursing component intended to reflect the intensity of nursing care and nontherapy ancillary services that patients are expected to require;
- a therapy component to reflect the physical and occupational therapy and speech–language pathology services provided or expected to be provided; and
- a component to cover room and board, administrative, and other capital-related costs.

For each day, the three components are summed.

Daily payments are adjusted up or down from the base rate using case-mix weights that reflect the provision of certain services and patient characteristics. A classification system called resource utilization groups (RUGs) classifies patients into 53 categories based on the number and type of minutes of therapy used or expected to be used, the use of certain services (e.g., respiratory therapy and specialized feeding), certain clinical conditions (e.g., pneumonia or dehydration), the need for assistance to perform activities of daily living (e.g., eating and toileting), and, in some cases, signs of depression. Information gathered from the standardized patient assessment instrument, the Minimum Data Set (MDS), is used to group patients. The nursing and therapy components have separate base rates and case-mix weights to reflect their relative resource requirements; the other component is a fixed amount per day for all patients.

The nursing and therapy weights have not been recalibrated with new data since the prospective payment system (PPS) was first implemented in 1998. CMS is in the process of analyzing recently collected data on staff time and other resources used to provide care from a sample of freestanding and hospital-based facilities that treat Medicare and Medicaid patients. Depending on the results of its analysis, it may incorporate at least some of the findings into the proposed rule expected to be issued in the spring of 2008 and make additional revisions in 2009.

The Commission has discussed two problems with the SNF PPS (MedPAC 2007a, 2007b, 2006). First, the RUG classification system does not adequately adjust payments to reflect the variation in providers’ costs for nontherapy ancillary (NTA) services (e.g., respiratory therapy and medications), which average 16 percent of daily costs. The system includes NTA costs with nursing costs and distributes payments based on the expected amount of nursing care, even though NTA costs are not necessarily associated with nursing costs and vary considerably more across patients. For example, payments are the same for patients who require equivalent nursing care even though some patients also require expensive drugs or respiratory therapy services. As a result, payments are too low for many beneficiaries who use these services and too high for those who do not. Hospital discharge planners and hospital administrators have reported problems placing patients who need intravenous antibiotics, expensive drugs, or ventilator care (Liu and Jones 2007, OIG 2006).

The second key problem with the PPS is that payments vary with the amount of therapy delivered, creating a financial incentive to furnish therapy services. Facilities are paid for providing therapy even when a patient’s need for and benefit of therapy have not been demonstrated.
Over time, the number of beneficiaries receiving therapy and the amount they receive have increased (MedPAC 2007b). For stays grouped into rehabilitation RUGs (groups used to categorize patients receiving at least 45 minutes of therapy a week), the therapy payment makes up 16 percent to 60 percent of the total daily payments, depending on the RUG.

In its June 2007 Report to the Congress, MedPAC described CMS-funded research that examined ways to establish and separately pay for NTA services and to base payments for therapy services on predicted care needs, not service provision (MedPAC 2007a). On the basis of this work, we concluded that the current PPS could be designed to (1) better target payments for NTA services, and (2) improve providers’ incentives by paying for therapy based on predicted care needs rather than on the services delivered. Reforms that base payments on predicted care needs rather than on service use could, as with any PPS, encourage providers to stint on needed services. Implementing pay-for-performance for SNFs, as we recommend later in this chapter, would help counter this incentive. The Commission has contracted with the Urban Institute to refine possible designs for paying for NTA and therapy components; we will report on this work in 2008.

Providers of skilled nursing facility care

SNF services may be furnished by hospital-based or freestanding facilities. In 2006, 92 percent of facilities were freestanding. A growing share of Medicare-covered stays and payments went to freestanding SNFs and for-profit SNFs (Table 2D-2). Freestanding facilities treated 89 percent of Medicare stays (up 4 percentage points since 2004) and accounted for 94 percent of spending (up 2 percentage points since 2004). For-profit SNFs’ shares of Medicare-covered stays and payments each increased 2 percentage points between 2004 and 2006. Almost all SNFs (94 percent) are part of nursing homes that also care for long-stay patients, which Medicare does not cover.

Patients in a freestanding facility for a Medicare-covered SNF stay are typically a small share of the total patient population in a Medicare-participating SNF. At the median, Medicare-covered SNF days made up just over 12 percent of total patient days in freestanding facilities in 2006—a sizable increase over the Medicare shares in 2005. Still, SNFs with large Medicare shares are the minority. In 2006, only 10 percent of freestanding SNFs had Medicare shares of 31 percent or more. Hospital-based facilities typically have considerably higher shares of Medicare patients (in 2004, the median was 73 percent) and treat few long-term care residents. The remaining patients in hospital-based facilities are either non-Medicare skilled nursing patients or long-term care residents.
Are Medicare payments adequate in 2008 and how should they change in 2009?

Our analysis of the adequacy of Medicare payments evaluates beneficiary access to care, the supply of providers, the volume of services, the quality of care, provider access to capital, and changes in payments and costs. As required by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, we consider an update appropriate for an efficient provider.

Indicators of payment adequacy are generally positive for SNFs. Beneficiaries have good access to services, although those who need certain expensive services may experience delays while awaiting placement in a SNF. The number of providers remained virtually constant in 2006. Volume, as measured by SNF days and admissions per 1,000 FFS enrollees, increased between 2005 and 2006. The two quality measures that MedPAC analyzes show mixed results: Risk-adjusted rates of discharge to the community continue to increase (indicating improved quality), while rates of potentially avoidable rehospitalizations continue to increase (indicating poorer quality). SNFs’ access to capital was good for most of 2007 but tightened in the fall, reflecting the general lending market, not the adequacy of Medicare payments. All signs indicate that Medicare continues to be a preferred payer.

**Beneficiaries’ access to care**

Most Medicare beneficiaries appear to experience little or no delay in accessing SNF services, especially if they need rehabilitation services. Market analysts and investor reports consistently note that successful SNFs typically increase their overall volume of Medicare patients and shift their mix toward patients who are classified into higher paying case-mix groups. While access is good, placement of some patients with complex care needs can be difficult and result in longer hospital stays as discharge planners seek willing or able SNF providers to take them. Interviews with hospitals in the spring of 2007 indicated that medically complex patients—such as those requiring complex wound care, ventilator care, or intensive intravenous antibiotics—could be hard to place (MedPAC 2007a). Some hospital administrators said that placement of such patients could improve if the SNF PPS were revised to more accurately pay for the care these patients need.

**Supply of providers**

The number of SNFs was almost the same in 2007 as in 2006, increasing by 0.3 percent, or 42 facilities (Figure 2D-2). The number of SNFs has hovered close to 15,000 since 2004, with a slight increase since 2001. The share of hospital-based units continued to decline; they made up 8 percent of all SNFs in 2007. However, a small number (11) of new hospital-based units opened in 2007. Equal shares of freestanding and hospital-based facilities in 2007 were new (about 1 percent).

**Volume of services**

Between 2005 and 2006, admissions declined slightly (–0.2 percent) and the number of days covered increased (1.7 percent), resulting in longer average stays (Table 2D-3). However, because during this period more beneficiaries participated in Medicare Advantage plans (whose volume is not included in the measures), admissions and days per FFS enrollee increased. From
2005 to 2006, admissions per 1,000 FFS beneficiaries increased 2.9 percent and days per 1,000 FFS enrollees increased 4.1 percent.

Some of the growth in FFS admissions and days may also be explained by a shift in the site of care from inpatient rehabilitation facilities (IRFs) to SNFs as IRFs begin to comply with the 75 percent rule for IRFs. Of the top 10 hospital diagnosis related groups with IRF destinations, the share of patients going to SNFs increased for 8 of the 10 diagnosis related groups between 2003 and 2006. The shifts were largest for patients recovering from heart failure and shock, hip and knee replacements, and medical back problems, conditions generally not counted toward the 75 percent rule.

In 2006, CMS implemented nine new RUGs for patients who qualify for both rehabilitation and extensive services, adding them at the top of the classification hierarchy. These highest payment RUG categories accounted for 26 percent of all RUG days in 2006, taking cases out of the rehabilitation-only groups (Figure 2D-3, p. 150). In 2005, rehabilitation RUGs accounted for 83 percent of RUG days; in 2006, their share had declined to 60 percent. Rehabilitation and rehabilitation plus extensive services, together, however, accounted for 86 percent of all days, reflecting a continued increase in the intensity of services furnished to SNF patients.

As reported in previous years, the distribution of rehabilitation days continued to shift toward the highest therapy groups (Figure 2D-4, p. 150). The ultra high and very high groups made up 59 percent of the rehabilitation days in 2006, up 7 percentage points from the previous year, while the share of days grouped into high, medium, and low categories declined. These changes could be a function of shifts in the site of service from other settings or could reflect the payment incentives to furnish the services necessary to get patients classified into the higher-paying rehabilitation RUGs.

The continued expansion of patients classified into rehabilitation RUGs and the increasing intensity of the services furnished underscore the importance of assessing the value of therapy services. The Commission previously recommended that CMS collect patient assessment information at discharge so that the changes in functional status can be measured for all patients (MedPAC 2006, 2005).

### Quality of care

Risk-adjusted measures of the quality of care furnished to patients during a Medicare-covered SNF stay show mixed results. Rates of community discharge within 100 days are almost at the same level as five years ago, having declined and then improved during the past two years (for a description of the measures, data sources, and their calculation see Kramer et al. 2008). The mean risk-adjusted facility rate of community discharge in 2005, the most recent year available, was 33.7 percent (Figure 2D-5, p. 151). The rates of rehospitalization within 100 days for 5 conditions (congestive heart failure, respiratory infection, urinary tract infection, sepsis, and electrolyte
imbalance) have steadily increased throughout the period (indicating worsening quality), averaging increases of almost 9 percent per year. In 2005, the mean risk-adjusted facility rate for the five potentially avoidable rehospitalizations was 17.8 percent, compared with 11.7 percent in 2000.

We use these measures to assess the quality of care provided by SNFs to short-stay patients rather than the measures currently reported on CMS’s Nursing Home Compare website (facility rates of delirium, pain, and pressure sores) for short-stay patients because the publicly reported measures have serious limitations (see discussion, p. 162). The rates of community discharge and potentially avoidable rehospitalization capture two important goals for SNF patients. Particularly for patients receiving rehabilitation therapy, recovering prior function and being discharged to the community are fundamental goals of their SNF stay. Avoiding hospitalization is important for any beneficiary but particularly those recovering from prior medical or surgical problems that prompted their SNF stay. Reducing rehospitalizations for any of the five conditions requires SNF staff to use preventive measures, detect potential signs of worsening patient condition, and provide prompt medical intervention when needed.

The risk-adjusted results for the quality measures continued to differ by facility type and ownership. Hospital-based facilities had community discharge rates
more than 14 percentage points higher (indicating higher quality) and potentially avoidable rehospitalization rates 4.5 percentage points lower (indicating higher quality) than those for freestanding facilities, after controlling for differences in case mix, ownership, and location. Hospital-based SNFs may have lower rehospitalization rates in part because their close proximity to the hospital facilitates physician visits. For-profit facilities had higher community discharge rates (0.7 percentage point)—indicating higher quality—but also higher potentially avoidable rehospitalization rates (1.4 percentage points)—indicating poorer quality—compared with nonprofit SNFs after risk adjustment.

Staffing ratios also affected these quality measures. After controlling for differences in case mix, one additional hour of licensed nurse time per resident day increased the community discharge rate (by 3.9 percentage points) and lowered the rehospitalization rate (by 1.2 percentage points). An additional hour of certified nurse aide time also was associated with a small increase in the community discharge rate (1.4 percentage points) and a small decrease in the rehospitalization rate (0.4 percentage point). After controlling for facility type and ownership, which are correlated with staffing levels, the effects of staffing and being hospital based decreased but remained significant. Thus, part of the quality differences across facility types is due to differences in staffing level.

Unmeasured differences in case mix and other factors that were not accounted for (e.g., staffing turnover and experience, the availability of IRFs and long-term care hospitals, and facility practice patterns) could also explain some of the differences in quality measures by facility type.

**Access to capital**

The vast majority of SNFs are small parts of larger nursing homes that seek capital for construction and capital improvements. Medicare provides a small share of most homes’ revenues, but because it is seen as a preferred payer, the ability of the homes to maintain or increase their Medicare shares influences how attractive a nursing home is to investors (see text box on Medicaid payment effects on nursing facility margins, p. 152). Analysts told us that investors view homes treating an above-average share of Medicare patients more favorably than other homes because Medicare’s generous payments are used to subsidize Medicaid payments.

SNF access to capital was good during most of 2007. One measure of the rising value of nursing homes is the price paid per bed for nursing homes sold during the year. Between 2005 and 2006, the share of facilities that sold for more than $50,000 per bed increased from 28 percent to 39 percent, while the share (11 percent) of homes that sold for under $20,000 per bed was the lowest since 1999 (Irvin Levin Associates 2007). Smaller homes also had better access to capital in 2006 than in 2005. Lending that is insured by the Department of Housing and Urban Development (HUD) increased during 2006. In fiscal year 2006, HUD insured mortgages for 222 projects with 24,945 beds/units, totaling $1.3 billion (HUD 2007). This represented a 58 percent increase over its lending in fiscal year 2005.
Analysts told us that investment has slowed considerably since August 2007, reflecting general lending conditions. They further stated that nursing homes will continue to have access to capital but that it will be more expensive and the terms are likely to be more restrictive. This tightening of capital markets is related to lending and real estate trends and does not reflect the adequacy of Medicare payments. Single homes and small chains are likely to use local or regional lenders, while large mergers and acquisitions have been postponed or canceled as lenders take stock of the capital markets. The National Investment Center, a nonprofit research organization providing information about business strategy and capital formation for the senior living industry, reported that early in 2007 lending to nursing homes and assisted living facilities had continued the record-breaking trends of 2006 (NIC 2007b). However, by summer, lending had slowed and was likely to remain sluggish due the credit crunch nationwide (NIC 2007a). Marcus and Millichap Real Estate Investment Services reported a major slowdown in the construction of nursing homes in the past year (Cain Brothers 2007a). Although new bed construction is down 28 percent compared with the same period last year, 2,600 new beds are being built.

Industry analysts and annual reports of several publicly traded companies indicated that SNFs use two Medicare-related strategies to improve their financial performance. Most notably, facilities expand their Medicare and private payer shares as ways to generate more revenue per occupied bed. They also focus on patients in high rehabilitation and extensive services plus rehabilitation RUGs. Reflecting this increase in case mix, companies can increase their reported revenues per bed by 5 percent to 8 percent a year.

Another strategy that nursing home companies reportedly use to improve their financial performance is to expand into related service lines such as hospice and outpatient rehabilitation as a way to gain a larger share of post-acute care expenditures. The largest chains continue to expand the number of holdings and diversification into other post-acute care services, including hospice, outpatient rehabilitation, assisted living, specialized rehabilitation units within SNFs, and long-term care hospitals. Some of the publicly traded companies note that, because SNFs represent the low-cost setting for institutional post-acute care, they want to be well positioned to expand their share of this care.
Analysts report an increasing division within the nursing home market between homes focusing on Medicaid patients and those that also treat Medicare and private pay patients. Homes that treat above-average shares of Medicare beneficiaries will have better access to capital than those that almost exclusively treat Medicaid patients. Analysts report that homes that are relatively more focused on Medicare are making investments in equipment, physical plant, and staff to handle patients with greater care needs. Some nursing homes are also using capital to update their facilities so they are more attractive to Medicare patients. Analysts told us that homes that can increase their Medicare census by 5 percent are seen as very attractive.

Analysts also told us that the large nursing home transactions by private equity firms are likely to be far less common over the coming year. Private equity ownership is a relatively recent trend (the past three years or so), with 7 of the largest 10 chains now owned by private groups. This investment reflected the growing market for health services generally, the aging population’s demand for services, and the attractive real estate market. In addition, nursing homes are seen as having relatively stable cash flows with growth potential (Cain Brothers 2007b). However, some analysts told us they expect few large private equity takeovers of nursing homes in the future because the relatively inexpensive capital that fueled this trend is no longer available.

Researchers and policymakers have raised concerns about the increased investment of private equity firms in nursing homes, including the lack of transparency of ownership, the corporate reorganization to limit litigation exposure, and the highly leveraged financing of some chains (Duhigg 2007, Stevenson et al. 2006). The impact of these changes on the quality of care furnished in nursing homes or SNFs is unknown. The Government Accountability Office has been asked to examine how private equity ownership has affected the quality of care in homes.

**Payments and costs for 2007**

Although aggregate Medicare margins for freestanding SNFs have varied over the past six years, they have exceeded 10 percent every year (Table 2D-4). In 2006, the aggregate Medicare margin for freestanding SNFs was 13.1 percent. This margin increased slightly from 2005 (12.9 percent), reflecting slower cost growth and higher payments for the new RUG categories. We estimate the Medicare margin for freestanding SNFs will be 11.4 percent in 2008.

Financial performance among freestanding SNFs continues to vary widely. The aggregate Medicare margin in for-profit SNFs was 16 percent compared with just over 3 percent in nonprofit facilities. Nonprofits had higher daily costs after adjusting for case mix and, between 2005 and 2006, had higher cost growth than for-profit facilities. In aggregate, rural facilities continued to have higher Medicare margins than their urban counterparts.

Examining the distribution of Medicare margins, one-half of freestanding SNFs had Medicare margins of 14.7 percent or more, while a quarter of them had Medicare margins at or below 4 percent. The top quartile of freestanding facilities had Medicare margins of at least 23.3 percent. Comparing freestanding SNFs in the top and bottom quartile of Medicare margins, we found that high-margin SNFs had case-mix-adjusted costs per day

### Table 2D-4

<table>
<thead>
<tr>
<th>Type of SNF</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>17.6%</td>
<td>17.4%</td>
<td>10.8%</td>
<td>13.7%</td>
<td>12.9%</td>
<td>13.1%</td>
</tr>
<tr>
<td>Urban</td>
<td>17.4%</td>
<td>16.8%</td>
<td>10.0%</td>
<td>13.0%</td>
<td>12.4%</td>
<td>12.7%</td>
</tr>
<tr>
<td>Rural</td>
<td>18.4%</td>
<td>20.0%</td>
<td>14.1%</td>
<td>16.5%</td>
<td>15.3%</td>
<td>14.5%</td>
</tr>
<tr>
<td>For profit</td>
<td>19.9%</td>
<td>20.0%</td>
<td>13.9%</td>
<td>16.6%</td>
<td>15.7%</td>
<td>16.0%</td>
</tr>
<tr>
<td>Nonprofit</td>
<td>10.1%</td>
<td>9.0%</td>
<td>1.5%</td>
<td>4.2%</td>
<td>4.3%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Government</td>
<td>4.9%</td>
<td>3.1%</td>
<td>-7.1%</td>
<td>-3.0%</td>
<td>-5.0%</td>
<td>-5.9%</td>
</tr>
</tbody>
</table>

Note: SNF (skilled nursing facility). 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.
that were one-third lower, higher average daily census, and longer stays (Table 2D-5). SNFs in the top margin quartile had slightly lower shares of patients in the clinically complex, special care, or extensive services compared with SNFs in the bottom margin quartile. The lower daily costs of high-margin SNFs are partly explained by the fact that they are bigger (with the accompanying economies of scale) and have longer stays (over which to spread their fixed costs) compared with low-margin SNFs. Unmeasured differences in patient mix could also explain some of the cost differences.

In modeling 2008 payments and costs with 2006 data, we consider policy changes that went into effect in 2007 and 2008. Except for accounting for full market basket updates for each year (3.1 percent and 3.3 percent in 2007 and 2008, respectively), there were no other policy changes to consider.

Our modeling of future year costs also considers recent cost growth for freestanding SNFs. Between 2005 and 2006, SNF cost growth (unadjusted for case mix) slowed, averaging 4.6 percent compared with 5.4 percent for the previous year (Figure 2D-6). Nonprofit facilities experienced higher cost growth on average between 2005 and 2006 than for-profit SNFs. In 2006, nonprofits also had higher daily costs than for profits (11 percent higher), after adjusting for case mix, which could be due to unmeasured differences in case mix.

Hospital-based facilities continued to have very negative margins (–83.8 percent), in large part reflecting their higher daily costs and shorter stays (their stays are less than half those of freestanding facilities). Per diem costs for hospital-based SNFs are about double those of freestanding facilities. Their higher routine costs are a function of higher staffing levels, a larger mix of professional staff, and generally higher wage rates (hospital-based SNFs typically pay their SNF staff the same rates as their hospital employees) (MedPAC 2007a). Hospital-based SNFs also have higher NTA costs that may capture unmeasured case-mix differences and the test-ordering practices of physicians managing the SNF care. We previously noted (p. 151) the differences in staffing and quality measures between freestanding and hospital-based facilities. Finally, hospital-based SNFs have higher overhead costs than freestanding SNFs. Because hospital-based facilities are small, their administrative costs are spread over fewer patients; further they carry some overhead from their host hospital. These factors raise these costs relative to those of freestanding facilities.

The Commission continues to be concerned about the differences in financial performance between hospital-based and freestanding facilities and between for-profit and nonprofit facilities. Our ongoing research examining alternative designs for the SNF PPS attempts to better target payments to patients with high NTA costs and to base therapy payments on care needs rather than service provision. We expect these reforms would change the distribution of payments, which, in turn, would narrow the differences in performance.

**Update recommendation**

SNFs should be able to accommodate cost changes in 2009 with the Medicare margin they have in 2008.

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### Table 2D-5

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Top quartile</th>
<th>Bottom quartile</th>
</tr>
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<tbody>
<tr>
<td>Case-mix adjusted costs per day</td>
<td>$206</td>
<td>$304</td>
</tr>
<tr>
<td>Case-mix adjusted ancillary costs per day</td>
<td>$87</td>
<td>$121</td>
</tr>
<tr>
<td>Percent for profit</td>
<td>85%</td>
<td>53%</td>
</tr>
<tr>
<td>Percent urban</td>
<td>68%</td>
<td>73%</td>
</tr>
<tr>
<td>Medicare share of days</td>
<td>12%</td>
<td>11%</td>
</tr>
<tr>
<td>Length of stay (in days)</td>
<td>37</td>
<td>32</td>
</tr>
<tr>
<td>Average daily census (patients)</td>
<td>86</td>
<td>73</td>
</tr>
<tr>
<td>Share of clinically complex, special care, or extensive service days</td>
<td>9%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Note: SNF (skilled nursing facility). Values shown are medians for the quartile. Top quartile SNFs were in the top 25 percent of the distribution of Medicare margins. Bottom quartile SNFs were in the bottom 25 percent of the distribution of Medicare margins. Standardized costs have been adjusted for case mix using the facility’s nursing case-mix index.

Source: MedPAC analysis of freestanding cost reports.
in current law for 2007, 2008, and 2009, we project the Medicare margin for freestanding SNFs to be more than 11 percent in 2008. SNF payments appear more than adequate to accommodate cost growth; thus, no update is needed.

**Implications 2D-1**

**Spending**
- This recommendation would lower program spending relative to current law by $250 million to $750 million for fiscal year 2009 and by $1 billion to $5 billion over 5 years.

**Beneficiary and provider**
- No adverse impact on beneficiary access is expected. This recommendation is not expected to affect providers’ willingness or ability to care for Medicare beneficiaries.

**Paying for Performance in SNFs**

In addition to evaluating the level of SNF payments, the Commission considered the readiness of this setting to have a portion of its Medicare payments tied to the value of the care it purchases. When the Commission and the Institute of Medicine reviewed the settings that were ready for linking payments to quality, SNFs were not among them (IOM 2006, MedPAC 2005). However, this was in large part a reflection of the measures that were available. The publicly reported quality measures for short-stay patients in use at the time did not reflect the care experience of most beneficiaries and could reflect care that was not, in fact, furnished during their SNF stays. However, since that time, the Commission has evaluated two measures—rates of community discharge and potentially avoidable rehospitalization—and concluded that they are suitable for a pay-for-performance program.

Linking Medicare’s SNF payments to patient outcomes is desirable for several reasons. First, paying for performance could help improve quality of care, which has been a persistent problem for some providers. Despite considerable congressional focus over the past 18 years, a small but substantial share of nursing homes continue to have serious quality-of-care problems. For example, in 2006, almost one in five homes was cited for survey deficiencies that caused actual harm or placed residents in immediate jeopardy (GAO 2007). We found that rehospitalization rates in 2005 varied more than fourfold across SNFs, while community discharge rates varied more than sevenfold. Given this large variation in quality, it makes sense to have Medicare vary its payments to reflect the product it purchases.

Second, paying for outcomes would encourage providers to consider the benefits and costs of services furnished to patients. The current PPS does not require providers to assess the value of additional services furnished or the costs to the program and the beneficiary of delivering poor quality of care. Providers currently have an incentive to furnish therapy services without considering whether the additional services improve beneficiary outcomes. As we consider reforms that divorce SNF payments from the provision of therapy services, the risk of stinting on needed services increases, as it does with any PPS. With such reforms, there is even more reason to consider tying some portion of provider payments to patient outcomes.

Last, paying for performance—using potentially avoidable rehospitalization rates as a measure—is one step in the path of holding multiple providers accountable for
reducing the number of unnecessary rehospitalizations. The Commission has explored bundling payments around a hospitalization and including care furnished during some time period beyond it as a way to align incentives across providers to reduce avoidable readmissions. It has also discussed reducing payments for potentially avoidable readmissions, separate from bundling payments. SNF pay for performance complements these policy ideas because it reinforces the desired outcome by making multiple providers accountable for lowering rehospitalization rates. It also could be implemented in a shorter time period than bundled payments.

**Design features**

The Commission previously developed principles to guide the design of pay-for-performance programs (MedPAC 2005). First, the program should reward high-performing providers (those that furnish high-quality care) and those that improve. This principle aims to encourage many providers to participate in the program to improve quality for as many beneficiaries as possible. Second, the program should be funded by a small set-aside of current payments (1 percent to 2 percent) from every provider, not from new spending. The program is intended to shift the incentives of payment, not the level, and should be budget neutral. Thus, the system would be funded by redistributing payments from SNFs that provide poor quality of care to SNFs with high quality and improving quality. Third, the pooled dollars should be fully distributed to providers that meet the reward criteria at the end of the year. Last, a process should be established to develop, validate, and update the measure set.

The design would need to consider two unique features of the SNF industry. Medicare accounts for a small share of the business at most SNFs and may not, on its own, be able to influence provider behavior, even as a preferred payer. Further, SNF margins on Medicare patients have been relatively high for the past five years, which may dampen the impact of a reward or penalty of a pay-for-performance program. For example, the cost to a provider of making the improvements to score better on the performance measures may exceed the financial reward obtained from the pay-for-performance program. In this case, providers could elect not to invest in changes that might be necessary to improve their quality. Given the relatively high margins and the low Medicare shares, the pay-for-performance program may need to be designed with a larger set-aside than the 1 percent to 2 percent generally considered appropriate for other provider settings. On the other hand, because Medicare is a preferred payer, given its relatively high payments, facilities may pay close attention to how they can increase their payments from Medicare.

**Performance measures**

The Commission has also developed criteria for the measures to distinguish between providers with high- and low-quality performance.

- The measures should be well accepted by quality experts and familiar to providers, and they should be evidence based.
- The measures should not impose undue data collection or analysis burdens on providers or CMS. When possible, the measures should rely on data that are currently available.
- The risk adjustment for outcomes-based measures should be sufficient so that providers do not have incentives to avoid patients who might lower their quality score.
- Most providers should be able to improve their quality performance. The measures should capture aspects of care over which providers have control, and the measures should be related to important aspects of quality that need improvement. The measures should be relevant to a wide range of beneficiaries and the care furnished so that the pay-for-performance program has its greatest impact.

**Rates of community discharge and potentially avoidable rehospitalization as pay-for-performance measures**

Over the past two years, the Commission has carefully evaluated the measures it uses to assess SNF quality—rates of community discharge within 100 days and potentially avoidable rehospitalization for 5 conditions within 100 days—and found that both measures meet MedPAC’s criteria for pay-for-performance measures. Both measures are evidence based and accepted as quality indicators. Experts we interviewed thought both measures, along with improvement in functioning (discussed on p. 159), would provide better information on whether patients benefit from SNF care and whether patient goals were attained compared with the current MDS-based measures (MedPAC 2005). Rehospitalization rates are used as quality measures in the post-acute and ambulatory care settings and are publicly reported for home health agencies on CMS’s Home Health Compare website.
Rates of community discharge are frequently used to evaluate rehabilitation care and have been associated with functional recovery as measured by a range of functional measures. Given that more than three-quarters of beneficiaries receive rehabilitation services, this measure reflects the care furnished to a large share of beneficiaries.

Both measures use data that are readily available and, because they do not rely on information from the second assessment, they avoid the sampling and accuracy issues associated with the MDS-based post-acute measures. Although about 10 percent of stays were not counted in the measures (due to short stays, deaths, and missing assessments), this attrition rate is far lower than the 45 percent of stays that are currently lost because patients do not stay long enough to be assessed on day 14, which is required to calculate currently reported measures.

Rates of community discharge and potentially avoidable rehospitalizations are measures upon which most SNFs can improve. Because most SNF patients are expected to improve and recover their maximum functioning, both measures capture key goals for SNF care: to be discharged back to the community and avoid rehospitalization. Both measures consider the care furnished to all beneficiaries and are not limited to specific conditions. In addition, improvement is within the control of providers. Preventive measures, early detection, prompt intervention, and the application of skilled rehabilitation and nursing services will improve a SNF’s performance. Finally, there is wide variation in both rates across providers, leaving ample improvement opportunities for all SNFs.

The Commission sponsored research to assess three technical aspects of the measures: the risk-adjustment methodology, the number of cases needed for the measures to be stable, and the time period considered by the measures. The researchers found that a robust risk-adjustment method was feasible using administrative data, a relatively small sample size was needed for stable measures at the facility level, and measures evaluating 100 days of care were preferable to those that considered 30 days (Donelan-McCall et al. 2006). These findings led us to conclude that the measures are ready for pay for performance and public reporting.

**Measures include a robust risk-adjustment methodology**

Sufficient risk adjustment is critical so that providers are not penalized for treating sicker patients or patients who are not expected to improve. Adequate risk adjustment also counters incentives providers may have to select patients who are relatively more profitable (or less likely to result in financial losses). Such selection is particularly worrisome when the characteristics that influence the profitability of a case are easily known before the patient is admitted. In addition, without good risk adjustment, SNFs could be unfairly disadvantaged when they appropriately transfer patients who need hospital services.

The risk-adjustment models for the rates of community discharge and potentially avoidable rehospitalizations control for clinical, facility, and community factors that could influence these quality measures. The risk adjustment considers 26 patient-level case-mix factors including patient age, the presence of advance directives, the Barthel index (a measure of functional independence), the cognitive performance scale (a measure of cognitive impairment), patient assessment items (bowel incontinence, indwelling catheter, feeding tube, and parenteral or intravenous feeding), a weighted comorbidity index, 12 diagnostic categories (from the qualifying hospital stay), and the length of stay of the qualifying hospitalization (Kramer et al. 2007b). The models also include staffing levels, facility characteristics, geographic region, and market area characteristics (including Medicare managed care penetration rates and the availability of home health agencies and hospital, nursing home, and SNF beds).

Yet, even good risk adjustment may not always adjust for all the potential risk factors. For example, the community discharge model does not include a measure of community support available to the patient (e.g., a willing and able caregiver at home), which may influence whether a patient is discharged home. The model also does not consider the relative advantage that continuing care retirement communities (those with SNF units) may have in managing their community discharge rates to improve their scores. Both models consider whether a facility is hospital based, which may affect the level of physician involvement in managing patient care and the availability of ancillary services. However, other aspects of physician care, such as whether effective communication has taken place, may affect both measures but have not been considered. Nevertheless, it is fair to hold the facilities accountable on the two measures—rehospitalization and community discharge—as they provide the nursing care that has been shown to influence these outcomes.

While not adjusting for every factor, the risk adjustment associated with the measures is very good. By including measures of functional status and cognitive status, which are strong predictors of whether a patient had
been residing in a nursing home, the risk-adjustment methodology accounts for the share of patients who may have a smaller chance of being discharged to the community.21 The risk-adjustment models explain 70 percent of the variation in community discharge rates and 54 percent of the variation in rehospitalization rates across facilities (Kramer et al. 2007b). At the patient level, the c-statistic for predicting whether a patient will go home was 0.78, while the c-statistic for whether a patient would be rehospitalized was 0.72.22 Because the models are highly predictive, we conclude that robust risk adjustment is possible for both measures. Even with this good risk adjustment, CMS should monitor SNF mortality rates as a check that SNFs are not inappropriately holding onto patients who should have been transferred to the hospital.

Unfortunately, even good risk adjustment on a pay-for-performance program cannot counter the incentives of the current PPS to select certain types of patients over others. A much more effective way to counter patient selection is to revise the PPS so that SNFs have little financial incentive to discriminate against some patients, such as those with high NTA care needs. The Commission has work under way with researchers from the Urban Institute to revise the therapy component and to add an NTA component. These reforms would better match payments to patient care needs. Without such reforms, patient selection is likely to continue. The Commission will report on these reforms in the spring of 2008.

**Minimum number of stays for stable measures is small**

Because Medicare patients comprise a small part of most nursing homes’ total patient mix, we wanted to know the minimum number of cases a facility would need to treat during the year to make the measures stable and accurate and allow valid comparisons across facilities. If the minimum case count needed for stability and validity were too high, a pay-for-performance or public-reporting program using these measures would exclude many SNFs.

Researchers found that only 25 stays were necessary for the measures to be stable. This minimum would result in about 10 percent of SNFs being excluded from the measure (accounting for only 1 percent of stays). This attrition rate is far lower than the almost 45 percent of stays that are not considered in the MDS-based measures.

We also explored extending the reporting period (from one year to 18 or 24 months) to see how many additional facilities would be included in the measures. Extending the period to 24 months still excluded 6 percent of facilities.

We concluded that the advantage of including 4 percent more facilities was outweighed by the disadvantage of reflecting care that had been provided up to two years in the past. Such dated information was not considered helpful to either consumers or SNFs trying to improve their performance.

Given the small numbers of Medicare patients in most SNFs, and the low incidence of any one of the five conditions (congestive heart failure, respiratory infection, urinary tract infection, sepsis, and electrolyte imbalance), we also wanted to assess the feasibility of a composite measure of potentially avoidable rehospitalizations. The five conditions account for more than three-quarters of rehospitalizations. The contractor found that the composite measure adequately represented the condition-specific rehospitalization rates and was more stable over time than the individual measures (Donelan-McCall et al. 2006).

**A 100-day time period is preferred to a 30-day measure**

Last, we evaluated the duration of the period considered by the two measures—shorter periods, such as 30 days, or a longer period coinciding with the SNF benefit (100 days). Considering rehospitalizations within 30 days of SNF discharge is likely to reflect care that was within the SNF’s control; on the other hand, it could result in providers delaying appropriate rehospitalizations until after 30 days in order to improve performance. A 30-day community discharge measure may create inappropriate incentives for SNFs to discharge beneficiaries. The 100-day measures are consistent with the SNF benefit and are less likely to result in premature discharges or delays in necessary rehospitalizations. On the other hand, the longer time frames may capture factors not within influence of the SNF.

We found that the risk-adjustment models were similar for both measures, suggesting that the populations were similar. The 100-day measures had empirical and conceptual advantages. The longer measure was more stable over time, was more normally distributed, and had fewer facilities with zero rates (the events did not occur). Because it aligns with the SNF benefit, it prevents inappropriate incentives that might occur with the 30-day rates—such as delaying hospitalizations until after 30 days or premature discharging of patients before day 30 to avoid detection in the measures and improve performance. Because almost all patients are discharged before 100 days (the 99th percentile length of stay is 100 days), the 100-day measure is unlikely to result in inappropriate discharges.
Other performance measures

Over time, the Commission would like other measures that capture important aspects of SNF care to be added to the two starter-set measures (rates of community discharge and rehospitalization). MedPAC previously noted that an entity charged with vetting possible performance measures should be established as a way to increase the credibility, efficiency, and effectiveness of pay-for-performance programs.

The five post-acute measures currently reported on CMS’s Nursing Home Compare website are not suitable for pay for performance. For the reasons discussed in the quality section (p. 162–163), three of the measures (pain, delirium, and pressure sores) need to be modified so they are more accurate. Most importantly, because almost half of SNF patients do not stay long enough to have a second assessment, the measures do not capture the care furnished to most SNF beneficiaries and result in measures that are systematically biased. This attrition rate presents a major impediment to using any MDS-based measure that requires a second assessment. In addition, the measures require assessors to consider a patient’s condition over the previous 14 days, so the measures can reflect the care furnished during the prior hospitalization. However, once assessments are required at discharge for all patients and no longer include information about preceding hospital stays, valid MDS-based measures may be considered. The other two post-acute measures, rates of flu shot and pneumonia vaccinations, do not capture the main goals for post-acute SNF care and therefore are not good candidates for a starter measure set.

Because more than three-quarters of beneficiaries are grouped into rehabilitation payment groups, indicators of the changes in their physical functioning and ability to perform activities of daily living (ADLs) would be an ideal set of pay-for-performance measures. Experts we spoke with thought measures of improved functioning would be good quality indicators for SNFs (MedPAC 2005). CMS’s planned pay-for-performance demonstration for nursing homes will use two ADL measures—percent of patients with improved level of ADL functioning and percent of patients whose mid-loss ADL function (transferring and locomotion) improves—to gauge the improvement in the physical functioning of post-acute patients. Both measures have been criticized, however, for the time period they consider, the way the functional levels are defined, and their lack of sensitivity; neither measure was endorsed by the National Quality Forum. CMS should consider improving these measures of change in functional status.

Given the high share of SNF patients who experience some pain, pain management should also be considered as a pay-for-performance measure. Last year when we explored potential process measures, experts told us that an important dimension to consider was how well providers managed the pain of their patients (MedPAC 2006). CMS’s publicly reported pain measure is inadequate and should not be used until it is revised (the discussion on p. 163 provides more detail). Several pain measures have been validated; it will be important to select one that best measures differences in how well facilities manage the pain of their patients and not differences in providers’ abilities to assess pain (Abt 2006).

Measures that consider care beyond the post-acute stay could be used to assess the long-term care furnished by nursing homes to beneficiaries who no longer qualify for a stay covered under Part A. However, long-stay measures do not gauge the value of Medicare’s purchases, since the program does not cover nursing home care. CMS’s demonstration (described below) has the broad goal of improving the care furnished to beneficiaries residing in nursing homes and, therefore, includes both short- and long-stay measures.

CMS’s pay-for-performance demonstration

CMS is planning a pay-for-performance demonstration to improve the quality of care furnished to beneficiaries in nursing homes (see text box, p. 160). The program will consider the care furnished to beneficiaries in Medicare-covered (short) and noncovered (long) nursing home stays (CMS 2007a). CMS will measure nursing home quality performance using a composite score covering four domains—staffing, potentially avoidable rehospitalizations, MDS-based measures, and results from nursing home inspection (see text box for description of the measures). The program will reward homes that attain the highest scores and those that have the most improvement in their total scores. Savings accrued from avoided hospitalizations and subsequent SNF stays will finance the demonstration and determine the size of the reward pools.

Several of the demonstration’s features meet MedPAC design criteria, while others do not. The program demonstration will reward high-performing providers and those that made the largest improvements, consistent with encouraging many providers to raise their quality.
The goal of CMS’s nursing home value-based purchasing demonstration is to improve the quality and efficiency of care furnished to Medicare beneficiaries. CMS will select up to five states to host the three-year demonstration, and facility participation will be voluntary and open to hospital-based and freestanding facilities. Participating providers (about 50 per state) will be randomly assigned to experimental and control groups and compared.

The planned demonstration will calculate a composite score for each participating home based on:

- Staffing (RN hours per resident day, total hours per resident day, and turnover rates), for a maximum total of 30 points;
- Potentially avoidable rehospitalizations, with separate conditions for long- and short-stay patients, for a maximum total of 30 points;
- Minimum Data Set quality measures (20 points):
  - Long-stay patient measures: percent of patients whose need for help with activities of daily living (ADLs) increased, percent of patients whose ability to move around a room declined, percent of high-risk patients with pressure sores, percent of patients who were physically restrained, and percent of patients who had a catheter inserted and left in.
- Short-stay (post-acute) patient measures: percent of patients with improved ADL functioning, percent of patients with improved mid-loss ADL functioning (transfer and locomotion) or who remained completely independent in these activities, and percent of patients with failure-to-improve bladder incontinence.
- The nursing home’s inspection survey results, with deficiencies weighted by their severity (20 points). Homes with one or more serious survey deficiencies will not be eligible for a reward.

Nursing homes with scores in the top 20 percent and homes with the top 20 percent improvement will be eligible for a reward.

The program will be financed by savings accrued from avoided hospitalizations and subsequent stays in skilled nursing facilities. State-specific savings pools will be calculated based on the difference in the growth in risk-adjusted Medicare expenditures between homes in the experimental and control groups. Spending on services furnished during the nursing home stay and within three days after discharge from the nursing home will be included in the spending comparisons.

Although CMS planned to have begun this demonstration in 2008, it is still in the process of obtaining clearance for the demonstration from the Office of Management and Budget, delaying the solicitation of participants. CMS had hoped to have the states identified and participating homes identified by fall 2008, but funding constraints make its timeline uncertain.
between long- and short-stay populations, the risk adjusters for the potentially avoidable rehospitalization measures are likely to require separate models. CMS plans to adjust the total nursing staffing measure for differences in case mix so that homes with higher acuity would be expected to have higher staffing levels. Given the different staffing levels of hospital-based and freestanding facilities, the adjustment also helps make fair comparisons between facilities.

The way the performance pool is established and reward payments are determined does not meet MedPAC’s design principles. The pool is funded not by set-aside payments but from savings that accrue as a result of lower spending for the homes in the experimental pay-for-performance group compared with homes in the control group. Because a portion of payments is not set aside, there may not be a pool to disburse—payments are a function of savings that may or may not be achieved. Thus, even high-performing providers may not be rewarded if there are no savings. While this financing provides the incentive to improve quality at facilities with poor performance, it may discourage participation since even good performance does not guarantee a reward. Because the pools are established on a statewide basis, rewards are not directly tied to an individual home’s actions, and a home will not have much control over whether it will receive a payout.

Almost all the pay-for-performance measures proposed for use in the demonstration are readily available from administrative data collected by CMS, with one exception—the staffing measure. The limitations of the staffing data currently collected in the self-reported Online Survey, Certification, and Reporting (OSCAR) database are widely acknowledged (Abt 2004). As a result, development work on the pay-for-performance design did not consider using the OSCAR data; instead, the demonstration will require nursing homes to submit staffing data. The data required to calculate the performance measures—hours worked by job category and numbers of employees during a reporting period—are captured by the payroll system of all nursing homes. Studies have examined the feasibility of requiring nursing home payroll data as part of a value-based purchasing system (Abt 2006, 2004, 2001). A study conducted for CMS concluded that while there is variability in payroll systems, homes would be able to provide accurate information needed for these measures and that the information could be made uniform (University of Colorado and the Colorado Foundation for Medical Care 2004). Interviews with nursing homes that are not part of chains indicated that they would be able to report the information needed to calculate the hours per resident day and nurse staffing turnover measures. Thus, while the demonstration will require homes to submit new data, this requirement is not considered to be unduly burdensome and is not expected to limit the participation of homes in the demonstration.

Some states have adopted, or plan to implement, pay-for-performance programs for nursing home services. Over the coming year, MedPAC plans to review these programs to gather insights about design features and measures for consideration in a SNF pay-for-performance program.

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**Pay-for-performance recommendation**

Because paying for performance could help improve quality of care and encourage providers to consider the benefits and costs of services furnished to patients, Medicare payments to SNFs should be linked to patient outcomes. Rates of community discharge and potentially avoidable rehospitalizations are readily available to comprise a starter set of measures.

**Recommendation 2D-2**

The Congress should establish a quality incentive payment policy for skilled nursing facilities in Medicare.

**Rationale 2D-2**

A pay-for-performance program for SNFs should be established to tie payments to patient outcomes. Two well-accepted measures—risk-adjusted rates of community discharge and potentially avoidable rehospitalization—should be included in a starter measure set, with other measures added over time. The two measures capture important goals for most SNF patients. By avoiding measures that require a second patient assessment, the measures will reflect the care furnished to most beneficiaries. In addition, the measures do not rely on indicators that consider care furnished during the prior hospitalization. The measures use data that are readily available: CMS currently collects the administrative data required to derive these measures. Over time, additional indicators should be added to the starter measures set to provide a multidimensional view of the care furnished to Medicare beneficiaries.
Skilled nursing facility services: Assessing payment adequacy and updating payments

Percentage of patients given influenza vaccinations during flu season; and
Percentage of patients assessed and given pneumonia vaccinations.

There are several problems with the delirium, pain, and pressure ulcer measures that undermine their accuracy. Most importantly, there is sample bias inherent in the way the data are collected (Donelan-McCall et al. 2006; MedPAC 2006, 2005). Because SNFs are not required to assess patients at discharge, almost half of SNF patients are not included in these measures since they do not stay long enough to have an assessment conducted on day 14 of their stay. The exclusion of these short-stay patients systematically biases the measures and means that the quality measures do not reflect the care furnished to all SNF patients. The “admission” assessment is also problematic because very few patients are actually assessed at admission. As a result, even for the sample of patients who are assessed twice, differences in patients’ conditions may be the result of actual patient differences or of the timing of the assessments. CMS recognizes the importance of a discharge assessment and is evaluating the possibility of developing a discharge MDS in conjunction with the transition of the MDS in fiscal year 2010.

A further complication with the measures is that the patient assessment questions ask about care during the past 7 and 14 days, which can extend back to the preceding hospital stay. For the first assessment, these “look back” periods confound care furnished by the SNF with that provided by the hospital. Until the patient assessment tool is modified, these data may include care that the SNF did not provide. Several sections of the draft revisions to the MDS differentiate between care furnished before and after the SNF admission (CMS 2008). Final decisions about revisions to the MDS have not been made. CMS plans to introduce the transition to the new assessment instrument in its proposed rule for fiscal year 2009 (late spring 2008). A transition will include a blended use of the old (MDS 2.0) and new (MDS 3.0) beginning in October 2009 and full transition to the new tool beginning October 2011 (CMS 2007b).

In addition to these timing issues, each measure has definition problems that should be addressed to make the measures more accurate (Kramer 2007a). For example, it is hard for clinicians conducting a patient assessment to detect pain and early-stage ulcers (Sangl et al. 2005). Therefore, reported differences in these measures may reflect differences in the staffs’ assessment abilities and

IMPLICATIONS 2D-2

Spending
• This recommendation would not affect federal spending relative to current law.

Beneficiary and provider
• This recommendation is expected to improve the quality of care for beneficiaries. It is expected to result in higher or lower payments for individual providers depending on the quality of their care.

Improving the measurement of skilled nursing facility quality
CMS currently reports five quality measures for short-stay post-acute patients on its Nursing Home Compare website. Experts have raised serious questions about the reliability and validity of three of these measures. Because of the limitations of these measures, the Commission has opted to use two alternative measures to track the quality of SNF care: rates of potentially avoidable rehospitalization and community discharge. Both measures reflect the clinical goals of most SNF patients. After extensive analysis of the two measures, the Commission has concluded that CMS should publicly report these measures on its Nursing Home Compare website. Further, to improve the accuracy of the measures it currently reported, CMS should revise the measures that use patient assessment information and require providers to conduct patient assessments at admission and discharge.

Problems with the publicly reported post-acute measures
CMS currently gathers information on five post-acute measures and publicly reports them on CMS’s Nursing Home Compare website. These measures include:
• Percentage of patients with delirium representing a departure from usual functioning on a 14-day assessment;
• Percentage of patients at the 14-day assessment with moderate pain at least daily or horrible/excruciating pain at any frequency;
• Percentage of patients who develop a pressure ulcer between the 5-day and 14-day assessment or percentage of patients who had any stage pressure ulcer at the 5-day assessment that worsened by the 14-day assessment;
not actual differences in patients’ conditions. The pain measure is narrowly defined, capturing only those patients on day 14 with moderate pain daily or excruciating pain at any frequency. In addition, the measure is confusing. Experts told us that assessors may differ in how they record patients with pain that was successfully managed with medication. Other pain measures have been validated and the draft revisions to the MDS include an expanded set of questions that record a broad range of pain experiences.

An alternative measure for the pain condition was found to be not valid (Abt 2006). The draft revised MDS asks about four specific behaviors in assessing delirium.

Another concern of the MDS-based measures is the inverse relationship between these publicly reported measures of quality and the quality based on rates of community discharge and potentially avoidable rehospitalization (Kramer et al. 2007b, MedPAC 2007a). SNFs that appear to furnish high-quality care using the CMS measures appear to furnish poor-quality care using community discharge and rehospitalization rates. The likely explanation is the differences in the patients included in each measure. While the community discharge and rehospitalization rates can be calculated for all patients (that is, all patients with an assessment at day 5), the CMS measures include only the patients who stayed long enough for a second assessment on day 14 (omitting almost half the SNF patients who were discharged, readmitted to the hospital, or died). Thus, facilities with high community discharge rates are likely to discharge their healthy patients, leaving only the sicker patients, who are then captured by the CMS measures.

Similarly, providers that elect to treat patients with the conditions counted in the potentially avoidable conditions rehospitalization measure will appear to furnish good quality (with their relatively low potentially avoidable rehospitalization rates) but could appear to furnish poor quality by CMS’s measures. In sum, the publicly reported measures based on patient assessment information result in a systematic bias against facilities that treat patients with short stays, discharge their healthiest patients, or elect to treat medically complex patients (rather than transfer them to the hospital). Reflecting measurement concerns, CMS’s planned pay-for-performance demonstration will not use the delirium, pain, and pressure ulcer measures (Abt 2006).

Apart from requiring that SNFs conduct patient assessments at discharge on all patients, the Commission is not in a position to evaluate the technical aspects of potential revisions to the MDS-based measures. Rather, an expert panel should carefully consider the relevant literature and the reliability and validity of alternative definitions used in these measures. Proposed revisions to the MDS have undergone such scrutiny.

**Alternative post-acute quality measures could be publicly reported**

Because of the problems with the publicly reported post-acute care measures, MedPAC uses alternative measures of quality that are appropriate for SNF patients—rates of discharge to the community and rehospitalization for five conditions that were potentially avoidable (electrolyte imbalance, urinary tract infections, congestive heart failure, sepsis, and respiratory infection). Experts told us that these measures provide better information on whether patients benefit from SNF care than the currently reported measures (MedPAC 2005). The measures capture key outcomes for beneficiaries placed in SNFs: Most beneficiaries want to improve their functional abilities so they can return to the community and avoid unnecessary hospitalization. Both measures are broad based (they apply to all patients) and combine a focus on clinical quality and efficiency of resource use (avoiding unnecessary SNF or hospital care).

Both measures are also well-accepted measures of quality. Rehospitalization rates are used as quality measures in the post-acute and ambulatory care settings and are publicly reported for home health agencies on CMS’s Home Health Compare website. The five conditions made up more than three-quarters of SNF rehospitalizations and are thus broadly representative of readmissions. Further, by considering readmissions for conditions considered to be potentially avoidable, the SNF measure attempts to capture care (e.g., preventive measures, early detection, and prompt nursing interventions) that a SNF could provide to prevent unnecessary rehospitalizations (Donelan-McCall et al. 2006). Rates of community discharge are frequently used to evaluate rehabilitation care and have been associated with functional recovery as measured by a range of functional measures. Given that more than three-quarters of beneficiaries receive rehabilitation services, return to the community is a good measure of whether patients improved sufficiently to meet this goal.
To assess the technical aspects of these measures, the Commission sponsored research to assess the risk adjustment methodology, consider the number of cases needed for stable measures, and evaluate the time period captured by the measures (discussed on pp. 157–158). The contractors found that robust risk adjustment is possible with readily available data, that the measures are stable for the majority of SNFs (those with at least 25 cases a year), and that measures looking at 100 days after admission to a SNF are preferred to those that examine only 30 days after admission. We concluded that both quality measures are ready for public reporting.

Quality measures recommendation

On the basis of our examination of the rates of community discharge and rehospitalization, we conclude that the measures are ready for public reporting. The problems with the pain, delirium, and pressure sore measures currently used by CMS are widely acknowledged; these measures need to be revised so they are accurate. Without assessments conducted at admission and discharge, however, measures that accurately reflect the care furnished to all patients will not be possible.

Recommendation 2D-3

To improve quality measurement for skilled nursing facilities, the Secretary should:

- add the risk-adjusted rates of potentially avoidable rehospitalizations and community discharge to its publicly reported post-acute care quality measures;
- revise the pain, pressure ulcer, and delirium measures currently reported on CMS’s Nursing Home Compare website; and
- require skilled nursing facilities to conduct patient assessments at admission and discharge.

Rationale 2D-3

Currently, CMS has five quality indicators for SNF patient care, all of them limited. They do not focus on whether Medicare patients benefit from SNF care or whether the goals for a SNF patient’s care are achieved. Two measures—rehospitalization and community discharge—reflect key clinical goals for SNF patients and are currently available from administrative data. Experts have raised a host of problems associated with the pain, delirium, and pressure sore measures CMS currently reports that undermine the accuracy of the measures. Chief among the concerns is that the measures can include information about the preceding hospitalization and not the SNF stay. Patients need to be assessed at admission and discharge so that MDS-based measures will reflect the care furnished to all SNF patients. Fixed timing for when patients are assessed will also help ensure that the measures capture differences in quality and not the timing of assessments.

Implications 2D-3

Spending

- This recommendation does not affect federal program spending relative to current law.

Beneficiary and provider

- This recommendation is expected to support quality improvement efforts. It would increase provider administrative costs because it requires patient assessments to be conducted at discharge for every beneficiary. The administrative burden could be lowered by replacing the day 5 assessment with one completed at admission and by having the discharge assessment include only a few key items. CMS would incur modest administrative costs associated with adding the new measures to its publicly reported set and developing a pared-back instrument for use at discharge.
1 A new spell of illness begins when a beneficiary has not had a hospital or SNF stay for 60 consecutive days.

2 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.

3 Medicare’s conditions of participation relate to many aspects of staffing and care delivery in the facility 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.

4 Medicare Advantage plans do not submit claims to Medicare, so their volume is not captured in the volume or spending measures.

5 Volume and case-mix growth contributed more to spending increases than the reductions in FFS enrollment. Had FFS enrollment remained constant, spending per FFS enrollee would have been $588 in 2007.


7 In 2006 and 2007, the projected market baskets were 3.1 percent; in 2008, the market basket is 3.3 percent.

8 When the prospective payment system was first implemented, there were 44 case-mix groups and the nursing weights were calculated with data collected from time studies in volunteer facilities in 6 states in 1990, 1995, and 1997. When the RUGs were expanded to 53 groups, CMS regrouped the time-study observations into the 53 groups and recalibrated the nursing weights. For the therapy weights, the same weights for the 44 groups were used. For example, the two new “ultra high rehabilitation plus extensive services” groups have the same therapy weights as the three “ultra high rehabilitation” groups under the 44-group system, even though these groups used different amounts of therapy (MedPAC 2007b).

9 The 75 percent rule attempts to identify patients who need intensive rehabilitation services provided by IRFs. CMS established criteria (identifying 13 specific conditions) and requires that at least 75 percent of the patients treated by IRFs have one of those conditions. In 2004, CMS revised its criteria, removing the single largest category of IRF admissions (major joint replacements), having concluded that most joint replacement patients do not require IRF level of care. The Medicare, Medicaid, and SCHIP Extension Act of 2007 rolled back and permanently set the compliance threshold to 60 percent. It also put into law CMS’s discretionary policy allowing IRFs to count patients whose comorbidities (rather than primary diagnoses) were among the 13 conditions toward the compliance threshold.

10 The extensive services category includes patients who have received intravenous medications or suctioning in the past 14 days, have required a ventilator or respiratory or tracheostomy care, or have received intravenous feeding within the past 7 days.

11 The community discharge and potentially avoidable rehospitalization rates have been risk-adjusted using many resident-level factors including the presence of advance directives, the Barthel index (a measure of functional independence), the cognitive performance scale (a measure of cognitive impairment), select patient assessment items (e.g., bowel incontinence, indwelling catheter, feeding tube, parenteral or intravenous feeding), a weighted comorbidity index, select comorbid conditions (from the qualifying hospital stay), and length of stay of the qualifying hospitalization. Data for this risk adjustment methodology come from Medicare SNF and hospital claims, the MDS, and the Online Survey Certification and Reporting System (Kramer et al. 2008).

12 This analysis updates work that examined trends between 2000 and 2004 (MedPAC 2007a).

13 HUD’s Section 232/223(f) program insures mortgages through HUD-approved lenders for construction and rehabilitation of nursing homes and assisted living facilities that accommodate 20 or more residents.

14 A study of one chain’s facilities in California found that the facilities had more survey deficiencies and lower staffing levels than other facilities in the state (Kitchener et al. 2007).

15 Costs were adjusted for case mix using each facility’s nursing case-mix index.

16 These ranges compare the 10th and 90th percentiles of the distribution of the community discharge and rehospitalization rates.

17 The five conditions are electrolyte imbalance, urinary tract infections, congestive heart failure, sepsis, and respiratory infection. These conditions were selected because they have been found to be affected by nursing staff levels (and within
a facility’s control) and because the incidence is sufficiently high to result in stable measures. The risk-adjusted rehospitalization rate for the five conditions was developed for CMS specifically as a measure of SNF quality (Kramer and Fish 2001).

18 Studies dating back to 1990 have used community discharge as a measure for evaluating the rehabilitation and SNF processes of care (Donelan-McCall et al. 2006).

19 This section summarizes work done for MedPAC by researchers at the University of Colorado at Denver and Health Sciences Center (Donelan-McCall et al. 2006).

20 Examining such facilities’ scores separately would diminish any potential advantage they might have in using community discharge rates as a quality measure.

21 The risk-adjustment model includes many variables to adjust for patient differences in their ability to go home after their SNF stay—most importantly, functional and cognitive status. Long-stay nursing home patients are not excluded from these measures because identifying long-stay residents is not straightforward. The data in the SNF stay file are not accurate regarding whether a patient had been a long-term resident in a nursing home. Furthermore, patients admitted from nursing homes are not always long-stay residents and excluding them from the analysis would incorrectly exclude some patients. Last, some extended-stay nursing home residents go home after an acute event that results in a hospitalization and subsequent SNF admission.

22 A c-statistic measures how well a model predicts risk, with values ranging from 0.5 to 1.0 (where higher values mean better predictive ability). By comparison, the c-statistic for models predicting hospital mortality rates for coronary artery bypass graft are in the 0.7 range (Peterson et al. 2000).

23 Most stays not covered by Part A are also for Medicare beneficiaries who no longer qualify for skilled care or who have exhausted their part A stay benefit.

24 In 2003, about 4 percent of patients were assessed at or within three days of admission (MedPAC 2006).

25 Many questions in the patient assessment require the assessor to look back over various periods of time (e.g., 7 or 14 days) and consider a patient’s condition or services provided. As a result, the first assessment records many aspects of care that actually occurred during the prior hospital stay.

26 Studies dating back to 1990 have used community discharge as a measure for evaluating the rehabilitation and SNF processes of care (Donelan-McCall et al. 2006).
References


Home health services
The Congress should eliminate the update to payment rates for home health care services for calendar year 2009.
Home health services

Section summary

Data on home health access, quality, volume, and financial performance suggest that most agencies should be able to accommodate cost increases without increasing base payments. The Commission estimates that agencies will have average margins of 15.4 percent in 2006 and 11.4 percent in 2008.

Access to care and supply of facilities—As in previous years, beneficiaries continue to have widespread access to care. Ninety-nine percent of beneficiaries live in an area served by at least one home health agency (HHA), and 97 percent live in an area served by two or more agencies. The number of HHAs continues to grow, although at a slower pace than in previous years. The number of agencies increased by about 4 percent to about 9,200 agencies for the first 11 months of 2007. Annual growth in agencies continues to exceed the rate of growth in Medicare enrollees.

Volume of services—The share of fee-for-service beneficiaries using the home health benefit continues to increase, reaching 8.1 percent in 2006. The average number of episodes per home health user continues to increase. Episodes with 10 or more therapy visits accounted for most
of the new episodes in 2006, with much of this increase in volume likely
 driven by an influx of patients who would have been treated by inpatient
 rehabilitation facilities in previous years. Chapter 2F provides more detail on
 this issue.

 **Quality**—Quality trends are mostly unchanged from previous years.
 There have been slight increases in the number of beneficiaries who show
 improvement in walking, bathing, pain management, transferring, and
 medication management. However, the rate of unplanned emergency
department use by home health patients has not improved, and the number of
patients hospitalized has increased slightly.

 **Access to capital**—The continuing entry of new agencies and the acquisition
 of existing agencies by national home health companies suggest that
 agencies have adequate access to capital for growth.

 **Payments and costs**—Average agency margins are projected to be 11.4
 percent in 2008. Home health base rates will increase by about 0.25 percent
 in 2008, the net impact of the 3.0 percent market basket update required
 by law and a 2.75 percent reduction to the base rate for changes in coding
 practice. The annual increase in cost growth for 2006 is 2.7 percent, higher
 than in previous years but still below the rate of cost growth indicated by the
 home health market basket.

 Our evidence suggests that beneficiaries have adequate access to quality
 home health care. The number of agencies in the program continues to
 rise, the share of beneficiaries using the benefit continues to increase, and
 the margins indicate that HHAs’ payments significantly exceed their costs.
 Quality continues to show small improvements for most measures. These
 factors suggest that most agencies should be able to accommodate cost
 increases over the coming year without an increase in base payments.

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**Recommendation 2E**

The Congress should eliminate the update to payment rates for home health care services
for calendar year 2009.
What is home health and the home health payment system?

Medicare home health consists of skilled nursing, physical therapy, occupational therapy, speech therapy, aide service, 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 (temporary but not indefinite) skilled care to treat their illness or injury and must be unable to leave their homes without considerable effort. Medicare does not require beneficiaries to pay copayments or a deductible for home health services.

Medicare pays for home health care in 60-day episodes. Episodes begin when patients are admitted to home health care. Most patients complete their course of care and are discharged before 60 days have passed. If they do not complete their care within 60 days, another episode begins and Medicare will pay for another episode.

Agencies receive one payment per episode for home health services. Medicare adjusts this payment based on measures of patients’ clinical and functional severity and the use of therapy during the home health episode. Medicare also adjusts for differences in local wages using the prefloor, prereclassification hospital wage index. Medicare makes additional adjustments to some episodes under special circumstances:

- An outlier payment is triggered if the cost of an episode exceeds Medicare’s payments by a certain threshold.
- A low utilization payment adjustment makes a per visit payment if a patient receives four or fewer visits during an episode.
- A partial episode payment requires the initiating agency to split the payment for a patient who transfers from one agency to another during an episode.

An overview of the home health prospective payment system (PPS) is available online at http://medpac.gov/documents/MedPAC_Payment_Basics_07_HHA.pdf.

How has the home health benefit changed?

In the early 1990s, both the number of users and the amount of services they used grew rapidly. At the same time, the home health benefit increasingly began to resemble long-term care and to look less like the medical services of Medicare’s other post-acute care benefits (MedPAC 2005a).

The trends of the early 1990s prompted stricter enforcement of program integrity standards and refinements to benefit eligibility standards and culminated with replacement of the cost-based payment system of the mid-1990s with a PPS in 2000. Between 1997 and 2000, the number of beneficiaries using home health services fell by about one million, and the number of visits fell by 65 percent (Table 2E-1, p. 174). However, after PPS was implemented these trends reversed. The number of users and visits have increased since 2000; for example, the share of users increased from 7.4 percent of fee-for-service beneficiaries to 8.1 percent in 2006.

The amount and type of care provided to beneficiaries shifted under PPS. The average number of visits provided to each beneficiary fell from 73 in 1997 to 34 in 2006 (Table 2E-1). In addition, the mix of care changed. Home health aide visits fell from about 50 percent of total visits in 1997 to about 20 percent in 2006. The share of therapy visits increased. Home health users have fewer visits today and receive a higher skill mix than the services provided before PPS.

Assessing changes in care that occurred after PPS was implemented is difficult because this service lacks clear, practical guidelines to identify beneficiaries whose characteristics suggest they would benefit from receiving the service and what services they ought to receive. Numerous studies have found significant geographic variation in the delivery of health care services (Fisher et al. 2003). Home health spending is consistent with this trend (Figure 2E-1, p. 175). Expenditures in the highest spending regions exceed $1,200 per enrollee, while in the lowest spending regions, expenditures are less than $100 per enrollee.

The lack of definition in the home health benefit may play a role in this variation. Suggesting that more home health service is better and less is worse oversimplifies the case, as we have discussed in previous reports (MedPAC 2005b). Better information about which patients most benefit from home health care would be helpful. This broader perspective on home health policy is consistent with our goal for post-acute care: to base decisions about where beneficiaries receive post-acute care services on patient characteristics and resource needs.
How has home health spending changed?

Medicare spending for home health care has fluctuated significantly over the last 10 years, but recent years have seen steady growth. Between 1990 and 1997, spending for home health grew by 24 percent annually, raising concerns about the appropriateness of Medicare’s cost-based reimbursement for home health and fraud by some providers. At the peak in 1997, home health expenditures totaled $17.7 billion, and 3.6 million beneficiaries received services (Table 2E-1). The Balanced Budget Act of 1997 (BBA) included several provisions designed to temporarily reduce payment for home health services. These changes had a swift effect on the industry; by 2000, the number of agencies fell by 34 percent to 6,881 and the number of beneficiaries served fell by 31 percent. The BBA also mandated a PPS for the home health benefit, which began operation in October 2000. Under the PPS, payments have risen by about 9 percent a year. Between 2007 and 2016, Medicare home health spending is expected to grow by an average of 6.2 percent annually (OACT 2007).

The home health industry has achieved remarkable financial results under the PPS, even after several reductions to the home health update. In 2001 through 2005, legislative actions reduced the home health update by an average of 1 percent. In 2006, the market basket increase was eliminated entirely. In addition to these reductions, CMS implemented an adjustment required by the BBA that reduced payments by 7 percent in 2003. Despite these reductions, margins remained robust through the period, averaging 16 percent over the 2002–2005 period (Table 2E-2).

Changes to payment policy in 2008

Medicare will implement significant refinements to the home health PPS in 2008. The proposed changes are designed to make payments under the home health PPS more accurate. The home health benefit has changed

<table>
<thead>
<tr>
<th>TABLE 2E-1</th>
<th>Changes in home health spending, visits, and users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agencies</td>
<td>10,447</td>
</tr>
<tr>
<td>Total spending (in billions)</td>
<td>$17.7</td>
</tr>
<tr>
<td>Users (in millions)</td>
<td>3.6</td>
</tr>
<tr>
<td>Number of visits (in millions)</td>
<td>258</td>
</tr>
<tr>
<td>Visit type (percent of total)</td>
<td></td>
</tr>
<tr>
<td>Home health aide</td>
<td>48%</td>
</tr>
<tr>
<td>Skilled nursing</td>
<td>41</td>
</tr>
<tr>
<td>Therapy</td>
<td>10</td>
</tr>
<tr>
<td>Medical social services</td>
<td>1</td>
</tr>
<tr>
<td>Visits per user</td>
<td>73</td>
</tr>
<tr>
<td>Percent of fee-for-service beneficiaries who used home health</td>
<td>10.5%</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>TABLE 2E-2</th>
<th>Home health agency margins</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2002</td>
</tr>
<tr>
<td>All</td>
<td>17.1%</td>
</tr>
</tbody>
</table>

significantly since the advent of PPS, but the payment system’s resource groups and relative weights are based on data from 1997 and 1998. The changes include several major revisions. The new payment system:

- Revises and expands the patient classification system (home health resource groups (HHRGs)). CMS replaces the system of 80 HHRGs with a new system of 153 HHRGs. The new system bases payments on therapy use and an episode’s timing in a sequence of consecutive episodes. The HHRG–153 provides higher payments for third and subsequent episodes in a sequence of consecutive episodes; the higher payments for later episodes reflect the higher average number of visits these patients receive.
- Replaces the 10-visit therapy threshold. The new system eliminates the current threshold, which increases payments for episodes that have 10 or more therapy visits and will make gradual payment increases with more therapy visits. The HHRG–153 splits the range of therapy visits from 0 to 20 visits into nine thresholds and provides smaller increases among the thresholds.

These refinements modestly improve the accuracy of the PPS (see text box, p. 176).
How will the home health resource group 153 change payment accuracy?

MedPAC analyzed the accuracy of the new home health resource group (HHRG) 153 system in two ways: by examining the ratio of payments to costs and by examining the variation in the amount of services used by patients in the same HHRG. Payment-to-cost ratios that are close to or equal to 1.0 indicate that payments for an episode are near or equal to costs. However, we note that payment-to-cost ratios for home health care are generally much higher than 1.0 because home health payments substantially exceed costs.

The new HHRG–153 system will result in a more even distribution of payments relative to costs. We compared the payments for episodes with similar therapy visits and episode timing under the new and old systems. MedPAC computed the average payment and cost for each episode under the HHRG–80 and the new HHRG–153 system. Under the current system, the payment-to-cost ratios for episodes with similar service use range from 1.02 to 1.73. Under the new system, the range between the ratios is narrowed to 1.14 to 1.40. More uniform ratios reduce the differences in financial returns among different types of patients and reduce the provider’s financial incentive to favor some patients.

Reviewing variation in service use among the episodes within an HHRG allows us to determine whether episodes are appropriately grouped. The episodes assigned to an HHRG should have similar levels of resource use and should be similar in the number of visits provided. In prior reports, the Commission noted that service use varies widely within HHRGs. The Commission has expressed concern that the degree of within-group variation suggests the payment system is inappropriately grouping dissimilar episodes in the same resource group, which creates the potential for agencies to favor profitable patients within a group. To measure this variation, the Commission compared the coefficient of variation for the number of visits per episode, a measure of how episodes in an HHRG differ from the average episode. A lower coefficient indicates that the episodes within an HHRG are homogeneous—that is, they are relatively similar in the number of visits provided.

Analysis of the coefficient of variation found that the new system establishes a more internally homogeneous set of HHRGs. The new system has more resource groups and uses two dimensions of service use—the number of therapy visits provided and an episode sequence in a spell of consecutive home health episodes—to classify episodes. Consequently, it has less within-group variation in the number of visits provided. The average coefficient of variation for visits has fallen from 0.81 in the current system to 0.75 for the proposed system of HHRGs. The reduction in variation means the new resource groups are better at grouping episodes with similar resource use than the current system. The reduction in within-group variation reduces the potential for providers to select the least costly patients in a resource group.

The changes for therapy payments under the HHRG–153 will lead to a more appropriate distribution of payments. Under the previous system, Medicare made fixed additional payments for episodes that included 10 or more therapy visits. As the number of therapy visits varies significantly among episodes, a single threshold did not capture the incremental costs of therapy in many episodes. Also, this payment “notch” created a significant financial incentive for agencies to provide 10 visits, even if the beneficiary’s condition warranted more or less therapy. The new system implements a more gradual payment increase by dividing the range of therapy visits between 0 and 20 visits into 9 separate payment thresholds. These new thresholds redistribute funds from the episodes that are most profitable under the previous system, those with 10–13 therapy visits, to those that were less profitable under the original single-therapy threshold.
Are Medicare payments adequate in 2008?

Beneficiary access to care
In this section, we assess two questions:

• Do communities have providers?

• Do beneficiaries obtain care?

Most communities have more than one home health agency (HHA). In the 12 months preceding June 2007, 99 percent of all Medicare beneficiaries lived in an area served by at least one HHA; 97 percent of beneficiaries lived in areas served by two or more HHAs. These numbers suggest that no substantially populated areas of the country lack HHAs.

Our measure of access is based on data collected and maintained as part of CMS’s Home Health Compare database as of October 2007. The service areas listed in the database are postal ZIP codes where an agency provided service 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. On the other hand, this definition may underestimate access if HHAs are willing to serve certain ZIPs but did not receive any requests from those areas in the preceding 12 months.

The Office of Inspector General and Agency for Healthcare Research and Quality, through the Consumer Assessment of Healthcare Providers and Systems (CAHPS®) survey, have previously studied access to home health care (OIG 2006). Those studies generally found that most beneficiaries did not have difficulty accessing home health care. However, these agencies have not conducted recent studies of access to home health care. For example, the last CAHPS survey that included home health was for 2004. Updated studies would be useful to follow any changes in access.

Changes in the volume of services
The share of fee-for-service beneficiaries using home health care has increased since 2002. The total number of users decreased in 2006, but this is largely due to a significant number of beneficiaries moving to Medicare Advantage. The number of users grew at a rate of 5.6 percent annually from 2002 to 2005, but fell by 0.4 percent in 2006 (Table 2E-3, p. 178). However, the total number of fee-for-service beneficiaries declined by 2.5 percent in 2006 as more beneficiaries enrolled in Medicare Advantage. As a result, the share of beneficiaries in fee-for-service who used home health care actually increased from 8.0 percent in 2005 to 8.1 percent in 2006.

Despite a decrease in the total number of users due to shifts to Medicare Advantage, the rate of fee-for-service beneficiaries using home health care and their episode volume have continued to increase. The number of episodes per fee-for-service beneficiary increased by 4 percent and the episodes per user increased by about 2 percent in 2006. Home health episode growth slowed in 2006, again consistent with the shift of beneficiaries to Medicare Advantage plans. Between 2002 and 2005, the number of episodes grew by about 8 percent a year. This growth fell to 1.7 percent in 2006.

The total number of home health visits has started to increase over the last several years. At the peak in 1997, agencies furnished 73 visits per beneficiary using home health care (Table 2E-1, p. 174). This number declined to a low of 30 visits per user in 2002 but has grown to 34 visits in 2006. The two drivers of this recent increase in visits are growth in the number of visits per episode and growth in the number of episodes per user.

Volume under the PPS has shifted to include a higher share of episodes with 10 or more rehabilitation visits, with the share of these cases rising from 24 percent in 2002 to 28 percent in 2006. The Commission noted in the past that episodes that meet the threshold for additional payment for therapy services—episodes with 10 or more visits—are paid significantly more than nontherapy episodes and are more profitable for providers (MedPAC 2007). Between 2002 and 2005, these types of episodes grew at about 13 percent annually, twice the rate of episodes with fewer than 10 therapy visits.

The difference in the growth rate became even more significant in 2006, and for the first time therapy-intensive episodes constituted the majority of new episodes. The annual growth of episodes with 10 or more visits was 4.2 percent in 2006, six times the rate of growth for episodes that were not therapy intensive. Because of this higher rate of growth, therapy-intensive episodes constituted about 70 percent of new episodes.

The growth in the number of therapy-intensive patients coincides with changes in the types of patients served by inpatient rehabilitation facilities (IRFs). The overall impact on patient severity from the response to changes in IRF policy is small. In 2004, the threshold for qualifying as an IRF was tightened, and to comply, IRFs have changed
the types of patients they serve. Apparently, many patients previously served by IRFs now use home health care instead (see Chapter 2F on IRFs). However, all new home health therapy episodes constituted only 1.1 percent of volume in 2006.

**Changes in quality**

Medicare uses the Outcome and Assessment Information Set (OASIS) to measure patients’ clinical severity and functional limitations at the beginning and end of an episode of home health care. This assessment tool allows HHAs to track their patients’ outcomes and to change their use of resources, care planning, and other processes to improve their services. CMS also uses OASIS to produce reports for agencies’ quality improvement efforts and publishes OASIS-based quality information to help consumers choose high-quality providers.

The quality measures in Table 2E-4 are the items Medicare reports from OASIS to the public. The first five rows show the percent of patients who improved as a percentage of the total number who were admitted with some level of limitation for each time period; increases indicate improving quality. The final two rows display the percentage of patients who used the hospital or the emergency room while under the care of an HHA. For these measures, lower scores suggest better care.

These quality indicators are risk adjusted to account for patients’ diagnoses, comorbidities, and functional limitations. Thus, to the extent possible, the improvements reflect small increases in the quality of care from HHAs rather than changes in patient characteristics. While there have been slight gains in quality for most measures, there have been no decreases in the rate at which beneficiaries visit the emergency room and there was a 1 point increase in the rate of hospital admissions in 2007.

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**Table 2E-3**

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>FFS beneficiaries (in millions)</td>
<td>34.9</td>
<td>35.8</td>
<td>36.3</td>
<td>36.6</td>
<td>35.7</td>
<td>1.6%</td>
<td>-2.5%</td>
</tr>
<tr>
<td>Home health users (in millions)</td>
<td>2.5</td>
<td>2.6</td>
<td>2.8</td>
<td>2.9</td>
<td>2.9</td>
<td>5.6%</td>
<td>-0.4%</td>
</tr>
<tr>
<td>Share of FFS beneficiaries who used home health</td>
<td>7.1%</td>
<td>7.3%</td>
<td>7.6%</td>
<td>8.0%</td>
<td>8.1%</td>
<td>3.9%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Total spending (in billions)</td>
<td>$9.3</td>
<td>$9.7</td>
<td>$11.0</td>
<td>$12.5</td>
<td>$13.2</td>
<td>10.2%</td>
<td>5.7%</td>
</tr>
<tr>
<td>Payments per:</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FFS beneficiary</td>
<td>$267</td>
<td>$272</td>
<td>$303</td>
<td>$340</td>
<td>$369</td>
<td>8.4%</td>
<td>8.4%</td>
</tr>
<tr>
<td>Home health user</td>
<td>$3,753</td>
<td>$3,704</td>
<td>$3,975</td>
<td>$4,266</td>
<td>$4,527</td>
<td>4.4%</td>
<td>6.1%</td>
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<tr>
<td>Episodes by type: (in millions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 10 therapy visits</td>
<td>3.1</td>
<td>3.2</td>
<td>3.4</td>
<td>3.7</td>
<td>3.7</td>
<td>6.2%</td>
<td>0.7%</td>
</tr>
<tr>
<td>10 or more therapy visits</td>
<td>1.0</td>
<td>1.1</td>
<td>1.2</td>
<td>1.4</td>
<td>1.4</td>
<td>12.9%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Total</td>
<td>4.0</td>
<td>4.3</td>
<td>4.7</td>
<td>5.1</td>
<td>5.1</td>
<td>7.9%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Episodes per:</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FFS beneficiary</td>
<td>0.12</td>
<td>0.12</td>
<td>0.13</td>
<td>0.14</td>
<td>0.14</td>
<td>6.2%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Home health user</td>
<td>1.62</td>
<td>1.64</td>
<td>1.68</td>
<td>1.73</td>
<td>1.76</td>
<td>2.2%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Average payment per episode</td>
<td>$2,317</td>
<td>$2,256</td>
<td>$2,361</td>
<td>$2,470</td>
<td>$2,569</td>
<td>2.2%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Share of episodes with 10 or more therapy visits</td>
<td>24%</td>
<td>25%</td>
<td>26%</td>
<td>27%</td>
<td>28%</td>
<td>4.7%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

**Note:** FFS (fee-for-service).

In 2006, we convened an expert panel to consider process measures of home health quality. We determined that additional measures for wound care and falls in the home would contribute to quality measurement. CMS will add a measure for wound care in 2008 and is developing a measure for falls. These new measures will provide useful information for conditions that are common among home health users. In 2008, CMS implemented a demonstration to test a pay-for-performance incentive (see text box, p. 180).

**Changes in the supply of agencies**

The number of agencies has increased significantly since PPS was implemented in 2001 (Table 2E-5). In 2002, 6,878 agencies participated in Medicare; by 2006, the number of agencies had increased by about 30 percent to 8,868. This growth was faster than the growth in the number of beneficiaries. For example, for every 10,000 beneficiaries in 2002 there were 1.9 HHAs, and by 2006 there were 2.4 agencies for every 10,000 beneficiaries, an increase of 22 percent.

Trends in provider growth reflect patterns in the entry and exit of providers, or the net growth. Variation among states in this net growth is significant, with some states seeing little or no change and others experiencing significant increases or decreases in the number of agencies. Between 2002 and 2006, 60 percent of the gain in the number of agencies occurred in Florida and Texas. Between 2002 and 2005, the six fastest growing states gained an average of 272 providers (MedPAC 2007). However, not all states experienced growth during this period. For example, Minnesota and Montana experienced declines. The number of agencies in Montana fell by 25 percent, while the number in Minnesota declined by 6 percent. It

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**Table 2E-4**

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
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</tr>
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<tbody>
<tr>
<td><strong>Functional/Pain measures (higher is better)</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Improvements in:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walking</td>
<td>34%</td>
<td>36%</td>
<td>38%</td>
<td>40%</td>
<td>42%</td>
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<tr>
<td>Getting out of bed</td>
<td>49</td>
<td>51</td>
<td>52</td>
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<tr>
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<td>57</td>
<td>60</td>
<td>61</td>
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<td>Managing oral medications</td>
<td>35</td>
<td>38</td>
<td>39</td>
<td>41</td>
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</tr>
<tr>
<td>Patients have less pain</td>
<td>57</td>
<td>59</td>
<td>61</td>
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<td><strong>Adverse event measures (lower is better)</strong></td>
<td></td>
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<td></td>
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<tr>
<td>Any hospital admission</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>29</td>
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<tr>
<td>Any unplanned emergency room use</td>
<td>21</td>
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**Table 2E-5**

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<tbody>
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<td>Number of agencies</td>
<td>6,878</td>
<td>7,223</td>
<td>7,710</td>
<td>8,218</td>
<td>8,868</td>
<td>6.1%</td>
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<td>Number of agencies per 10,000 beneficiaries</td>
<td>1.9</td>
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<td>2.1</td>
<td>2.2</td>
<td>2.4</td>
<td>4.2</td>
<td>8.0</td>
</tr>
</tbody>
</table>

Note: 2007 count will be added after year closes.

Source: CMS’s Providing Data Quickly database.
Medicare started a home health pay-for-performance demonstration in January 2008. Providers in seven states will have the option of participating in the demonstration. They will be evaluated on seven measures from the Home Health Compare measure set. Agencies that volunteer will be assigned to an experimental group or a control group. For those assigned to the experimental group, agencies in the top 20 percent of performance and 10 percent of improvement will be eligible for an incentive payment. The control group will serve as a comparison to allow CMS to compare differences in cost and quality between agencies that are and are not eligible for the incentive.

MedPAC has recommended that Medicare implement a home health pay-for-performance program, and in our June 2007 report we offered an example of a possible framework. The Commission noted that a pay-for-performance program should include the following elements:

• Reward providers for achieving high quality and also reward those who significantly improve in the quality they deliver. This principle seeks to encourage as many providers as possible to improve, regardless of their overall level of improvement.

• The incentive should be a small portion of the current payment, 1 percent or 2 percent. The Commission determined that the purpose of the reward is to change the incentives in the payment system and not to increase the overall level of reimbursement. As the program gains more experience with performance incentives, the size of the incentive should increase.

• Distribute all payments that are set aside for performance incentives.

• The pay-for-performance system should be designed in collaboration with other purchasers and apply the lessons learned from the program and other health care payers. The program should be evaluated regularly and incorporate new information about health care quality and the program’s effectiveness.

• Pay-for-performance incentives should not increase total spending. The goal should be to shift the incentives for payment and not to increase payment amounts.

CMS’s demonstration is an interim step in the development of a pay-for-performance system for home health care. In several aspects, the demonstration is consistent with the elements of the Commission principles. For example, the demonstration will reward both attainment and improvement. In addition, the demonstration relies on measures that providers already use and report.

The framework in our June 2007 report differed in several key aspects (MedPAC 2007):

• Use of composite measures. CMS’s demonstration will evaluate agencies on each of seven different measures. Our analysis found that composite measures, which can aggregate a multitude of performance measures across a patient or an agency, provide a more complete picture of agency performance. Any single measure of quality will apply to only a subset of providers, patients, and quality traits. Aggregating performance measures into a composite score ensures that the quality measures are broadly applicable for a range of patients and agencies.

• Risk adjustment. CMS is relying on the risk adjustment used for Home Health Compare to
Concerns about the rapid growth in home health in certain areas led CMS to launch a demonstration to identify fraudulent providers in October 2007. Agencies in Los Angeles, California, and Houston, Texas, will be subject to additional review, including submitting ownership information and a special survey of their operations by CMS's capacity measure because many HHAs use contracted therapists, aides, and nurses to meet their patients’ needs. The total number of agencies provides some indication about the availability of home health services but must be considered with other factors that describe access such as the number of beneficiaries served or episodes delivered.
Home health services: Assessing payment adequacy and updating payments

state regulators. CMS selected these areas after observing significant increases in the number of agencies and spending there. CMS will conduct the demonstration for two years, and if the techniques succeed in identifying fraudulent providers, the demonstration may expand to other areas.

How did agency participation change in 2007?
The growth in HHAs in 2007 was smaller than in prior years, with a net gain of about 410 new agencies—or a growth of about 4.6 percent. Policy changes for survey and certification and payments may play a role, but even with this slowdown the total number of agencies reached 9,289 in 2007.

Most agencies use the Medicare survey and certification process to gain the accreditation necessary to participate in Medicare. Under this process, state survey agencies visit a new agency to determine whether it meets Medicare’s conditions of participation. Once an agency has satisfactorily completed this process and met state licensing requirements, it may begin to receive payment from Medicare. The increase in new providers has strained resources available to the states for certifying new agencies and some have fallen behind in the recertifications of existing agencies they must also conduct. CMS has instructed agencies to focus their efforts on responding to complaints and recertifications; consequently, some states, including Texas, are not certifying new agencies. Agencies that wish to be certified have an alternative to the state process; they may use one of the independent certification agencies such as the Joint Commission or the Community Health Accreditation Program.

Implementation of the new HHRG–153 system and the adjustment for coding improvements (discussed later) may have slowed the number of new entrants. These policies will change the distribution and level of payments for agencies. Some providers may wish to see the effects of these changes before they decide to begin offering Medicare services. It is also possible that the decrease in the number of fee-for-service beneficiaries may be a factor slowing the entry of new agencies, as the home health industry contends that reimbursement for beneficiaries enrolled in Medicare Advantage plans is inadequate.

Home health agencies’ access to capital
Few HHAs access capital through publicly traded shares or public debt. 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. Investor analyses of the leading publicly traded companies are limited indicators of the general industry. Medicare home health care has a small share of the entire “home care” market that investors analyze, which includes nonskilled Medicaid and private duty nursing, nurse staffing services, home infusion, and home oxygen services. Also, publicly traded companies are a small portion of the total number of agencies in the industry.

Since most new HHAs are not owned by publicly traded companies, the data on provider entry provides insight on the access to capital for the privately held agencies. In 2007, about 520 new HHAs entered the program and about 95 percent of them are for profit. The entry of new for-profit agencies suggests that the home health industry has access to capital.

While most HHAs are independently operated or part of a small chain of local or regional agencies, many of the larger publicly traded companies are acquiring established agencies. Purchasing established agencies allows firms to enter new markets with an established referral base in the local market as well as the staffing and other infrastructure for delivering services. One estimate suggests that three of the largest publicly traded Medicare home health companies—Gentiva, Amedisys, and LHC—acquired 165 agencies in 2006 (Deutsche Bank 2007). Consolidation activity is expected to continue, as currently the largest publicly traded firms own less than 10 percent of the HHAs participating in Medicare. Like the overall growth in agencies, these acquisitions suggest that publicly traded firms have adequate access to capital.

Payments and costs for 2008
In addressing payment adequacy, the Commission also considers the relationship between Medicare payments and costs in 2008. MedPAC evaluates provider financial performance by examining the cost information reported by HHAs on Medicare cost reports. The Commission’s goal is for payments to be adequate for efficient providers. In making our update recommendation, we focus on the freestanding providers because they are the majority of providers and because they do not reflect the impact of the allocation of overhead costs from the hospital. Our model of HHA margins is based on data from about 4,840 freestanding HHAs.

Our estimated margin for freestanding HHAs is 15.4 percent in 2006. Like previous years, margins generally
vary depending on the number of episodes provided. Agencies in the highest volume quintile had an average margin of 9.2 percent, while those in the lowest had an average margin of 16.7 percent (Table 2E-6).

Hospital-based HHAs have higher costs in part because hospitals allocate hospital-wide overhead costs to the home health provider; if this cost allocation did not exist, the hospital-based margin would be higher. Furthermore, no patient or other economic characteristics of hospital-based HHAs explain these higher costs. Hospital-based providers report higher costs per episode but provide fewer visits per episode than freestanding providers. Hospital-based providers also have a lower case mix, which suggests that they serve less costly patients. Finally, hospital-based and freestanding providers deliver care in the same setting—the beneficiary’s home—so the differences we see in costs are not due to different settings. Hospital-based HHAs had a margin of –4.9 percent in 2006.

**Projecting margins for 2008**

In modeling 2008 payments and costs, we incorporate policy changes that went into effect between the year of our most recent data, 2006, and the year of margin projection, 2008, as well as those changes scheduled to be in effect in 2009. The major changes, including those discussed previously, are:

- **Implementation of the revised system of HHRGs.** The new system of resource groups redistributes payments, so it is budget neutral. However, in our modeling of margins for 2008 we assume, consistent with past experience, some changes in agency coding practices that increase payment.

- **Impact of case-mix adjustment.** CMS plans to reduce payments in 2008–2011 to correct for an increase in case mix not attributable to patient severity that occurred between 1999 and 2005 (see discussion in next section). The reduction will lower payments by 2.75 percent in 2008–2010 and by 2.71 percent in 2011. Our modeling assumes planned reductions of 2.75 percent per year in 2008 and 2009.

- **Market basket.** By statute, HHAs will receive a full market basket increase of 3.0 percent in 2008. The net increase will be 0.25 percent with the reduction for the case-mix adjustment.

With these policies and the changes discussed below, we estimate that HHAs will have margins of 11.4 percent in 2008.

**Changes in coding practice for 2008 and 2009**

The home health PPS, like the other payment systems, relies on the relationship between a patient’s conditions and resource use to set payments. For a patient with a range of conditions that do and do not affect payment, PPS creates an incentive for providers to always code those conditions that affect payment and be less detailed with coding conditions that do not affect payment. A consequence of this incentive is that coding practices may change when the conditions that affect payment are modified. These changes in coding practice will likely result in increased reporting of conditions that raise payments; as a result, aggregate payments will increase.

Recent analysis of historical coding trends indicates that changes in coding practice since the PPS was

| TABLE 2E-6 | Margins for freestanding home health agencies |
|---|---|---|---|
| All | 17.3% | 15.4% | 100% |
| Geography | | | |
| Urban | 16.5 | 14.6 | 62 |
| Mixed | 18.7 | 17.2 | 21 |
| Rural | 14.1 | 14.3 | 17 |
| Type of control | | | |
| For profit | 19.2 | 17.4 | 77 |
| Nonprofit | 13.8 | 11.6 | 15 |
| Government | 8.5 | 3.6 | 8 |
| Volume quintile | | | |
| First | 12.7 | 9.2 | 20 |
| Second | 13.5 | 11.0 | 20 |
| Third | 13.3 | 10.6 | 20 |
| Fourth | 17.4 | 15.4 | 20 |
| Fifth | 18.6 | 16.7 | 20 |

Note: Government-owned providers operate in a different context from other providers, so their margins are not necessarily comparable.

implemented have increased case mix. CMS analyzed claims from 2000–2005 and found that changes in coding practices increased case mix by 11.78 percentage points. Consequently, the 2005 overall case mix overstated the severity of home health patients. As noted earlier, CMS is lowering payments in 2008 through 2011 to account for the impact of the overstated case mix.

Implementation of the HHRG–153 system presents a substantial opportunity for change in coding in 2008 and subsequent years. For example, the number of diagnostic conditions that affect payment is expanding from 4 categories to 22. CMS has not proposed a payment adjustment for future coding changes, so aggregate payments will likely increase from agencies adjusting to the new system. Consequently, our estimate assumes that agencies will change their coding practices under the new HHRG–153 in 2008. Based on CMS’s estimate of coding change that occurred in 2000–2005, we assume that changes in coding practice will raise payments by 1.6 percent in 2008 and 2009.

**Growth in cost per episode**

Since 2001, the average rate of annual cost growth has been significantly lower than the level of inflation indicated by the home health market basket. Between 2002 and 2005, the increase in growth averaged about 1.1 percent a year, significantly lower than the market basket, which averaged 3.3 percent over that period. This phenomenon appears to be diminishing and agencies are beginning to see a rate of cost growth that is higher than in previous years but still lower than most other providers. In 2005, costs increased by 1.6 percent and in 2006 cost growth reached 2.7 percent. Analysis of the cost reports suggests that the costs were increasing across all categories (e.g., labor, transportation) that agencies report and were not attributable to any single area.

**How should Medicare payments change in 2009?**

The evidence suggests that payments for home health care are adequate to provide access to quality care.

**Recommendation 2E**

The Congress should eliminate the update to payment rates for home health care services for calendar year 2009.

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**Rationale 2E**

Our evidence suggests that beneficiaries have adequate access to quality home health care. The number of agencies in the program continues to rise, the share of beneficiaries using the benefit continues to increase, and the margins indicate that HHAs’ payments significantly exceed their costs. Quality continues to show small improvements for most measures. These factors suggest that most agencies should be able to accommodate cost increases over the coming year without an increase in base payments.

**Implications 2E**

**Spending**

- This recommendation decreases federal program spending relative to current law by between $250 million and $750 million in 2009 and between $1 billion and $5 billion over five years.

**Beneficiary and provider**

- No adverse impacts are expected. This recommendation is not expected to affect beneficiary access to care or providers’ ability to provide care.

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**Future refinements to the home health PPS**

The new refinements modestly improve the home health PPS’s accuracy, but additional work is needed to improve the accuracy of the system. On average, payments substantially exceed costs for most services, and significant variation exists within resource groups in the new system.

Therapy services have become a major driver of episode volume and payment growth in the PPS. The HHRG–153 will reduce the payment distortions associated with a single threshold, so payment increases for additional therapy visits will now be more gradual. However, it will not address the disparity in payment-to-cost ratios between episodes that receive little or no therapy and episodes that receive significant therapy. Even under the new HHRG–153 system, our modeling indicates that episodes with little or no therapy will be less profitable than those with 6 or more therapy visits. Although the increase is more gradual under the new system, it begins increasing payment for therapy at 6 visits compared with 10 for the current system. The higher payments for therapy-intensive cases, coupled with the lower threshold for additional
payment, suggests that significant incentives for additional therapy visits will remain, if not expand, under the new system. Addressing the disparity in financial margins between therapy and nontherapy patients will make these two classes of patients equally attractive to providers.

The current rate-setting methodology assumes that labor costs for a given discipline are constant across the continuum of patient severity. However, many HHAs employ a range of practitioners with different levels of expertise and wages, from aides to nurses with advanced clinical training. Patients with a higher clinical severity may require more specialized care with higher labor costs than other patients. However, the home health cost report does not collect these data. Expanded information on the home health cost report about the mix of labor that agencies employ would make it possible to analyze differences in skill mix and labor costs among HHAs. Differences in labor mix may account for some of the broad variation we observe in provider costs. Future refinements in the home health PPS should consider how these variations affect cost and total resource use.

MedPAC’s statutory mandate requires that it consider the adequacy of Medicare payment for efficient providers. Ensuring that payments are not significantly higher than costs for an efficient provider is critical to the cost discipline of a PPS. If base payments significantly exceed provider costs, improving other aspects of the payment system, such as relative weights, will not resolve this problem. As noted earlier, the home health industry has achieved double-digit margins since the implementation of PPS. The recently announced 11.78 percent reduction for HHAs will significantly reduce these margins, but our analysis for 2008, which includes the policy changes for 2009, suggests that substantial profits remain for this period. If CMS maintains its current policy, and the recent increase in cost trends persists, it is possible that margins may come down to levels that are similar to those of other providers. If so, our future analysis of payment adequacy will capture this trend. ■
Endnotes

1 For this analysis MedPAC used a sample of claims, the Outcome Assessment Information Set, and cost reports for freestanding providers from 2003.

2 MedPAC has noted the risk adjustment for Home Health Compare may not be adequately adjusting for the differences in severity between the caseloads of individual HHAs. The comparison in this chapter focuses on national level data, and in this case the risk adjustment is accounting for aggregate changes in the population.

3 About 521 new agencies entered Medicare in 2007, and about 99 have exited.

4 The home health case-mix system needs improvement and may not always accurately measure patient severity. It is not clear how these inaccuracies bias the comparison of hospital-based and freestanding home health providers. However, the case mix is the indicator of severity the home health PPS relies on and offers insight into how the program views the severity of patients in each setting.

5 The financial performance of hospital-based HHAs is included in MedPAC’s assessment of payment adequacy for hospitals (Chapter 2A).

6 MedPAC includes planned policy changes for 2009 to assess their impact on provider margins.
References


Inpatient rehabilitation facility services
The update to the payment rates for inpatient rehabilitation facility services should be eliminated for fiscal year 2009.

COMMISSIONER VOTES: YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1
Inpatient rehabilitation facility services

Section summary

In this section, we present information on hospitals and units within hospitals that provide intensive inpatient rehabilitation services—including physical, occupational, and speech therapy. Beneficiaries must be able to tolerate and benefit from three hours of therapy per day to be eligible for treatment in a rehabilitation hospital or unit, also called inpatient rehabilitation facilities (IRFs). Medicare is the principal payer for IRF services, accounting for about 70 percent of discharges. Medicare expenditures for inpatient rehabilitation services have declined from $6.4 billion in 2005 to about $6.0 billion in 2006. Medicare spending for IRF services is projected to be $5.5 billion in each fiscal year from 2007 to 2009 and then will begin to increase as Medicare enrollment increases.

With the beginning of the IRF prospective payment system (PPS) in 2002, mandated by the Balanced Budget Act of 1997, the number of facilities, volume of cases, and costs and payments per case increased. In 2004, CMS found that very few IRFs met the Medicare requirement that 75 percent of patients must present with 1 of 10 (later changed to 13)
clinical conditions requiring rehabilitation, the so-called “75 percent rule.” As a result, CMS published a rule that phased in the compliance threshold over four years to 75 percent, which would have been fully implemented on July 1, 2008. This change in policy is the principal reason the volume of patients admitted to IRFs declined in 2005 and 2006. In December 2007, the Congress rolled back the 75 percent rule, setting the compliance threshold permanently at 60 percent, in one of several provisions of the Medicare, Medicaid, and SCHIP Extension Act of 2007 addressing IRFs.

We examined a variety of data in assessing the adequacy of Medicare’s payments for IRF services. Most data pertain to 2006, the second year of the transition to the revised 75 percent rule. The factors we examined are:

- **Supply of facilities**—The supply of IRFs increased after implementation of the PPS at 1.6 percent per year from 2002 to 2004 and has remained stable through 2006. A decline in the number of urban IRFs between 2004 and 2006 was nearly offset by an increase in the number of rural IRFs. The number of for-profit IRFs grew faster than nonprofit IRFs after the PPS was implemented and even faster from 2004 to 2005, but declined in 2006.

- **Volume of services and beneficiaries’ access to care**—Medicare IRF cases increased by more than 6 percent per year from 2002 to 2004 but decreased by 10 percent per year, on average, between 2004 and 2006. The patients treated by IRFs in 2006 and 2007 were more complex than those who shifted to alternative settings. These increases in case mix are consistent with implementation of the 75 percent rule. While we have no direct measures of beneficiaries’ access to care, an assessment of hospital discharge patterns to post-acute care suggests that beneficiaries who no longer qualify for admission to IRFs as a result of the 75 percent rule are able to obtain rehabilitation care in other settings.

- **Quality**—Although the case mix of Medicare IRF patients increased considerably between 2004 and 2007, quality indicators for Medicare
IRF patients improved. We measure quality using the change in Functional Independence Measure™ scores reported on the Inpatient Rehabilitation Facility–Patient Assessment Instrument between admission and discharge; a higher score indicates greater improvement. All patients increased their functioning from admission to discharge, from 22.8 in 2004 to 23.8 in 2007. The subset of Medicare patients who were discharged home increased functioning between admission and discharge from 25.0 in 2004 to 27.5 in 2007.

- **Access to capital**—Hospital-based units represent more than 80 percent of IRFs. These IRFs have access to capital through their parent institutions, as evidenced by hospitals’ current ability to obtain capital as we describe in Section 2A. However, freestanding IRFs’ access to capital is less clear.

- **Payments and costs**—With the introduction of the IRF PPS in 2002, payments per case rose rapidly, while growth in costs per case remained low in 2002 and 2003. Implementation of the revised 75 percent rule resulted in growth in costs per case accelerating between 2004 and 2006 as case mix increased and the volume of cases declined. IRF Medicare margins for 2006 are 12.4 percent. We are projecting IRF Medicare margins for 2008 to be 8.4 percent.

As was the case last year, our recommendation for the IRF payment update attempts to balance beneficiary access to care with fiscal constraint. We believe that Medicare beneficiaries’ access to hospital-level rehabilitation care is adequate, as evidenced by the number of IRFs and IRF beds. While the 75 percent rule has had significant impacts on IRF volume, this decline was consistent with the overall policy goal of the rule—to direct the most clinically appropriate cases to this costly setting. Beneficiaries with conditions not included in the 75 percent rule are obtaining care in alternative settings. However, it is difficult to compare rehabilitative care quality and outcomes among post-acute care settings, so we do not know whether less-intensive facilities are providing the same care available in IRFs. Measures of quality continue to show improvement for patients who
receive care in IRFs. Access to capital is mixed, with hospital-based IRFs having good access to capital, but with freestanding IRFs perhaps having difficulty. IRFs had begun to adapt to existence under the 75 percent rule by changing their admissions patterns, with growth in cost per Medicare case now slightly lower than the growth in Medicare payments for most IRFs. Our projected 2008 margin is 8.4 percent. We believe this margin should be sufficient to accommodate cost increases in 2009. On the basis of these analyses, we recommend eliminating the update to payment rates for inpatient rehabilitation services for fiscal year 2009. We will closely monitor indicators within our update framework and will be able to reassess our recommendation for the IRF payment update in the next fiscal year.

Recommendation 2F

The update to the payment rates for inpatient rehabilitation facility services should be eliminated for fiscal year 2009.

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

After an illness, injury, or surgery, some patients receive intensive inpatient rehabilitation services—including services such as physical, occupational, or speech therapy—in a specialized hospital or hospital-based unit known as an inpatient rehabilitation facility (IRF). Relatively few Medicare beneficiaries use these services because they must generally be able to tolerate and benefit from three hours of therapy per day to be eligible for treatment. IRFs may be freestanding hospitals or specialized, hospital-based units.

Medicare is the principal payer for IRF services, accounting for about 70 percent of discharges. About 369,000 beneficiaries received care in IRFs in 2006. Medicare expenditures on inpatient rehabilitation services were $6.0 billion in 2006, down from $6.4 billion in the prior fiscal year.

To qualify as an IRF for Medicare payment, facilities must meet the Medicare conditions of participation for acute care hospitals. They also must meet the following additional conditions:

- have a preadmission screening process to determine that each prospective patient is likely to benefit significantly from an intensive inpatient rehabilitation program;
- use a coordinated multidisciplinary team approach that includes rehabilitation nursing, physical and occupational therapists, and speech–language pathologists;
- have a director of rehabilitation, with training or experience in rehabilitating patients, who provides services in the facility on a full-time basis; and
- for each year, have no fewer than 60 percent of all patients admitted with a primary diagnosis or a comorbidity in 1 or more of 13 conditions, such as stroke or hip fracture. This requirement was previously on a phased-in trajectory to require that 75 percent of IRF patients meet these criteria and has thus been referred to as the “75 percent rule” (see discussion of the 75 percent rule in the text box, pp. 196–197).

Before January 2002, IRFs were paid under the Tax Equity and Fiscal Responsibility Act of 1982, on the basis of their average costs per discharge, up to an annually adjusted facility-specific limit. In January 2002, IRFs began to be paid predetermined per discharge rates based primarily on patient characteristics, the facility’s wage index, and facility characteristics. As of 2004, all IRFs are paid under the prospective payment system (PPS).

**Are Medicare payments adequate in 2008?**

We examine the following factors in determining the adequacy of Medicare payments to IRFs:

- supply of facilities;
- volume of services and beneficiaries’ access to care;
- quality;
- access to capital; and
- payments and costs, focusing in particular on the costs incurred by efficient providers, pursuant to a specific mandate of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003.

Our indicators of Medicare payment adequacy are mixed. The number of IRFs increased after the PPS was implemented; the total number of IRFs has since remained stable from 2004 to 2006, with declines in the number of urban facilities being generally offset by increases in rural IRFs. The number of hospital-based IRFs declined slightly between 2005 and 2006, while the number of freestanding providers remained constant. After the PPS began, the volume of cases and Medicare spending grew rapidly, with both cases and spending per case increasing by about 6.5 percent annually during this time. From 2004 to 2005, the volume of cases dropped, although spending increased, consistent with the increase in patient complexity. We have no direct indicators of beneficiaries’ access to care because there are no surveys specific to this population and because some patients who could potentially receive care in IRFs can be treated in other settings. Quality indicators for all IRF patients and patients discharged home improved slightly from 2004 to 2007. IRFs’ access to capital is mixed: Hospital-based units have access through their parent institution, but freestanding IRFs may have difficulty raising capital.
The 75 percent rule for inpatient rehabilitation facilities

The intent of the 75 percent rule is to ensure that inpatient rehabilitation facilities (IRFs) are unique compared with other hospitals. For 20 years, from 1984 to 2004, the diagnoses included in the 75 percent rule were the same and were known as the Health Care Financing Administration-10 (HCFA–10) (Figure 2F–1). In 2002, CMS discovered that fiscal intermediaries were using inconsistent methods to enforce the 75 percent rule. As a result, CMS suspended enforcement of the rule until the agency could examine it and determine whether the regulation should be modified.

**FIGURE 2F–1**

*Change in the inpatient rehabilitation facility criteria*

<table>
<thead>
<tr>
<th>Old HCFA–10 conditions</th>
<th>New CMS–13 conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stroke</td>
<td>1. Stroke</td>
</tr>
<tr>
<td>2. Brain injury</td>
<td>2. Brain injury</td>
</tr>
<tr>
<td>3. Amputation</td>
<td>3. Amputation</td>
</tr>
<tr>
<td>4. Spinal cord</td>
<td>4. Spinal cord</td>
</tr>
<tr>
<td>5. Fracture of the femur</td>
<td>5. Fracture of the femur</td>
</tr>
<tr>
<td>7. Multiple trauma</td>
<td>7. Multiple trauma</td>
</tr>
<tr>
<td></td>
<td>• After less intensive setting</td>
</tr>
<tr>
<td></td>
<td>11. Rheumatoid arthritis</td>
</tr>
<tr>
<td></td>
<td>• After less intensive setting</td>
</tr>
<tr>
<td></td>
<td>12. Joint replacement</td>
</tr>
<tr>
<td></td>
<td>• Bilateral</td>
</tr>
<tr>
<td></td>
<td>• Age ≥85</td>
</tr>
<tr>
<td></td>
<td>• Body mass index ≥50</td>
</tr>
<tr>
<td></td>
<td>13. Systemic vasculidities*</td>
</tr>
<tr>
<td></td>
<td>• After less intensive setting</td>
</tr>
</tbody>
</table>

Note: HCFA–10 (Health Care Financing Administration–10).
*Systemic vasculidities are relatively rare inflammations of the arteries, frequently autoimmune, that involve a variety of systems, including joints.

Supply of providers

After the PPS was implemented, the supply of IRFs increased at an average rate of about 1.6 percent per year from 2002 to 2004 and grew slightly between 2004 and 2005 (Table 2F–1, p. 198). In 2006, however, the number of IRFs participating in Medicare declined slightly. This aggregate change masks interesting trends among its components. For example, the number of IRFs located in urban areas declined by more than 3 percent between 2005 and 2006. Rural IRFs, however, have a very different
trend, increasing by 4 percent per year under the first years of the PPS. The number of rural IRFs grew by another 6 percent from 2004 to 2005, and by more than 10 percent in 2006, likely in response to the ability of critical access hospitals to open IRF units beginning in October 2004 (rural hospital-based units grew by 8.8 percent between 2005 and 2006) and to the 21.3 percent rural adjustment included in the PPS payment.\(^4\)

Changes in the number of IRFs broken down by ownership also show different patterns of growth. The number of proprietary IRFs grew at nearly three times the pace of nonprofit IRFs after the PPS was implemented. From 2002 to 2004, for-profit IRFs grew at 3 percent per year, and they grew by an additional 3.7 percent between 2004 and 2005. The number of nonprofit IRFs grew by 1.1 percent annually and then declined by 1 percent during these periods. Both categories declined between 2005 and 2006. The number of government-owned IRFs has increased in the last year, likely reflecting an increase in the number of rehabilitation units at critical access hospitals operated by county or local governments.

The supply of IRFs presents a partial picture of Medicare beneficiary access to IRF services. Rehabilitation hospitals may have responded to the ongoing phase-in of the 75 percent rule by reducing the number of beds they operate, either by closing down beds or by putting dedicated IRF rooms to other inpatient purposes, as would be expected in the face of declines in volume. Such changes would

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In 2004, CMS redefined arthritis conditions allowed to be treated in IRFs. This removed from the 75 percent rule the largest single category of IRF admissions (major joint replacements) and substituted three more precise conditions. This change contributed to the reduction in the volume of patients admitted to IRFs between 2004 and 2005 and to the increase in the complexity of patients. Complexity increased because IRFs no longer admitted as many joint replacement patients, who were less complex than other IRF patients.

CMS created a four-year transition period for compliance with the revised 75 percent rule. The Deficit Reduction Act of 2005 added a year to the transition. The policy was:

- 50 percent of the IRF's total patient population must meet the revised regulations in cost reporting years beginning on or after July 2004,
- 60 percent in cost reporting years beginning on or after July 2005 through June 2007,
- 65 percent in cost reporting years beginning on or after July 2007 through June 2008.

For cost reporting periods beginning on or after July 2008, the threshold was scheduled to return to 75 percent. However, the Medicare, Medicaid, and SCHIP Extension Act of 2007 rolled back the compliance threshold to 60 percent and set it at that level permanently; it made permanent, via statute, the CMS discretionary policy of allowing IRFs to count patients whose comorbidities (rather than primary diagnoses) were in 1 of the 13 conditions toward the compliance threshold.

The renewed enforcement of the 75 percent rule was extremely controversial. Even though the rule has been in place since 1984, CMS has not consistently enforced it, as noted earlier.

The rule categorized large classes of admissions as not appropriate for IRF care. CMS concluded that most joint replacement patients (the largest category of IRF patient in 2004) did not need the intensive rehabilitation services IRFs provided and could receive rehabilitation services from alternative providers, such as acute care hospitals, skilled nursing facilities, long-term care hospitals, outpatient rehabilitation providers, and home health agencies. IRFs not in compliance with the revised rule—most of the IRFs at the time—would be declassified and paid acute inpatient prospective payment system (PPS) rates for all cases, which generally are much lower than IRF PPS rates.\(^5\)
The number of IRFs rose slightly from 2002 to 2005, but the trend changed in 2006.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All IRFs</td>
<td>1,117</td>
<td>1,157</td>
<td>1,188</td>
<td>1,211</td>
<td>1,227</td>
<td>1,231</td>
<td>1,224</td>
<td>1.6%</td>
<td>0.3%</td>
<td>−0.6%</td>
</tr>
<tr>
<td>Urban</td>
<td>950</td>
<td>971</td>
<td>988</td>
<td>1,001</td>
<td>1,009</td>
<td>1,000</td>
<td>969</td>
<td>1.1</td>
<td>−0.9</td>
<td>−3.1</td>
</tr>
<tr>
<td>Rural</td>
<td>167</td>
<td>186</td>
<td>200</td>
<td>210</td>
<td>218</td>
<td>231</td>
<td>255</td>
<td>4.4</td>
<td>6.0</td>
<td>10.4</td>
</tr>
<tr>
<td>Freestanding</td>
<td>195</td>
<td>214</td>
<td>215</td>
<td>215</td>
<td>217</td>
<td>217</td>
<td>217</td>
<td>0.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Hospital based</td>
<td>922</td>
<td>943</td>
<td>973</td>
<td>996</td>
<td>1,010</td>
<td>1,014</td>
<td>1,007</td>
<td>1.9</td>
<td>0.4</td>
<td>−0.7</td>
</tr>
<tr>
<td>Nonprofit</td>
<td>731</td>
<td>733</td>
<td>755</td>
<td>765</td>
<td>772</td>
<td>765</td>
<td>757</td>
<td>1.1</td>
<td>−0.9</td>
<td>−1.0</td>
</tr>
<tr>
<td>For profit</td>
<td>240</td>
<td>271</td>
<td>277</td>
<td>290</td>
<td>294</td>
<td>305</td>
<td>299</td>
<td>3.0</td>
<td>3.7</td>
<td>−2.0</td>
</tr>
<tr>
<td>Government</td>
<td>146</td>
<td>153</td>
<td>156</td>
<td>156</td>
<td>161</td>
<td>161</td>
<td>168</td>
<td>1.6</td>
<td>0.0</td>
<td>4.3</td>
</tr>
</tbody>
</table>

Note: IRF (inpatient rehabilitation facility), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system).

Source: MedPAC analysis of Provider of Services files from CMS.

Fewer rehabilitation beds are available

<table>
<thead>
<tr>
<th>Type of bed</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Average annual change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beds, freestanding hospitals</td>
<td>12,298</td>
<td>12,755</td>
<td>13,321</td>
<td>13,271</td>
<td>13,117</td>
<td>12,339</td>
<td>12,424</td>
<td>1.6%</td>
</tr>
<tr>
<td>Beds, hospital-based rehabilitation units</td>
<td>21,888</td>
<td>22,068</td>
<td>22,538</td>
<td>23,096</td>
<td>23,653</td>
<td>23,532</td>
<td>22,866</td>
<td>2.0</td>
</tr>
<tr>
<td>Total inpatient rehabilitation beds</td>
<td>34,186</td>
<td>34,823</td>
<td>35,859</td>
<td>36,367</td>
<td>36,770</td>
<td>35,871</td>
<td>35,290</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Note: Excludes data from Maryland, non-U.S. hospitals, and outliers.

Volume of services and access to care

Medicare spending grew by almost 7 percent per year from 2002 to 2004, reaching more than $6.4 billion in 2004 before declining to about $6.0 billion in 2006 (Table 2F-3).6

The number of unique beneficiaries and the number of IRF cases also increased rapidly from 2002 to 2004 and then began to decline in 2005. The number of unique beneficiaries using IRFs increased 6.5 percent annually from 2002 to 2004 but decreased by an average of 9.5 percent annually between 2004 and 2006. After we adjust for decreases in fee-for-service (FFS) enrollment reflecting increased enrollment in Medicare Advantage, the decline was 8.8 percent annually over this period. The number of Medicare IRF cases (some beneficiaries have multiple IRF admissions in a given year) followed similar trends. After we account for the effects of declining enrollment in FFS Medicare, most of the residual decline in IRF utilization is the result of the 75 percent rule.7 As the 75 percent rule has been permanently set at 60 percent via the Medicare, Medicaid, and SCHIP Extension Act of 2007, we do not anticipate continued dramatic reductions in IRF utilization attributable to this rule. Payments per case increased by an average annual rate of 9.1 percent between 2002 and 2004 and then by an average 7.5 percent annually from 2004 to 2006. These payment increases generally reflect the increasing complexity of IRFs’ patient mix over time, as less complex patients are going to other settings.

From 2002 to 2004, the average length of stay declined, consistent with implementation of the new IRF PPS. From 2004 to 2005, the average length of stay increased 4 percent, from 12.7 days to 13.1 days; the average length of stay remained stable at 13 days in 2006. Stays were longer at proprietary and freestanding facilities than at nonprofits, government IRFs, and hospital-based facilities in 2006. The increased length of stay is consistent with the increased average complexity of patients treated in IRFs since 2004.

The most common rehabilitation conditions for Medicare beneficiaries for 2004 to 2006 are shown in Table 2F-4 (p. 200). The most frequent rehabilitation diagnoses changed from major joint replacement in 2004 to stroke in 2007. In 2004, stroke patients made up less than 12 percent of IRF cases, but by 2007 they made up nearly 21 percent. In contrast, in 2004 major joint replacement patients

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**Table 2F-3: Number of IRF cases has declined since 2004, while payments per case have increased**

<table>
<thead>
<tr>
<th>TEFRA</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Average annual change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medicare spending (in billions)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$4.23</td>
<td>$4.51</td>
<td>$5.65</td>
<td>$6.16</td>
<td>$6.43</td>
<td>$6.40</td>
<td>$5.98</td>
<td></td>
<td>6.7% –3.6%</td>
</tr>
<tr>
<td><strong>Unique beneficiaries</strong></td>
<td>N/A</td>
<td>N/A</td>
<td>398,000</td>
<td>435,000</td>
<td>451,000</td>
<td>410,000</td>
<td>369,000</td>
<td></td>
</tr>
<tr>
<td><strong>IRF patients per 10,000 FFS beneficiaries</strong></td>
<td>N/A</td>
<td>N/A</td>
<td>114</td>
<td>121</td>
<td>124</td>
<td>112</td>
<td>103</td>
<td></td>
</tr>
<tr>
<td><strong>Cases</strong></td>
<td>384,207</td>
<td>415,579</td>
<td>439,631</td>
<td>478,723</td>
<td>496,695</td>
<td>449,321</td>
<td>404,255</td>
<td></td>
</tr>
<tr>
<td><strong>Payment per case</strong></td>
<td>$10,312</td>
<td>$9,982</td>
<td>$11,152</td>
<td>$12,952</td>
<td>$13,275</td>
<td>$14,248</td>
<td>$15,354</td>
<td></td>
</tr>
<tr>
<td><strong>ALOS (in days)</strong></td>
<td>14.6</td>
<td>14.0</td>
<td>13.3</td>
<td>12.8</td>
<td>12.7</td>
<td>13.1</td>
<td>13.0</td>
<td></td>
</tr>
</tbody>
</table>

Note: IRF (inpatient rehabilitation facility), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system), N/A (not available), FFS (fee-for-service), ALOS (average length of stay).

Source: MedPAC analysis of Provider of Services files from CMS.
Inpatient rehabilitation facility services: Assessing payment adequacy and updating payments

made up more than 30 percent of IRF cases; by 2007, these patients represented 15.5 percent of cases. These changes are consistent with IRFs’ response to continued implementation of the 75 percent rule.

The patients who continued being treated in IRFs were more complex than those who shifted to alternative settings. From the first half of calendar year 2006 to the first half of 2007, IRFs experienced an overall 0.3 percent increase in Medicare case-mix index. These changes in case mix are consistent with what we would expect under the second year of implementation of the renewed enforcement of the 75 percent rule, as IRFs continued to refrain from admitting cases that potentially would not count toward an IRF’s compliance with the rule. In the first half of calendar year 2007, cases that did not meet the criteria of the 75 percent rule had much lower relative weights (1.0) than cases that met the criteria (1.37) (eRehabData® 2007). Under the clinical protocols eRehabData® used to ascertain whether a claim is likely to be counted toward the 75 percent rule, 55.5 percent of Medicare cases counted in 2005, 60.1 percent of cases in 2006, and 60.4 percent of cases in the first half of 2007.

It is important to note, however, that the rate of increase in case mix slowed significantly in 2007 compared with previous years; the average annual change in case mix from 2004 to 2006 was just over 5 percent. Not only was the aggregate change slower in 2007, but in some instances (e.g., traumatic brain injury, amputation, and hip and knee replacements), the case mix actually declined.

We have no direct measures of beneficiaries’ access to care. The decrease in IRF discharges is difficult to interpret because we do not know where beneficiaries who needed intensive rehabilitation received services (e.g., from skilled nursing facilities (SNFs), long-term care hospitals, home health agencies, or outpatient providers). It is not possible to identify a beneficiary who received rehabilitation care in one of these other settings who would have received care in an IRF if not for the 75 percent rule. Additionally, some of the decline in IRF services reflects the decline in the Medicare FFS population, as more beneficiaries enroll in Medicare Advantage. We can analyze changes in discharges to IRFs in the aggregate, however, and draw inferences about the effects of the 75 percent rule on the patterns we observe.

We examined Medicare acute care hospital inpatient claims to identify the discharge destinations for the 10 conditions that had the highest number of discharges to IRFs in 2003. Although these conditions represented a significant share of IRFs’ volume, IRFs were the discharge destination for only about 10 percent of the cases in these diagnosis related groups (DRGs) discharged from acute care hospitals. We then analyzed how the share of cases with these conditions that were discharged to IRFs changed between 2003 and 2006.

Two conditions—major joint replacement of the lower extremity and stroke—illustrate how IRFs’ admitting patterns changed over this time period (Table 2F-5).

The most significant shift in acute care hospital discharge and IRF admissions patterns is seen in hip and knee replacements (DRG–209). IRF admissions of patients discharged from acute care hospitals under this DRG declined by 27 percent between 2004 and 2006, falling from a high of more than 130,000 to just under 96,000 admissions. Such a decline is not surprising. Major joint replacements were the subject of a specific policy change by CMS designed to better identify patients who warranted the high level of care that IRFs provide. Some of this decline is not due to the 75 percent rule but rather reflects a decline in the number of beneficiaries enrolled in FFS Medicare between 2004 and 2006.

<table>
<thead>
<tr>
<th>Type of case</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke</td>
<td>11.5%</td>
<td>14.9%</td>
<td>18.5%</td>
<td>20.5%</td>
</tr>
<tr>
<td>Major joint replacement</td>
<td>30.3%</td>
<td>25.8%</td>
<td>21.0%</td>
<td>15.5%</td>
</tr>
<tr>
<td>Fracture of the lower extremity</td>
<td>7.8%</td>
<td>10.5%</td>
<td>14.5%</td>
<td>16.4%</td>
</tr>
<tr>
<td>Debility</td>
<td>6.5%</td>
<td>6.1%</td>
<td>5.8%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Neurological disorders</td>
<td>6.4%</td>
<td>7.4%</td>
<td>7.0%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Brain injury</td>
<td>4.7%</td>
<td>6.1%</td>
<td>5.9%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Other orthopedic conditions</td>
<td>6.4%</td>
<td>6.1%</td>
<td>5.4%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Spinal cord injury</td>
<td>5.1%</td>
<td>5.2%</td>
<td>4.7%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Cardiac conditions</td>
<td>6.5%</td>
<td>5.1%</td>
<td>4.2%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Other</td>
<td>14.7%</td>
<td>12.7%</td>
<td>12.9%</td>
<td>11.7%</td>
</tr>
</tbody>
</table>

Note: “Other” includes conditions such as major medical trauma, amputations, and pain syndrome. Totals may not sum to 100 percent due to rounding.

Additionally, the effects of the 75 percent rule are confounded with the increased adoption of computer-assisted surgery and minimally invasive surgery (MIS) for hip and knee replacements. The literature on the efficacy of this change in surgical practice is mixed. Some researchers assert that there is no difference between MIS for hip and knee replacement relative to more traditional approaches (Bozic and Beringer 2007, Cuckler 2007, Malik and Dorr 2007, Ulrich et al. 2007, Vail and Callaghan 2007), while others have identified significant differences between MIS and traditional hip and knee replacement surgery. Most notably, many researchers have found that MIS results in shorter acute hospital lengths of stay (Mahmood et al. 2007). Other research has shown that, in addition to shorter lengths of stay, MIS patients have less postoperative pain and quicker rehabilitation after surgery (Dorr et al. 2007, King et al. 2007, Learmonth et al. 2007, Pour et al. 2007, Procyk 2007, Tashiro et al. 2007), especially when the performing physicians have advanced training in the technique (Levine et al. 2007) or other operative changes are made (Berger 2007). If these new protocols do result in less postoperative pain and more rapid and effective rehabilitation, such changes may also partly explain the shift of hip and knee replacement cases from IRFs to SNFs and home health care. Alternatively, additional changes in orthopedic surgery or rehabilitation techniques, coupled with a healthier aging population, may expand the population of clinically appropriate candidates for treatment in the IRF setting.

By contrast, IRF admissions of stroke patients—a condition that CMS has continued to identify as appropriate for admission to IRFs, without qualifications—increased by 17 percent between 2004 and 2006 (an enrollment-adjusted increase of 19 percent). IRFs’ admissions of stroke patients (as well as their share of stroke patients) increased, while FFS enrollment declined and acute care discharges of stroke patients to SNFs and settings other than home health care also declined, suggesting that, even under the 75 percent rule, IRFs were able to develop strategies to maintain or increase their rates of admission of appropriate patients.

The hip and knee replacement example also illustrates the fact that declines in IRF admissions, even if attributable to the 75 percent rule, do not necessarily mean that Medicare beneficiaries are forgoing rehabilitation services. While we cannot say that an individual patient who was not admitted to an IRF because of the 75 percent rule received care in another setting, we can look at general trends. In the case

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Major joint replacement/hip and knee replacement</td>
<td>IRF</td>
<td>130,418</td>
<td>28%</td>
<td>95,578</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>SNF/swing bed</td>
<td>150,397</td>
<td>33%</td>
<td>169,052</td>
<td>35%</td>
</tr>
<tr>
<td></td>
<td>Home health</td>
<td>98,036</td>
<td>21%</td>
<td>130,732</td>
<td>27%</td>
</tr>
<tr>
<td></td>
<td>All other settings</td>
<td>83,249</td>
<td>18%</td>
<td>86,545</td>
<td>18%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>462,100</td>
<td>100%</td>
<td>481,907</td>
<td>100%</td>
</tr>
<tr>
<td>Stroke</td>
<td>IRF</td>
<td>41,501</td>
<td>18%</td>
<td>48,519</td>
<td>19%</td>
</tr>
<tr>
<td></td>
<td>SNF/swing bed</td>
<td>62,425</td>
<td>27%</td>
<td>67,694</td>
<td>26%</td>
</tr>
<tr>
<td></td>
<td>Home health</td>
<td>25,734</td>
<td>11%</td>
<td>30,545</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>All other settings</td>
<td>105,004</td>
<td>45%</td>
<td>114,157</td>
<td>44%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>234,664</td>
<td>100%</td>
<td>260,915</td>
<td>100%</td>
</tr>
</tbody>
</table>

Note: IRF (inpatient rehabilitation facility), DRG (diagnosis related group), SNF (skilled nursing facility), N/A (not applicable). All other settings includes outpatient care, other inpatient facilities, or to home.

of patients with hip and knee replacements discharged under DRG–209, admissions to SNFs increased by 8 percent between 2004 and 2006, and admissions to home health agencies increased by 28 percent over this period. Among the 10 DRGs that resulted in the greatest number of discharges to IRFs in 2002, discharges to home health agencies grew the fastest in nearly all these DRGs between 2003 and 2006, outpacing growth in discharges to any other setting.

If patients who need intensive rehabilitation are still able to obtain this care in other settings, the reduction in IRF volume, while significant, may not constitute an access problem. However, it is difficult to assess whether rehabilitation care is comparable across settings in terms of quality, outcomes, or relative costliness. A MedPAC-commissioned study conducted by RAND found that Medicare costs for hip and knee replacement patients receiving post-acute care in IRFs cost Medicare roughly $4,400 more than patients treated in SNFs in 2002 and 2003, but the evidence as to whether these additional expenditures result in better outcomes is inconclusive (Beeuwkes Buntin et al. 2005, MedPAC 2005). This is primarily because this study was limited in its ability both to assess how strongly patient selection influenced these results and to examine utilization of physician and outpatient therapy services and also because of the difficulties in comparing patients and outcomes across different assessment tools and patient populations.

Patient assessment instruments (where they exist) are not comparable across post-acute care settings in their content or application. While Medicare requires three of the post-acute care settings to use patient assessment tools, each uses a different one. SNFs use the Minimum Data Set, home health agencies use the Outcome and Assessment Information Set (OASIS), and IRFs use the Inpatient Rehabilitation Facility–Patient Assessment Instrument (IRF–PAI). Medicare does not require long-term care hospitals to use a patient assessment tool. Although the existing tools measure the same broad aspects of patient care—functional status, diagnoses, comorbidities, and cognitive status—the time frames covered, the scales used to differentiate among patients, and the definitions of the care included in the measures vary considerably (MedPAC 2005).

MedPAC has previously observed that the lack of a common patient assessment instrument impedes analyses of comparative quality and cost of post-acute care across settings (MedPAC 2007, 2006, 2005). The inability to precisely compare and categorize patients with respect to their conditions warranting post-acute care has precluded the development of patient criteria that could help hospital discharge planners identify the most appropriate venues for patients’ post-acute care needs. (The Medicare, Medicaid, and SCHIP Extension Act of 2007 requires the Secretary of Health and Human Services to further study alternatives to the 75 percent rule that may better identify patients appropriate for treatment in IRFs (see text box).) As a result, from Medicare’s perspective, the admission of a patient to one post-acute care setting versus another is difficult to understand and may reflect considerations like the availability of a facility of a given type in a market, relationships among acute and post-acute care providers in a market, or patient selection.

Further, the lack of a common post-acute care patient assessment instrument precludes comparison of the outcomes of these assignments with post-acute care. As noted above, each of the existing instruments contains data elements, measures, and scales that are unique to it; as a result, we cannot compare the outcomes of rehabilitation services provided to a patient in home health care (as indicated on the OASIS assessment) with the outcomes for a patient in an IRF (reflected on the IRF–PAI).

Because of these structural problems, it is not possible to answer fundamental questions such as whether the higher cost of IRF care is warranted by the outcomes or whether patients who previously might have been admitted to an IRF but now are receiving care in a SNF or home health agency are receiving care of different quality or cost.

The Deficit Reduction Act of 2005 addressed this concern by requiring CMS to implement a demonstration project under which the agency would develop and field a uniform post-acute care patient assessment instrument and use it to compare patients and outcomes to assess the potential to rationalize Medicare payments for post-acute care across settings. The patient assessment instrument has been developed, and the demonstration was scheduled to begin in January 2008. The corresponding final report is due in July 2011.

**Quality of care**

Our indicators of quality of care provided by IRFs show slight improvement from 2004 to 2006. To assess changes, we use a measure commonly tracked by the industry: the difference between discharge and admission scores for the commonly used Functional Independence Measure™ (FIM™), incorporated in the IRF–PAI.
The 18-item FIM™ measures the level of disability in physical and cognitive functioning and the burden of care for patients’ caregivers (Deutsch et al. 2005). Scores for each item range from one (complete dependence) to seven (independence). To compare quality on a national basis, we use the average difference in scores at discharge versus admission for Medicare patients—a larger number indicates greater improvement in condition between admission and discharge. We report this measure in two ways. We compare differences for:

- all Medicare patients treated in an IRF, and
- the subset of Medicare patients who were discharged home from an IRF.\(^{14}\)

Between 2004 and 2007, the quality indicators for all IRF patients and the subset of patients who were discharged home improved (Figure 2F-2, p. 204). All patients increased their functioning from admission to discharge, as measured by their FIM™ scores, from 22.8 in 2004 to 23.8 in 2007, an improvement of a full percentage point. Patients discharged home increased functioning between admission and discharge from 25.0 in 2004 to 27.5 in 2007. Functional improvement for both groups of patients, while still increasing, appears to have slowed somewhat between 2006 and 2007, potentially reflecting the increase in case mix that we observe over this period.

We use a summary score for comparing functional improvement. In the future, the Commission and CMS might want to investigate whether using more detail to compare admission and discharge function scores might provide more information about quality of care. For example, comparing scores by case-mix groups or impairment categories might be another useful way to examine the quality of IRF care. Our initial evaluation of functional improvement by impairment category group revealed no clear patterns (e.g., no systematic relationship between year-to-year improvement by impairment category groups that count toward the 75 percent rule versus those that do not). In the aggregate, the rate of improvement in function reflected in these raw scores is slightly lower in 2007 than in the preceding several years. Over the same time, IRFs’ average case mix increased, which may partly explain the lower increase in functional improvement. Beyond the aggregate change, however, it

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**Summary of Section 115 of the Medicare, Medicaid, and SCHIP Extension Act of 2007**

In December, the Congress passed, and the President signed into law the Medicare, Medicaid, and SCHIP Extension Act of 2007 (MMSEA). Section 115 of this Act contained a number of provisions related to Medicare’s prospective payment system for inpatient rehabilitation facility (IRF) services. Changes to the 75 percent rule were the most significant of the IRF-related provisions. The legislation rolled back the compliance threshold to 60 percent, retroactively effective for cost reporting periods beginning on or after July 1, 2007 (the compliance threshold at that time had been 65 percent, pursuant to the Deficit Reduction Act of 2005). The law also permits IRFs to count patients whose primary diagnoses are not among the 13 criteria conditions, but whose secondary diagnoses are, to count toward the threshold. This policy had been set to expire with full implementation of the 75 percent rule on July 1, 2008. Under the MMSEA legislation, both of these policies became permanent.

The legislation also sets the update to the IRF base payment rates to zero for fiscal years 2008 and 2009, with a delayed implementation date of April 1, 2008. Absent this provision, the statutory update for IRFs is market basket.

Lastly, the MMSEA directs the Secretary of Health and Human Services to study access to IRF care under the 75 percent rule, including an examination of conditions that could be covered under the IRF prospective payment system but that currently are not, and an analysis of alternatives to—or refinements of—the 75 percent rule criteria, specifically looking at patients’ functional status, their diagnoses, and comorbidities. The Secretary is required to submit a report on these analyses to the Congress no later than 18 months after the date of enactment of the MMSEA. ■
IRFs’ access to capital

IRFs appear to continue to have adequate access to capital. Four of five IRFs are hospital-based units that have access to capital through their parent institution. Because acute care hospitals generally have good access to capital (as discussed in Section 2A), we expect that their IRF units do as well. Modern Healthcare’s annual survey of hospital construction indicates that construction and planning of new rehabilitation facilities progressed at a robust pace in 2006 (Table 2F-6). Rehabilitation construction projects that were begun or designed in 2006 had fewer additional beds than were represented by these phases in 2005, possibly reflecting industry’s anticipation of the future effects of the 75 percent rule.

Freestanding IRFs, however, may face more difficulty accessing capital. One major national chain of IRF providers representing nearly half of all freestanding facilities experienced significant reductions in its cash flow and total capital in 2005 and 2006, and its 2006 capital expenditures are less than a quarter of what they were in 2001. Many of these financials reflect historical one-time changes that are not related to operations. Changes to the company’s operational structure, the recent resetting of the compliance threshold to 60 percent, and the fact that the company secured credit agreement terms before the recent credit market turmoil may improve its outlook going forward. A second chain, operating six freestanding facilities, reports positive cash flow, capital, and capital expenditures and has reduced its debt in 2006, but its inconsistent earnings per share over time have prevented this chain from significantly increasing its capital and cash on hand. (Most other freestanding facilities are independent or local chains of only a few providers (proprietary or nonprofit).)

is difficult to ascertain any meaningful pattern in changes in IRF patients’ functional improvement by impairment category. The Commission will continue to examine these data, particularly to assess whether functional improvement varies with the complexity of the cases IRFs treat.

TABLE 2F-6
Rehabilitation hospital construction projects, 2005–2006

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th></th>
<th></th>
<th></th>
<th>2006</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Project</td>
<td>Completed</td>
<td>Broke ground</td>
<td>Designed</td>
<td></td>
<td>Completed</td>
<td>Broke ground</td>
<td>Designed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Projects</td>
<td>Beds</td>
<td>Projects</td>
<td>Beds</td>
<td>Projects</td>
<td>Beds</td>
<td>Projects</td>
<td>Beds</td>
</tr>
<tr>
<td>Entire hospitals</td>
<td>12</td>
<td>328</td>
<td>10</td>
<td>966</td>
<td>21</td>
<td>953</td>
<td>12</td>
<td>493</td>
</tr>
<tr>
<td>Expansions</td>
<td>13</td>
<td>350</td>
<td>18</td>
<td>364</td>
<td>16</td>
<td>804</td>
<td>13</td>
<td>170</td>
</tr>
<tr>
<td>Renovations</td>
<td>23</td>
<td>256</td>
<td>14</td>
<td>233</td>
<td>34</td>
<td>329</td>
<td>24</td>
<td>217</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>934</td>
<td>42</td>
<td>1,563</td>
<td>71</td>
<td>2,086</td>
<td>49</td>
<td>880</td>
</tr>
</tbody>
</table>

Payments and costs

The last component of our update framework examines changes in payments and costs. We also calculate an aggregate Medicare margin for IRFs.

With the introduction of the IRF PPS in 2002, payments per case rose rapidly and growth in cost per case remained low in both 2002 and 2003 (Figure 2F-3). The new enforcement of the 75 percent rule resulted in growth in costs per case accelerating between 2004 and 2006 as case-mix index increased and the volume of cases declined. The 10 percent average annual increase in costs from 2004 to 2006 is consistent with the 5 percent average annual increase in case-mix index and the 10 percent annual decline in patient volume over this time, which reduces the ability of IRFs to benefit from economies of scale. The fact that IRFs appear to be reducing bed capacity at a slower rate than discharges likely further exacerbates their ability to constrain costs.

Medicare margins, 2000–2006

From 2002 (the beginning of the IRF PPS) to 2003, aggregate Medicare margins increased rapidly, from 11 percent to almost 18 percent, and then declined slightly to just over 16 percent in 2004 (Table 2F-7, p. 206). All groups had rapid increases in margins from 2002 to 2003. We estimate that aggregate Medicare margins for 2006 are 12.4 percent, which represents a 0.8 percentage point decrease from 2005. The IRFs at the 25th percentile have a margin of −4.6 percent and those at the 75th percentile have a margin of 19.7 percent in 2006, slightly lower at both points than last year’s margins (data not shown). Proprietary IRFs have margins roughly 60 percent higher than nonprofits’ margins (16.6 percent compared with 10.7 percent). Freestanding IRFs and proprietary IRFs, which had the highest margins in 2004 (greater than 20 percent), continued to exhibit the best financial performance in 2006, with margins of 17.9 percent and 16.6 percent, respectively. The margin for hospital-based IRFs increased slightly in 2006, rising to 9.5 percent, likely due to the introduction of a teaching adjustment to the payment system in 2006.

Medicare margins for 2008

To project the Medicare margin for 2008, the policy year, we incorporate policy changes that went into effect in 2006 and 2007 as well as policies scheduled to be in effect in 2009, which allows us to consider whether current payments will be adequate under all applicable provisions of current law. The policies include:

- for fiscal year 2007, a market basket update of 3.3 percent, a 0.1 percent increase for change in the outlier policy, and a 2.6 percent decrease in payments to account for coding improvement, for a net increase of 0.8 percent (CMS 2006);

- for the first half of fiscal year 2008, a market basket update of 3.2 percent and a 0.7 percent decrease for change in the outlier policy (CMS 2007), and for the second half of fiscal year 2008, rates were reduced to fiscal year 2007 levels pursuant to the Medicare, Medicaid, and SCHIP Extension Act of 2007, for a net average increase of 1.7 percent for fiscal year 2008; and

- for 2007 to 2009, the effect of the 75 percent rule, including the Medicare, Medicaid, and SCHIP Extension Act of 2007’s rollback and permanent freeze of the compliance threshold at 60 percent.

The policy we initially anticipated to have the most significant impact on the projected margin over this period

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**Note:** IRF (inpatient rehabilitation facility), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system). Data are from consistent two-year cohorts of IRFs.

Source: MedPAC analysis of Medicare cost report data from CMS.
ReCommendation 2F

The update to the payment rates for inpatient rehabilitation facility services should be eliminated for fiscal year 2009.

RATIOnALe 2F

The evidence from the indicators we have examined suggests a mixed picture. The supply of IRFs is generally stable, with increases in the number of rural IRFs offset by somewhat larger reductions in the number of urban facilities. The overall number of IRF beds has declined slightly. The volume of cases declined at a rapid rate from the high of nearly 500,000 cases in 2004 to just over 400,000 cases in 2006. All these metrics are consistent with expectations of events under the 75 percent rule, and we do not believe these changes in utilization of IRF services pose a problem with access to rehabilitation services. Beneficiaries who need rehabilitation care but who no longer count toward IRFs’ compliance with the 75 percent rule appear to be able to receive care in other settings. Given that we did not see any indications of access problems during the transition to the full compliance threshold of 75 percent, we believe the recent legislation freezing the compliance threshold at 60 percent will provide for ample access because IRFs will not be required to reduce their admissions any further to retain their IRF status. The quality of IRF care continues to improve, even in light of increases in IRFs’ case mix.

was the phase-in of the revised 75 percent rule, which in 2009 would have required that 75 percent of cases in IRFs comply with the rule. However, with the 75 percent rule set permanently at 60 percent, we believe IRFs will not need to reduce admissions further to comply with this rule. Therefore, taking account of the recent legislation and other IRF policy changes that have taken place, we project that Medicare margins will drop from 12.4 percent in 2006 to 8.4 percent in 2008.

How should Medicare payments change in 2009?

Historically, the statutory payment update for IRFs is the market basket. However, the Medicare, Medicaid, and SCHIP Extension Act of 2007 reduced the IRF payment update to zero for fiscal years 2008 and 2009. The following is our recommendation for an update to IRF payments in 2009.

Update recommendation

IRFs should be able to accommodate cost changes in fiscal year 2009 with no update to their payment rates.

### Table 2F-7

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All IRFs</td>
<td>1.3%</td>
<td>1.5%</td>
<td>11.0%</td>
<td>17.8%</td>
<td>16.2%</td>
<td>13.2%</td>
<td>12.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>1.3</td>
<td>1.5</td>
<td>11.6</td>
<td>18.5</td>
<td>16.8</td>
<td>13.7</td>
<td>13.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>0.9</td>
<td>1.1</td>
<td>5.0</td>
<td>10.4</td>
<td>10.5</td>
<td>9.2</td>
<td>7.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freestanding</td>
<td>1.2</td>
<td>1.5</td>
<td>18.5</td>
<td>23.0</td>
<td>24.3</td>
<td>20.5</td>
<td>17.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital based</td>
<td>1.3</td>
<td>1.4</td>
<td>6.4</td>
<td>14.9</td>
<td>12.0</td>
<td>9.4</td>
<td>9.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonprofit</td>
<td>1.5</td>
<td>1.6</td>
<td>6.8</td>
<td>14.5</td>
<td>12.7</td>
<td>10.0</td>
<td>10.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>For profit</td>
<td>0.9</td>
<td>1.3</td>
<td>18.8</td>
<td>24.3</td>
<td>24.1</td>
<td>19.5</td>
<td>16.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>1.1</td>
<td>1.4</td>
<td>2.4</td>
<td>10.2</td>
<td>9.1</td>
<td>8.2</td>
<td>6.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: IRF (inpatient rehabilitation facility), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system). Government-owned providers operate in a different context from other providers, so their margins are not necessarily comparable.

Source: MedPAC analysis of cost report data from CMS.
Access to capital is good for most IRFs. Although we expect IRF margins to continue to fall from the high levels we observed through 2006, we anticipate IRFs’ Medicare margins in 2008 (estimated under 2009 payment policies) will be 8.4 percent. Under the new compliance threshold of 60 percent, IRFs will no longer be required to make changes to their cost structures as a result of this rule. We believe these factors suggest that IRFs could absorb cost increases and continue to provide care to clinically appropriate Medicare cases with no update to payments in 2009. We will continuously monitor indicators of the adequacy of IRF payments at this level within our update framework and will be able to reassess our recommendation for the IRF payment update in the next fiscal year.

**IMPLICATIONS 2F**

**Spending**
- This recommendation has no effect on federal program spending relative to current law in that it mirrors the update specified in the Medicare, Medicaid, and SCHIP Extension Act of 2007.

**Beneficiary and provider**
- We do not expect that this recommendation will have adverse impacts on Medicare beneficiaries with respect to their access to care or their out-of-pocket spending. This recommendation is not expected to affect providers’ ability to provide care to Medicare beneficiaries.
Inpatient rehabilitation facility services: Assessing payment adequacy and updating payments

1 The 13 conditions are stroke, brain injury, amputation, spinal cord injury, fracture of the femur, neurological disorders, multiple trauma, congenital deformity, burns, certain osteoarthritis conditions, certain rheumatoid arthritis conditions, and specific joint replacement conditions. These conditions may count toward an IRF’s compliance with the 75 percent rule if they are being actively treated in conjunction with the condition that is the primary cause for admission. For more information on how Medicare’s payment system for IRFs operates, see MedPAC’s Payment Basics document at http://www.medpac.gov/documents/MedPAC_Payment_Basics_07_IRF.pdf.

2 While the Medicare, Medicaid, and SCHIP Extension Act of 2007 rolled back and permanently set the compliance threshold at 60 percent, we continue to refer to the policy as “the 75 percent rule” in this chapter, as it governed IRFs’ admissions practices, and their associated costs and payments, through the period of time reflected in the analyses we report here.

3 The Health Care Financing Administration, renamed CMS, is the agency that administers Medicare.

4 We would expect new IRF units opened by critical access hospitals to be compliant with the 75 percent rule at the outset of their operations and thus would not have to make the kinds of adjustments to their admissions practices as have more established IRFs that previously operated under the more lax enforcement of the rule. As a result, their margins should not be as heavily affected by volume declines in subsequent years.

5 Declassified IRFs that are units in critical access hospitals are paid 101 percent of their costs.

6 The 2005 and 2006 estimates reflect the CMS Office of the Actuary’s significant downward revisions of IRF spending estimates for these years.

7 Members of the rehabilitation community also point to the activities of CMS’s recovery audit contractors (RACs) operating in New York, California, and Florida as an additional cause of the reduction in IRF admissions through 2006. The RACs, established under Section 306 of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, were charged with identifying and recouping overpayments in FFS Medicare. They have been criticized as being overly aggressive in complying with their mandate with respect to IRFs.

8 The compliance threshold was 60 percent from July 1, 2005, through June 30, 2007. The threshold increased to 65 percent on July 1, 2007, and was scheduled to go to the full 75 percent effective July 1, 2008. The Congress eliminated the IRF payment rate update for 2009 in the Medicare, Medicaid, and SCHIP Extension Act of 2007.

9 The first year that “discharge to IRF” was available on hospital inpatient claims was 2002, but our analysis of these data suggests that hospitals did not consistently use this discharge destination code in that year.

10 In 2006, the cases previously coded under DRG–209 were split into two new DRGs: DRG–544 and DRG–545.

11 We saw similar declines among DRGs that were unlikely to generate cases that would meet the criteria of the 75 percent rule, such as heart failure and shock (DRG–27), medical back problems (DRG–243), and simple pneumonia (DRG–89). Such cases represented a relatively small share of IRF admissions, and discharges to IRFs represented a very small share of total hospital discharges for these DRGs.

12 Adjusted for this decline in FFS enrollment, IRF admissions of patients with major lower extremity joint replacements decreased by 25 percent between 2004 and 2006.

13 Interestingly, Pour et al. (2007) highlight preoperative rehabilitation as a major factor influencing the outcome of total hip arthroplasty.

14 CMS changed the instructions for assessing functioning at discharge, effective April 1, 2004. Before this date, recording of patients’ scores reflected their lowest functioning in the three days before discharge. Afterward, patients’ scores reflected functioning at discharge. Our comparisons are for each half-year period from June 1, 2004, through June 30, 2007.
References


Long-term care hospital services
The Secretary should update payment rates for long-term care hospitals for rate year 2009 by the projected rate of increase in the rehabilitation, psychiatric, and long-term care hospital market basket index less the Commission’s adjustment for productivity growth.

COMMISSIONER VOTES: YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1
Long-term care hospital services

Section summary

In this section, we present information on providers of long-term care hospital (LTCH) services. LTCHs furnish care to patients with clinically complex problems, such as multiple acute or chronic conditions, who need hospital-level care for relatively extended periods. Medicare is the predominant payer for LTCH services, accounting for about 70 percent of LTCH discharges.

Supply of facilities—The total number of LTCHs increased 1 percent between 2005 and 2006, after climbing an average 11.3 percent per year between 1992 and 2005. This slowing in growth is due to a decline in the number of long-term care hospitals within hospitals (HWHs), likely because of the 25 percent rule, which policymakers expected would slow entry of HWHs into the Medicare program. Freestanding facilities, by contrast, have begun to grow somewhat more rapidly than previously.

Volume of services and beneficiaries’ access to care—In the early years of the LTCH prospective payment system (PPS), the number of cases

In this section

- What is long-term care hospital care and where is it provided?
- Medicare spending for long-term care hospital services
- Ensuring that appropriate patients are treated in LTCHs
- Are Medicare payments adequate in 2008?
- How should Medicare payments change in 2009?
- Update recommendation
per fee-for-service (FFS) beneficiary grew an average 9 percent per year. Between 2005 and 2006, however, the number of cases per FFS beneficiary fell 0.4 percent. Medicare spending for LTCH services held steady at $4.5 billion between 2005 and 2006, although spending per FFS beneficiary and payments per case continued to increase (2.5 percent and 3.4 percent, respectively). We have no direct indicators of beneficiaries’ access to LTCHs, but the number of beneficiaries using LTCHs—controlling for the change in the number of FFS beneficiaries—remained fairly steady between 2005 and 2006, suggesting that access to care was maintained.

**Quality**—The evidence on quality is mixed. Risk-adjusted rates of death in LTCHs and readmission to acute care hospitals have fallen, as have risk-adjusted rates of death within 30 days of discharge, albeit at a slower rate. Patients experienced fewer postoperative pulmonary embolisms and deep vein thromboses and more decubitus ulcers, infections due to medical care, and postoperative sepsis.

**Access to capital**—The indications regarding LTCHs’ access to capital are difficult to interpret. Private equity firms now control a large portion of the for-profit segment of the market, but some financial analysts argue that even private equity firms might not have access to capital in the current financial environment and that some of the smaller chains are already highly leveraged. Uncertainty about potential changes to Medicare’s payment policies may have heightened lenders’ anxiety. But payment policy changes under the recently passed Medicare, Medicaid, and SCHIP Extension Act of 2007, applicable for the next three years, improve the financial picture considerably, at least for the short term, leading some financial analysts to predict that business will stabilize. LTCH companies are increasingly diversified, both vertically and horizontally, which may improve their ability to control their costs.

**Payments and costs**—Evidence from cost reports shows that growth in cost per case has increased rapidly since the PPS was implemented. This rise in
cost has roughly paralleled growth in payments per case, which climbed 13 percent between 2003 and 2004, 10 percent between 2004 and 2005, and 4 percent between 2005 and 2006. Some of the growth in payments has been due to improvements in documentation and coding that raise average case mix (and therefore payments) even though patients are no more resource intensive than they previously were.

The Medicare margin for LTCHs based on 2006 cost reports is 9.4 percent. CMS has since made a number of policy changes that reduce payments for LTCHs, including recalibrating relative weights in 2007, adjusting for coding improvements, implementing new ways to reimburse LTCHs for patients with the shortest lengths of stay, and reducing aggregate payments for high-cost outliers. Because of these changes, we estimate LTCHs’ aggregate Medicare margin will be between –1.4 percent and –0.4 percent in 2008. This range is based on different assumptions about HWHs’ behavior in response to the 25 percent rule. If HWHs do not change their behavior, the Medicare margin is estimated to be –1.4 percent. If they change their behavior to avoid payment reductions, the margin is estimated to be –0.4 percent. HWHs could change behavior in a number of ways to minimize the effect of the rule—for example, admitting more patients who were high-cost outliers in the acute care hospital and not subject to the rule, recruiting patients from a more diverse set of acute hospitals to minimize referrals from their host hospital, and organizing as freestanding LTCHs.

Assessing current payment adequacy in this sector is difficult. Growth in LTCH facilities, cases, and Medicare spending has slowed. However, it is difficult to determine when use of these services is appropriate and necessary. Frequently, LTCHs entering the program locate in market areas where LTCHs already exist, raising questions about whether there are sufficient numbers of very sick patients to support the number of LTCHs in the community. Seen in this light, recent slowing in growth of facilities, cases, and Medicare spending may indicate that the industry is approaching
equilibrium after a period of explosive growth spurred by overpayment and inappropriate admissions.

Nevertheless, our estimated Medicare margin for 2008 suggests that LTCHs may not be able to accommodate growth in the cost of caring for Medicare beneficiaries in 2009 without an increase in the base rate. Therefore, we recommend that the Secretary update payment rates for LTCH services by the market basket index, less the Commission’s adjustment for productivity growth. We recommend to the Secretary rather than to the Congress because the Secretary has the authority to determine updates to payment rates for LTCHs. Under the current forecast of the rehabilitation, psychiatric, and LTCH market basket, the Commission’s recommendation would update the LTCH payment rates by 1.6 percent in 2009. (The market basket is subject to change, resulting in change to the update amount.)

**Recommendation 2G**

The Secretary should update payment rates for long-term care hospitals for rate year 2009 by the projected rate of increase in the rehabilitation, psychiatric, and long-term care hospital market basket index less the Commission’s adjustment for productivity growth.

**COMMISSIONER VOTES:**

YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1
What is long-term care hospital care and where is it provided?

Patients with clinically complex problems, such as multiple acute or chronic conditions, may need hospital-level care for relatively extended periods. Some are treated in long-term care hospitals (LTCHs). 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. Beginning January 1, 2008, LTCHs must also have a screening process to help ensure the appropriateness of patient admissions and stays (see text box on the Medicare, Medicaid, and SCHIP Extension Act of 2007 (MMSEA)). Because of relatively long stays and the level of care provided, care in LTCHs is expensive.

The Medicare, Medicaid, and SCHIP Extension Act of 2007

The Medicare, Medicaid, and SCHIP Extension Act of 2007 (MMSEA) includes several provisions related to long-term care hospitals (LTCHs), including the application of facility criteria, changes to the 25 percent rule, and changes to the short-stay outlier policy.

Facility criteria

The MMSEA changes the definition of LTCHs to include some of the facility criteria recommended by the Commission (MedPAC 2004). In addition to meeting the conditions of participation applicable to acute care hospitals, LTCHs must meet the following criteria:

- LTCHs must have a patient review process that screens patients both before admission and regularly throughout their stay to ensure appropriateness of admission and continued stay. The MMSEA does not specify the admission and continued stay criteria to be used.
- LTCHs must have active physician involvement with patients during their treatment, with physician on-site availability on a daily basis to review patient progress and consulting physicians on call and capable of being at the patient’s side within a period of time determined by the Secretary.
- LTCHs must have interdisciplinary treatment teams of health care professionals, including physicians, to prepare and carry out individualized treatment plans for each patient.

The 25 percent rule

The MMSEA also 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 a HWH’s or satellite’s host hospital during a cost reporting period to no more than 50 percent and holding it at this level for three years. (The applicable threshold for HWHs and satellites in rural areas or in urban areas with a single or dominant acute care hospital is 75 percent.) The MMSEA prohibits the Secretary from applying the 25 percent rule to freestanding LTCHs for a period of three years. (See the text box, p. 222, for more information about the 25 percent rule.)

Short-stay outliers

As discussed in the text box (p. 224), Medicare applies different payment rules for LTCH cases with the shortest lengths of stay (so-called “very short-stay outliers”). The MMSEA prohibits the Secretary, for a three-year period, from applying these rules.

The MMSEA also imposes a three-year limited moratorium on new facilities and new beds in existing facilities, expands review of medical necessity, and reduces aggregate payments for fiscal year 2008 by implementing a zero update for discharges occurring during the final quarter of the fiscal year. In addition, the MMSEA requires the Secretary to conduct a study on the use of LTCH facility and patient criteria to determine medical necessity and appropriateness of admission to and continued stay at LTCHs, considering both the Secretary’s ongoing work on this subject and MedPAC’s 2004 recommendations.
What conditions are treated in LTCHs?

LTCHs specialize in providing care to patients with a wide variety of complex conditions, such as respiratory problems and skin ulcers. About 80 percent of LTCH patients are admitted from acute care hospitals. The top 15 long-term care diagnoses made up more than 60 percent of discharges from LTCHs in 2006 (Table 2G-1). The most frequently occurring long-term care diagnosis related group (LTC–DRG) is LTC–DRG 475, respiratory diagnosis with ventilator support. Five of the top 15 LTC–DRGs are respiratory conditions. A recent analysis by RTI International of LTCH claims from fiscal year 2004 found that respiratory cases tend to be among the more profitable cases in LTCHs (RTI 2007). RTI’s analysis found that the aggregate margins earned from ventilator-dependent cases and from pulmonary edema and respiratory failure cases were 21 percent and 28 percent, respectively, compared with a margin of 12 percent for all LTCH claims. Aggregate margins for pneumonia and chronic obstructive pulmonary disease were also higher than average. By contrast, the aggregate margin for skin ulcer cases, the second most common type of case, was 4.5 percent, while the aggregate margin for rehabilitation cases was –0.1 percent. Since 2004, there have been several changes to the payment system for LTCHs that may have altered profitability across LTC–DRGs.

The types of cases treated by LTCHs are often treated in alternative settings. The Commission’s previous research found that, even among patients whose clinical characteristics placed them in the top 5 percent probability of using an LTCH, only 4 percent were admitted to these facilities in markets that had them (see text box on alternatives to LTCHs, p. 220). More recent research by RTI found that of all cases with an acute hospital discharge diagnosis of DRG 475—the most frequently occurring LTCH discharge—only 34 percent were treated in LTCHs. Virtually all the rest were treated in acute hospitals, 18 percent as outliers and 48 percent as nonoutlier cases (RTI 2007). RTI found that DRG 475 ranked 3rd among acute hospital outlier cases and 16th among acute hospital nonoutlier cases.
Where are LTCHs located?

LTCHs can be either freestanding facilities or located within hospitals, in which case they are called hospitals within hospitals (HWHs). CMS has long been concerned that incentives under the acute care hospital prospective payment system (PPS) might encourage hospitals to make decisions about patient care on financial rather than clinical bases, resulting in inappropriate discharge of patients to LTCHs. In the short run, such inappropriate discharges create financial windfalls for hospitals engaging in the practice and increase costs to the Medicare program by triggering two payments (one for the acute care hospital stay and one for the LTCH stay) for what otherwise would be one inpatient stay. Over the longer term, such discharges distort the acute inpatient PPS relative weights by reducing the costs of some acute care hospitals.

Accordingly, CMS has established several policies to ensure that LTCHs operate independently from acute care hospitals. CMS requires that a HWH or satellite facility be independent and not influenced by the host hospital or related organization. The agency also established the so-called 25 percent rule, under which Medicare pays less for certain patients a HWH or satellite LTCH admits from its host hospital (the text box on the 25 percent rule, p. 222, describes this policy).

LTCHs are not distributed evenly in the nation, as shown in Figure 2G-1. Some areas have many LTCHs; others have none. The five states with the largest number of
In 2004, MedPAC conducted market-level analyses to compare characteristics of patients treated in markets with and without long-term care hospitals (LTCHs) and patient-level analyses to examine the impact of LTCH use on Medicare spending and outcomes. These analyses examined episodes of care created from 2001 claims data. Episodes began with admission to the acute hospital and ended with readmission to the acute hospital, 61 days without Medicare acute or post-acute care services, or death. MedPAC also created two subsamples of episodes for patients most likely to use LTCHs. The first subsample included patients who had a high probability (the top 5 percent) of using an LTCH based on their clinical characteristics. (Although these patients had the highest probability of using an LTCH, their likelihood of using one was still relatively small; only 4 percent of them used LTCHs.) The second subsample consisted of patients with an acute hospital diagnosis of tracheostomy with at least 96 hours of ventilator support. This group was the most strongly associated with using LTCHs; 23 percent were admitted to LTCHs.

We used the full sample and two subsamples to evaluate how LTCH use affected acute hospital length of stay; discharge destination after acute hospital stay; Medicare spending for post-acute care, including spending for LTCH care; Medicare spending for the episode of care (Part A services and home health care); readmission to acute hospitals; and mortality 120 days after acute hospital admission. We controlled for severity of illness using clinical variables available in administrative data and an instrumental variable approach to control for unmeasured severity of illness or “selection bias,” which might arise if physicians refer sicker patients to LTCHs from the acute hospital.

RTI International performed a similar analysis of claims data from 2004, focusing on cases with an acute hospital discharge diagnosis related group (DRG) among the top 50 LTCH DRGs and a severity index score of 2 or greater (RTI 2007).

Both MedPAC and RTI found that patients who use LTCHs have shorter acute hospital lengths of stay than similar patients who do not use these facilities, suggesting that LTCHs substitute for at least part of the acute hospital stay.

MedPAC also found that, in areas without LTCHs, freestanding skilled nursing facilities (SNFs) were

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**Medicare spending for long-term care hospital services**

Since October 2002, Medicare has paid LTCHs prospective per discharge rates based primarily on the patient’s diagnosis and the facility’s wage index. Before that, LTCHs were paid under the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) on the basis of their average costs per discharge but no more than an annually adjusted limit calculated for each facility. The PPS pays differently for patients who are high-cost outliers and for those whose lengths of stay are substantially shorter than average. CMS reduced payment for short stays in 2006.
Alternatives to long-term care hospitals (cont.)

the principal alternative. In areas without LTCHs, 25 percent of patients in the top 5 percent probability of using an LTCH were discharged from the acute hospital to a freestanding SNF, compared with 20 percent in areas with LTCHs. While this difference appears small, only 4 percent of these high-probability patients used LTCHs in market areas that had these facilities, as noted earlier. Among patients with tracheostomies in the acute hospital, 17 percent were discharged to freestanding SNFs in areas without LTCHs compared with 11 percent in areas with LTCHs. In both groups, the use of LTCHs was associated with a one-third reduction in the probability of using a freestanding SNF. We also found that beneficiaries in areas without LTCHs were not necessarily excluded from using LTCH services. Six percent of patients with tracheostomies who lived in areas without LTCHs used an LTCH in 2001.

We found that patients using LTCHs were less costly to Medicare during their acute hospital stays, principally because of shorter lengths of stay and lower outlier payments; the same patients, however, were more costly to the program during the post-acute phase of their episodes and were more costly for the total episode. The cost differences narrowed considerably when LTCH care was targeted to patients who were most likely to need this level of care. For example, among patients in the top 5 percent of probability of using an LTCH, we found that patients using LTCHs cost Medicare more than patients using alternative settings, but the difference was not statistically significant. For patients with tracheostomies, total episode spending was lower for those who used an LTCH than for those who did not. These findings suggest that LTCH use is best targeted to those patients who need and can benefit from the level of care provided in this setting.

Two caveats applied to our findings on Medicare payments because they are based on actual Medicare spending in 2001. First, acute hospital high-cost outlier payments were unusually high in 2001 (CMS 2003). As a result, we may have overstated the amount by which LTCHs reduced Medicare’s spending on outlier payments. Second, 2001 preceded changes in the financial incentives and rates that occurred with implementation of the LTCH prospective payment system (PPS) in 2003. Consequently, Medicare PPS spending for LTCH patients in the top 5 percent and for LTCH patients with tracheostomies may have been significantly higher than actual payments in 2001 because of the combination of the PPS rates and improvements in coding. Therefore, our findings of savings may have been overstated.

and again for the shortest stays in 2007. The recently passed MMSEA will temporarily suspend the 2007 changes. (This policy is discussed in detail in the text box on payment for short-stay outliers, p. 224).

Until 2007, LTCH payment rates were based on the LTC–DRG patient classification system. Patients were assigned to LTC–DRGs based primarily on diagnoses and procedures. In October 2007, CMS began replacing the LTC–DRG system with Medicare severity (MS) LTC–DRGs (CMS 2007a). These groups comprise base LTC–DRGs that have been subdivided into one, two, or three severity levels. As with the LTC–DRG system, the 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. CMS is phasing in MS–LTC–DRGs, with payment weights equal to a 50/50 blend of LTC–DRGs and MS–LTC–DRGs in 2008. Payment will be based entirely on MS–LTC–DRG weights in 2009. MS–LTC–DRGs are intended to improve the accuracy of payments.

After the PPS was implemented, Medicare payments for LTCH services grew rapidly, climbing an average 29 percent per year between 2003 and 2005 (Table 2G–2, p. 223). In 2006, Medicare spending for care provided by LTCHs was virtually the same as in 2005, $4.5 billion.
In fiscal year 2005, CMS established a new policy—the so-called 25 percent rule—to help ensure that hospitals within hospitals (HWHs) and long-term care hospital (LTCH) satellites do not function as units of host hospitals and that decisions about admission, treatment, and discharge in both the acute care hospital and the LTCH are made for clinical rather than financial reasons.

The 25 percent rule limits the proportion of Medicare patients who can be admitted from an HWH’s host hospital during a cost reporting period. HWHs and satellites are paid LTCH prospective payment system (PPS) rates for patients admitted from the host acute care hospital when those patients are below the threshold that year. After the threshold is reached, the LTCH is paid the lesser of the LTCH PPS rate or an amount equivalent to the acute hospital PPS rate for patients discharged from the host acute care hospital. Patients from the host hospital who are outliers under the acute hospital PPS before their transfer to the HWH do not count toward the threshold and continue to be paid at the LTCH PPS rate even if the threshold has been reached. The policy was to be phased in over three years, with the threshold set at 75 percent for fiscal year 2006, 50 percent for fiscal year 2007, and 25 percent for fiscal year 2008 and beyond. (Less stringent thresholds were applied to HWHs and satellites in rural areas or in urban areas where they are the sole LTCH or where there is a dominant acute care hospital.)

We estimated that this policy would reduce Medicare payments to LTCHs unless behavior changed. However, the impact of this policy could be reduced if HWHs and satellites admitted more patients who were high-cost outliers in their host hospitals, admitted patients from other acute hospitals, and reorganized as freestanding LTCHs. In addition, the impact of this policy may be blunted because, despite a regulatory requirement for HWHs and satellites to report their status to their fiscal intermediaries, CMS has had problems identifying HWHs and satellites.

Beginning in July 2007, CMS extended the 25 percent rule to apply to all freestanding LTCHs, limiting the proportion of patients who can be admitted to an LTCH from any one acute care hospital during a cost reporting period. The extended policy was to be phased in over three years, with the applicable threshold for non-HWHs and nonsatellites set at 75 percent for rate year 2008.

The Medicare, Medicaid, and SCHIP Extension Act of 2007 (MMSEA) substantially changed the 25 percent rule by rolling back the phased-in implementation of the 25 percent rule for HWHs and satellites, limiting the proportion of Medicare patients who can be admitted from an HWH’s or satellite’s host hospital during a cost reporting period to no more than 50 percent and holding it at this level for three years. (The applicable threshold for HWHs and satellites in rural areas or in urban areas with a single or dominant acute care hospital is 75 percent.) The MMSEA also reverses CMS’s phase-in of the 25 percent rule for freestanding LTCHs, preventing the Secretary from applying the rule to freestanding LTCHs for three years.

Ensuring that appropriate patients are treated in LTCHs

In response to Commissioners’ questions about the rapid growth in the number of LTCHs, the uneven distribution of providers across geographic areas, and the role that LTCHs play, MedPAC conducted qualitative and quantitative research on these facilities using data from 2001 (before the PPS was implemented) (MedPAC 2004). As mentioned...
above, we found that the types of cases LTCHs treat are often treated in alternative settings, such as acute care hospitals and skilled nursing facilities. We also found that patients using LTCHs cost Medicare more than similar patients using other settings (see text box on alternatives to LTCHs, pp. 220–221). However, the cost differences narrowed considerably if LTCH care was targeted to patients who were most likely to need this level of care.

The Commission was unable to measure the value Medicare gets from LTCH purchases because data on outcomes are not available. We looked at readmission to the acute care hospital as a gross measure of outcomes and found that patients treated in LTCHs in 2001 tended to have fewer acute hospital readmissions than patients treated in other post-acute care settings (MedPAC 2004). However, using 2004 data, RTI found that having an LTCH admission was associated with a greater likelihood of an acute care readmission (RTI 2007). This could reflect poorer quality, but it also could be due to a sicker patient population in LTCHs or to patients being discharged too soon from the acute care hospital.

In 2004, the Commission called for facility and patient criteria to differentiate LTCHs from other post-acute care settings and ensure that appropriate patients are treated in these facilities. While LTCHs appear to have value for very sick patients, they are too expensive to be used for patients who could be treated in less intensive settings (MedPAC 2004). Recently, the Congress mandated that the Secretary of Health and Human Services study whether facility and patient criteria can be used to determine medical necessity and appropriateness of admission to and continued stay at LTCHs (see text box, p. 217).

The Commission has also pointed out the need to monitor compliance of LTCHs with any new facility-level and patient-level criteria. Currently, quality improvement organization (QIO) reviews determine whether an LTCH patient required hospital-level care. Past QIO reviews found that a relatively large proportion of LTCH cases did not. In fiscal year 2005, a review of a national sample of 1,392 LTCH claims—about 1 percent of all LTCH claims—found that 7.9 percent of cases were not medically necessary (CMS 2006b). (By comparison, 4.7 percent of Medicare claims made by acute care hospitals were denied during the same period.) But the QIO review process does not distinguish whether a patient needed LTCH care as opposed to acute hospital care or other post-acute care.

### Table 2G–2

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Cases</td>
<td>85,229</td>
<td>98,896</td>
<td>16.0%</td>
<td>110,396</td>
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<td>Cases per 10,000 FFS beneficiaries</td>
<td>25.1</td>
<td>28.3</td>
<td>12.7</td>
<td>30.8</td>
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<tr>
<td>Spending (in billions)</td>
<td>$1.9</td>
<td>$2.2</td>
<td>15.8</td>
<td>$2.7</td>
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<tr>
<td>Spending per FFS beneficiary</td>
<td>$56.0</td>
<td>$63.0</td>
<td>12.5</td>
<td>$75.4</td>
</tr>
<tr>
<td>Payment per case</td>
<td>$22,009</td>
<td>$22,486</td>
<td>2.2</td>
<td>$24,758</td>
</tr>
<tr>
<td>Length of stay (in days)</td>
<td>31.3</td>
<td>30.7</td>
<td>–1.9</td>
<td>28.8</td>
</tr>
</tbody>
</table>

Note: PPS (prospective payment system), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), FFS (fee-for-service).

Source: MedPAC analysis of MedPAR data from CMS.
A short-stay outlier (SSO) is a patient with a shorter-than-average length of stay. In the long-term care hospital (LTCH) payment system, lower payments are triggered for patients with a length of stay equal to or less than five-sixths of the geometric mean length of stay for the patient’s long-term care diagnosis related group (LTC–DRG). About 35 percent of all LTCH cases received payment adjustments for having shorter-than-average stays in 2006, but this varies across types of cases. RTI analysis of 2004 data found, for example, that approximately 90 percent of psychiatric cases (LTC–DRG 430: psychoses, and LTC–DRG 429: organic disturbances and mental retardation) received SSO adjustments (RTI 2007).

Before July 2006, Medicare paid LTCHs the least of: 120 percent of the cost of the case, 120 percent of the LTC–DRG specific per diem amount multiplied by the patient’s length of stay, or the full LTC–DRG payment. Beginning in July 2006, CMS added another alternative for payment and changed an existing alternative to pay less for these cases. These changes reflected CMS’s belief that SSO cases with lengths of stay similar to those in acute care hospitals should be paid at rates comparable to those under the acute care hospital PPS. For an SSO patient, Medicare pays LTCHs the least of:

- 100 percent of the cost of the case,
- 120 percent of the LTC–DRG specific per diem amount multiplied by the patient’s length of stay,
- the full LTC–DRG payment, or
- a blend of the inpatient prospective payment system (IPPS) amount for the DRG and 120 percent of the per diem payment amount.

CMS has contracted with RTI to study the feasibility of implementing our recommendations on criteria for LTCHs. In a report released in January 2007, RTI reported findings from its site visits and data analyses. RTI recommended steps to better define LTCHs and to identify patients who are better suited to other settings (RTI 2007). RTI’s recommendations are similar to MedPAC’s recommendations, but CMS and RTI are continuing to explore the issue of whether clear patient criteria can be established.
With the support of RTI, CMS has convened two technical expert panels (TEPs) composed of clinicians from LTCHs, acute care hospitals with ventilator units, inpatient rehabilitation facilities, and skilled nursing facilities to discuss differences in the populations admitted to each setting and begin to identify critical differences in populations and facilities that would be associated with inappropriate admissions. At the most recent TEP meeting, held in November, small groups of clinicians used case studies to identify patient populations (with a particular focus on ventilator-dependent patients, the most frequently occurring LTCH diagnosis) and discuss the types of resources needed to treat these types of cases and the relative costliness and outcomes of treating them in LTCHs versus alternative sites of care.

TEP participants discussed facility-level criteria that could be used to define LTCHs. All agreed that a critical mass of patients with the targeted conditions was required to ensure that health providers had adequate experience treating the conditions. If this is the case, then the proliferation of LTCHs in some markets might be cause for concern. TEP participants also determined that structure and process standards were required to further ensure quality of care.

TEP participants agreed that one of the most consistent identifying features of critically ill patients is the need for intensive nursing care. For example, LTCHs and acute care hospital step-down units often have a RN-to-patient ratio of 1 to 4 or 5, compared with the typical ratio of 1 to 12 on an acute care medical/surgical floor. However, participants also agreed that LTCHs treat patients that are also appropriately cared for in other settings. That fact may complicate the development of useful and appropriate patient-level criteria for LTCHs.

That similar patients are treated in different settings also raises questions about parity across providers. The Commission has long held that payment for the same set of services should be the same regardless of where the services are provided. If LTCH patients can be (and are) appropriately treated in other facilities, then Medicare’s payments should be neutral with respect to setting. More research and better data are needed to compare types of patients, payments and costs, quality of care, and outcomes across acute and post-acute care settings to determine whether payments in each setting are sufficient.

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**Are Medicare payments adequate in 2008?**

We examine the following factors in determining the adequacy of Medicare payments to LTCHs:

- supply of facilities
- volume of services and access to care
- quality
- access to capital
- payments and costs

Conflicting findings make it difficult to assess current payment adequacy in this sector. Recent slowing in growth of LTCH facilities, cases, and Medicare spending may be cause for concern. Alternatively, the industry may be approaching equilibrium after a period of explosive growth spurred by overpayment and inappropriate admissions.

Our indicators of adequacy are mixed. The total number of LTCHs is holding fairly steady after a long period of rapid growth, as are both the total number of cases per FFS beneficiary and Medicare spending. Although we have no direct evidence on beneficiaries’ access to LTCH care, the steady use of this type of care suggests that access is being maintained. Quality indicators are mixed. Indications regarding LTCHs’ access to capital are unclear, although the MMSEA significantly alters Medicare payment policies for LTCHs, brightening the financial picture considerably. Aggregate Medicare margins for 2006 are 9.4 percent. Because of changes in payment policies and increases in costs, the estimated margin for 2008 ranges from –1.4 percent to –0.4 percent.

**Change in supply of facilities**

After a long period of rapid growth, the increase in the number of LTCHs participating in the Medicare program has slowed dramatically. From 1992 to 2005, the number of LTCHs quadrupled from 97 to 388, climbing an average 11.3 percent per year (Figure 2G-2, p. 226). Between 2005 and 2006, however, there was a net increase of just four LTCHs participating in Medicare (Table 2G-3, p. 227). Preliminary data suggest a stable situation for 2007.

For several years, HWHs were growing at a faster rate than freestanding LTCHs—about 16 percent annually from 2002 to 2005, compared with an average 4.6 percent
for freestanding facilities. Between 2005 and 2006, the total number of HWHs fell almost 2 percent. This turnaround is likely due to the 25 percent rule, which policymakers expected would slow down entry of HWHs into the Medicare program. Freestanding facilities, by contrast, grew somewhat more rapidly (5 percent) than they had previously.

Nationwide, there were approximately 26,000 Medicare-certified LTCH beds in 2006, or 0.73 bed per 1,000 FFS Medicare beneficiaries. However, as mentioned previously, the geographic distribution of LTCH beds is very uneven, with some areas having many and some having none.

The MMSEA imposes a three-year limited moratorium on new LTCHs and new beds in existing LTCHs.

**Change in volume of services and access to care**

We have no direct indicators of beneficiaries’ access to LTCH services. Controlling for the change in the number of FFS beneficiaries, the number of beneficiaries using LTCHs remained constant between 2005 and 2006, suggesting that access to care was maintained during the period. But assessment of access is difficult both because there are no criteria for LTCH patients and because it is not clear whether the patients treated in LTCHs require that level of care.

The number of LTCH cases grew an average 10.2 percent per year between 2003, when the PPS was implemented, and 2005 (Table 2G-2, p. 223). In 2006, almost 116,000 FFS beneficiaries had about 130,000 admissions to LTCHs, a decrease in admissions of 2.9 percent from the previous year. Most of this decrease can be explained by a 2.5 percent decline in the number of FFS beneficiaries, resulting from growth in the number of beneficiaries enrolling in Medicare Advantage plans. Medicare payments per case increased 3.4 percent between 2005 and 2006, after growing at an annual rate of 16.6 percent between 2003 and 2005. Since 2003, length of stay has declined about 1 percent per year, on average.

**Change in quality of care**

We use four types of measures of quality for LTCHs that can be calculated from routinely collected administrative data: death in the LTCH, death within 30 days of discharge from the LTCH, readmissions to acute care hospitals, and selected Agency for Healthcare Research and Quality (AHRQ) patient safety indicators (PSIs) that measure adverse events. The evidence based on these measures is mixed.

Death in the facility, death within 30 days of discharge, and readmission to the acute care hospital are generally used as gross indicators of quality. We focus on examining trends in these indicators, rather than levels, because levels can reflect both planned procedures and unplanned incidents as well as coding practices. The risk-adjusted share of patients who died in the LTCH and the share of those who died within 30 days of discharge continued to decline (Table 2G-4). After rising from 2004 to 2005, the risk-adjusted share of patients readmitted to the acute care hospital decreased in the next period.

AHRQ publishes 25 hospital-level PSIs to identify potentially preventable adverse events resulting from acute hospital care (AHRQ 2007). Four of them appear to be most appropriate for LTCHs—decubitus ulcers, infection due to medical care, postoperative pulmonary embolism (PE) or deep vein thrombosis (DVT), and postoperative sepsis. Patients in LTCHs frequently have lengthy stays and may be more likely to develop decubitus ulcers than patients in some other settings. Five of the 10
The most frequent LTCH diagnoses are respiratory related, so postoperative PE and DVT can be risks for these patients. We calculated the change in the rates per 1,000 LTCH patients for the four PSIs; results are shown in Table 2G-5 (p. 228). The rates for one of the four PSIs—postoperative PE or DVT—declined from 2005 to 2006, indicating improved quality, while the rates for decubitus ulcer, infection due to medical care, and postoperative sepsis increased, indicated worsening quality. However, we need to be cautious about interpreting the PSIs, as they were developed for acute hospital care, not for LTCHs.

Additional measures of quality for LTCHs are needed. The AHRQ PSIs can be calculated for overall industry safety in LTCHs, but because the incidence of these problems is relatively low, they may not be suitable for measuring quality in individual hospitals. Further, data on patient outcomes are currently not available. Measures of quality at the hospital-specific level could come from the industry. For example, the National Association of Long Term Hospitals has begun collecting outcomes and other performance measurement data from participating LTCHs. The measures include rates of weaning from ventilators, pneumonia contracted while on a ventilator, decubitus ulcers acquired in the LTCH, falls, and use of restraints (Kalman 2007). CMS could use a patient assessment instrument to collect similar data to monitor LTCH care. In addition, industry efforts to study the characteristics, treatments, and outcomes of LTCH patients such as those dependent on ventilators could lead to the development of evidence-based practice guidelines for some conditions (Scheinborn et al. 2007).

### Table 2G-3

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</thead>
<tbody>
<tr>
<td>All</td>
<td>286</td>
<td>317</td>
<td>353</td>
<td>388</td>
<td>392</td>
<td>10.7%</td>
<td>1.0%</td>
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<td>Urban</td>
<td>266</td>
<td>291</td>
<td>322</td>
<td>354</td>
<td>359</td>
<td>10.0%</td>
<td>1.4%</td>
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<tr>
<td>Rural</td>
<td>20</td>
<td>26</td>
<td>31</td>
<td>33</td>
<td>32</td>
<td>18.2%</td>
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<td>Freestanding</td>
<td>137</td>
<td>142</td>
<td>146</td>
<td>157</td>
<td>165</td>
<td>4.6%</td>
<td>5.1%</td>
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<tr>
<td>Hospital within hospital</td>
<td>149</td>
<td>175</td>
<td>207</td>
<td>231</td>
<td>227</td>
<td>15.7%</td>
<td>–1.7%</td>
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<td>Nonprofit</td>
<td>85</td>
<td>100</td>
<td>117</td>
<td>129</td>
<td>133</td>
<td>14.9%</td>
<td>3.1%</td>
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<tr>
<td>For profit</td>
<td>168</td>
<td>187</td>
<td>207</td>
<td>230</td>
<td>228</td>
<td>11.0%</td>
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<tr>
<td>Government</td>
<td>33</td>
<td>30</td>
<td>29</td>
<td>29</td>
<td>31</td>
<td>–4.2%</td>
<td>6.9%</td>
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</table>

Note: LTCH (long-term care hospital). Source: MedPAC analysis of Provider of Service files from CMS.

### Table 2G-4

<table>
<thead>
<tr>
<th>LTCH deaths and readmissions to acute care hospitals are declining</th>
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<tr>
<td>--------------------------</td>
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<tr>
<td>Death in LTCH</td>
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<tr>
<td>Death within 30 days of LTCH discharge</td>
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<td>Readmission to acute care hospital</td>
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</table>

Note: LTCH (long-term care hospital). Rates are adjusted to reflect 2001 case mix. Source: MedPAC analysis of MedPAR data from CMS.
Long-term care hospital services: Assessing payment adequacy and updating payments

Kindred, for example, owns more than 200 nursing facilities, a contract rehabilitation business providing rehabilitation services primarily in long-term care settings, and a pharmacy division operating more than 40 pharmacies and a pharmacy management business servicing most of its LTCHs. Select Medical is a leading operator of outpatient rehabilitation facilities in the United States and Canada. Most recently, the company announced an agreement to acquire CORA Health Services, an outpatient rehabilitation company with 95 clinics in Florida, Michigan, and Pennsylvania, for $46 million.

Payment policy changes under the MMSEA improve the industry’s financial picture considerably.

<table>
<thead>
<tr>
<th>Patient safety indicator</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Change in rate, 2005–2006</th>
<th>Observed adverse events, 2006</th>
<th>Total number of patients, 2006</th>
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</thead>
<tbody>
<tr>
<td>Decubitus ulcer</td>
<td>98.49</td>
<td>137.56</td>
<td>152.3</td>
<td>10.7%</td>
<td>16,593</td>
<td>103,975</td>
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<tr>
<td>Infection due to medical care</td>
<td>21.41</td>
<td>24.98</td>
<td>25.57</td>
<td>2.4</td>
<td>2,444</td>
<td>91,934</td>
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<tr>
<td>Postoperative PE or DVT</td>
<td>35.61</td>
<td>38.89</td>
<td>34.79</td>
<td>–10.5</td>
<td>560</td>
<td>15,940</td>
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<tr>
<td>Postoperative sepsis</td>
<td>81.68</td>
<td>74.18</td>
<td>75.58</td>
<td>1.9</td>
<td>286</td>
<td>3,158</td>
</tr>
</tbody>
</table>

Note: PE (pulmonary embolism), DVT (deep vein thrombosis). To control for patient condition on admission to the long-term care hospital, eligible discharges include only those with a previous acute hospital stay.

Source: MedPAC analysis of MedPAR data from CMS.

Long-term care hospitals’ access to capital

Almost three-quarters of LTCHs are proprietary, and roughly two-thirds of these are owned by one of two chains: Kindred Healthcare, Inc. and Select Medical Corp. For-profit chains can access capital through the equity market as well as by borrowing. Private equity firms control a large portion of the for-profit segment of the market. Several small chains, in addition to Select Medical, are controlled by private equity firms. Most recently, the private equity firm Highland Capital Management acquired Cornerstone Health Group, an owner of nine LTCHs, in October 2007.

The indications regarding LTCHs’ access to capital are difficult to interpret. Some financial analysts argue that even private equity firms might not have access to capital in the current environment and that some of the smaller chains are already highly leveraged. Uncertainty about potential changes to Medicare’s payment policies may heighten lenders’ anxiety.

On the other hand, some financial analysts believe that dire predictions about Medicare payment reductions have not come to pass and that business should stabilize over the next year. The publicly traded Kindred announced in early November 2007 that its third-quarter results exceeded expectations. Several analysts recently awarded the company’s stock “buy” and “market perform” ratings. In addition, private equity investment in the industry suggests that LTCHs have access to capital. LTCH companies are also increasingly diversified, both vertically and horizontally, which may improve their ability to control costs. Kindred, for example, owns more than 200 nursing facilities, a contract rehabilitation business providing rehabilitation services primarily in long-term care settings, and a pharmacy division operating more than 40 pharmacies and a pharmacy management business servicing most of its LTCHs. Select Medical is a leading operator of outpatient rehabilitation facilities in the United States and Canada. Most recently, the company announced an agreement to acquire CORA Health Services, an outpatient rehabilitation company with 95 clinics in Florida, Michigan, and Pennsylvania, for $46 million. Payment policy changes under the MMSEA improve the industry’s financial picture considerably.

Payments and costs

To assess the adequacy of Medicare payment, we examine payments to and costs of LTCHs. We also calculate an aggregate Medicare margin for LTCHs.

Evidence from cost reports suggests that growth in cost per case has increased rapidly since the PPS was implemented, climbing 9 percent between 2003 and 2004 and 6 percent annually between 2004 and 2006 (Figure 2G-3). When considering LTCH costs, note that LTCHs have considerable discretion in determining which patients to admit. Therefore, LTCHs may be very responsive to changes in payments, adjusting their costs per case when payments per case change. The rise in cost per case has roughly paralleled growth in payments per case, which climbed 13 percent between 2003 and 2004, 10 percent between 2004 and 2005, and 4 percent between 2005 and 2006.
Much of the growth in payments since the PPS was implemented has been due to an increase in the reported case mix of patients. When it first implemented the LTCH PPS, CMS expected that coding under the new classification system would improve. History suggests that the introduction of new case-mix classification systems and subsequent refinements to those systems usually lead to more complete documentation and coding of the diagnoses, procedures, services, comorbidities, and complications that are associated with payment. That can raise the average case-mix index (CMI) under the new or refined classification system, even though patients are no more resource intensive than they previously were. Changes to a classification system can therefore lead to unwarranted increases in payments to providers. For example, CMS found that between 2003 and 2004 LTCH improvements in coding and documentation resulted in an apparent CMI increase of 4.0 percent (CMS 2006b).6

Improvements in documentation and coding can be expected to decline over time, as LTCHs become familiar with the classification system. This may have helped to dampen recent growth in payments per case. However, on October 1, 2007, Medicare implemented a refined case-mix classification system, the MS–LTC–DRGs. The MS–LTC–DRGs comprise the base LTC–DRGs previously used for payment that have been subdivided into one, two, or three severity levels. MS–LTC–DRGs are the same groups used in the acute inpatient PPS, but they have relative weights specific to LTCH patients. Consistent with our analysis of changes to the acute care hospital PPS, we expect LTCHs will improve their documentation and coding of diagnoses and procedures and that this change in behavior will lead to increases in reported case mix (MedPAC 2007). Without an offsetting adjustment, increased case mix will lead to growth in payments per case.

The Medicare margin is the difference between Medicare payments and costs, as a percentage of Medicare payments. Conceptually, this margin represents the percentage of revenue that providers keep. LTCHs’ Medicare margins under TEFRA were often less than zero (Table 2G-6, p. 230). After CMS implemented the PPS in 2003, margins rose rapidly for all groups of LTCHs, climbing from 0.4 percent in 2002 to 11.8 percent in 2005. The 2006 Medicare margin for LTCHs is 9.4 percent.

HWHs and for-profit LTCHs have higher margins than freestanding and nonprofit LTCHs (Table 2G-6). (Government-owned LTCHs are relatively few in number, have few Medicare patients, and operate under different budget and economic constraints than other LTCHs.)

A number of payment policy changes affect our estimate of the 2008 Medicare margin. In general, these changes decrease payments for LTCHs. The changes include:

- a market basket increase of 3.4 percent for 2007, offset by an adjustment for past coding improvement for a net update of zero (CMS 2006b);
- changes in the short-stay outlier policy in 2007;
- changes to the case-mix groups and relative weights in 2007, implemented in a non-budget-neutral manner (CMS 2006a);
- for 2007 through 2010, setting the 25 percent rule at 50 percent for HWHs and satellite LTCHs and at 75 percent for rural facilities and for those in urban areas with a single or dominant acute care hospital (see text box, p. 217);
How should Medicare payments change in 2009?

The Secretary has the discretion to update payments for LTCHs; there is no congressionally mandated update. As noted above, LTCHs tend to be very responsive to changes in payments, adjusting their costs per case when payments per case change. Therefore, we expect growth in costs will continue to slow as growth in payments has been contained. CMS’s latest forecast of cost growth (the market basket) for 2009 is 3.1 percent.

MedPAC’s update framework reflects the expectation that, in the aggregate, providers should be able to reduce the quantity of inputs required to produce a unit of service while maintaining service quality. Prospective payment is designed to promote efficiency, and providers should be expected to increase productivity. To estimate productivity increases, MedPAC uses the 10-year moving average of multifactor productivity in the economy as a whole, which is 1.5 percent for 2007.
**Update recommendation**

On the basis of our review of payment adequacy for LTCHs, the Commission recommends that the Secretary update LTCH payment rates by the rehabilitation, psychiatric, and LTCH market basket index less the Commission’s adjustment for productivity growth (1.5 percent). Under current market basket assumptions, this recommendation would update the LTCH payment rates by 1.6 percent.

**RECOMMENDATION 2G**

The Secretary should update payment rates for long-term care hospitals for rate year 2009 by the projected rate of increase in the rehabilitation, psychiatric, and long-term care hospital market basket index less the Commission’s adjustment for productivity growth.

**RATIONALE 2G**

Conflicting findings make it difficult to assess current payment adequacy in this sector. Growth in LTCH facilities, cases, and Medicare spending have slowed, which could call into question the adequacy of payments and access to care. However, it is difficult to determine when use of these services is appropriate and necessary. Frequently, LTCHs entering the program locate in market areas where LTCHs already exist, raising questions about whether there are sufficient numbers of very sick patients to support the number of LTCHs in the community. Seen in this light, recent slowing in growth of facilities, cases, and Medicare spending may be desirable. Further, payment policy changes to be implemented under the MMSEA improve the financial outlook for LTCHs considerably. Nevertheless, our estimated Medicare margin for 2008 suggests that LTCHs may not be able to accommodate the cost of caring for Medicare beneficiaries in 2009 without an increase in the base rate.

**IMPLICATIONS 2G**

**Spending**

- This recommendation decreases federal program spending by between $50 million and $250 million in one year and by less than $1 billion over five years.

**Beneficiary and provider**

- This recommendation is not expected to affect Medicare beneficiaries’ access to care or providers’ ability to furnish care. ■
Long-term care hospital services: Assessing payment adequacy and updating payments

1 The five states with the largest number of beds per 1,000 Medicare beneficiaries are Massachusetts, Louisiana, Rhode Island, Texas, and Connecticut.

2 For more detail on the PPS for LTCHs, see http://medpac.gov/documents/MedPAC_Payment_Basics_07_LTCH.pdf.

3 During the year, the HWH will be paid the LTCH rate. During retrospective settlement at the end of an HWH’s cost report year, if the HWH is determined to be overpaid, CMS will collect the overpayment from future payments.

4 A geometric mean is derived by multiplying all numbers in a set and raising that product to the exponent of one divided by the number of cases in the set.

5 We used LTCH claims for 2003 through 2006 to identify patients with the four PSIs. We excluded patients from the analysis who had any diagnosis before transfer to the LTCH that would trigger the PSIs. (LTCH patients who did not have a prior acute care hospital stay were excluded from the analysis because we could not determine whether they had a diagnosis before admission to the LTCH that would trigger the PSIs.) Therefore, observed changes in rates are not the result of LTCHs admitting more patients who already had these conditions. The PSIs are also risk-adjusted so changes should not reflect a changing patient population over time.

6 CMS found that the observed average CMI increased 6.75 percent between fiscal year 2003 (when the PPS was implemented) and fiscal year 2004 (CMS 2006b). A previous 3M analysis suggested that, in the years immediately preceding implementation of the PPS, the increase in real CMI (that is, the increase due to treatment of more resource-intensive patients rather than to improvements in documentation and coding) was 2.75 percent (CMS 2006b). CMS assumed that the real CMI increase remained relatively constant into fiscal year 2005 and concluded that, between 2003 and 2004, improvements in coding and documentation resulted in an apparent CMI increase of 4.0 percent (6.75 percent minus 2.75 percent). Since this 4.0 percent was considerably higher than the 0.34 percent originally estimated by CMS actuaries, CMS concluded that an additional 3.66 percent adjustment (4 percent minus 0.34 percent) should be made to the federal payment rate for rate year 2007 to account for improvements in coding. For fiscal year 2007, CMS implemented a zero update, subtracting 3.66 percent from the applicable market basket increase of 3.4 percent.
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CHAPTER 3

Update on the Medicare Advantage program
<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Description</th>
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<tbody>
<tr>
<td>3-1</td>
<td>The Congress should require the Secretary to establish additional, tailored performance measures for special needs plans and evaluate their performance on those measures within three years.</td>
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<tr>
<td>3-2</td>
<td>The Secretary should furnish beneficiaries and their counselors with information on special needs plans that compares their benefits, other features, and performance with other Medicare Advantage plans and traditional Medicare.</td>
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<tr>
<td>3-3</td>
<td>The Congress should direct the Secretary to require chronic condition special needs plans to serve only beneficiaries with complex chronic conditions that influence many other aspects of health, have a high risk of hospitalization or other significant adverse health outcomes, and require specialized delivery systems.</td>
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<tr>
<td>3-4</td>
<td>The Congress should require dual-eligible special needs plans within three years to contract, either directly or indirectly, with states in their service areas to coordinate Medicaid benefits.</td>
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<td>3-5</td>
<td>The Congress should require special needs plans to enroll at least 95 percent of their members from their target population.</td>
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</table>
| 3-6            | The Congress should eliminate dual-eligible and institutionalized beneficiaries’ ability to enroll in Medicare Advantage plans, except special needs plans with state contracts, outside of open enrollment. They should also continue to be able to disenroll and return to fee-for-service at any time during the year.  

(Note: This recommendation includes a two-word, technical correction that Commissioners voted on at their January meeting. That vote was 14 yes and 3 absent.) |
| 3-7            | The Congress should extend the authority for special needs plans that meet the conditions specified in Recommendations 3-1 through 3-6 for three years. |
Chapter summary

The Commission supports private plans in the Medicare program. Medicare beneficiaries should have a choice between the fee-for-service (FFS) Medicare program and the alternative delivery systems that private plans can provide. Private plans may use care management techniques, and—if paid appropriately—they have the incentive to innovate. The Commission supports financial neutrality between payment rates for the FFS program and the Medicare Advantage (MA) program. Financial neutrality means that Medicare should pay the same amount, adjusting for risk, regardless of which option a beneficiary chooses. Neutrality is important to spur efficiency and innovation.

Looking at the MA program, we find that:

- At the end of 2007, about 20 percent of Medicare beneficiaries were enrolled in MA plans. All beneficiaries have access to an MA plan in 2008, with an average of 35 plans available in each county. In 2008, 85 percent of Medicare beneficiaries have a local HMO or preferred provider organization plan in their county and
all beneficiaries have a private fee-for-service (PFFS) plan available. Enrollment data show rapid growth in private plans, but it comes mostly from two types of plans of concern to us—PFFS plans and special needs plans (SNPs).

- For 2008, MA plan bids for traditional Medicare services relative to Medicare FFS spending increased over the ratio we found for 2006, and costs for MA plans continue to exceed Medicare FFS expenditures. This added cost contributes to the worsening long-range financial sustainability of the Medicare program. MA payments are projected to be 113 percent of FFS expenditures for 2008. The MA program is now less efficient than the traditional program. That is, plan bids for the traditional Medicare benefit package are projected at 101 percent of FFS, while they were at 99 percent of FFS in 2006. However, one plan type—HMOs—continues to bid below FFS, with bids projected at 99 percent of FFS in 2008. Although we are comparing plans with FFS, the Commission does not view traditional FFS as a reasonable standard of efficiency. Indeed, many of the Commission’s past recommendations are designed to address flaws in FFS.

- Some quality measures show disappointing results. Commercial and Medicaid plans improved more in clinical measures over the past year than Medicare plans. New plans in Medicare—those entering the program in 2004 or later—show poorer performance than older plans on clinical indicators of quality. However, MA plans, including new plans, have high enrollee satisfaction.

We are concerned about the lack of comparable quality indicators for Medicare beneficiaries in the traditional Medicare FFS program, in particular the survey that measures changes in the health status of FFS beneficiaries. We also discuss the absence of quality measures for certain types of MA plans. Data on the health care MA plans provide are also lacking. These data would be useful for monitoring and learning from the MA program.
SNPs, created by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, were designed to serve Medicare beneficiaries with special needs. These plans are allowed to limit enrollment to specific categories of beneficiaries. Recent legislation extended SNPs for another year, but a moratorium was imposed that prevents the formation of new plans or the expansion of current plans. The Commission has concluded that SNPs require further study to determine whether they provide value to the program. We recommend ways to improve SNPs as they continue to be evaluated. The current rule allowing dual-eligible beneficiaries to change plans each month has contributed to marketing abuses. Therefore, we recommend a change in enrollment rules so that beneficiaries may enroll in an MA plan only during the annual open enrollment and during defined special election periods.

SNPs must collect and report general MA plan quality measures, which are not designed to ensure that SNPs provide specialized care for their targeted populations. New and existing measures should form the basis for a rigorous evaluation to help inform a future decision about whether SNPs should become a permanent MA option.

Recommnendation 3-1

The Congress should require the Secretary to establish additional, tailored performance measures for special needs plans and evaluate their performance on those measures within three years.

Commissioner Votes:
YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0

A lack of clear information is an impediment to beneficiaries’ learning about and making an informed decision about joining a SNP, as well as to policymakers’ ability to judge what benefits SNPs provide.

Recommendation 3-2

The Secretary should furnish beneficiaries and their counselors with information on special needs plans that compares their benefits, other features, and performance with other Medicare Advantage plans and traditional Medicare.

Commissioner Votes:
YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0

CMS has not explicitly defined which chronic conditions are appropriate for SNPs to target. Not all chronic condition SNPs are sufficiently specialized to
warrant targeted delivery systems and disease management strategies and the unique ability to limit enrollment to certain beneficiaries.

**Recommendation 3-3**

The Congress should direct the Secretary to require chronic condition special needs plans to serve only beneficiaries with complex chronic conditions that influence many other aspects of health, have a high risk of hospitalization or other significant adverse health outcomes, and require specialized delivery systems.

**Recommendation 3-4**

The Congress should require dual-eligible special needs plans within three years to contract, either directly or indirectly, with states in their service areas to coordinate Medicaid benefits.

**Recommendation 3-5**

The Congress should require special needs plans to enroll at least 95 percent of their members from their target population.

Although they were intended to coordinate Medicare and Medicaid, dual-eligible SNPs are not required to coordinate benefits with Medicaid programs, and many operate without state contracts. Without a contract with states to cover Medicaid benefits, it is unclear that a dual-eligible SNP is different from a regular MA plan.

SNPs may apply to CMS for a waiver to enroll a disproportionate share of their targeted population. This means that the target population in the plan must be greater than the percentage that occurs nationally in the Medicare population. SNPs with waivers can select among enrollees who fall outside targeted populations based on unknown criteria.

Dual-eligible and institutionalized Medicare beneficiaries can enroll and disenroll from MA plans monthly. The provision may contribute to plan marketing abuses. This recommendation would still allow dual-eligible and
institutionalized beneficiaries to change plans during the open enrollment period and during special election periods triggered by life events, and to disenroll from a bad plan at any time.

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**Recommendation 3-6**

The Congress should eliminate dual-eligible and institutionalized beneficiaries’ ability to enroll in Medicare Advantage plans, except special needs plans with state contracts, outside of open enrollment. They should also continue to be able to disenroll and return to fee-for-service at any time during the year.

(Note: This recommendation includes a two-word, technical correction that Commissioners voted on at their January meeting. That vote was 14 yes and 3 absent.)

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SNPs’ authority to limit enrollment will expire December 2009. In light of SNPs’ rapid growth in number and enrollment, we call for a rigorous evaluation to inform our decision about recommending them as a permanent MA option.

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**Recommendation 3-7**

The Congress should extend the authority for special needs plans that meet the conditions specified in Recommendations 3-1 through 3-6 for three years.
Update on MA plan enrollment, availability, and payment

The Medicare Advantage (MA) program allows Medicare beneficiaries to receive Medicare benefits from private plans rather than from the traditional fee-for-service (FFS) program. MA enrollees may receive additional benefits beyond those offered under traditional Medicare. Medicare finances these additional benefits in most cases, though in some cases enrollees pay additional premiums for the extra benefits. Medicare pays plans a capitated rate for the 20 percent of beneficiaries enrolled in MA plans at the end of 2007.

Over the past year, the Commission has monitored the MA program as enrollment in private plans expands, new organizations enter the Medicare market, and different types of MA options gain market share. The Commission’s earlier recommendations to the Congress on MA and the new recommendations in this chapter concerning special needs plans (SNPs) generally seek to promote an efficient, high-quality private health plan option in Medicare.

The Commission supports private plans in the Medicare program. Beneficiaries should be able to choose between the FFS Medicare program and the alternative delivery systems that private plans can provide. Private plans may use care management techniques, and—if paid appropriately—they have the incentive to innovate.

However, the Commission also supports financial neutrality between payment rates for the FFS program and the MA program. Financial neutrality means that the Medicare program should pay the same amount regardless of which Medicare option a beneficiary chooses. Neutrality is important to restore the original goal of having private plans in Medicare: to stimulate efficiency and innovation. Currently, the MA system increases government outlays and beneficiary premiums (including those who elect to remain in traditional Medicare) at a time when Medicare is under increasing financial stress.

This chapter contains several new recommendations for improving the program, and we reiterate our past recommendations. We are particularly concerned about private fee-for-service (PFFS) plans and SNPs. Our concerns with regard to SNPs are discussed in detail at the end of this chapter. Our concerns with PFFS plans arise because they are not coordinated care plans and do not operate on a level playing field with other plan types. They are the plan type with the highest enrollment growth since 2005. With one minor exception (a plan that has a hospital network), PFFS plans do not have provider networks, and they pay providers at Medicare rates—that is, they operate like traditional FFS. However, they are less efficient than the traditional FFS program; they bid 8 percent higher than FFS for the same benefit package. PFFS plans have fewer program requirements than coordinated care plans; the law exempts them from the quality reporting requirements applicable to other plan types. An additional concern is that PFFS plans and their brokers have been responsible for a large portion of the marketing abuses in the MA program, which have resulted in sanctions and fines from the Centers for Medicare & Medicaid Services (CMS), including a moratorium on marketing and sanctions and fines on brokers by the states (U.S. House of Representatives 2007).

Plan types

The MA program includes several plan types. CMS calls HMOs and preferred provider organizations (PPOs) coordinated care plans (CCPs), which have provider networks and various tools to coordinate and manage care. CMS divides PPOs into two categories—local and regional. Local PPOs can serve individual counties (as can HMOs), while regional PPOs are required to serve and offer a uniform benefit package across regions made up of one or more states. Local PPOs must meet more extensive network requirements than regional PPOs. The MA program also includes PFFS plans (and plans tied to medical savings accounts (MSAs)), which do not typically have provider networks and so have less ability to coordinate care.

Within a plan type, we sometimes make further distinctions. SNPs, described in detail later in this chapter, are also CCPs. All enrollment, bidding, and payment statistics presented in this chapter regarding CCPs include SNPs. We also sometimes distinguish employer-only plans, which are available only to employer or union groups and not to individual beneficiaries. The employer-only plans may be any plan type, and our statistics (except for the availability statistics because these plans are not available to all beneficiaries) include them.

Plan enrollment in 2007

Enrollment in MA plans grew by 18 percent, or 1.4 million enrollees, from November 2006 to November 2007 (Table 3-1, p. 244). Almost 9 million beneficiaries are now enrolled in private plans, comprising 20 percent of all Medicare beneficiaries.
Update on the Medicare Advantage program

Medicare beneficiaries will have more plans to choose from in 2008. Private plan alternatives to the FFS Medicare program are available to all beneficiaries, as has been the case since 2006 (Table 3-2). Despite relatively slower enrollment growth in the local CCP plans, more of these plans will be available in 2008. Eighty-five percent of Medicare beneficiaries will have a local HMO or PPO plan operating in their county of residence, up from 82 percent in 2007 and 67 percent in 2005. (Separately, 80 percent of beneficiaries will have an HMO available and 62 percent will have a local PPO available in 2008, up from 76 percent and 62 percent, respectively, in 2007.) PFFS plan availability increased in 2007 to virtually 100 percent of beneficiaries, and that situation continues into 2008.

Overall access to CCPs (not shown in table) will remain at 99 percent of beneficiaries in 2008, up from 98 percent in 2006. Access to regional PPOs remains unchanged from 2006 and 2007.

High-deductible plans linked to MSAs will be available to all Medicare beneficiaries outside Puerto Rico in 2008. MSAs were available for the first time in 2007 and they were in 38 states and the District of Columbia (77 percent of beneficiaries). In 2007, about 2,000 beneficiaries were enrolled in MSA plans. (See p. 250 of MedPAC’s March 2007 report for a more detailed description of MSA plans (MedPAC 2007).)

**Table 3-1**

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<tr>
<td>Urban</td>
<td>6.7</td>
<td>7.7</td>
<td>15</td>
<td>23</td>
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</table>

**Note:** MA (Medicare Advantage), CCP (coordinated care plan), PFFS (private fee-for-service). Penetration is the percentage of all Medicare beneficiaries who are enrolled in plans. For rural and urban areas, the table shows the percentage of beneficiaries living in these areas who are enrolled in plans. CCPs include special needs plans; all categories include employer-only plans. Totals include about 400,000 enrollees in cost-reimbursed plans that are not MA plans. Totals may not sum due to rounding.

**Source:** MedPAC analysis of CMS enrollment files.
Beneficiaries will have many more plan options to choose from in 2008 than in the past. Excluding SNPs and employer-only plans, an average of 35 plan options are offered in each county in 2008, compared with 20 plan options in 2007. The growth in the number of PFFS offerings accounts for the bulk of the increase. PFFS plans now account for more than three-quarters of all plan options open to all Medicare beneficiaries (not counting SNPs and employer-only plans that are open to only a subset of beneficiaries).

For 2008, the share of Medicare beneficiaries living in an area with a SNP will increase to 95 percent, up from 76 percent in 2007. The percentages of beneficiaries in SNP service areas are: 77 percent for dual-eligible, 54 percent for institutional, and 89 percent for chronic condition SNPs.

Access to plans with extra benefits has increased. In 2008, 88 percent of Medicare beneficiaries have access to at least one MA plan that includes Part D coverage and has no premium (beyond the Medicare Part B premium) for the combined coverage (and no additional premium for non-Medicare-covered benefits included in the benefit package), compared with 86 percent in 2006.

### Determining Medicare payment for MA plans

Since 2006, plan bids have partially determined the Medicare payments they receive. Plans bid to offer Part A and Part B coverage (Part D coverage is handled separately) to Medicare beneficiaries. The bid discussed here covers an average beneficiary with respect to health spending and includes plan administrative cost and profit. CMS bases the Medicare payment for a private plan on the relationship between its bid and benchmark.

The benchmark is an administratively determined bidding target. Legislation in 1997 established benchmarks in each county, which included a floor—a minimum amount below which no county benchmarks could go. By design, the floor rate exceeded FFS spending in many counties. It was established to attract plans to areas (mostly rural) with lower-than-average FFS spending. Legislation in 2000 established a second, higher “urban” floor, which applied only to counties in metropolitan areas with more than 250,000 residents. Also, no benchmark can be below per capita FFS spending in a county.

If a plan’s bid is above the benchmark, then the plan receives the benchmark and enrollees have to pay an additional premium that equals the difference. If a plan’s bid falls below the benchmark, the plan receives its bid. Plans that bid below the benchmark also receive payment from Medicare in the form of a “rebate,” defined by law as 75 percent of the difference between the plan’s bid and its benchmark. The plan must then return the rebate to its enrollees in the form of supplemental benefits, lower cost sharing, or lower premiums.
A more detailed description of the MA program payment system can be found on MedPAC’s website: http://www.medpac.gov/documents/MedPAC_Payment_Basics_07_MA.pdf.

**Payments to plans in 2008 and comparison with Medicare FFS spending**

The Commission supports financial neutrality between payment rates for the FFS and the MA programs. Financial neutrality means that the Medicare program should pay the same amount, adjusting for the risk status of each beneficiary, regardless of which Medicare option a beneficiary chooses. Numerically, that means plans should be paid 100 percent of FFS spending, after adjusting for risk. Our analysis of plan benchmarks and MA payment levels shows that benchmarks and MA program payments continue to be well above FFS expenditures.

In our March 2007 Report to the Congress, the Commission found that 2006 program payments to MA plans were 112 percent of spending in Medicare’s traditional FFS program (MedPAC 2007). The report also noted that MA benchmarks were 116 percent of FFS expenditures. In this section, we update the earlier analysis with new enrollment data for 2007, the 2008 benchmarks, and the 2008 plan bids. The new analysis shows similar, although higher, results, with MA payments projected at 113 percent of FFS spending and benchmarks at 118 percent of FFS spending (Table 3-3). That means the Medicare program is paying about $10 billion more for the 20 percent of beneficiaries enrolled in MA plans than if they remained in FFS Medicare.

We present some of the data with and without results for plans in Puerto Rico, where the MA market has some unusual characteristics. The statute set benchmarks in Puerto Rico effectively at 180 percent of FFS expenditures. Traditionally, we have reported our MA analyses including Puerto Rico; however, excluding Puerto Rico from the overall statistics in the updated analysis results in benchmarks of 116 percent (rather than 118 percent) of FFS and puts MA payments at 112 percent (rather than 113 percent) of FFS.

The ratio of payments relative to FFS spending varies by the type of MA plan. While we have grouped HMOs and local (not regional) PPOs together into the local CCP category for enrollment and availability analyses, we report them separately for the bidding and payment analyses because they exhibit different bidding behavior. We also look at SNPs and employer-only plans, because their bidding behavior differs from that of other types of plans.

Benchmarks differ from the overall average of 118 percent when plans draw enrollment from areas with higher or lower benchmarks, relative to FFS, than the average. Local PPOs draw more heavily (not shown in table) from urban floor counties (55 percent of their enrollment vs. 40 percent of all MA enrollees), and PFFS plans draw more heavily from rural floor counties (31 percent of PFFS enrollment vs. 10 percent of all MA enrollees).

Therefore, local PPOs and PFFS plans have higher average benchmarks compared with FFS than other plan types.

We estimate that HMOs bid an average of 99 percent of FFS spending, while bids from other plan types average at least 103 percent of FFS spending. These bids, combined with benchmarks well above FFS, produce payments to plans that are well above FFS spending. These numbers suggest that HMOs can provide the same services for less than FFS and other plan types tend to charge more. HMOs have increased their bids from 97 percent of FFS in 2006 to 99 percent in 2008. Only PFFS plans have reduced their bids relative to FFS compared with 2006, probably because PFFS plans have expanded and are now available in all areas. As they expand, they draw enrollment from counties with benchmarks that are closer to FFS, so their bids are closer to FFS.

We project 2008 payment to plans will average 113 percent of FFS spending. HMOs and regional PPO payments are estimated to be 112 percent of FFS, while payments to PFFS and local PPOs will average at least 117 percent. These payment ratios are two points higher than we estimated for 2006, except for the PFFS plan ratio, which is two points lower.

While, on average, SNPs bid below FFS spending, payments to SNPs average 115 percent of FFS spending. It is most appropriate to compare the SNP numbers with those for HMOs, because 90 percent of SNP enrollees are in SNP HMOs. We also report SNPs with and without Puerto Rico because almost one-quarter of all 2007 SNP enrollees lived in Puerto Rico. Average SNP benchmarks, without Puerto Rico, are projected at 114 percent rather than 121 percent; SNP program payment levels would have been projected at 109 percent rather than 115 percent of FFS if Puerto Rico had been excluded. With or without Puerto Rico, SNPs bid lower relative to FFS than any other group of plans, partly because of the relatively low benchmark-to-FFS ratios of the areas outside of Puerto Rico where they tend to draw enrollment.
Employer-only plans tended to bid higher (108 percent) than other plans and their payments averaged 116 percent of FFS spending. Although they are not displayed, we examined employer-only plans within each plan type and found that they consistently bid higher than plans open to all Medicare beneficiaries. Because these plans do not have to market to individuals, the Medicare bids may not be as competitive. Employer-only plans can negotiate with employers after the Medicare bidding process is complete, which may result in some employer costs being shifted into the Medicare bid and payment. An alternative explanation for the higher bids is that the retiree population has higher costs. Regardless of the cause for the higher bids, excluding the employer-only plans from our calculations would move the average MA bid down to 99 percent of FFS. We intend to investigate employer-only plans further.

Beginning in 2007, almost all MA plan payments were fully risk adjusted, after a lengthy phase-in. The transition to full risk adjustment may affect the bidding behavior of some plan types. SNPs expect to enroll less healthy people than average and employer-only plans expect to enroll healthier people on average (as one might expect given the target populations). Plans are paid more for less healthy enrollees, and if plans can successfully manage care, they should be able to lower costs for these enrollees more than for healthy beneficiaries. The opposite may be true of employer-only plans. What plans do to manage care and how effective they are is unknown. In future work, we would like to investigate the relationship between risk adjustment and bidding behavior.

To examine plans’ relative costs for different types of enrollees, we need to see plan data that include service use. Plans now submit only diagnosis data for the risk adjustment process and no longer provide encounter data to CMS that detail the services provided to each enrollee. (Under a prior risk-adjustment system, plans submitted inpatient hospital encounter data.) If CMS collected encounter data, it would help explain plans’ relative costs for different types of enrollees and help determine best practices that other plans or the FFS system might want to adopt. It may also inform questions about the relationship
between Part D offerings and the use of other health services.

Efficiency in Medicare Advantage and extra benefits

Ideally, efficient plans can provide extra benefits. If a private plan used savings from covering hospital and physician care to provide low cost sharing or extra benefits, it would attract enrollees. Extra benefits could include reduced out-of-pocket costs and coverage of services not covered by Medicare, such as dental, hearing, and vision services and (most importantly before the advent of Part D) outpatient prescription drugs. Having plans compete with each other based on furnishing hospital and physician care at low cost and high quality would promote efficiency. In a system in which plan payments are appropriately risk-adjusted, a richer benefit package would generally signal that one plan was more efficient than a competing plan—and that a private plan offering extra benefits was more efficient than the traditional Medicare FFS program in the plan’s market area.

We want to be clear that even though we use the FFS Medicare spending level as a measure of parity for the MA program, this should not be taken as a conclusion that the Commission believes that FFS Medicare is an efficient delivery system in most markets. In fact, much of our work is devoted to identifying inefficiencies in FFS Medicare and suggesting improvements in the program. However, good policy might argue that coordinated care systems found in many MA plans should always be able to be as efficient as FFS Medicare and in most cases should be more efficient. We would also like to note that some level of inefficiency is built into benchmarks based on FFS spending.

Our analysis finds that some plans are able to cover the same services in the traditional Medicare Part A and Part B benefit at a lower cost. As shown in Table 3-3 (p. 247), on average for 2008, HMO plans cover the same services for 99 percent of Medicare FFS expenditures. However, some plan types were much less efficient; for example, PFFS plan bids averaged 108 percent of FFS expenditures. Note that Medicare payments are higher than these bids because of the payment formula mentioned earlier.

Paying a plan more than FFS spending for delivering the same services is not an efficient use of Medicare funds, particularly if the payments do not result in improved quality of care. We are concerned that the average MA bid for Medicare Part A and Part B services is above average FFS spending. This means that, on average, all extra services by the plan are funded by the Medicare program and not by plan efficiencies. In addition, a significant portion of the value of the extra benefits goes to fund plan administration and profits and not to services for beneficiaries.

The MA program as currently structured does not ensure that any added benefits are delivered as efficiently as possible. Many MA plans have demonstrably higher costs than traditional Medicare. Moreover, increasing MA payments in low-cost areas does little to reward the providers responsible for keeping down costs in those areas. A better approach would be to reward providers in low-cost areas through the FFS payment structure—or better yet, through innovative new payment systems.

The effects of high benchmarks

The Commission supports financial neutrality between payments in the traditional FFS program and MA program payments. Expressed in terms of the level of benchmarks for MA plans in the current bidding system, financial neutrality would mean that benchmarks should be set at 100 percent of Medicare FFS expenditures, as the Commission recommended. The Commission also recommended that the 25 percent difference between the benchmark amount and bids below 100 percent of the benchmark that is currently retained in the Trust Funds should be used to fund a pay-for-performance program in MA to spur improvements in quality.

Payment policy is a powerful signal of what we value. The original conception (in the 1980s) for private plans in Medicare was that private plans would be a mechanism for introducing innovation into the program while saving money for Medicare (they were paid 95 percent of FFS). To compete effectively with Medicare, private plans would be compelled to do things that traditional Medicare found difficult or that would be difficult to impose on all beneficiaries and providers—for example, selective contracting with efficient providers and effective management and coordination of care. By increasing payment to levels significantly above traditional Medicare, we have changed the signal we are sending to the market: Instead of efficiency-enhancing innovation, we are getting plans (private FFS) that are much like traditional Medicare, except at a higher cost.

The growth in less efficient plans heightens our concerns about equity issues that arise with MA vis-à-
vis the traditional Medicare program, about equity for beneficiaries and taxpayers, and about ensuring a level playing field among the different types of MA plans. The equity and efficiency issues are of particular concern when Medicare is not financially sustainable in the long run (described in depth in Chapter 1).

With MA benchmarks at their current levels, the MA program has higher costs than FFS Medicare. While some of the excess funds are used to finance extra benefits for MA enrollees, all beneficiaries (through their Part B premium) and all taxpayers (through general revenues) are paying for those benefits. Most Medicare beneficiaries are not MA enrollees, but all beneficiaries pay for benefits enjoyed by the 20 percent who are enrolled in MA plans. The current level of payments also distorts other elements of the program, such as the Part D benchmarks (as we discuss in Chapter 4) and rapid plan market entry as noted later in this chapter.

The high MA benchmarks allow plans to be less efficient than they would be if they faced the financial pressure of benchmarks closer to Medicare FFS levels. As the Commission has stated in the past, organizations are more likely to be efficient when they face financial pressure, and the Medicare program needs to exert consistent financial pressure on the FFS and MA programs, coupled with meaningful quality measurement and pay-for-performance programs, to maximize the value it receives for the dollars it is spending. These principles are embodied in our past recommendations on the MA program (see text box, p. 250). We strongly reiterate these recommendations in light of our concerns about the directions the MA program is taking.

**Medicare Advantage plan performance on quality measures**

Although many MA plans perform well on quality measures, we find that between 2005 and 2006, clinical process measures and intermediate outcomes measures in MA did not show the same rate of improvement as in commercial and Medicaid plans. Newer MA plans—those that began operating in 2004 or later—tend to score worse than older plans on clinical quality measures. In addition, a survey that tracks the physical and mental health of MA enrollees shows that, between 2004 and 2006, the large majority of plans showed outcomes within expected ranges, but plans were less likely to have improved the physical and mental health of their enrollees than in earlier years. On the other hand, surveys of MA enrollees’ satisfaction with their health plans and providers show that, on average, Medicare beneficiaries are satisfied with their access to care in MA and are happy with their providers. Medicare health plan enrollees report greater satisfaction with their care and with access to care than enrollees of commercial and Medicaid plans (AHRQ 2007a).

The Commission has stressed the importance of using quality indicators to compare MA plans with each other and with care provided in the traditional FFS Medicare program. We have recommended the establishment of a pay-for-performance program for MA plans. Because these recommendations have not been adopted, we are concerned about the inconsistencies we see in plan measures available and our inability to compare quality in MA with FFS. In particular, we would like to be able to compare changes in enrollee health status over time between the two parts of the Medicare program.

**Available data on quality in MA and summary results**

There are several sources of information on the performance of MA plans on quality measures. The information forms the basis of public reporting of plan performance. Regulators and purchasers use the data to monitor health plans and promote quality improvement, and health plans use the data in their own quality improvement activities. In this chapter, we review the most recent results from three data sources: the Health Outcomes Survey (HOS), the Healthcare Effectiveness Data and Information Set (HEDIS®), and the Consumer Assessment of Healthcare Providers and Systems (CAHPS®). The most recent HOS data show results as of 2006. The most recent HEDIS data are also for 2006, and CAHPS data reflect Medicare beneficiary experiences during early 2007 and the end of 2006.

Not all MA plans participate in HOS and HEDIS. The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) exempted PFFS plans and MSA plans from quality-reporting requirements. PPO plans report only on the services of network providers, as provided for in the MMA, and are not obligated to report on measures based on data extracted from medical records.

Our main conclusions and findings are that:

- Quality has not been improving in MA plans as fast as for other payers. We base this conclusion on the
Medicare Advantage (MA) recommendations from the June 2005 Report to the Congress are summarized below:

- The Commission recommended that the Congress eliminate the stabilization fund for regional preferred provider organizations (PPOs). Authorization of the fund was one of several provisions intended to promote development of regional PPOs. The fund was available in 2007 but was not used. Subsequent legislation has reduced the fund and made funds unavailable until the year 2013.

- The Commission recommended that the Congress clarify that regional plans should submit bids that are standardized for the region’s MA-eligible population. Regional PPOs can have an advantage over local plans as a result of the MA bidding process. Because of the different method used to determine benchmarks for regional PPOs in relation to the method used for other plans, and because of the bidding approach used for regional plans, there can be distortions in competition between regional and local plans.

- The Commission recommended that the Congress remove the effect of payments for indirect medical education from the MA plan benchmarks. MA rates set at 100 percent of fee-for-service (FFS) include medical education payments, but Medicare makes separate indirect medical education payments to hospitals treating MA enrollees.

- The Commission recommended that the Congress set the benchmarks that CMS uses to evaluate MA plan bids at 100 percent of FFS costs. The Commission has consistently supported the concept of financial neutrality between payment rates for the FFS program and private plans. However, financial neutrality can be achieved gradually to minimize the impact on beneficiaries.

- The Commission believes that pay-for-performance should apply in MA to reward plans that provide higher quality care. The Commission recommended that the Congress redirect the amounts retained in the Trust Funds for bids below the benchmarks to a fund that would redistribute the savings back to MA plans based on quality measures.

- The Commission recommended that the Secretary calculate clinical measures for the FFS program that would permit CMS to compare the FFS program with MA plans. The Commission believes that more can be done to facilitate beneficiary choice and decision making by enabling a direct comparison between the quality of care in private plans and quality in the FFS system.

One recommendation became a provision of the Deficit Reduction Act, which specifies in statute the timeline for phasing out the hold-harmless policy that offsets the impact of risk adjustment on aggregate plan payments through 2010.

HEDIS results reported by the National Committee for Quality Assurance (NCQA) that compare 2006 performance with 2005 performance and compare Medicare plans with commercial plans. The HOS data also show that fewer MA plans have improved outcomes for their Medicare enrollees between 2004 and 2006 compared with earlier years.

- Newer plans—those that began their contracts in 2004 or later—have lower performance on clinical measures than older plans, as reflected in the most recent HEDIS scores. CAHPS data show that beneficiaries have the same level of satisfaction in new and old plans, but they also show that vaccination rates are substantially lower in newer plans.

- There are differences in reporting requirements that make it difficult for us, CMS, or beneficiaries to compare plans. PFFS and MSA plans do not report HEDIS data because of a statutory exemption. HEDIS data for PPOs (local and regional) are not as complete as for HMO plans. Across all plan types, plans occasionally do not report on individual HEDIS measures. We also do not have sufficient data to compare clinical measures in MA with similar measures in the traditional FFS program.
Recent performance results for Medicare plans: The Medicare HOS

HOS is a longitudinal survey of self-reported health status among Medicare health plan enrollees that measures changes over a two-year period. For each plan in the MA program (other than PFFS and MSA plans), a randomly selected sample of enrollees who have been in the plan at least six months are surveyed in a given year and resurveyed two years later. Two-year change scores are calculated and beneficiaries’ physical and mental health status is categorized as better, the same, or worse than expected, based on a predictive model, taking into account risk-adjustment factors and death. When results are reported, a plan is deemed to have better or poorer outcomes if the plan’s results on the physical or mental health measures are significantly different from the national average change in health status across all plans.

The most recent HOS data show disappointing results (Table 3-4). For the enrollee cohort surveyed on its health status changes between 2004 and 2006—the most recent cohort surveyed—CMS reported that in 13 of 151 plans enrollees reported a worse-than-expected decline in physical health, 2 plans showed improved physical health among enrollees, 7 plans showed declining mental health, and 5 plans showed improved mental health. The remaining plans had results within the expected range. While in the most recent cohort only two plans had results for physical health that were better than expected, between 2000 and 2004, 20 or more plans, from a similar total number of plans, showed improved physical health outcomes. In five plans, the mental health of enrollees improved in the 2004–2006 cohort, yet all but one of the earlier cohorts showed greater improvement in mental health.

Recent performance results for Medicare plans: HEDIS

MA plans have not shown the same rate of improvement in HEDIS results as commercial and Medicaid plans. For measures that can be compared over multiple years, in some cases there has been little improvement in Medicare plan scores over the past six years. There is also significant variation in scores across plans. Plans that began their Medicare contracts in 2004 or later tend to have lower scores than older plans. Not all plans are required to report on all measures, and plans may choose not to report a particular measure. Consequently, some plans report on very few measures, with newer plans less likely to report a full complement of measures. While there may be good reasons not to report a particular measure, it does raise questions about whether plans may not report measures when they show poor quality.

HEDIS measures and reporting of results NCQA developed HEDIS through a public–private partnership of various stakeholders that includes CMS. Development began in 1992, with new measures continually added over the years. Medicare plans have been required to report HEDIS data since 1997. However, the MMA exempted PFFS and MSA plans from HEDIS reporting requirements, and PPO plans are required to report only on the services of network providers. PPOs also are not obligated to report on measures based on data extracted from medical records.
Update on the Medicare Advantage program

The report also tracks the level of change over time in plan performance measures and shows the degree of variability among plans in individual scores. For our analysis, we use the NCQA data of the SOHCQ report to compare Medicare plans with commercial plans and for a historical comparison of recent results with those in Commission reports from prior years. To compare HEDIS results for different MA plan types and categories, we use data from public use files (PUFs) provided by CMS. The CMS data show information for a larger number of plans than the NCQA data.

The NCQA SOHCQ report data are simple averages of scores across plans rather than being averages across the number of plan enrollees. Our analysis is also based on simple averages across plans when averages are used.

### Medicare HEDIS results compared with commercial and Medicaid plans

Medicare performs better than commercial plans for about half of the HEDIS measures common to both sectors, with commercial plans better for the other half. A concern, however, is that Medicare plans are not improving their performance to the same extent as commercial and Medicaid plans. While commercial and Medicaid plans improved significantly between 2005 and 2006, in releasing the SOHCQ report for 2006, NCQA pointed to the lower level of improvement among Medicare plans and commented that the Medicare results generally provide information on process measures (e.g., the percentage of women ages 40–69 who had a mammogram to screen for breast cancer). HEDIS measures also include intermediate outcomes measures (e.g., low-density lipoprotein cholesterol below 100 for patients with cardiovascular conditions) as well as measures of customer service (e.g., the percentage of calls received by plan call centers during operating hours that were “abandoned by the caller before being answered by a live voice”).

In addition to the effectiveness-of-care measures and certain utilization data, HEDIS collects resource use data for six major chronic conditions, including diabetes, chronic obstructive pulmonary disease, and hypertension. Although we do not examine the data in this chapter, NCQA summarizes its findings on spending on diabetes care (the focus of this year’s resource use findings) by saying that “initial results suggest that there is no meaningful relationship between how much plans spend and the quality of care they deliver—in other words, getting more care isn’t the same thing as getting better care” (NCQA 2007).

NCQA publishes an annual State of Health Care Quality (SOHCQ) report showing the performance of three types of plans participating in HEDIS—commercial, Medicare, and Medicaid plans. The report also tracks the level of change over time in plan performance measures and shows the degree of variability among plans in individual scores. For our analysis, we use the NCQA data of the SOHCQ report to compare Medicare plans with commercial plans and for a historical comparison of recent results with those in Commission reports from prior years. To compare HEDIS results for different MA plan types and categories, we use data from public use files (PUFs) provided by CMS. The CMS data show information for a larger number of plans than the NCQA data. The NCQA SOHCQ report data are simple averages of scores across plans rather than being averages across the number of plan enrollees. Our analysis is also based on simple averages across plans when averages are used.

### Table 3–5

<table>
<thead>
<tr>
<th>HEDIS® measure (total number)</th>
<th>New measures or not comparable to year</th>
<th>Change over time, 2005 to 2006</th>
<th>Medicare performance relative to commercial plans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Better</td>
<td>Worse</td>
<td>Same</td>
</tr>
<tr>
<td>Antidepressant medication management (3)</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Beta-blocker treatment [2]</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Comprehensive diabetes care [9]</td>
<td>5</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Screenings not in diabetes category [4]</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Monitoring persistent drug use in the elderly [5]</td>
<td>5</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Use of high-risk drugs in the elderly [2]</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Mental health treatment [2]</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Alcohol/drug treatment [2]</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Other measures [5]</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: HEDIS® [Healthcare Effectiveness Data and Information Set], N/A (not applicable). Four additional measures are Medicare-only measures that are new or not comparable to earlier years.

“highlight … a need to refocus on quality improvement efforts in this key public program” (NCQA 2007).

NCQA reported that, between 2005 and 2006, Medicare plans improved on only 6 of 38 HEDIS effectiveness-of-care measures, compared with 30 of 44 measures for commercial plans and 34 of 43 measures for Medicaid plans that showed improvement. For 4 of the 13 measures for which Medicare plans showed no improvement, Medicare scores are better than commercial scores; in 9 of the 13 measures, they are worse.

NCQA adds new measures periodically, and the specification of some measures changes over time. In such cases, performance can be measured, but not improvement. Eight new measures are tracked for both Medicare and commercial plans: five measures of persistent drug use among the elderly and three new comprehensive diabetes care measures. For seven of the eight new measures, Medicare plans performed better than commercial plans. For six other measures that cannot be compared between 2005 and 2006 because of changed specifications, Medicare performed better than commercial plans in four cases. Four new measures of drug–disease interactions in the elderly track care for Medicare only (Table 3-5).

Past Medicare HEDIS results Although many of the measures used in earlier years have changed their specifications and cannot be compared across years, a comparison of historical rates on some measures shows that there has not been improvement in many Medicare HEDIS scores. The March 2004 Report to the Congress noted that diabetes care had improved and suggested that the improvement reflected the targeted efforts of CMS (and others) to improve diabetes care (MedPAC 2004). The 2004 report also highlighted the poor performance of plans on mental health measures, which continued to be the case in 2006. The rate of eye exams for diabetic patients is lower than it was in 2000. Cholesterol management and hemoglobin A1c control also show relatively poor performance compared with past results. However, there have been gains in management of antidepression medication (Table 3-6).

Variation in 2006 HEDIS measures across plans On any given measure, HEDIS scores vary greatly among health plans, as indicated by the minimum, maximum, average, and median scores for selected measures (Table 3-7, p. 254). For example, the rate of hemoglobin A1c testing varies from about 34 percent to 98 percent, and eye exams for diabetics range from about 15 percent to 91 percent.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Change in rate, 2001 to 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beta-blocker treatment after heart attack</td>
<td>Better</td>
</tr>
<tr>
<td>Cholesterol management: control</td>
<td>Worse</td>
</tr>
<tr>
<td>Comprehensive diabetes care: eye exams</td>
<td>Worse</td>
</tr>
<tr>
<td>Poor hemoglobin A1c control</td>
<td>Same</td>
</tr>
<tr>
<td>Antidepression medication management:</td>
<td></td>
</tr>
<tr>
<td>Acute phase</td>
<td>Better</td>
</tr>
<tr>
<td>Continuation phase</td>
<td>Better</td>
</tr>
<tr>
<td>Contacts</td>
<td>Worse</td>
</tr>
<tr>
<td>Follow-up after hospitalization for mental illness:</td>
<td></td>
</tr>
<tr>
<td>Less than 7 days</td>
<td>Same</td>
</tr>
<tr>
<td>Less than 30 days</td>
<td>Worse</td>
</tr>
</tbody>
</table>

Note: HEDIS® (Healthcare Effectiveness Data and Information Set).

HEDIS data reporting issues One concern in reviewing the HEDIS data is the frequency with which plans do not report their performance on certain measures. Plans do not report measures for a number of reasons. With some measures, for example, a plan may not have a sufficient number of enrollees to whom the measure applies (e.g., diabetics) to calculate a valid rate. In such a case, the plan reports the measure as not applicable. A plan, or CMS or NCQA, may determine that a reported measure is materially biased and is not valid (shown as NR, not reported). In addition, plans may choose not to report a measure even though the report would be valid (also shown as NR in plan reporting). Because NR can represent two possibilities—inability to report or a decision not to report—CMS is working with NCQA to have plans specify the nature of the nonreporting. CMS hopes to be able to obtain such information in the 2008 HEDIS reporting cycle (for experience in 2007). To the extent that nonreported measures reflect a plan’s preference not to report rather than legitimate methodological issues, the value of the reporting requirement is undermined. HMOs are far more likely than PPOs to report a greater number of measures. Almost two-thirds of HMOs report on 80 percent or more of the HEDIS measures, while more...
than two-thirds of PPOs report on fewer than half of the HEDIS measures. Fewer than two-thirds of MA plans reported on 15 of the 42 HEDIS measures reported in the CMS files. Seventy-one plans—all of which are HMOs—reported on all measures. Twenty-eight local or regional PPOs reported on fewer than one-third of the measures. However, one local PPO reported on all measures for 2006 other than the two mental health follow-up measures. There are 59 local or regional PPO plans included in the 276 total, or 21 percent of all plans reporting, which contributes to the relatively high percentage of nonreporting of certain measures, given that PPOs are not obligated to report on measures that require extracting medical records (Figure 3-1).

**Variation in HEDIS results based on plan characteristics and the effect of new plans** One issue NCQA raised when it released its 2007 SOHCQ report was whether the generally poorer performance of Medicare plans was due to the number of new plans operating in MA. Looking only at plans that reported in both 2007 and 2006—that is, removing plans reporting for the first time in 2007—according to NCQA staff, the results of the SOHCQ report would have shown that Medicare plans had improved on 11 measures over the previous year, rather than on only 6 measures. On the basis of our analysis of the CMS HEDIS public use data, we have arrived at findings similar to those of NCQA about the effect of newer plans—that is, they tend to have lower HEDIS scores than older plans.

We have defined new plans as those that began their Medicare contracts on or after January 1, 2004 (versus plans that had been contractors before 2004—that is, before passage of the MMA). The plans are new in the sense that the contract is a new Medicare contract.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Average</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Drugs to be avoided in the elderly</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One prescription*</td>
<td>0.1*</td>
<td>61.1*</td>
<td>23.0*</td>
<td>22.9*</td>
</tr>
<tr>
<td>At least 2 prescriptions*</td>
<td>0.0*</td>
<td>37.9*</td>
<td>6.0*</td>
<td>5.4*</td>
</tr>
<tr>
<td><strong>Potentially harmful drug–disease interactions in the elderly</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Falls + tricyclic antidepressants, antipsychotics or sleep agents*</td>
<td>0.0*</td>
<td>55.4*</td>
<td>14.8*</td>
<td>13.7*</td>
</tr>
<tr>
<td>Dementia + tricyclic antidepressants or anticholinergic agents*</td>
<td>0.0*</td>
<td>66.0*</td>
<td>24.7*</td>
<td>23.8*</td>
</tr>
<tr>
<td>Renal failure + non-aspirin NSAIDs or COX–2 selective NSAIDs*</td>
<td>0.0*</td>
<td>57.0*</td>
<td>9.3*</td>
<td>7.8*</td>
</tr>
<tr>
<td>Total potentially harmful drug–disease interactions in the elderly*</td>
<td>0.0*</td>
<td>62.4*</td>
<td>19.5*</td>
<td>18.5*</td>
</tr>
<tr>
<td><strong>Comprehensive diabetes care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hemoglobin A1c testing</td>
<td>33.8</td>
<td>97.8</td>
<td>86.3</td>
<td>88.1</td>
</tr>
<tr>
<td>Poor hemoglobin A1c control*</td>
<td>5.6*</td>
<td>100.0*</td>
<td>31.2*</td>
<td>25.4*</td>
</tr>
<tr>
<td>Eye exams</td>
<td>15.1</td>
<td>91.2</td>
<td>60.3</td>
<td>61.1</td>
</tr>
<tr>
<td>Lipid profile</td>
<td>33.2</td>
<td>98.3</td>
<td>83.8</td>
<td>85.4</td>
</tr>
<tr>
<td>Monitoring diabetic nephropathy</td>
<td>53.8</td>
<td>98.5</td>
<td>85.2</td>
<td>85.7</td>
</tr>
<tr>
<td>&lt;100 LDL–C level</td>
<td>0.0</td>
<td>82.6</td>
<td>44.8</td>
<td>47.4</td>
</tr>
<tr>
<td>Good hemoglobin A1c control</td>
<td>0.0</td>
<td>91.2</td>
<td>43.8</td>
<td>46.0</td>
</tr>
<tr>
<td>Blood pressure controlled &lt;130/80</td>
<td>0.0</td>
<td>52.3</td>
<td>29.8</td>
<td>29.9</td>
</tr>
<tr>
<td>Blood pressure controlled &lt;140/90</td>
<td>0.0</td>
<td>83.2</td>
<td>57.1</td>
<td>59.1</td>
</tr>
<tr>
<td><strong>Follow-up after hospitalization for mental illness</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visit within 7 days</td>
<td>0.0</td>
<td>76.8</td>
<td>36.6</td>
<td>35.5</td>
</tr>
<tr>
<td>Visit within 30 days</td>
<td>0.0</td>
<td>92.4</td>
<td>55.9</td>
<td>57.1</td>
</tr>
</tbody>
</table>

Note: HEDIS® (Healthcare Effectiveness Data and Information Set), NSAID (nonsteroidal anti-inflammatory drug), LDL–C (low-density lipoprotein cholesterol). Values of zero are reported. Because invalid values are not to be reported, zero values are assumed to be correctly reported values for a plan.

* Indicates lower score is better for this measure.

Source: MedPAC analysis of CMS HEDIS® public use files.
One exception is in the area of management of antidepression medication, where new plans had better scores. However, this conclusion is based on a very small portion, about 10 percent, of new plans reporting the measure (data not shown).

Using the measure for the rate of testing hemoglobin A1c for diabetics as an example of the variation in HEDIS scores across plans, we see systematically lower scores among newer plans (Figure 3-2, p. 256). The measure, in use since 1999, reports the percentage of plan members, ages 18 through 75, with diabetes type 1 and type 2 who were continuously enrolled during the measurement year and who had a hemoglobin A1c blood test (AHRQ 2007b). The difference between newer plans and older plans dating from 2004 or later. The organization holding a new contract may have extensive experience as an MA contractor in another area (dating back to well before 2004 in many cases) or with another type of MA product in the same area. About half the plans we are classifying as new in this analysis of HEDIS data are sponsored by national or regional chain organizations, or other types of organizations that have had extensive experience as MA contractors. Among the remaining plans, many have experience with reporting HEDIS data as Medicaid health plans or as commercial plans.
Update on the Medicare Advantage program

For hemoglobin A1c testing, nearly half of all older plans have scores of 90 or better, compared with 22 percent of newer plans. Nearly half of newer plans have scores below 85. The scores of older plans are more concentrated in the higher numbers, while the scores of newer plans have a wider range and include scores under 70.

Enrollment in newer plans and possible causes of differences between new and old plans New plans began their Medicare contracts on or after January 1, 2004. However, enrollment in the new plans is relatively small. About 13 percent of enrollees are in the newer plans, with an average enrollment under

### Table 3–8

Medicare HEDIS® measures show mixed results

<table>
<thead>
<tr>
<th>Measure</th>
<th>New plans better</th>
<th>Old plans better</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring for patients on persistent medications</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Diabetes management</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Drugs to be avoided in the elderly</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Note: HEDIS® (Healthcare Effectiveness Data and Information Set). Table includes effectiveness-of-care measures reported by at least 50 percent of both old and new plans (15 of 38 total measures of effectiveness of care). New plans began their Medicare contracts on or after January 1, 2004.

Source: MedPAC analysis of CMS public use files.
Within the group of new plans, there is an almost even split between the number of PPOs and HMOs, with 47 PPOs and 55 HMOs. One might expect the relatively large percentage of PPOs among new plans to decrease the average scores for new plans because PPOs might have poorer HEDIS scores than more tightly managed plans, but that is not the case. HEDIS scores among new PPOs are often better than HEDIS scores for new HMOs. For measures reported on by at least 90 percent of new and old plans, the average scores of new PPOs are better than those of new HMOs in five of eight cases (Figure 3-3), although the differences are very small.

7,000, compared with 37,000 for older plans. The newer reporting plans are also more likely to be PPOs. The greatest growth in enrollment is in PFFS plans, which are not accountable for reporting on any of these measures.

The average enrollment in the different types of plans raises the question of whether smaller plans are likely to have lower HEDIS scores. This does not appear to be the case. Looking only at plans with fewer than 10,000 enrollees, we still see that newer small plans generally have lower HEDIS scores (data not shown).

**FIGURE 3-3**
New PPO HEDIS® scores are better than new HMO scores on five out of eight measures

Note: PPO (preferred provider organization), HEDIS® (Healthcare Effectiveness Data and Information Set), ACE (angiotensin-converting enzyme), ARB (angiotensin receptor blocker), HbA1c (hemoglobin A1c). Measures displayed are those that are comparable among plan types. Results are for new plans only, defined as those that began their Medicare contracts on or after January 1, 2004.

Source: MedPAC analysis of CMS HEDIS® public use files.
Update on the Medicare Advantage program

Recent performance results for Medicare plans:

CAHPS

The CAHPS program provides information based on surveys of members’ experiences with their health plan and with the providers in the health plan. The CAHPS domains consist of questions related to the following issues:

- getting care without long waits,
- getting care that is needed,
- having doctors who communicate well,
- overall rating of health care patients received, and
- overall rating of health plan.

Note: PPO (preferred provider organization), PFFS (private fee-for-service). Data for regional PPOs may not be representative of enrollee opinions because data are only available for plans representing 40 percent of enrollees. Data for cost-reimbursed HMOs excluded. The rating of care and rating of plan show beneficiaries giving a rating of 8, 9, or 10 on a 10-point scale. The remaining measures are composites, with the data showing beneficiaries stating that the description usually or always applied. Composite scores reflect a combination of questions on a particular topic.


To the extent that lower scores on quality measures may be due to a plan’s status as a new, start-up organization, and scores can be expected to improve as the organization gains experience in data collection and reporting of HEDIS measures, CMS may wish to monitor more closely the new plans that show relatively poorer performance to ensure that scores improve as the plans gain experience.

Another factor to consider is that variation in scores may occur within a given Medicare contractor at the plan level rather than at the contract level. Because HEDIS and CAHPS data are reported at a level of aggregation that includes different MA benefit packages and different geographic areas within the reporting unit, CMS may want to consider examining and reporting data at a lower level of aggregation than the contract level.
The Agency for Healthcare Research and Quality (AHRQ) developed CAHPS. The Medicare health plan CAHPS survey was first fielded in 1997. In addition to consumer satisfaction results, CAHPS data are the source of some effectiveness-of-care measures, including the rate of flu shots and pneumonia vaccination. For reporting comparisons of one plan to another, CAHPS measures are adjusted for response bias with respect to age, education, self-reported physical and mental health status, proxy status, and Medicare and Medicaid dual-eligibility status.

The most recent CAHPS Medicare health plan survey, fielded in April through July of 2007, tracks member experiences over the preceding six months. For the 2007 reporting year, CAHPS data are reported at the Medicare contract level (the H-number or R-number level). Previously, the Medicare CAHPS reporting unit consisted of smaller geographic areas, or submarkets under a contract number. Reporting at the contract level makes CAHPS reporting consistent with reporting of HEDIS and HOS data in MA.

**Completeness of CAHPS data for 2006–2007** MA plan enrollees participate in the CAHPS survey if the plan has at least one year of Medicare experience. Unlike HEDIS and HOS, CAHPS data include PFFS plans. We have summary data for Medicare health plans, but they may not be representative for particular types of plans because of the age of the plan, the size of the survey samples, or other reasons that would cause CMS not to report data on particular plans. In particular, the data for regional PPOs and cost HMOs may not be representative of the entire group. Compared with MA HMO and PFFS plans, for which we have CAHPS data for 81 percent and 93 percent of plans, respectively, we have data for only 27 percent of regional PPOs and 54 percent of local PPOs.

**CAHPS results for 2006–2007** In general, MA enrollees within all types of plans are satisfied with their access to care and doctors’ communication. For the access-to-care categories of CAHPS, about 90 percent of enrollees report that they usually or always get needed care and they get the care on a timely basis. Ratings are even higher for the survey questions dealing with the ability of doctors to communicate well. Ratings are not quite as high in the categories of overall rating of health care that beneficiaries obtain through the plan. Overall plan ratings are also lower but still show high levels of satisfaction (Figure 3-4).

**CAHPS results for Medicare plans compared with commercial and Medicaid plans** Medicare enrollee satisfaction for the 2006–2007 CAHPS reporting period is higher than for commercial enrollees in each CAHPS category (Table 3-9, p. 260).

**Flu shots and pneumococcal vaccinations** CAHPS is the source of data for tracking vaccination rates among Medicare plan enrollees. The average rate of vaccination among MA enrollees was slightly lower than the national rate for the flu vaccine, and it was higher for the pneumococcal vaccine. The Centers for Disease Control and Prevention reported that, in the 2005–2006 flu season, 69.3 percent of Americans age 65 or older received a flu shot (CDC 2007); 63.7 percent had a pneumococcal vaccination in 2005 (CDC 2006). Across all Medicare plan types, 67.5 percent of enrollees received a flu vaccine and 65.6 percent received a pneumonia vaccine (data not shown). The rate varies by plan type—noting again that regional PPO data may not be representative of all plans within this category (Figure 3-5, p. 261). Within each plan type, the rates vary significantly across individual plans.

**Comparing CAHPS results for new plans and old plans** Unlike the HEDIS results, the CAHPS results do not show large differences in member satisfaction between older plans (pre-2004) and newer plans, except with respect to the overall rating of the plan. However, for the preventive services reported through CAHPS, newer plans performed worse than older plans (Table 3-10, p. 261).

**Comparing quality in MA with the quality of care in FFS Medicare** All MA plans participate in CAHPS, including PFFS and MSA plans. There is also a CAHPS survey of Medicare beneficiaries in the traditional FFS program. The FFS CAHPS results can be used to compare beneficiaries’ reported experiences in FFS with the experiences of MA enrollees for the domains CAHPS covers: access to medical care, impressions of the health plan (or the FFS program) and providers, and overall rating of the care beneficiaries receive. The FFS CAHPS survey was first fielded in 2000, and the latest results released were for 2004. The FFS CAHPS was fielded again in 2007 but results are not yet available. The 2004 Medicare FFS CAHPS results showed that FFS beneficiaries gave the traditional Medicare program ratings similar to those MA enrollees gave their plans, with Medicare FFS receiving slightly higher ratings in terms of getting needed care. Medicare FFS beneficiaries were more likely than MA
plan enrollees to give higher ratings for the quality of their health care and satisfaction with their health plan (RTI International and RAND 2005).

Another source of information comparing the experiences of MA enrollees and beneficiaries in FFS Medicare is the Medicare Current Beneficiary Survey (MCBS). MCBS data from 2005 show that beneficiaries in FFS and MA report similar trouble in getting access to care, getting needed care, and delaying care because of the cost (differences of 1 or 2 percentage points in each case). Higher proportions of FFS enrollees reported not having a usual source of care (2 percent in MA vs. 5 percent in FFS) or not having a usual doctor (8 percent in MA vs. 19 percent in FFS) (CMS 2007).

A HOS survey was administered in a pilot project to a national sample of FFS beneficiaries in 1998, with follow-up interviews in 2000. The FFS HOS survey has not continued beyond the initial pilot, and differences between outcomes in managed care for the 1998–2000 cohort and for the 1998–2000 FFS group have not been analyzed. A study that compared outcomes for the 2002–2004 HOS cohort (managed care enrollees) with a matched set of beneficiaries who completed the SF-12 survey as part of the FFS CAHPS survey found no significant difference between managed care enrollees and FFS beneficiaries at the national level in terms of the degree of change in mental or physical health. However, at the state level, a pattern emerged indicating that mental health outcomes were better in FFS Medicare (HSAG 2006).

### Informing beneficiaries about MA performance measures

CMS has made it easier for beneficiaries to obtain information on the quality of care in MA plans. Until recently the only HEDIS scores beneficiaries could obtain easily in reviewing their plan options were scores for five measures: eye exams for diabetics, hemoglobin A1c control for diabetics, diabetics who received a lipid test, mammography rates, and receiving beta blockers after a heart attack. The measures were displayed as individual plan measures in bar graphs that included the national

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**Table 3-9: CAHPS® enrollee satisfaction measures are higher for Medicare plans than commercial plans in 2006–2007**

<table>
<thead>
<tr>
<th>Measure and plan type</th>
<th>Always</th>
<th>Usually</th>
<th>Always or usually</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting needed care composite</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicare</td>
<td>63%</td>
<td>27%</td>
<td>90%</td>
</tr>
<tr>
<td>Adult commercial</td>
<td>51</td>
<td>34</td>
<td>85</td>
</tr>
<tr>
<td>Adult Medicaid</td>
<td>47</td>
<td>27</td>
<td>74</td>
</tr>
<tr>
<td>Child Medicaid</td>
<td>52</td>
<td>18</td>
<td>70</td>
</tr>
<tr>
<td>Getting care quickly composite</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicare</td>
<td>66</td>
<td>22</td>
<td>88</td>
</tr>
<tr>
<td>Adult commercial</td>
<td>57</td>
<td>29</td>
<td>86</td>
</tr>
<tr>
<td>Adult Medicaid</td>
<td>53</td>
<td>25</td>
<td>78</td>
</tr>
<tr>
<td>Child Medicaid</td>
<td>71</td>
<td>12</td>
<td>83</td>
</tr>
<tr>
<td>How well doctors communicate composite</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicare</td>
<td>75</td>
<td>19</td>
<td>94</td>
</tr>
<tr>
<td>Adult commercial</td>
<td>70</td>
<td>22</td>
<td>92</td>
</tr>
<tr>
<td>Adult Medicaid</td>
<td>67</td>
<td>19</td>
<td>86</td>
</tr>
<tr>
<td>Child Medicaid</td>
<td>79</td>
<td>12</td>
<td>91</td>
</tr>
</tbody>
</table>

Note: CAHPS® (Consumer Assessment of Healthcare Providers and Systems). Composite scores reflect a combination of questions on a particular topic.

average score for the measure and the average score for
the measure in the state, along with scores for up to two
additional plans that could be compared with the plan the
beneficiary chose to examine. (The comparison among
plans allows only three plans to be compared at a time. A
beneficiary has to do multiple queries to look at more than
three plans.)

Beginning with the November–December 2007 open
enrollment period, Medicare beneficiaries can obtain a
much wider range of data from plans’ HEDIS reporting,
though CMS has discontinued the display of national and
state average scores. Using the Medicare Options Compare
website, a beneficiary or other user can see plan scores
for 20 HEDIS measures—about half of all the HEDIS
measures in effectiveness of care (including the rates of
flu and pneumonia vaccination, which are obtained from
CAHPS, but which NCQA reports as part of its HEDIS
reporting).

A beneficiary has a choice of seeing the actual HEDIS
score or a star rating based on the score for each individual
measure. The new star rating system is a five-star system
for each HEDIS score that is based on the relative level of
the plan score on the particular measure.

Conclusions on quality in MA
Medicare beneficiaries give high ratings to the care
they receive through MA plans and express satisfaction
with their providers and health plans. However, quality

Figure 3-5
Rates of influenza and pneumococcal
vaccination varied among plans but
were close to national average levels, 2006

The percentage of enrollees, by plan type

Influenza vaccination

Pneumococcal vaccination

Source: MedPAC analysis of CMS Consumer Assessment of Healthcare Providers
and Systems® summary data.

Note: PPO (preferred provider organization), PFFS (private fee-for-service). Data
for regional PPOs may not be representative of enrollee opinions because data are available only for plans representing 40 percent of enrollees.
Data for cost-reimbursed HMOs excluded.

Table 3-10
Newer plans are similar to older plans on most CAHPS®
measures, but worse on two measures, 2006–2007

<table>
<thead>
<tr>
<th>Measure</th>
<th>Old plans</th>
<th>New plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting care quickly composite (percent usually or always)</td>
<td>89%</td>
<td>89%</td>
</tr>
<tr>
<td>Getting needed care composite (percent usually or always)</td>
<td>91</td>
<td>91</td>
</tr>
<tr>
<td>Doctors who communicate well composite</td>
<td>94</td>
<td>95</td>
</tr>
<tr>
<td>Rating of care (percent rating 8, 9, or 10 out of 10)</td>
<td>81</td>
<td>82</td>
</tr>
<tr>
<td>Rating of plan (percent rating 8, 9, or 10 out of 10)</td>
<td>81</td>
<td>77</td>
</tr>
<tr>
<td>Preventive care measures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flu vaccination rate (percent of enrollees)</td>
<td>73</td>
<td>64</td>
</tr>
<tr>
<td>Pneumonia vaccination rate (percent of enrollees)</td>
<td>72</td>
<td>62</td>
</tr>
</tbody>
</table>

Note: CAHPS® (Consumer Assessment of Healthcare Providers and Systems). New plans are those that began their Medicare contracts on or after January 1, 2004. Composite scores reflect a combination of questions on a particular topic.

Source: MedPAC analysis of CMS CAHPS® summary data.
measures for clinical processes and intermediate outcomes in MA show disappointing results. Commercial and Medicaid plans show more improvement than Medicare plans in clinical measures over the past year. New plans in Medicare perform worse than older plans on clinical indicators of quality.

The Commission has recommended that the quality of care should be measured in both the MA and the FFS program so that beneficiaries can use quality as a factor when they choose between the two sectors. Beneficiaries can now judge differences in quality only between one MA plan and another without being able to compare MA quality with the quality of care in FFS Medicare (or in a given geographic area). Although the tools exist to measure and compare outcomes among FFS beneficiaries as well as MA enrollees—for example, the HOS—the Medicare program does not make such comparisons.

By statute, PFFS plans and MSA plans are exempt from the reporting requirement applicable to all other MA plans. In testimony before the Congress and in our June 2007 Report to the Congress, we called attention to this difference among plan types and have suggested that all MA plans should be subject to the same reporting requirements. We noted earlier that some plans are not reporting on required elements.

The other relevant point is that information on quality is a necessary component of pay-for-performance (P4P) programs. The Commission has noted that MA already has the type of quality data necessary for a P4P program, and the Commission has recommended that a portion of plan payments be used to fund a P4P program in MA. A P4P program would encourage plans to improve their performance and could help address our concerns about the relatively poorer performance of some MA plans on quality measures.

### Special needs plans

The Congress created a new MA plan type known as a special needs plan in the MMA to provide a common framework for existing plans (in particular those operating under demonstration authority) for special needs beneficiaries and to expand beneficiaries’ access to and choice among MA plans. Targeted populations include dual (Medicare and Medicaid) eligibles, the institutionalized, and beneficiaries with severe or disabling chronic conditions. SNPs function essentially like (and are paid the same as) any other MA plan but must also provide the Part D drug benefit. Unlike other MA plans, however, they can limit their enrollment to their targeted populations—a provision that will lapse at the end of 2009, absent action by the Congress to extend the provision (see text box). If the Congress allows SNPs’ authority to limit their enrollment to targeted populations to lapse, then existing SNPs could become regular MA plans and continue to serve their existing members, but they would need to accept enrollment from all eligible Medicare beneficiaries. A CMS evaluation that was due to the Congress in December 2007 will be based on early years of the program, so it may lack complete measures of SNPs’ quality and other characteristics, and it will lack an evaluation of the experience of more recent entrants into the program.

There is an exception to SNPs’ ability to limit their enrollment to targeted populations. They may apply to CMS for a waiver to enroll other beneficiaries as long as their membership includes a disproportionate percentage of their targeted population (greater than the percentage that occurs nationally in the Medicare population). This provision allows SNPs to select enrollees from among the nontarget population based on unknown criteria.

SNPs offer the potential to improve care coordination for dual eligibles and other special needs beneficiaries through unique benefit design and delivery systems. However, as described in MedPAC’s June 2006 and June 2007 Reports to the Congress, we have concerns that SNPs have too little oversight to ensure that they fulfill this promise of coordinating care for special needs beneficiaries. SNPs, even dual-eligible SNPs, are not required to contract with states to provide Medicaid benefits. On the basis of site visits and discussions with experts, we do not see how dual-eligible SNPs that do not integrate Medicaid can fulfill the opportunity to coordinate the two programs. We also are unsure whether SNP designation is necessary to allow plans to furnish benefits targeted at people in institutions and with chronic conditions. CMS instructed SNPs to describe how they plan to meet their enrollees’ special needs in their 2008 application, but CMS has not specified minimum expectations or established an enforcement mechanism. We are also concerned that since the creation of SNPs, CMS has consistently interpreted the SNP provision broadly and not established requirements to maximize the likelihood that all SNPs will focus on providing high-quality specialized care.

### SNP types

The MMA authorized Medicare contracting with SNPs for three types of beneficiaries: dual eligibles, institutionalized
beneficiaries, and patients with severe chronic diseases or conditions.

**Dual eligible**

Dual-eligible SNPs are designed to serve dual-eligible beneficiaries, but they are not required to coordinate benefits with Medicaid programs, and many dual-eligible SNPs operate without any state contracts. They were intended, at least in part, to create a permanent home for various demonstrations to integrate Medicare and Medicaid in Massachusetts, Minnesota, and Wisconsin and to allow organizations in other states to implement similar programs. Dual-eligible beneficiaries can enroll in any type of SNP (if they meet the enrollment criteria) or other MA plan, not just dual-eligible SNPs.

**Institutional**

Institutional SNPs may enroll beneficiaries who reside or are expected to reside for 90 days or longer in a long-term care facility, including skilled nursing facilities, nursing homes, nursing facilities, intermediate care facilities for the mentally retarded, and inpatient psychiatric facilities. They may also enroll beneficiaries living in the community who require a level of care equivalent to that of beneficiaries in these facilities. With CMS approval, they may limit enrollment and marketing to select facilities within their geographic service area.

**Chronic condition**

Chronic condition SNPs are designed for beneficiaries with severe or disabling chronic conditions, which CMS has not explicitly defined. Because chronic condition SNPs are a new offering, CMS said it did not want to limit innovations. The agency instead said that it planned to evaluate proposed plans on a case-by-case basis, considering appropriateness of the target population, clinical programs and expertise, and how the SNP will cover the full spectrum of the target population without discriminating against the sicker members. Currently, chronic condition SNPs serve beneficiaries with a variety of conditions, including cardiovascular disease, congestive heart failure, diabetes, chronic obstructive pulmonary disease, asthma, hypertension, coronary artery disease, osteoarthritis, mental illness, end-stage renal disease, and human immunodeficiency virus/acquired immunodeficiency syndrome. Some SNPs target multiple conditions that tend to occur together. CMS recently approved a chronic condition SNP for beneficiaries with high cholesterol as well as one for beneficiaries with Alzheimer’s disease. At issue is whether all these conditions are sufficiently dominant to organize care around them.

**SNP availability and enrollment**

The number of SNPs has grown rapidly since they were introduced, with just 11 SNPs in 2004, 125 in 2005, 276 in 2006, and 477 in 2007 (Figure 3-6, p. 264). In 2008, there are nearly 800 SNPs. Dual-eligible SNPs are still the most common type (57 percent of all SNPs), but chronic condition and institutional SNPs have grown to account for a larger share. Most beneficiaries (95 percent) live in an area served by a SNP. Eighty-nine percent of beneficiaries live in an area served by a chronic condition SNP, 77 percent in areas with dual-eligible SNPs, and 54 percent in areas with institutional SNPs.

Enrollment in SNPs by type is roughly proportional to the plans’ availability. In July 2006, most SNP enrollment (83 percent) was in dual-eligible plans (Figure 3-6). Enrollment in chronic condition SNPs was almost entirely (98 percent) in a single plan in Puerto Rico, and...
enrollment in institutional SNPs was mostly (88 percent) in Evercare plans offered by UnitedHealthcare. By November 2007, most SNP enrollment (70 percent) was still in dual-eligible plans. Enrollment in chronic condition SNPs increased partly because of the entrance of chronic condition SNPs structured as regional PPOs, offered by XLHealth, which attracted about 74,000 enrollees. Between July 2006 and November 2007, enrollment in institutional SNPs grew as a share of total SNP enrollment from 4 percent to 13 percent. Redefinition of the SCAN demonstration social HMO as an institutional SNP largely accounts for this growth. SCAN’s approximately 90,000 enrollees account for 62 percent of institutional SNP enrollment.

What are our concerns about SNPs?
The Congress created SNPs to shift several existing specialized plans (primarily those operating under demonstration authority) to a more permanent status. If the Congress allows their authority to limit their enrollment to targeted populations to lapse, then existing SNPs could become regular MA plans or be approved as demonstrations. Many observers have been surprised at how many organizations opted to offer SNPs under this new authority and how different some of these plans look compared with the demonstration models.

The transition to full risk adjustment may have contributed to rapid SNP growth. The new risk-adjustment model pays more appropriately than the previous model, thereby discouraging plan selection of healthier enrollees and making sicker beneficiaries more attractive to enroll than in the past. Nonetheless, the rapid, large growth in SNPs is surprising because they are paid the same as other MA plans. To the extent that they enroll beneficiaries who are less healthy, risk adjustment is the only difference in their payment and therefore may play a role in this growth. We plan to continue to monitor the risk-adjustment system.
Any improvements should apply to all MA plans and not just to SNPs.

We are concerned about the lack of Medicare requirements to target special populations to ensure that SNPs provide specialized care for their populations. We are also concerned that since the creation of SNPs, CMS has consistently interpreted the SNP provision broadly and not established requirements to maximize the likelihood that all SNPs would focus on providing high-quality specialized care. In short, we are concerned that there is a lack of accountability. This raises questions about the value of these plans to the Medicare program.

SNP recommendations

Whether to allow SNPs to continue to limit their enrollment to a target population comes down to whether they need to limit their enrollment to do something special or whether they do the same things as regular MA plans. A key motivation for creating SNPs still applies to allowing them to continue: providing a big umbrella to cover all special plans and demonstrations. If SNP authority were to cease, then some existing SNPs could change into regular MA plans and others could revert to or try to become demonstrations. CMS or the Congress would need to continually reapprove these types of demonstrations, and any new projects that hoped to build off the lessons learned would also have to become demonstrations.

The recommendations reflect our expectation that SNPs should provide specialized care for their enrollees that regular MA plans do not provide as efficiently or as effectively. SNPs may be able to tailor unique benefit packages that allow them to provide more efficient, higher quality care through specialization. However, some SNPs clearly do not meet this standard. SNPs are a type of MA plan and, as such, are subject to all the Commission’s MA recommendations, including those on payment and quality (see text box, p. 250).

Quality, information, and accountability

We are concerned about the lack of Medicare requirements designed to ensure that SNPs provide specialized care for their targeted populations and SNPs’ resulting lack of accountability to beneficiaries and the Medicare program. We are also concerned about problems eligible beneficiaries may have in accessing reliable information about SNPs.

All SNPs should be evaluated on some additional measures, while other measures should be specific to SNP types—for example, SNPs for end-stage renal disease (ESRD) should be evaluated by the same measures as the ESRD demonstrations. All these measures, together with existing measures that compare SNPs with other MA plans, should form the basis for a rigorous evaluation to help inform a future decision about whether SNPs should become a permanent MA option. The performance measures should be established, plans’ performance on them should be evaluated, and the Secretary should publicly report the results within a three-year period to inform future decisions about extending SNP authority.

Recommended performance measures should include quality, resource use, consumer satisfaction, and any other aspects the Secretary deems appropriate. Examples might include measures currently being developed by NCQA and CMS specifically for SNPs, HOS measures, and RAND’s Assessing Care of Vulnerable Elders measures for health problems affecting seniors.

The Congress should require the Secretary to establish additional, tailored performance measures for special needs plans and evaluate their performance on those measures within three years.

SNPs must measure and report the same quality measures as other MA plan types. If SNPs need to limit their enrollment to a target population to provide specialized care, then the quality of that specialized care should be assessed by appropriate measures.

Spending

- See Recommendation 3-7.

Beneficiaries and plans

- This recommendation is expected to improve the quality of care for beneficiaries.
- Plans will have the burden of reporting more information as a result of this recommendation.

After discussions with SNPs, states, and CMS, we have learned that lack of clear information is an impediment to beneficiaries’ learning about and making an informed decision about joining a SNP. Because the CMS website template is structured to compare all MA plans consistently and CMS has not restructured the template to reflect SNP offerings, these plans are not described accurately. For example, the Medicare Compare website shows cost-
sharing requirements for dual-eligible SNPs that charge no enrollee cost sharing because it is paid by states through Medicaid. The comparative SNP information could be included on the Medicare Compare website—for example, as a drill-down option. Because most beneficiaries do not use the website, written comparative SNP information should be mailed to beneficiaries annually (similar to the regional Medicare+Choice guides that were included in Medicare & You).

**Recommendation 3-2**
The Secretary should furnish beneficiaries and their counselors with information on special needs plans that compares their benefits, other features, and performance with other Medicare Advantage plans and traditional Medicare.

**Rationale 3-2**
Both sources of information will assist beneficiaries and formal and informal beneficiary counselors to make informed decisions about the benefits SNPs offer.

**Implications 3-2**

**Spending**
- See Recommendation 3-7.

**Beneficiaries and plans**
- This recommendation should improve beneficiaries’ ability to make informed choices about special needs plans.
- This recommendation should have minimal impact on plans.

**Defining chronic condition SNPs**

Chronic condition SNPs are designed for beneficiaries with severe chronic diseases or conditions, which CMS has not explicitly defined. We are concerned that the current standard is too loose; for example, CMS recently approved a SNP for beneficiaries with high cholesterol, a condition so common that all MA plans should be expected to manage it. Not all chronic condition SNPs are sufficiently specialized to warrant targeted delivery systems and disease management strategies and the unique ability to limit enrollment to certain beneficiaries.

Chronic condition SNPs should strive to integrate existing delivery systems, incorporating their enrollees’ primary care and other responsible physicians. Plans should engage in activities to help to overcome the existing fragmentation in FFS Medicare. These care coordination efforts could rely primarily on physicians to organize enrollees’ care and services from multiple providers. Alternatively, they could use other care managers, such as disease management providers. Chapter 2 of MedPAC’s June 2006 Report to the Congress discusses different care coordination models (MedPAC 2006).

We envision the narrower definition of chronic condition SNPs included in the recommendation going into effect soon. To refine the definition, the Secretary should convene a panel of clinicians and other experts to create a list of chronic conditions and criteria appropriate for chronic condition SNP designation. The list of chronic conditions and other criteria should be issued as a proposed rule with comment and final rule within a three-year period to inform future decisions about extending SNP authority. As part of the “other” criteria, the panel should identify the appropriate stage or severity for each condition for SNP designation.

**Recommendation 3-3**
The Congress should direct the Secretary to require chronic condition special needs plans to serve only beneficiaries with complex chronic conditions that influence many other aspects of health, have a high risk of hospitalization or other significant adverse health outcomes, and require specialized delivery systems.

**Rationale 3-3**
Chronic condition SNPs are too broadly defined. Not all chronic condition SNPs are sufficiently specialized to warrant targeted delivery systems and disease management strategies and the unique ability to limit enrollment to certain beneficiaries.

**Implications 3-3**

**Spending**
- See Recommendation 3-7.

**Beneficiaries and plans**
- This recommendation would help focus chronic condition SNPs on beneficiaries with appropriate chronic conditions.
- Some plans would either have to change their targeted conditions or cease to be SNPs; they could continue as MA plans, however.

**Dual eligibles and states**

Although they were intended to coordinate Medicare and Medicaid, dual-eligible SNPs are not required to
coordinate benefits with Medicaid programs, and many dual-eligible SNPs operate without state contracts. Without a contract with states to cover Medicaid benefits, it is unclear how a dual-eligible SNP would differ from a regular MA plan. Dual-eligible beneficiaries are too heterogeneous a group for a single clinical model to serve all of them. Instead, dual-eligible SNPs should be an integration model to coordinate financing and other aspects of Medicare and Medicaid.

Based on our discussions with SNPs that have a contract, it may reasonably take several years to establish one. Recommending that all dual-eligible SNPs should contract with states within three years means that by 2012 any new dual-eligible SNPs could begin operating only if they started with a contract in place. Contracts would not have to include capitation; states and SNPs may arrive at other payment arrangements and should coordinate other aspects, such as marketing, appeals, and enrollment. Ideally, contracts would cover long-term care, but we recognize that this may be more complicated than covering other benefits. Few SNPs with state contracts have taken risk for this high-cost service. Indirect contracts could be appropriate if states limit the number of managed care plans they will contract with and SNPs work out contracts with plans that have existing state contracts but may not be SNPs.

Some dual-eligible SNPs have succeeded in achieving greater coordination with states. In addition, by the end of 2008, 32 states will have Program of All-Inclusive Care for the Elderly (PACE) contracts that coordinate capitated Medicare and Medicaid payments. Although PACE is a different program, it shows that states will enter contracts and other collaborative agreements.

We welcome CMS’s efforts to encourage greater state–SNP integration and would like CMS to do even more to facilitate collaboration between states and SNPs. It is unrealistic to expect or require all states to enter into partnership agreements with all entities that wish to offer dual-eligible SNPs. Not all states may see value in all plans, and they have a legitimate role in serving their dual-eligible beneficiaries in determining which plans they wish to contract with.

While pursuing contracts, dual-eligible SNPs should limit enrollees’ out-of-pocket cost sharing to no more than Medicaid cost sharing. Medicare beneficiaries qualify for Medicaid support because they are poor. Cost sharing in Medicaid programs is low to ensure access to care. Plans should not raise cost sharing above these levels. To ensure that SNPs are not given an unfair competitive advantage over other MA plans, their bids should be required to reflect actual negotiated provider payment rates and beneficiary cost sharing.

**Recommendation 3-4**

The Congress should require dual-eligible special needs plans within three years to contract, either directly or indirectly, with states in their service areas to coordinate Medicaid benefits.

**Rationale 3-4**

Without a contract with states to cover Medicaid benefits, it is unclear that a dual-eligible SNP would differ from a regular MA plan or offer any advantage to dual-eligible beneficiaries who join.

**Implications 3-4**

**Spending**
- See Recommendation 3-7.

**Beneficiaries and plans**
- Beneficiaries should receive greater coordination of their Medicare and Medicaid benefits.
- Some plans would be unable to contract with states and would have to cease to be SNPs; they could continue as MA plans, however.

**Disproportionate share enrollment**

Most SNPs limit their enrollment to their targeted special needs population. They may apply to CMS for a waiver to enroll other beneficiaries as long as their total membership includes a disproportionate percentage of their targeted population. According to CMS, the percentage of the target population in the plan must be greater than the percentage that occurs nationally in the Medicare population. We expect plans to report on their use of the waivers and explain which other beneficiaries they enrolled and why. We expect CMS to report this information, in addition to reporting the number of waivers it has granted, both annually and in its evaluation of SNPs to be completed within three years to inform future decisions about whether SNPs and waiver authority should continue.

**Recommendation 3-5**

The Congress should require special needs plans to enroll at least 95 percent of their members from their target population.
### TABLE 3–11

**MA election periods**

<table>
<thead>
<tr>
<th>Time frame</th>
<th>Eligibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Annual election period</strong></td>
<td>November 15 through December 31</td>
</tr>
<tr>
<td><strong>Initial coverage election period</strong></td>
<td>Begins: 3 months before entitlement to both Part A and Part B&lt;br&gt;Ends on the later of:&lt;br&gt;1. last day of the month preceding entitlement to both Part A and Part B, or&lt;br&gt;2. 3 months after the month of eligibility.</td>
</tr>
<tr>
<td><strong>Special election periods (SEPs)</strong></td>
<td>Begins: defined trigger events, as listed in left-hand column below.&lt;br&gt;Ends: when the beneficiary elects a new MA plan or when the SEP time frame ends, whichever comes first.</td>
</tr>
<tr>
<td>Change in residence outside of the service area</td>
<td><strong>Permanent move:</strong>&lt;br&gt;Begins: the month prior to the beneficiary’s move.&lt;br&gt;Ends: 2 months after the move.</td>
</tr>
<tr>
<td></td>
<td><strong>Temporary move:</strong>&lt;br&gt;Begins: beginning of the sixth month of being out of the area.&lt;br&gt;Ends: end of the eighth month.</td>
</tr>
<tr>
<td>MA plan’s contract terminated</td>
<td>MA plans must give notice of at least 60 calendar days.</td>
</tr>
<tr>
<td></td>
<td>Begins: 2 months before termination.&lt;br&gt;Ends: 1 month after the termination month.</td>
</tr>
<tr>
<td>Beneficiary demonstrates that the MA plan violated its contract, or the plan (or its agent) materially misrepresented the plan in marketing.</td>
<td>Beneficiary may elect another MA plan or traditional Medicare during the last month of enrollment in the MA plan.&lt;br&gt;CMS may process a retroactive disenrollment.</td>
</tr>
</tbody>
</table>

Note: MA (Medicare Advantage), SNP (special needs plan). CMS may provide special election periods for other exceptional conditions. MA organizations are not required to open their MA plans for enrollment during an open enrollment period (OEP). However, MA organizations must accept valid requests for disenrollment from MA plans during the OEP since traditional Medicare is always open during an OEP. In addition, if an MA organization has more than one MA plan, the MA organization is not required to open each plan for enrollment during the same time frames. If an MA organization opens a plan during part of an OEP, it is not required to open the plan for the entire month; it may choose to open the plan for only part of the month.

Source: CMS, Medicare Managed Care Manual.

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### RATIONALE 3–5

The current disproportionate share standard is too liberal and untargeted. It allows SNPs with waivers to select among enrollees who fall outside targeted populations based on unknown criteria. The Commission encourages legitimate innovation in plan design but believes the current standard does not hold plans accountable for which enrollees they accept or reject.

### IMPLICATIONS 3–5

#### Spending
- See Recommendation 3-7.

#### Beneficiaries and plans
- Because few SNPs have received a disproportionate enrollment waiver, relatively few beneficiaries would have to switch plans or return to FFS as a result of this recommendation. Changes now would avoid bigger effects in the future if more plans were granted a disproportionate share waiver.
We are concerned about reports of marketing abuses. In 11 of a series of 13 focus groups that Commission staff conducted in 2007 on Part D issues, participants volunteered stories of inappropriate marketing. Sean Dilweg, the Wisconsin Commissioner of Insurance,
testified to the Subcommittee on Health of the House Committee on Ways and Means that states have consistently reported complaints of unethical, high-pressure sales tactics, such as door-to-door sales; sales agents improperly portraying that they were from Medicare or Social Security; mass enrollments and door-to-door sales at senior centers, nursing homes, or assisted living facilities; forged signatures on enrollment forms; and improper obtaining or use of personal information (Dilweg 2007).

One consequence is that these beneficiaries can find themselves enrolled in plans that charge them more cost sharing than under FFS. Another consequence is that these beneficiaries can enroll and disenroll from plans frequently, harming the continuity of care if their providers do not participate in each plan. We are also concerned about reports of marketing abuses from stand-alone prescription drug plans. If they enroll in one of these plans, dual eligibles are automatically disenrolled from their SNP or other MA plan. We encourage CMS to track and report the extent to which dual eligibles switch between plans (and FFS Medicare) during the year. Together with making changes to beneficiaries’ ability to enroll in plans, we strongly urge CMS to consider increasing its oversight of plans’ and brokers’ marketing practices.

**Recommendation 3-6**

The Congress should eliminate dual-eligible and institutionalized beneficiaries’ ability to enroll in Medicare Advantage plans, except special needs plans with state contracts, outside of open enrollment. They should also continue to be able to disenroll and return to fee-for-service at any time during the year.\(^\text{16}\)

**Rationale 3-6**

Dual-eligible and institutionalized Medicare beneficiaries are allowed to enroll and disenroll from MA plans on a monthly basis. Presumably, they were exempted from lock-in to give them greater protection than other beneficiaries. However, the provision has had unintended consequences. This recommendation is designed to protect dual-eligible beneficiaries from marketing abuses from all types of MA plans. Dual-eligible and institutionalized beneficiaries could change plans during the open enrollment period and during special election periods triggered by life events (e.g., at the point they become eligible for Medicaid or enter a nursing home), and they could choose to disenroll from a plan at any time. We would provide an exception for SNPs with state contracts because states’ enrollment periods can differ from Medicare’s and because states will oversee plans with which they have a relationship.

**Implications 3-6**

**Spending**
- See Recommendation 3-7.

**Beneficiaries and plans**
- This recommendation is designed to protect dual-eligible Medicare beneficiaries from plan marketing abuses.
- This should have a significant impact on plans; it may reduce plan enrollment.

**Extension of SNP authority to limit enrollment**

The authority for SNPs to limit enrollment is scheduled to expire December 2009. A CMS evaluation was due to the Congress in December 2007. Because most SNPs had been operating only for a year or two when the study was conducted, there may be insufficient quality and other data on which to evaluate them. In light of SNPs’ rapid growth in number and enrollment, we want a rigorous evaluation upon which to base our decision before recommending that they be made a permanent MA option.

Plans should consider adopting a range of care coordination tools, such as care managers, individualized health plans, multidisciplinary teams, and electronic medical records. The Secretary should develop and implement quality measures that capture care coordination processes—for example, use of individualized health plans, medical record exchanges, and indicators of lack of care coordination such as emergency room use. New specialized measures must supplement existing measures that allow for the comparison between SNPs and other MA plans.

**Recommendation 3-7**

The Congress should extend the authority for special needs plans that meet the conditions specified in Recommendations 3-1 through 3-6 for three years.

**Rationale 3-7**

All SNP types have the potential to improve care; however, the current evaluation will not give us enough data to assess these plans. Additional quality indicators, state contracts, and narrower definitions of chronic diseases will improve oversight of these plans; we would like to re-evaluate them once they have an opportunity to meet
these criteria before deciding whether they should become a permanent MA option. The Secretary would need to implement all new rules, collect performance data from plans, evaluate their performance, and report the results within a three-year period to inform future decisions about extending SNP authority.

**IMPLICATIONS 3-7**

**Spending**
- No significant budgetary effect for 2009 and increases Medicare spending relative to current law by less than $1 billion over five years

**Beneficiaries and plans**
- This recommendation would allow beneficiaries to continue to have access to SNPs during an additional evaluation period.
- This recommendation would allow providers additional time to be evaluated while continuing to operate SNPs.

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Report to the Congress: Medicare Payment Policy | March 2008
The NCQA report is based on a smaller proportion of the measurement year (and is not otherwise exempt from reporting), the plan is subject to the HEDIS reporting requirements. At least 293 contracts met the minimum size requirements for 2006, and 3 contracts withdrew from the program at the end of 2006. Thus, the PUF files are relatively complete in their representation of Medicare plans in that they include reports from more than 90 percent of plans that were eligible for HEDIS reporting in 2006. However, not all measures are reported by all plans.

HEDIS and HOS data are reported at the Medicare contract level—the “H” or “R” number level. Multistate plans, such as the Humana regional plan contract number that covers 23 states (R5826), are considered a single “plan” for reporting HEDIS and CAHPS data. Reporting at the H or R level also means that data are reported for enrollees who may have very different benefit packages and cost-sharing structures in their MA “plans.” Some plans (benefit offerings), which are subsets of H and R numbers (and which are the organizational unit for plan bids and pricing), may not include Part D drug coverage or the H or R number will have benefit offerings with richer benefits or lower cost sharing. Reporting at the contract level also causes SNPs to be combined with other plans if an organization offers each type of plan under a single H or R number.

Medicare improved on six measures based on the final published version of the NCQA SOHCQ report for 2007 (showing 2006 results). Earlier versions of the report showed that Medicare improved on seven measures between 2005 and 2006.

CMS has indicated that when a plan does not report a HEDIS measure, CMS will “usually issue a request for the data, and [plans] … comply as soon as they can.”

Plans that decided to enter into Medicare contracts because of the MMA provisions on payment and other provisions seeking to increase plan availability would have started their contracts in 2005 or toward the end of 2004 (the MMA was enacted in December 2003). In the HEDIS data we examined, there was only one plan with a contract that began on January 1, 2004. There were seven other contracts that began in 2004, dating from May 2004 or later.

There are also two PFFS plans represented in the CMS HEDIS PUF data, with only one of the plans reporting any measures at all. The only measure this PFFS reported was breast cancer screening rates.

MSA plan enrollees also participate in CAHPS, but the current data do not include any MSA plans. As in the case of HEDIS and HOS, cost-reimbursed HMOs participate in CAHPS. (Cost-reimbursed HMOs are paid under the

1 We projected FFS spending by county using 2007 estimates in the 2007 MA rate book updated by the CMS estimate of growth in national spending for 2008. We discounted spending related to the double payment for indirect medical education payments made to teaching hospitals.

While we were able to isolate the influence of Puerto Rico on our ratios, we cannot isolate other geographic areas. Our ratios are built on data from plan service areas, so that a plan’s ratio of payment to FFS is calculated over its entire service area and weighted by its enrollment from each county. We expect the ratios to vary based on the geography of each plan’s service area, but many service areas are very broad and thus cannot be attributed to individual geographic areas. Plans that serve Puerto Rico, on the other hand, do not include mainland service areas in their bids.

Nonfloor counties’ benchmarks average 112 percent of FFS spending. Floor counties have benchmarks that average 120 percent of FFS spending.

In discussing how CMS uses Healthcare Effectiveness Data and Information Set (HEDIS®) data in monitoring plans, CMS staff stated that the data are a component of contractor monitoring through a performance assessment system that is updated annually. The performance of plans is a factor in determining which plans are audited. For those with high scores on particular data elements, the audit requirements can be lessened. HEDIS scores were one of the factors used in deciding to terminate the contract of an MA plan in 2007 based on concerns about the quality of care the plan provided.

A score might not improve if it is particularly high to begin with. In most cases, this does not explain the lack of improvement in Medicare HEDIS scores. In comparing Medicare and commercial HEDIS scores on measures reported by both types of plans in 2006, for four measures Medicare scores exceeded commercial scores by 10 percent or more, but commercial scores exceeded Medicare scores by 10 percent or more for nine measures.

The NCQA report is based on a smaller proportion of Medicare health plans than the number that appear in the PUFs: NCQA included 211 plans (Medicare contracts), and the PUF files for 2006 (based on plan reports completed in 2007) contain data for 275 contracts, with one contract split into two market areas (for a total of 276 reporting units). The CMS HEDIS PUF files do not include all MA contractors for 2006. In 2006, there were 426 coordinated care plan contracts and 25 PFFS contracts. However, there is a minimum size requirement for MA organizations to report HEDIS measures. If an MA contract has at least 1,000 members as of July 1 of the measurement year (and is not otherwise exempt
provisions of Section 1876 of the Social Security Act. They are not MA plans, and members are not “locked in” to the health plan; that is, they may receive Medicare-covered services through FFS providers.)

12 The CMS HOS staff told us that a forthcoming dissertation, expected to be completed in the fall of 2008, will compare the 1998–2000 managed care enrollees with FFS Medicare beneficiaries.

13 Another social HMO, Elderplan, Inc., of New York was also redefined as an institutional SNP and had 16,368 enrollees in November 2007.

14 There is no guarantee that any of the several hundred SNPs would be approved as demonstrations. Under Section 402(b) of the Social Security Amendments of 1967, CMS is authorized to use demonstration authority to waive Medicare payment requirements. Since SNPs are paid the same as other MA plans, it may be especially difficult for them to be approved as demonstrations.

15 CMS phased in the hierarchical condition category risk-adjustment model, which uses age, sex, other demographic variables, and diagnoses, from 2004 through 2007. It predicts resource use better than the previous principal inpatient diagnosis cost group model, which did not include diagnoses (MedPAC 2004).

16 This recommendation includes a two-word, technical correction that Commissioners voted on at their January meeting. That vote was 14 yes and 3 absent.
Part D enrollment, benefit offerings, and plan payments
RECOMMENDATION

The Congress should direct the Secretary to make Part D claims data available regularly and in a timely manner to congressional support agencies and selected executive branch agencies for purposes of program evaluation, public health, and safety.

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

This chapter examines Medicare’s prescription drug program as it enters its third year. Our analysis of Part D enrollment for 2007 shows:

- Of more than 40 million Medicare beneficiaries, about 90 percent were enrolled in Part D plans or had drug benefits at least as generous as basic Part D coverage. Of the 13 million beneficiaries estimated to be eligible for Part D’s “extra help” with premiums and cost sharing, more than 9 million were receiving low-income subsidy (LIS) and nearly another million had other sources of coverage, leaving about 3 million without either.

- Around 17 million individuals (including more than 6 million dually eligible for Medicare and Medicaid) were enrolled in stand-alone prescription drug plans (PDPs). Sixty-one percent of PDP enrollees were in plans with basic coverage that was actuarially equivalent to the defined standard benefit—typically using copays instead of coinsurance and charging no deductible. Nine percent of PDP enrollees were in plans that offered gap coverage. About half

In this chapter

- Part D enrollment and recipients of “extra help”
- Patterns of enrollment in 2007
- Part D formularies
- Plan offerings for 2008
- Beneficiary premiums, thresholds for low-income premium subsidies, and plan payments
- Part D data still unavailable for purposes other than payment
of all PDP enrollees received Part D’s extra help, which effectively eliminated their coverage gap.

- Eighty percent of the 7 million individuals enrolled in a Medicare Advantage–Prescription Drug plan (MA–PD) had enhanced benefits—coverage with an average benefit value higher than basic benefits. A much larger share of MA–PD enrollees were in plans that offered some gap coverage: 33 percent compared with 9 percent for PDP enrollees.
- Among enrollees with gap benefits, most had coverage for generic but not brand name drugs.

Our look at Part D formularies shows:

- Most plans use a three-tier structure that includes one generic tier and two other tiers that distinguish between preferred and nonpreferred brand name drugs. The share of enrollees in plans that used a three-tier formulary grew from 59 percent for PDP enrollees in 2006 to 69 percent in 2007, and from 73 percent to 87 percent of MA–PD enrollees.
- In 2006, 63 percent of PDP enrollees and 67 percent of MA–PD enrollees were in plans with specialty tiers for expensive products, unique drugs, and biologicals. In 2007, those percentages rose to 74 percent and 84 percent, respectively. Cost sharing for specialty-tier drugs is typically 25 percent to 30 percent of the plan’s negotiated price and enrollees may not appeal cost-sharing amounts as they can for drugs on other tiers.
- For 2007, copays for the median enrollee in either a PDP or MA–PD with a three-tier formulary were $5 per 30-day prescription for a generic drug, $28 or $29 for preferred brand name drugs, and $60 for nonpreferred brands.

Our analysis of benefit offerings, premiums, and plan payments shows:

- For 2008, most beneficiaries again have a choice of 50 to 60 PDPs. There is a slight increase in the share of PDP offerings that include gap coverage.
• Sponsors are offering 19 percent more MA–PDs for 2008 than for 2007. MA–PDs have been much more likely than PDPs to include enhanced benefits, reflecting their use of MA payments to reduce cost-sharing requirements and premiums.

• Average monthly premiums have increased for 2008, and premiums for the most popular PDPs increased more than did those for other plans. For 2008, the average Part D enrollee pays about $27 per month, up 16 percent from the $23 average for 2007. The average PDP enrollee pays about $32 per month, compared with $27 in 2007. For the average enrollee in an MA–PD, plans charge nearly $13 of their monthly MA premium for Part D benefits, compared with about $10 in 2007.

• There are several reasons for the increase in premiums. One is that CMS is phasing down Part D’s federal subsidy to 74.5 percent as called for by law. A second reason for increased premiums is that risk scores for Part D enrollees have crept up over time because of changes in how providers code their services under Part A and Part B. A third factor may be Part D’s risk corridors that limit plans’ profits and losses and are scheduled to widen in 2008. As plans bear more insurance risk, they may bid higher.

• Plans that bid less qualify to enroll LIS beneficiaries without charging those enrollees a premium. Medicare law set up this process to provide an incentive for plans to control growth in drug spending and keep premiums low.

• For 2007, CMS chose not to follow the law in setting regional thresholds and did not weight plan premiums by enrollment. As a result, fewer beneficiaries were reassigned to a new plan relative to what would have happened under the law, and Medicare spending was higher.

• For 2008, about 2.6 million individuals needed to switch to a different plan if they did not want to pay a premium. CMS reassigned 2.1 million of those beneficiaries. This number is considerably more than last year because the agency began phasing in enrollment
weighting to set the thresholds, which led to lower thresholds in many regions. More plans had higher bids and premiums, and so more LIS enrollees needed to change plans.

- As Part D moves into its third year, the Commission is concerned that CMS has not made drug claims data available to congressional support agencies and selected executive branch agencies. CMS released a proposed rule on this topic in 2006, but the agency has not finalized the rule and stakeholders could challenge a final version in court. Stakeholder concerns about release of the data could be mitigated. The Commission needs claims data to monitor and evaluate Part D and make recommendations to improve the program. Other agencies need drug claims to monitor drug safety and health trends and to evaluate the program.

**Recommendation 4-1**

The Congress should direct the Secretary to make Part D claims data available regularly and in a timely manner to congressional support agencies and selected executive branch agencies for purposes of program evaluation, public health, and safety.

**COMMISSIONER VOTES:**

YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0
Under Medicare Part D, private plans compete to deliver prescription drug benefits and try to attract enrollees on the basis of premiums, benefit design, drug formularies, pharmacy networks, and quality of services. Organizations that offer Part D plans bear insurance risk for some of their enrollees’ benefit spending. Plan sponsors may offer Part D benefits either as a drug-only package (as a stand-alone prescription drug plan (PDP)) or as part of the broader package of medical benefits offered by Medicare Advantage–Prescription Drug plans (MA–PDs). PDPs must offer their plan throughout their PDP region; CMS created 34 such regions throughout the United States. Most MA–PDs are local plans that select individual counties where they offer their benefits. Regional MA–PDs are an exception; they must offer their plan throughout 1 of the 26 MA regions across the country. For more about the Part D and Medicare Advantage payment systems, see www.medpac.gov/documents/MedPAC_Payment_Basics_07_PartD.pdf and www.medpac.gov/documents/MedPAC_Payment_Basics_07_MA.pdf.

Medicare trustees report that, during calendar year 2006, the Medicare program and enrollees spent $47 billion on Part D benefits and premiums (Boards of Trustees 2007). (Medicare program spending made up $44 billion of the total.) In 2007, updated 10-year projections of spending for the program were about 30 percent lower than projections prepared when the law that created Part D was enacted. Analysts attribute lower projections to competitive bids from plan sponsors that were lower than expected, as well as to levels of enrollment that were lower than anticipated originally (CBO 2007).

According to CMS, five separate surveys suggest that more than 75 percent of Part D enrollees are satisfied with the program (CMS 2007j). (Some individual surveys report higher percentages.) An important reason is that the Part D program subsidizes enrollees’ drug spending, thereby saving most beneficiaries money. CMS estimates that in 2007, enrollees saved an average of $1,200 compared with individuals without prescription drug coverage. Enrollees who receive extra help with premiums and cost sharing through Part D’s low-income subsidy (LIS) saved an average of $3,350, according to CMS (CMS 2007j).

The law that created Part D set out a defined standard benefit structure for the program’s initial year, but the deductible, initial coverage limit, and out-of-pocket spending limit increase over time at the same rate as the annual increase in average total Part D drug expenses of Medicare beneficiaries (Table 4–1). For 2008, the defined standard benefit includes a $275 deductible, 25 percent coinsurance until the enrollee reaches $2,510 in total covered drug spending, and then a coverage gap in which enrollees are responsible for the full discounted price of covered drugs until their true out-of-pocket spending reaches $5,726.25. (“True out of pocket” refers to the fact that cost sharing paid by most sources of supplemental coverage does not count toward this limit. The enrollee pays nominal cost sharing above this limit.

<table>
<thead>
<tr>
<th>Parameters of the defined standard benefit increase over time</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deductible</td>
<td>$250.00</td>
<td>$265.00</td>
<td>$275.00</td>
</tr>
<tr>
<td>Initial coverage limit</td>
<td>2,250.00</td>
<td>2,400.00</td>
<td>2,510.00</td>
</tr>
<tr>
<td>True out-of-pocket spending limit</td>
<td>3,600.00</td>
<td>3,850.00</td>
<td>4,050.00</td>
</tr>
<tr>
<td>Total covered drug spending at true out-of-pocket limit</td>
<td>5,100.00</td>
<td>5,451.25</td>
<td>5,726.25</td>
</tr>
</tbody>
</table>

Minimum cost sharing above the true out-of-pocket limit:

- Copay for generic/preferred multisource drug prescription: 2.00, 2.15, 2.25
- Copay for other prescription drugs: 5.00, 5.35, 5.60

Note: Under Part D’s defined standard benefit, the enrollee pays the deductible and then 25 percent of covered drug spending (75 percent paid by the plan) until total covered drug spending reaches the initial coverage limit. The enrollee then reaches the coverage gap where she must pay 100 percent of covered drug spending until she reaches the true out-of-pocket limit. “True out of pocket” refers to the fact that cost sharing paid by most sources of supplemental coverage does not count toward this limit. The enrollee pays nominal cost sharing above this limit.

Source: CMS 2007g, CMS 2006a.

Medicare trustees report that, during calendar year 2006, the Medicare program and enrollees spent $47 billion on Part D benefits and premiums (Boards of Trustees 2007). (Medicare program spending made up $44 billion of the total.) In 2007, updated 10-year projections of spending for the program were about 30 percent lower than projections prepared when the law that created Part D was enacted. Analysts attribute lower projections to competitive bids from plan sponsors that were lower than expected, as well as to levels of enrollment that were lower than anticipated originally (CBO 2007).
Part D enrollment, benefit offerings, and plan payments

As of January 2007, about 90 percent of Medicare beneficiaries were either enrolled in Part D plans or had creditable coverage—which means they have credit for having prescription drug benefits through non-Medicare sources at least as generous as basic Part D coverage (Figure 4-1). Medicare subsidized drug spending for 71 percent of all Medicare beneficiaries. They fell into the following four categories: One group is the nearly 11 million individuals, or 26 percent of all beneficiaries, who enrolled voluntarily in stand-alone PDPs. A second group is made up of more than 6 million beneficiaries (14 percent) who are dually eligible for both Medicare and Medicaid that CMS automatically enrolled in stand-alone Part D plans. (Those individuals may switch to a different plan if they prefer to do so.) Third, another 6.7 million (15 percent) were enrolled in MA–PDs (including about 0.5 million dual eligibles). And fourth, 7 million beneficiaries (16 percent) received primary prescription drug coverage through their past employers. In return, Medicare provided those employers with a tax-free subsidy for some of each eligible individual’s drug costs.

Another 19 percent of Medicare beneficiaries have other sources of creditable coverage that Medicare does not subsidize. About 8 percent of individuals had primary drug coverage through the Federal Employees Health Benefits Program or TRICARE, the health care systems for government and military retirees, respectively. CMS estimates that 11 percent of Medicare beneficiaries have creditable coverage through the Department of Veterans Affairs, Indian Health Service, former employers that do not participate in Medicare’s retiree drug subsidy, current employers (in the case of individuals who are still active workers), or qualified state pharmaceutical assistance programs. That leaves 10 percent (about 4.5 million beneficiaries) without prescription drug coverage or with coverage of lesser value than Part D.

Part D includes an LIS that provides assistance with premiums and cost sharing for individuals with low incomes and assets. In the agency’s public outreach campaign to beneficiaries, CMS refers to this as “extra help.” As of January 2007, an estimated 13.2 million Medicare beneficiaries (more than 30 percent) were eligible for extra help (Kaiser Family Foundation 2007). Of those 13.2 million, about 9.3 million were receiving the subsidy, and another 0.7 million had other sources of creditable coverage. CMS estimated that an additional 3.3 million Medicare beneficiaries were eligible for extra help but had not yet signed up. (For a more in-depth discussion of LIS outreach efforts, see Chapter 5.)

Patterns of enrollment in 2007

In 2006 and 2007, the typical Medicare beneficiary had 50 to 60 PDPs available, in addition to MA–PDs. However, Part D enrollment was concentrated in plans offered by relatively few sponsors. For 2008, only a
handful of sponsors have exited the market and Medicare beneficiaries continue to have a broad number of choices of PDPs and MA–PDs.

Thus far, the market shares of Part D plan sponsors have not changed much. Even though premium competition was a central component of Part D’s design (to provide an incentive to manage growth in drug spending), stable market shares might suggest that, to date, Part D enrollees have not been willing to switch among plans. In a survey of seniors that CMS conducted after Part D’s open enrollment period for the 2007 benefit year, only about 6 percent reported switching plans (CMS 2007j). However, as we show later in the chapter, premiums for many of the most popular plans increased for 2008, and so greater numbers of enrollees may have decided to switch to plans with lower premiums. (Enrollment data by plan were not available for 2008 at publication.)

Part D’s annual process for setting LIS premium subsidy thresholds is another source of competitive pressure because plans may compete to remain premium-free to LIS enrollees and thereby hold on to this group of members for the upcoming year. In 2006, dual eligibles and other LIS enrollees were randomly assigned to qualifying plans through an auto-assignment process. This process helped to ensure that dual eligibles would have continuous drug coverage as Medicaid’s responsibility for that coverage ended and Medicare’s status as primary payer began. Auto-assignment also allowed plans to save on marketing costs and meant that qualifying plans could count on Medicare to pay for all or much of those enrollees’ premiums and cost sharing. CMS pays plans more for LIS enrollees by applying a multiplier to the risk factor that is based on a beneficiary’s health status to compensate for higher average drug spending. In 2007 and subsequent years, CMS randomly assigns new Part D enrollees who receive extra help to a qualifying plan. The agency reassigns some individuals to a new qualifying plan if their previous year’s plan bids in such a way that its premium is above the threshold. For some PDP sponsors, the stakes in this annual threshold competition are high because a very large proportion of plan members are LIS enrollees. However, other sponsors rely much less on LIS enrollees and may believe that CMS’s risk adjusters do not provide sufficient compensation.

After Part D’s initial open enrollment period in 2006, plan membership was highly concentrated in plans offered by relatively few sponsors. That pattern remained unchanged in 2007. As of July 2007, the top two sponsors accounted for nearly half of enrollment in all stand-alone PDPs and about one-third of MA–PD enrollment. UnitedHealthcare and PacifiCare (which merged in 2006) accounted for 27 percent of the 16.8 million PDP enrollees and 17 percent of the 7.4 million MA–PD enrollees (Figure 4-2, p. 284). Similarly, Humana had 21 percent of all PDP enrollees and 15 percent of MA–PD enrollees.

For 2008, changes in whether specific sponsors bid low enough so that their plans qualify to remain premium-free to LIS enrollees could affect the market shares shown in Figure 4-2. As one example, consider the case of UnitedHealthcare. For 2008, that sponsor’s bids led to relatively higher plan premiums, and the company no longer offers a premium-free product to 650,000 LIS enrollees who live in 18 of the 34 PDP regions where the insurer’s plans qualified for 2007 (UnitedHealth Group 2007). If all 650,000 were in PDPs and allowed themselves to be reassigned to other plans, the loss of enrollees would equate to about 4 percentage points of United’s 27 percent PDP market share for 2007. (Note, however, that some LIS enrollees may have chosen to stay in United’s plans and pay some of the premium.) Relatively higher bids for some plans offered by Humana, CIGNA, WellCare, and other sponsors also led them to lose qualifying status as premium-free plans in several regions. Other sponsors stand to gain LIS enrollees as beneficiaries are reassigned to qualifying plans.

### Part D Formularies

The Medicare drug benefit allows plans to develop formularies to manage the cost and use of prescription drugs by covering different drugs and tiering their cost sharing. A formulary is a list of drugs that plans agree to cover and the terms under which they will cover them. In non-Medicare markets, most formularies are variations of two basic models: open or closed. In an open formulary, a payer provides coverage for all drugs in most, if not all, therapeutic classes and may encourage enrollees to use preferred drugs through tiered cost sharing. In a closed formulary, the payer does not reimburse for drugs unless they are listed on the formulary or are covered through an exceptions process. Many payers have moved to a hybrid of open and closed formularies that uses three cost-sharing tiers: low copays for generic drugs, higher but still relatively low copays for preferred brand name drugs, and significantly higher copays for nonpreferred brands. (See MedPAC 2004 for a broader discussion of formularies.)
When designing formulary systems, plans must strike a balance between providing enrollees with access to medications and controlling growth in drug spending by negotiating drug prices and managing utilization. Part D plans must rely on clinicians when developing and reviewing their formularies through a pharmacy and therapeutics committee made up primarily of practicing physicians and pharmacists. However, plans also consider how to control costs when developing formularies. Making all medications readily accessible at preferred levels of cost sharing can lead to Part D premiums that are high relative to a plan’s competitors. On the other hand, an overly restrictive formulary may keep a plan’s premium competitive but also may be less likely to attract Part D enrollees because of the limited number of drugs it covers.

The Commission asked researchers at NORC at the University of Chicago and Georgetown University to describe features of and changes in Part D formularies. Since medication therapies come in a variety of forms and dosages, a critical task of this work was to analyze how to define a drug (see text box, pp. 286–287). Each month, Part D plans submit data to CMS on the list of drugs they cover, cost-sharing tiers on which drugs are placed, and whether each drug is subject to utilization management tools such as requirements for prior authorization. The NORC/Georgetown team analyzed CMS data for 2006 and 2007 to compare tier structures, the numbers of drugs listed, and the degree to which plans managed utilization.

**Plan tier structures**
CMS data show that most plans’ formularies fall into three categories: 25 percent cost sharing for all listed drugs (as in the defined standard benefit), one generic and one brand name tier, and three-tier designs that distinguish

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**Note:** PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). Enrollment numbers are as of July 2007.

Source: CMS 2007c.
between preferred and nonpreferred brands. Among these categories, most plans use the latter. In addition, CMS permits Part D plans to use a specialty tier for expensive products, unique drugs, and biologicals, and most plan formularies also include a specialty tier.

By setting differential copays between preferred and nonpreferred brands, three-tier formularies may give plans a stronger tool than two tiers for encouraging substitution among drugs within the same therapeutic class. Use of three-tier designs in Part D has increased: The share of beneficiaries enrolled in a three-tier formulary grew from 59 percent of PDP enrollees in 2006 to 69 percent in 2007, and from 73 percent of MA–PD enrollees in 2006 to 87 percent in 2007 (Figure 4-3). (Here the term “three-tier formulary” refers to plans that distinguish between preferred and nonpreferred brand name drugs even if the plan includes a fourth tier for specialty drugs.)

The use of specialty tiers has also increased significantly. In 2006, 63 percent of PDP enrollees and 67 percent of MA–PD enrollees were in plans that used such a tier. In 2007, those shares rose to 74 percent of PDP enrollees and 84 percent of MA–PD enrollees (Figure 4-4, p. 288). Most of the remaining enrollees were either in plans that had the defined standard benefit structure (which uses flat 25 percent coinsurance) or in plans with cost-sharing requirements comparable to those of specialty tiers. For 2006, CMS did not establish specific criteria for placing drugs on a specialty tier. However, for 2007, CMS defined specialty tiers more clearly: Only Part D drugs with negotiated prices that exceeded $500 per month could be

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). Percentages are weighted by enrollment. PDPs exclude employer-only groups and plans offered in U.S. territories. MA–PDs exclude demonstration programs, 1876 cost plans, employer-only groups, and plans offered in U.S. territories. Two-tier plans have one lower tier of cost sharing for generic drugs and one higher tier for brand name drugs. Three-tier plans have a generic tier and distinguish between preferred and nonpreferred brands—the latter have higher levels of cost sharing. Many plans also include a fourth specialty tier that applies to expensive products and unique drugs and biologicals for which enrollees may not appeal for lower cost sharing. Totals may not sum to 100 percent due to rounding.

What is a drug?

How drugs are defined can have a significant impact on formulary rules and standards. CMS generally requires that plan formularies include at least two drugs in each of its therapeutic categories and classes (unless only one drug is available). Yet, two products may be considered the same drug by one measure, while they are treated as separate entities by another.

The Food and Drug Administration’s national drug codes (NDCs) are very detailed, with separate codes for every combination of chemical ingredients, strength, form, package size (how many doses included in one container used by the pharmacy), and the firm that manufactures or distributes the drug. Meanwhile, the model therapeutic coding system that many Part D plans use was designed by the U.S. Pharmacopeia.

<table>
<thead>
<tr>
<th>Generic name</th>
<th>Trade name</th>
<th>Form</th>
<th>Strength</th>
<th>NDC</th>
<th>Percent of 2007 Part D plans listing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paroxetine HCl</td>
<td>Paroxetine HCl</td>
<td>Oral solid</td>
<td>40 mg</td>
<td>00093712156</td>
<td>100.0% 100.0% 100.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30 mg</td>
<td>00093711656</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>20 mg</td>
<td>49884087701</td>
<td>99.7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10 mg</td>
<td>00093711456</td>
<td>99.6%</td>
</tr>
<tr>
<td>Paxil®</td>
<td>Oral solid</td>
<td>10 mg</td>
<td>00029321013</td>
<td>36.1% 100.0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>40 mg</td>
<td>00029321313</td>
<td>35.9%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>20 mg</td>
<td>00029321113</td>
<td>36.1%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>30 mg</td>
<td>00029321213</td>
<td>35.7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Suspension</td>
<td>10 mg/5 ml</td>
<td>00029321548</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Paxil CR®</td>
<td>Oral solid</td>
<td>25 mg</td>
<td>00029320713</td>
<td>71.4% 71.4%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12.5 mg</td>
<td>00029320613</td>
<td>71.4%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>37.5 mg</td>
<td>00029320813</td>
<td>71.4%</td>
<td></td>
</tr>
<tr>
<td>Paroxetine mesylate</td>
<td>Pexeva®</td>
<td>Oral solid</td>
<td>10 mg</td>
<td>63672201001</td>
<td>55.0% 55.0%</td>
</tr>
</tbody>
</table>

Note: NDC (national drug code), HCl (hydrochloride), CR (continuous release), mg (milligrams), ml (milliliters). Oral solids are in pill form and suspensions are in liquid form. Percent of plan values are for stand-alone prescription drug plans and Medicare Advantage–Prescription Drug plans combined. Other NDCs for paroxetine exist, but these are the 13 reference codes for which CMS required plans to report whether they listed the codes in their formularies for 2007.


on a specialty tier. In 2008, only drugs with prices that exceed $600 per month may be on a specialty tier.

Broader use of specialty tiers has important implications for beneficiaries and plans. From an enrollee’s perspective, cost-sharing requirements for specialty-tier drugs can be high (at least 25 percent of the plan’s negotiated price) until the beneficiary reaches the catastrophic levels of spending in Part D’s benefit that limit out-of-pocket spending. In addition, under CMS’s regulations, enrollees may not appeal cost sharing as they can for other drugs such as those on nonpreferred brand tiers. Since the drugs...
on specialty tiers are often used to treat very serious illnesses such as rheumatoid arthritis, multiple sclerosis, some cancers, and hepatitis C, these patients could be facing relatively high cost sharing for medications on top of significant out-of-pocket costs for the rest of their medical care. From a plan’s perspective, if most of its competitors are using specialty tiers, it may be important to add a specialty tier to limit the risk of attracting sicker enrollees who use very expensive drugs. Otherwise, those expensive drugs would be available for a much lower copay.

For 2007, copay levels for the median enrollee in either a PDP or MA–PD with a three-tier formulary were similar: $5 per 30-day prescription for a generic drug, $28 or $29 for preferred brand name drugs, and $60 for nonpreferred brands (Table 4-3, p. 289). Plans charged the median PDP enrollee 30 percent for specialty-tier drugs, while the median MA–PD enrollee paid 25 percent. There is wide variation in what enrollees pay across Part D plans. Among PDPs, for example, copays for generic drugs ranged from zero to $25 dollars, while copays for preferred brand name drugs ranged from $15 to $59 and...
Part D enrollment, benefit offerings, and plan payments

Among MA–PDs, the variation in copays for preferred and nonpreferred brand name drugs and specialty drugs was greater than the variation in copays for equivalent formulary tiers in PDPs. This likely reflects that enrollment in PDPs is more highly concentrated among a limited number of national plans.

Although copays for the median enrollee were fairly stable between 2006 and 2007 for generic drugs, those for nonpreferred brand name drugs increased from $55 to $60. For the median MA–PD enrollee, copays for prescriptions of preferred brands increased from $27 to $29. Meanwhile, the median enrollee in a PDP saw coinsurance rates for drugs on the specialty tier rise from 25 percent in 2006 to 30 percent in 2007. Copays across Part D plans varied widely in both 2006 and 2007.

Under CMS regulations, plans are to limit cost sharing for specialty-tier drugs to no more than 25 percent of the negotiated price within the benefit’s initial coverage limit. However, plans may use higher coinsurance to maintain actuarial equivalence in a basic benefit with no deductible or one that is lower than the defined standard benefit’s deductible (CMS 2007f). For 2007, the median enrollee in a PDP that uses a specialty tier faced 30 percent cost sharing for those drugs. This shows that plans are making extensive use of the flexibility that Part D allows for actuarial equivalence in benefit designs, trading off a lower or no deductible for all plan members with higher cost sharing on specialty drugs used by a few enrollees (Hargrave et al. 2007). At the same time, this form of actuarial equivalence may raise out-of-pocket spending

Notes about this graph:

- PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). Calculations are weighted by enrollment. PDPs exclude employer-only groups and plans offered in U.S. territories. MA–PDs exclude demonstration programs, 1876 cost plans, employer-only groups, and plans offered in U.S. territories. Specialty tiers apply to expensive products and unique drugs and biologicals for which enrollees may not appeal for lower cost sharing.


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Figure 4-5

PDPs and MA–PDs listed similar numbers of drugs on their formularies in 2007

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). PDPs exclude employer-only groups and plans offered in U.S. territories. MA–PDs exclude demonstration programs, 1876 cost plans, employer-only groups, and plans offered in U.S. territories. Values reflect the percent of distinct chemical entities listed within CMS’s file of reference national drug codes. The text box (pp. 286–287) provides a discussion of alternative definitions of drugs.

and disproportionately affect access for beneficiaries who use these high-cost drugs.

Currently, the Commission does not have access to Part D claims information that might allow us to examine trends among beneficiaries who use drugs on specialty tiers. (See discussion at the end of this chapter on Part D claims data.) When linked with claims for Part A and Part B services, drug claims would allow us to look at patients’ current levels of utilization, as well as whether greater adherence to those medication therapies is associated with lower use of other health care services.

**Formulary sizes, stability, and utilization management**

The number of drugs that plans list on their formulary can be another way to analyze Part D plans. Note, however, that the number of drugs on a plan’s formulary does not necessarily represent beneficiary access to medications. Plans’ processes for nonformulary exceptions, prior authorization (preapproval from a plan before coverage), quantity limits (plans limit the number of doses of a particular drug covered in a given time period), and step therapy requirements (enrollees must try specified drugs before moving to other drugs) can have a strong influence on access to certain drugs. For example, unlisted drugs may be covered through the nonformulary exceptions process, which may be relatively easy for some plans and more burdensome for others. Alternatively, on-formulary drugs may not be covered in cases in which a plan does not approve a prior authorization request. Also, a formulary’s size can be deceptively large if it includes drugs that are no longer used in common practice.

During 2007, enrollees in stand-alone PDPs and MA–PDs had similar numbers of drugs listed on their plans’ formularies. The average PDP enrollee was in a plan that listed 87 percent of all distinct chemical entities on which CMS requires plans to report, while the average MA–PD enrollee was in a plan listing 86 percent (Figure 4-5). However, the number of drugs listed on any given plan’s formulary can vary considerably, from around 50 percent for plans with the tightest formularies to 100 percent for some of the most popular plans.

Plans may remove a drug from their formularies, move a drug to a higher cost-sharing tier, or impose new restrictions at any point during the year, as long as they notify affected enrollees, pharmacists, and physicians at least 60 days before the change. Beginning in 2007, CMS began requiring plans to provide continued coverage of an enrollee’s medications for those who were already on medications affected by formulary changes during the year. (Some exceptions apply, such as removing formulary drugs that the Food and Drug Administration or a product manufacturer has withdrawn from the market.)

During 2007, the average Part D enrollee was relatively unaffected by formulary changes. In their analysis, NORC/Georgetown researchers found that the average PDP enrollee was in a plan that listed 1,116 chemical entities in January 2007. During the year, average enrollees saw slightly more drugs deleted than added to their plan’s formulary, but those changes amounted to just 2

---

**Table 4–3: Cost sharing for Part D plans in 2007**

<table>
<thead>
<tr>
<th>Tier</th>
<th>PDP</th>
<th>MA–PD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
<td>Minimum</td>
</tr>
<tr>
<td>Copay</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generic</td>
<td>$5</td>
<td>$0</td>
</tr>
<tr>
<td>Preferred brand name drug</td>
<td>28</td>
<td>15</td>
</tr>
<tr>
<td>Nonpreferred brand name drug</td>
<td>60</td>
<td>35</td>
</tr>
<tr>
<td>Specialty-tier coinsurance</td>
<td>30%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). Calculations are weighted by enrollment. Generic copay values are for all plans that use dollar copays. Copay values for preferred and nonpreferred brand name drugs are only for plans that use three tiers. PDPs exclude employer-only groups and plans offered in U.S. territories. MA–PDs exclude demonstration programs, 1876 cost plans, employer-only groups, and plans offered in U.S. territories. Specialty tiers apply to expensive products and unique drugs and biologicals for which enrollees may not appeal for lower cost sharing.

percent of the drugs listed. Most of the drugs that were dropped reflect adjustments to CMS’s requirements for reporting formulary information to the agency rather than meaningful changes to coverage. Most of the drugs added were newly approved by the Food and Drug Administration.

NORC/Georgetown analysts also examined the degree to which plans changed their formularies between 2006 and 2007. For 2007, CMS changed its process for submitting formulary information and introduced a standard set of reference drugs that permitted better comparisons across plans. At the same time, the change in reporting requirements made the task of comparing the same plan’s formulary for the two years more difficult. Nevertheless, NORC/Georgetown researchers saw evidence suggesting that plans dropped only a small share of drugs from the

### Table 4-4: Characteristics of PDPs

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th></th>
<th>2008</th>
<th></th>
<th>Percent of estimated enrollment&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Plans</td>
<td>Enrollees (as of July 2007)</td>
<td>Plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
<td>Percent</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(in millions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,866</td>
<td>100%</td>
<td>16.1</td>
<td>100%</td>
<td>1,824</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td></td>
<td>100%</td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Type of organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1,507</td>
<td>80%</td>
<td>13.9</td>
<td>86%</td>
<td>1,589</td>
</tr>
<tr>
<td>Near-national&lt;sup&gt;c&lt;/sup&gt;</td>
<td>149</td>
<td>8%</td>
<td>0.6</td>
<td>4%</td>
<td>32</td>
</tr>
<tr>
<td>Other</td>
<td>210</td>
<td>11%</td>
<td>1.7</td>
<td>10%</td>
<td>203</td>
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<tr>
<td>Type of benefit</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Defined standard</td>
<td>219</td>
<td>12%</td>
<td>2.9</td>
<td>18%</td>
<td>217</td>
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<tr>
<td>Actuarially equivalent&lt;sup&gt;d&lt;/sup&gt;</td>
<td>760</td>
<td>41%</td>
<td>9.9</td>
<td>61%</td>
<td>682</td>
</tr>
<tr>
<td>Enhanced</td>
<td>877</td>
<td>48%</td>
<td>3.3</td>
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<td>Type of deductible</td>
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<tr>
<td>Zero</td>
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<td>60%</td>
<td>8.6</td>
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<td>1,065</td>
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<tr>
<td>Reduced</td>
<td>157</td>
<td>8%</td>
<td>0.5</td>
<td>3%</td>
<td>150</td>
</tr>
<tr>
<td>Defined standard&lt;sup&gt;e&lt;/sup&gt;</td>
<td>582</td>
<td>31%</td>
<td>7.0</td>
<td>43%</td>
<td>609</td>
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<td>Drugs covered in the gap</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Some generics but no brand name drugs</td>
<td>511</td>
<td>27%</td>
<td>1.3</td>
<td>8%</td>
<td>528</td>
</tr>
<tr>
<td>Some generics and some brand name drugs</td>
<td>27</td>
<td>1%</td>
<td>0.1</td>
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<td>1</td>
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<tr>
<td>None</td>
<td>1,328</td>
<td>71%</td>
<td>14.7</td>
<td>91%</td>
<td>1,295</td>
</tr>
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</table>

Note: PDP (prescription drug plan). The PDPs and enrollment described here exclude employer-only plans and plans offered in U.S. territories. Sums of percentages may not add to totals due to rounding.

<sup>a</sup> Assumes that enrollees will remain in the same plan in which they were enrolled in 2007. Note, however, that some beneficiaries will enroll in or (in the case of beneficiaries who receive extra help) be reassigned to a different plan for 2008. About 99 percent of July 2007 PDP enrollees who were within the scope of our analysis were in 2007 plans that could be matched to 2008 plans.

<sup>b</sup> Reflects total numbers of plans for the 17 organizations with at least one PDP in all 34 PDP regions.

<sup>c</sup> Totals for organizations offering 30 or more PDPs across the country, but without 1 in each PDP region.

<sup>d</sup> Benefits labeled actuarially equivalent to Part D’s standard benefit include what CMS calls “actuarially equivalent standard” and “basic alternative” benefits.

<sup>e</sup> $265 in 2007 and $275 in 2008.

Source: MedPAC analysis of CMS landscape, bid, and enrollment data.
average enrollee’s plan formulary—affecting about 1 percent of total drugs listed.

Part D plans apply utilization management tools—including prior authorization, step therapy, and quantity limits—to selected drugs. Plans use tools for drugs that are expensive; potentially risky; subject to abuse, misuse, or experimental use; or to encourage use of lower cost therapies. Some tools are more common than others. For example, all PDPs and almost all MA–PDs use prior authorization for at least one drug on their formularies. For 2007, average enrollees in either a PDP or MA–PD faced some sort of utilization management for 18 percent of the drugs listed on their formulary. Prior authorization was used for 8 percent of drugs, step therapy for 1 percent, and quantity limits for 12 percent. The use of specific tools varies by drug class. For example, in 2006 Part D formularies, 70 percent or more of drugs listed in the therapeutic class of immune suppressants (rheumatoid arthritis agents) required prior authorization, while fewer than 5 percent of renin angiotensins (selected hypertension drugs) had similar requirements (MedPAC 2006).

**Plan offerings for 2008**

The total number of PDPs available for 2008 is relatively stable. Organizations are offering just 2 percent fewer stand-alone plans than for 2007: 1,824 compared with 1,866 (Table 4-4). In most states, Medicare beneficiaries can choose from 50 to 60 PDPs in addition to MA–PDs available in their county (data not shown).

In the near term, industry consolidation will reduce the number of plans to a limited degree. A few major plan sponsors are acquiring one another. For example, UnitedHealthcare acquired PacifiCare in 2006 and Sierra in late 2007. Universal American Financial Corp. acquired MemberHealth in 2007. Most of these component companies currently offer several PDPs in each region. We expect their combined numbers of plans to decline. Other sponsors may decide to exit the Part D market if they are unable to attract sufficient enrollment or if Part D’s widening risk corridors (which cause plans to bear more insurance risk for their enrollees’ drug spending) leave them with the risk of unacceptable losses. Under CMS’s guidelines, sponsoring organizations may usually offer no more than two PDPs in each region but may offer up to four if additional plans have meaningful differences in benefit design, such as coverage in the gap (CMS 2007a).

If one sponsor acquires another, the parent organization has three years to consolidate its plan offerings, and generally sponsors should offer no more than two plans with basic benefits among subsidiaries.

In 2008, 17 national organizations offer at least one PDP in each region, and those sponsors account for 87 percent of all stand-alone plans and 86 percent of total enrollment in PDPs (Table 4-4). In 2007, there were also 17 organizations participating nationwide, but some of the sponsors have changed. Express Scripts and National Medical Health Card Systems no longer offer PDPs to all Medicare beneficiaries. Instead, both companies will concentrate on PDPs offered to individuals within employer-only group arrangements. In their place, Sterling Insurance Company and Universal American Financial Corporation expanded their 2008 offerings in all 34 regions to include PDPs open to any Medicare beneficiary. SierraRx is nearly national, offering 32 PDPs in 24 regions, but without a plan in each region.

**Little change in PDP benefit designs for 2008**

Within certain limits, sponsoring organizations may offer Part D plans that have the same actuarial (average benefit) value as the defined standard benefit but a different benefit structure. For example, a plan may use tiered copayments rather than 25 percent coinsurance. Or a plan may have no deductible but use cost-sharing requirements that are equivalent to a rate higher than 25 percent. Both defined standard benefit plans and plans that are actuarially equivalent to the defined standard benefit are known as “basic benefits.” Once an organization offers at least one PDP with basic benefits within a PDP region, it may also offer a plan with “enhanced benefits”—basic and supplemental coverage combined, with a higher average benefit value.

In 2007, many beneficiaries—61 percent of all PDP enrollees—enrolled in plans with basic coverage that was actuarially equivalent to the defined standard benefit. Typically, actuarially equivalent basic benefits use copays rather than the 25 percent coinsurance charged in Part D’s defined standard benefit. More than half (54 percent) of PDP enrollees enrolled in plans that charged no deductible (Table 4-4). Nine percent of PDP enrollees were in plans that offered gap coverage, typically only for generic rather than brand name drugs. However, just over half of all PDP enrollees received Part D’s extra help, which effectively eliminated their coverage gap.
For 2008, plan sponsors have kept benefit designs similar to those in 2007. Sponsors are offering somewhat fewer actuarially equivalent basic plans and somewhat more enhanced plans (Table 4-4, p. 290). Just over half of all PDPs (51 percent) are enhanced packages with a higher average benefit value than basic benefits. However, a plan’s enhancement need not include coverage within the defined standard benefit’s coverage gap. A common form of supplemental benefits offered in enhanced plans is coverage of the defined standard benefit’s deductible. Fifty-eight percent of all PDPs charge no deductible for 2008, and another 8 percent of plans use a lower deductible than the $275 that is part of the defined standard benefit. For 2008, only about 30 percent of PDPs include gap coverage, and nearly all of those plans cover only generic drugs. Among those that offer generic drugs

<table>
<thead>
<tr>
<th>Table 4-5</th>
<th>Characteristics of MA–PDs</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>2007</td>
</tr>
<tr>
<td></td>
<td>Plans</td>
</tr>
</tbody>
</table>
|           | Number | Percent | Number (in millions) | Percent | Number | Percent |%
| Total     | 1,622 | 100%     | 5.0 | 100% | 1,932 | 100% | 100% |
| Type of organization | | | | | | | |
| Local HMO | 947 | 58% | 3.7 | 75% | 1,025 | 53% | 78% |
| Local PPO | 247 | 17% | 0.3 | 7% | 353 | 18% | 6% |
| PFFS      | 367 | 23% | 0.8 | 16% | 520 | 27% | 14% |
| Regional PPO | 34 | 2% | 0.1 | 2% | 34 | 2% | 2% |
| Type of benefit | | | | | | | |
| Defined standard | 84 | 5% | 0.1 | 1% | 79 | 4% | 1% |
| Actuarially equivalentb | 321 | 20% | 1.0 | 19% | 132 | 7% | 5% |
| Enhanced | 1,217 | 75% | 4.0 | 80% | 1,721 | 89% | 94% |
| Type of deductible | | | | | | | |
| Zero | 1,461 | 90% | 4.7 | 95% | 1,665 | 86% | 95% |
| Reduced | 38 | 2% | 0.1 | 1% | 45 | 2% | 2% |
| Defined standardc | 123 | 8% | 0.2 | 3% | 222 | 11% | 3% |
| Drugs covered in the gap | | | | | | | |
| Some generics but no brand name drugs | 450 | 28% | 1.2 | 25% | 661 | 34% | 37% |
| Some generics and some brand name drugs | 76 | 5% | 0.4 | 8% | 327 | 17% | 25% |
| None | 1,096 | 68% | 3.3 | 67% | 944 | 49% | 38% |

Note: MA–PD [Medicare Advantage–Prescription Drug [plan]], PPO [preferred provider organization], PFFS [private fee-for-service]. The MA–PDs and enrollment described here exclude employer-only plans, plans offered in U.S. territories, 1876 cost plans, special needs plans, demonstrations, and Part B-only plans. Sums of percentages may not add to totals due to rounding.

a. Assumes that enrollees will remain in the same plan in which they were enrolled in 2007. Note, however, that some beneficiaries will enroll in a different plan for 2008 and the distribution of types of organizations could look considerably different (e.g., a larger share of enrollees are likely to be in PFFS plans). About 96 percent of July 2007 MA–PD enrollees that were within the scope of our analysis were in 2007 plans that could be matched to 2008 plans. New plan entrants are credited with no enrollment.
b. Benefits labeled actuarially equivalent to Part D’s standard benefit include what CMS calls “actuarially equivalent standard” and “basic alternative” benefits.

Source: MedPAC analysis of CMS landscape, bid, and enrollment data.
in the coverage gap, about half limit that coverage to preferred generics.

**Differences between MA–PDs and PDPs**

Sponsors are offering 19 percent more MA–PDs for 2008: 1,932 compared with 1,622 in 2007 (Table 4-5). (Note that our analysis focuses primarily on plans open to any enrollee in the region and thereby excludes employer-only group plans, special needs plans, and plans for beneficiaries who do not have Part A coverage. We also exclude cost plans.) Although HMOs still dominate the ranks, in 2008 private fee-for-service (PFFS) plans make up a larger share of all MA–PDs: 27 percent compared with 23 percent in 2007. This is consistent with the rapid growth in enrollment among PFFS plans that the Commission documented in several recent reports and in Chapter 3 of this report (MedPAC 2007a, MedPAC 2007b).

Offerings through MA–PDs differ systematically from PDPs. The law allows MA–PDs to use 75 percent of the difference between an MA plan’s benchmark payment and its bid (called rebate dollars) for providing Part A and Part B services to supplement its package of benefits or lower its premium. Many MA–PDs use some of their rebate dollars to enhance their Part D benefits or to reduce the portion of their plan premium associated with drug coverage.

Over the past two years, MA–PDs have been much more likely than PDPs to include enhanced benefits. However, this difference is more striking for 2008: 89 percent of MA–PD offerings were enhanced, up from 75 percent in 2007. By comparison, enhanced plans comprised 51 percent of all PDP offerings in 2008, up from 48 percent in 2007.

Another key difference between PDPs and MA–PDs is the relative importance of LIS recipients. Among PDPs, LIS enrollees made up more than half of total enrollment. By comparison, LIS enrollees made up less than 10 percent of the 7 million MA–PD enrollees. (Note that special needs plans are omitted from our analysis.) This difference is not surprising, since dual-eligible beneficiaries made up most of the population of LIS recipients, and most duals are in traditional Medicare rather than in MA plans. For that reason, CMS automatically assigned most duals and other low-income beneficiaries to PDPs rather than to MA–PDs.

**Beneficiary premiums, thresholds for low-income premium subsidies, and plan payments**

In the Commission’s March 2007 report, we drew attention to the fact that, when setting Part D premiums and LIS thresholds for 2007, CMS chose to depart from current law (MedPAC 2007a). The Medicare law called for weighting Part D plan bids for 2007 with their 2006 enrollment when calculating the national average bid (called enrollment weighting). In 2006, Medicare’s Part D subsidy was 80 percent or more rather than the 74.5 percent called for by law, because in the first year of the program CMS lacked information about which plans would draw the most enrollees. However, for 2007, CMS had enrollment data that it could have used to set premiums consistent with the law. Since enrollees tended to select or were auto-enrolled in plans with lower premiums, fully weighting plan bids by enrollment would have led to a lower government subsidy, lower Medicare payments to plans, and higher enrollee premiums. Instead, CMS chose not to use enrollment weighting fully in 2007, which raised Medicare’s subsidy, increased the government’s payments to plans, and lowered enrollee premiums relative to the statutory requirement.

The Medicare law also calls for enrollment weighting in the formula for calculating each region’s LIS premium threshold. CMS also chose not to do this in 2007. Enrollment weighting would have led to fewer premium-free plans available for LIS enrollees, which meant that more individuals would have had to change plans or pay more to stay in the same plan. Using unweighted premiums avoided disruption for 2007 but increased payments to plans from the program and postponed but did not avoid the need for some LIS enrollees to switch plans.

For both actions, CMS used its general demonstration authority to transition to enrollment weighting over time. In its report, the Commission reiterated a past recommendation that CMS should not use its general demonstration authority as a mechanism to increase payments (MedPAC 2007a). According to CMS’s Office of the Actuary, the demonstrations raised Medicare spending in 2007 by $1 billion relative to current law—$0.6 billion for higher program payments that limited the increase in enrollee premiums and $0.4 billion for the transition in setting LIS premium thresholds. The phase-in of enrollment weighting will also lead to higher spending—albeit in decreasing amounts over time—in
Part D enrollment, benefit offerings, and plan payments

50 percent are enrollment weighted. This means that substantially more LIS-eligible beneficiaries needed to switch Part D plans or begin paying some of the premium. CMS switched most of those beneficiaries through the agency’s auto-assignment process.

The delay in moving to statutory requirements for enrollment weighting runs counter to an underlying philosophy of Part D: Beneficiaries’ enrollment choices should drive the competitive outcome among plans. CMS’s decision to delay setting the national average bid and LIS premium thresholds based on enrollment means that plans with higher premiums or premiums above the LIS thresholds probably will retain many of their enrollees. This could mean that some sponsors with higher premium plans remain in the market longer than they would in the absence of those decisions and prevent enrollment from moving to more competitive plans. At the same time, switching plans can be difficult for some beneficiaries, as we discuss later.

### Table 4-6

<table>
<thead>
<tr>
<th></th>
<th>2007 enrollment (in millions)</th>
<th>Premium*</th>
<th>Percentage change in premium</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2007</td>
<td>2008</td>
</tr>
<tr>
<td><strong>PDPs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic coverage</td>
<td>12.8</td>
<td>$24.05</td>
<td>$28.32</td>
</tr>
<tr>
<td>Enhanced coverage</td>
<td>3.3</td>
<td>40.42</td>
<td>45.43</td>
</tr>
<tr>
<td>Any coverage</td>
<td>16.1</td>
<td>27.39</td>
<td>31.81</td>
</tr>
<tr>
<td><strong>MA–PDs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic coverage</td>
<td>1.0</td>
<td>16.86</td>
<td>20.72</td>
</tr>
<tr>
<td>Enhanced coverage</td>
<td>4.0</td>
<td>8.68</td>
<td>10.51</td>
</tr>
<tr>
<td>Any coverage</td>
<td>5.0</td>
<td>10.35</td>
<td>12.59</td>
</tr>
<tr>
<td><strong>All plans</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic coverage</td>
<td>13.8</td>
<td>23.52</td>
<td>28.15</td>
</tr>
<tr>
<td>Enhanced coverage</td>
<td>7.3</td>
<td>23.09</td>
<td>25.61</td>
</tr>
<tr>
<td>Any coverage</td>
<td>21.1</td>
<td>23.37</td>
<td>27.28</td>
</tr>
</tbody>
</table>

**Note:** PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). The PDPs and enrollment described here exclude employer-only plans and plans offered in U.S. territories. The MA–PDs and enrollment described here exclude employer-only plans, plans offered in U.S. territories, 1876 cost plans, special needs plans, and Part B-only plans.

*Premiums are the weighted average using July 2007 enrollment. New plan entrants are credited with no enrollment. Almost 99 percent of July 2007 PDP enrollees and about 96 percent of MA–PD enrollees that were within the scope of our analysis were in 2007 plans that could be matched to 2008 plans. Note that some beneficiaries will choose to enroll in or be automatically reassigned to a different plan for 2008.

**Reflects the portion of MA plans’ total monthly premium attributable to Part D benefits for plans that offer Part D coverage. MA–PD premiums reflect rebate dollars (75 percent of the difference between a plan’s payment benchmark and its bid for providing Part A and Part B services) that were used to offset Part D premium costs. Note that lower average premiums for enhanced MA–PD premiums reflect a different mix of sponsoring organizations and counties of operation than the MA–PDs with basic coverage.

**Source:** MedPAC analysis of CMS landscape, bid, and enrollment data.

future years. CMS has not specified whether the two demonstrations will continue and for how long. In the President’s budget proposal for fiscal year (FY) 2008, documents suggested that the demonstration to limit increases in premiums could last through FY2009 and the demonstration for setting LIS thresholds could last through FY 2011 (OMB 2007). Actual timing could differ.

For 2008, the agency still is not using full enrollment weighting but does weigh enrollment to a greater degree. Last year, 20 percent of the national average bid to provide basic benefits was based on an enrollment-weighted average of PDP bids. For 2008, 60 percent of the national bid is enrollment weighted (CMS 2007i). Once plans have submitted their bids, enrollment weighting lowers federal expenditures for plan payments and raises enrollee premiums relative to the agency’s approach to setting payments for 2007. CMS is also placing more emphasis on enrollment weighting in setting LIS regional thresholds. For 2007, 0 percent of premium thresholds were based on enrollment-weighted average premiums while, for 2008, 50 percent are enrollment weighted. This means that substantially more LIS-eligible beneficiaries needed to switch Part D plans or begin paying some of the premium. CMS switched most of those beneficiaries through the agency’s auto-assignment process.

The delay in moving to statutory requirements for enrollment weighting runs counter to an underlying philosophy of Part D: Beneficiaries’ enrollment choices should drive the competitive outcome among plans. CMS’s decision to delay setting the national average bid and LIS premium thresholds based on enrollment means that plans with higher premiums or premiums above the LIS thresholds probably will retain many of their enrollees. This could mean that some sponsors with higher premium plans remain in the market longer than they would in the absence of those decisions and prevent enrollment from moving to more competitive plans. At the same time, switching plans can be difficult for some beneficiaries, as we discuss later.
Average Part D premiums

On average, Part D enrollees will pay $27 per month in 2008, up about $4 or 17 percent from the $23 average for 2007. The average PDP enrollee will pay about $32 per month, compared with $27 in 2007—a 16 percent increase (Table 4-6). Similarly, the portion of MA premiums attributable to prescription drug benefits will increase for 2008, with the average MA–PD enrollee paying nearly $13 per month compared with $10 in 2007 (22 percent higher). (These amounts reflect MA–PDs’ rebate dollars, which come from the MA payment system.) According to CMS, in 2008 the average portion of an MA–PD premium for Part D benefits was $11 below the average PDP premium before rebates (CMS 2007j). Since bids for both PDPs and MA–PDs make up the overall national average bid and affect Medicare’s payments to plans, lower average bids by MA–PDs somewhat reduce federal program spending for Part D.

Although most plans have higher premiums for 2008, plans with greater shares of total enrollment had larger increases in their premiums than other plans. For this reason, unweighted averages for plan premiums increased more slowly than did averages weighted by plan enrollment. For example, the unweighted average premium for basic coverage in a PDP rose from $28.79 per month in 2007 to $30.14 in 2008—an increase of 5 percent (Table 4-7). However, if PDP enrollees remained in the same plans, premiums for basic coverage would rise from $24.05 in 2007 to approximately $28.32 in 2008—an increase of 18 percent (Table 4-6).

There are several reasons for the increase in premiums for 2008. One is CMS’s continued transition to enrollment weighting described earlier. A second reason is that average risk scores for Part D enrollees have increased over time because of changes in how providers code their services under Part A and Part B. For Medicare to avoid paying too much for a beneficiary of average health, CMS adjusted Part D payments downward. Since enrollee premiums are tied to plan bids, lower risk-adjusted payments from Medicare mean enrollee premiums must increase. A third factor may be the widening of risk corridors that limit plans’ profits and losses under Part D in 2008. This means that plans will bear more insurance risk in 2008 and may have led to higher bidding.

Regional thresholds for low-income premium subsidies

For 2008, 495 PDPs (27 percent) qualified as premium-free for enrollees who receive the full LIS. All PDP regions have at least five qualifying PDPs, most regions have 15 or more, and some have as many as 20. Eleven of the 34 PDP regions had fewer qualifying PDPs for 2008, while 15 regions had more qualifying plans. CMS will randomly assign new Part D enrollees who receive...
extra help as well as those individuals who need to be reassigned to plans with premiums below their regional threshold. Under the agency’s 2008 “de minimis” policy, plans with premiums within $1 of their regional threshold remain premium-free to LIS recipients, but those plans will not receive new randomly assigned enrollees. CMS used a $2 de minimis policy in 2007.

CMS estimates that for 2008, 2.6 million individuals (more than 25 percent of all who received extra help during 2007) were affected by turnover among qualifying plans (CMS 2007k). Of those individuals, 1 million are beneficiaries who were reassigned to a qualifying plan offered by the same sponsor. Since many plan sponsors use the same formulary for all their plans, these reassigned beneficiaries are less likely to face significant changes due to their reassignment. However, CMS reassigned another 1.2 million individuals to qualifying plans offered by a different plan sponsor, and those beneficiaries and the physicians and pharmacies who serve them could face transition issues as they change formularies. Among the individuals that CMS reassigned to a new plan, 0.2 million are dual-eligible beneficiaries who reside in long-term care facilities. CMS estimates that the agency reassigned just under half of the 0.2 million individuals to plans offered by a different sponsor (CMS 2007d). Another 0.4 million LIS enrollees picked a plan on their own for 2007. CMS notified those individuals that their 2007 plan no longer qualified for 2008, and it was up to them to enroll in a new qualifying plan on their own or they must pay some of the premium to stay in the same plan. The amount LIS enrollees would need to pay to remain in the same plan differs across plans, ranging between $1 and $22 per month. The most common amount would be $4 to $5 per month.

By comparison, for 2007, about 1.2 million LIS enrollees were in plans that had premiums above the regional thresholds (CMS 2007e). Ultimately, only about 0.2 million individuals were reassigned to a qualifying plan offered by a different sponsor; the remaining beneficiaries were reassigned to qualifying plans under the same sponsor (CMS 2006c). The increase in the number of individuals reassigned to a new plan for 2008 reflects CMS’s transition to enrollment-weighted thresholds. In 2007, CMS did not use enrollment weighting at all when setting regional LIS thresholds. For 2008, 50 percent of threshold amounts were based on enrollment-weighted averages, which led to lower thresholds in many regions. In turn, more plans had higher bids with premiums above those thresholds; therefore, more LIS enrollees needed to change plans.

Before the start of Part D, the Commission studied issues that arise when individuals switch drug plans (MedPAC 2004). Transitioning enrollment from one plan to another can affect which pharmacies beneficiaries may use, the number of drugs available to them, and the degree to which they must navigate management tools such as plans’ requirements for prior authorization and quantity limits. It may also affect costs for providers. For example, pharmacists often must call physicians to make therapeutic substitutions consistent with a new plan’s formulary, and physicians or their staff often must provide more information to plans to obtain prior authorization on behalf of a patient. Some implications that we drew from our research were that it is critically important to coordinate quick exchange of enrollment and other data between old and new plans, and Medicare and plans need detailed strategies to communicate with beneficiaries about how their new plan could affect their coverage.

CMS requires Part D plans to have formal transition policies in place for any newly enrolled beneficiary. Specifically, during the first 90 days of a beneficiary’s enrollment, plans must provide a temporary 30-day supply of the enrollee’s current drug if the beneficiary appears at the pharmacy and requests a refill for a nonformulary drug (CMS 2006d). (Residents of long-term care facilities may receive a 90-day supply.) CMS allows plans to use prior authorization and other management tools during this transition period but only if such requirements can be resolved at the point of sale. Plans must also send written notice to the enrollee within three days of the transition refill about the temporary nature of the supply and the plan’s transition policy. Plans may charge cost sharing for transition refills, but LIS enrollees pay no more than the statutory amount: $2.25 or $5.60 copays in 2008, or 15 percent coinsurance, depending on the extra help a beneficiary is eligible to receive.

When CMS departed from law in 2007 and 2008 and delayed enrollment weighting, the agency set LIS premium thresholds in a way that meant less disruption of coverage for LIS enrollees, since fewer needed to switch plans. However, CMS’s approach also increased Medicare program spending relative to current law at a time when the program faces considerable problems with financial sustainability, as we discuss in depth in Chapter 1.
Should policymakers take further steps to reduce the number of LIS enrollees who must switch plans? On the one hand, transitions may be particularly challenging for dual-eligible beneficiaries, who tend to have more chronic conditions and use more prescription drugs. Some of these individuals have cognitive impairments and lack family support to help them navigate the transition to a new plan’s formulary. On the other hand, year-to-year changes in enrollment are part of the fundamental design of Part D. Plans that are able to manage drug spending and bid more competitively are rewarded with more enrollment than plans that are not. Moreover, other Part D enrollees who do not receive extra help face transition issues. For example, one estimate suggests that nearly 20 percent of PDP enrollees would face a premium increase of $10 per month or more in 2008 if they did not change plans (Hoadley et al. 2007a). Some of those individuals may have found such an increase unaffordable, needed to switch plans, and may need to change some medications or seek formulary exceptions.

Some stakeholders suggest that one way to reduce the number of beneficiaries who must be reassigned from year to year is to require CMS to exclude rebate dollars from MA–PD premiums when setting regional thresholds. MA–PDs may use rebate dollars to lower plan premiums and provide additional benefits. (Rebate dollars are made up of 75 percent of the difference between a plan’s county payment benchmark for providing Part A and Part B services and its bid.) Most MA–PDs use a portion of their rebate dollars to lower the premium they charge enrollees for Part D benefits. When setting LIS thresholds for each region, CMS averages PDP premiums with these lower premiums from MA–PDs. In regions where MA–PDs hold sizable shares of Part D enrollment, reducing MA–PD premiums with rebate dollars leads to lower regional thresholds and fewer PDPs with qualifying premiums. For example, Arizona and Nevada have many Medicare beneficiaries enrolled in MA–PDs and the lowest LIS premium thresholds in the country: $16 and $17 per month, respectively. Those states also have the fewest number of PDPs available at no premium to LIS enrollees: seven and five, respectively.

The Commission supports the participation of private health plans in Medicare. We also note that MA benchmarks and payments significantly exceed average expenditures in fee-for-service (FFS) Medicare (see Chapter 3.) To the extent that Medicare paid MA–PDs no more than FFS spending, plan rebate dollars could reflect more efficient provision of care. Under those circumstances, policymakers may want CMS to continue setting regional thresholds using MA–PD net of rebate dollars. However, if MA–PD rebate dollars largely reflect payments in the MA program that are higher than FFS, policymakers might want to exclude rebate dollars when setting the thresholds.

In today’s context where benchmarks exceed FFS spending, it would be difficult to tease out how many of a plan’s rebate dollars are due to efficiency versus higher payments. Just removing rebate dollars from the threshold calculations would also increase program spending, since the thresholds would rise and Medicare would pay somewhat more each month for the premiums of plans that would then qualify at the margin. However, if the Congress followed the Commission’s recommendation for payment equity between MA and FFS Medicare and reduced benchmarks, any bids below average FFS spending would result only from efficiency gains.

There may be other ways to lower the number of LIS enrollees who must switch plans from year to year or to limit burdensome effects that can result from switching plans. Most of these alternatives involve a trade-off between lower transition effects on LIS beneficiaries and higher Medicare program spending. For example, CMS could have used a $2 de minimis policy in 2008 as the agency did in 2007. Under such a policy, more plans would have qualified as premium-free and CMS estimates that it would have needed to reassign 0.5 million fewer LIS enrollees. However, the higher de minimis amount could have increased program spending somewhat if the added costs of that policy for plans led sponsors to raise their bids in subsequent years. Plans with premiums below regional thresholds might also perceive a higher de minimis policy as unfair. Another approach could be to lengthen the period under which a newly reassigned LIS enrollee may receive a temporary transitional prescription refill from 30 days (current policy) to 90 days. This would give beneficiaries more time to seek help in obtaining prescriptions for drugs on their new plan’s formulary or to seek formulary exceptions. However, program spending and all Part D premiums would also increase somewhat, since plans would need to include the added costs of these transitional refills within their bids.

The Commission is evaluating beneficiary-centered assignment—an alternative method to reduce the burden on beneficiaries who must switch plans. Instead of reassigning beneficiaries randomly among qualifying plans, CMS could reassign them based on the degree to
which an individual’s past use of medications matches a plan’s formulary. Some Medicaid and state pharmacy assistance programs have used this approach to help their enrollees select among Part D plans (Hoadley et al. 2007b). State officials believe beneficiaries have better access to the drugs they are used to taking under this approach. The Commission is continuing to look at the effects of beneficiary-centered assignment on individuals’ access to drug therapies, as well as whether the approach could potentially lead to Medicare program savings.

**Plan payments and reconciliations**

For each Medicare enrollee in a plan (either stand-alone PDP or MA–PD), current law calls for Medicare to provide plans with a subsidy that averages 74.5 percent of basic coverage for beneficiaries. That average subsidy takes two forms:

- Direct subsidy—a monthly payment to plans set as a share of the national average bid, adjusted for the risk of the individual enrollee.
- Individual reinsurance—Medicare subsidizes 80 percent of drug spending above an enrollee’s catastrophic threshold. Reinsurance reduces risk for Part D sponsors by providing greater federal subsidies for the highest cost enrollees.

In addition, 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 or gains by financing some of the higher-than-expected costs or recouping excessive profits. Also, Medicare pays expected cost sharing and premiums for plan enrollees who receive LIS.

Although plans receive essentially the same level of direct subsidy per enrollee (modified by risk adjusters), the level of subsidies granted through other payment mechanisms differs from plan to plan. Subsidy dollars vary depending on the characteristics of individuals that each plan enrolls (e.g., income, institutionalized status, and health status) as well as whether a plan’s losses or profits trigger provisions of its risk corridors.

<table>
<thead>
<tr>
<th>Risk corridors</th>
<th>Individual reinsurance</th>
<th>Low-income cost sharing</th>
<th>Total (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2,700</td>
<td>$1,600</td>
<td>$37</td>
<td>$4,300</td>
</tr>
</tbody>
</table>

**Top organizations that owe Medicare:**
- UnitedHealthcare/PacifiCare: $680
- Humana: $720
- Coventry: $81
- Independence Blue Cross: $50
- WellPoint: $140

**Top organizations that Medicare owes:**
- MemberHealth: $41
- Longs Drug Stores: $8
- CIGNA: $9
- Sierra Health Services: $23
- Health Net: $42

Note: Amounts are for both stand-alone and Medicare Advantage prescription drug plans. The low-income cost-sharing, reinsurance, and risk-sharing amounts may not equal the total reconciliation amount because of rounding and an adjustment made for the Part D Payment Demonstration program.

Source: CMS 2007b.
CMS makes prospective payments to plans for direct subsidies, expected reinsurance, and LIS cost-sharing amounts based on plans’ estimates of their costs as reflected in their bids. The agency announced that for 2006, it expects to collect $4.3 billion from plan sponsors because plans’ actual costs were lower than expected. CMS reconciles prospective payments with plans after the end of each year by comparing data on actual levels of enrollment, enrollee risk factors, levels of incurred allowable drug costs (after rebates and other discounts), individual reinsurance amounts, LIS, and risk corridors. Of the $4.3 billion, $1.6 billion stems from prospective payments that were too high for individual reinsurance and $2.7 billion is from risk corridors that limit plans’ profits and losses. CMS estimates that one sponsoring organization owes nearly half of the total (Table 4-8). Eighty percent of plan sponsors owed Medicare, while the remaining 20 percent of sponsors received money (OIG 2007).

These reconciliation payments stem from the fact that, for many plans, the ultimate cost of providing Part D benefits in 2006 was considerably lower than what they bid. When sponsors prepared bids for 2006, few had reliable information from which to estimate the drug spending of future enrollees. As a result, sponsors submitted a wide range of bids and the distribution of plan premiums was broad. For 2007 bids, sponsors had actual claims experience to draw upon. Plans whose 2006 premiums were relatively high tended to lower their bids for 2007. Since CMS completed the reconciliation process about nine months after the 2006 plan year ended, plan sponsors had use of these reconciliation funds for a considerable time. The Department of Health and Human Services’ Office of Inspector General recommends that CMS consider an interim reconciliation process so that sponsors will not owe Medicare such large amounts in the future (OIG 2007). However, CMS believes that the accuracy of plan bids is improving as plans have gained experience in providing Part D benefits, which should also lower the magnitude of reconciliation amounts.

One can observe the effects of lower bids for basic coverage in the average prospective payments to plans, which fell from $126 per enrollee in 2006 to $107 in 2007 (Figure 4-6). When one divides the $4.3 billion that CMS expects in net reconciliation amounts by total enrollment for 2006, plans owed Medicare about $16 per enrollee per month. Net of this average reconciliation amount, average costs per enrollee for basic coverage in 2006 were about $110 per month—12.5 percent lower than the average $126 per month that plans received prospectively.

For 2008, a larger proportion of PDPs raised their bids. Nearly two-thirds of all PDPs have higher premiums for 2008 than they had in 2007. However, average prospective payments for basic coverage rose only 2 percent, from $107 per month in 2007 to $109 in 2008 (Figure 4-6). Of that amount, the base beneficiary premium makes up $28, while Medicare pays the remainder through direct subsidies ($53) and plans’ expected individual reinsurance ($29). Combined, the direct subsidy and the base beneficiary premium make up the national average bid ($80.52). These average amounts reflect the continued phase-in of enrollment weighting. Specific premiums for plans are higher or lower than the base beneficiary premium, depending on how each plan’s bid compares.
Part D enrollment, benefit offerings, and plan payments

Part D data still unavailable for purposes other than payment

In its proposed rule, CMS would rely on its authority to add terms to its contracts with plans to make claims data available to other parts of CMS, to executive branch and congressional support agencies, and to private researchers so long as they sign data use agreements. CMS has not published a final version of the rule, and as a result the Commission still does not have access to claims information and thus cannot use these data to tell what drugs people use. This information is critical to evaluating Part D and reporting to the Congress about this program. While many private researchers and other government agencies support the rule, some stakeholders have opposed it because of concerns about patient and provider privacy. Some plan sponsors are also concerned that if data showing utilization patterns for their enrollees become public, that information could affect plans’ negotiations with manufacturers over drug prices and rebates. The Commission believes it is possible for CMS to protect privacy issues by, for example, not allowing agencies to reveal patient identification. Similarly, plans’ concerns about proprietary information could be mitigated by requiring appropriate data use agreements with CMS and limiting access to congressional support agencies and selected federal agencies. However, even if the proposed rule moves forward, stakeholders could challenge it in court.

Three years ago, the Commission recommended the following (MedPAC 2005):

The Secretary should have a process in place for timely delivery of Part D data to congressional support agencies to enable them to report to the Congress on the drug benefit’s impact on cost, quality, and access.

Given that the proposed rule has not moved forward and that stakeholders could potentially challenge such a rule in court, the Commission recommends the following:

RECOMMENDATION 4-1

The Congress should direct the Secretary to make Part D claims data available regularly and in a timely manner to congressional support agencies and selected executive branch agencies for purposes of program evaluation, public health, and safety.
R A T I O N A L E  4-1

Congressional support agencies such as the Commission need these data to monitor and evaluate the performance of Part D and to make recommendations to improve the program. Other executive branch agencies such as the Food and Drug Administration and offices within CMS that do not pay plans need Part D data to monitor adverse drug events and other health trends associated with the use of drugs, to look at whether the use of appropriate medication therapy reduces the use of other Medicare services, and to evaluate the program.

I M P L I C A T I O N S  4-1

Beneficiary and provider

- Beneficiaries could benefit from this recommendation to the extent that CMS and congressional agencies are able to improve the Part D program. Research conducted by executive branch and congressional agencies using Part D claims could also benefit public health and better ensure drug safety.

- Stakeholders will likely object to the extent that they have concerns about protecting patient and provider privacy and protecting proprietary information. The Commission believes that CMS could provide claims data in a way that addresses these concerns.

Spending

- This recommendation would not increase federal program spending.
1 Plans submitted formularies to CMS with a variety of tier structures, ranging from one to eight tiers. However, not all tiers reflect cost-sharing differences for enrollees; some plan formularies include several tiers that have the same cost sharing. For our formulary analysis, we delineate tiers only when they mark differences in cost sharing.

2 The fact that a much larger percentage of PDP enrollees are in plans that use 25 percent coinsurance rather than tiered copays reflects that recipients of Part D’s LIS make up a much higher percentage of total PDP enrollment than MA–PD enrollment. For 2006, CMS auto-assigned LIS enrollees randomly among PDPs that had premiums below regional threshold values. Plans with the defined standard benefit (which uses 25 percent coinsurance) tend to have lower premiums than plans with tiered copays.

3 On the plan formulary data, CMS does not indicate which tiers were specialty tiers. Therefore, there may be some tiers that offer specialty-type drugs but do not claim this appeal exemption. Tiers for nonspecialty injectable drugs in some plan formularies are an example.

4 2008 is the first year when CMS allows sponsoring organizations to offer only employer-group PDPs without also offering PDPs open to any Medicare beneficiary.

5 In previous years, CMS did not include data on special needs plans (SNPs) in the landscape files that MedPAC uses for its analysis. However, the agency did provide landscape data on SNPs for 2008. To allow comparisons between 2008 data and our analysis of 2007 plans, we excluded SNPs.

6 CMS excludes certain types of MA–PDs when setting the thresholds: Program of All-Inclusive Care for the Elderly, PFFS, medical savings accounts, and Section 1876 cost plans.

7 Under the de minimis policy, plans with premiums that are within $1 of their regional threshold may charge enrollees who are eligible for full LIS benefits no more than the applicable low-income premium subsidy amount.


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Increasing participation in the Medicare Savings Programs and the low-income drug subsidy
5-1 The Secretary should increase State Health Insurance Assistance Program funding for outreach to low-income Medicare beneficiaries.

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

5-2 The Congress should raise Medicare Savings Program income and asset criteria to conform to low-income drug subsidy criteria.

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

5-3 The Congress should change program requirements so that the Social Security Administration screens low-income drug subsidy applicants for federal Medicare Savings Program eligibility and enrolls them if they qualify.

COMMISSIONER VOTES: YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1
Increasing participation in the Medicare Savings Programs and the low-income drug subsidy

Chapter summary

Although programs like the Medicare Savings Programs (MSPs) and the low-income drug subsidy (LIS) provide significant financial benefits to enrollees with limited incomes, most eligible beneficiaries do not participate. There are many reasons why individuals might choose not to take advantage of these programs, but researchers have found that the main barriers to enrollment are beneficiaries’ lack of knowledge of the programs and the complexity of the application processes.

Overall, Medicare beneficiaries aged 65 or over are more likely to be poor or near poor than the population under 65. They spend a larger percentage of their income on out-of-pocket health costs. Those eligible for but not enrolled in MSPs are more likely than those enrolled in MSPs to report that they did not receive needed health care because of cost.

There have been a number of campaigns to increase awareness of programs like MSPs that can help this population but the campaigns have had limited success. Initiatives have focused on increasing awareness of the programs and simplifying the eligibility and

In this chapter

- Why is the participation rate in MSPs and other programs for beneficiaries with limited incomes so low?
- Relationship between MSP and LIS
- Income and health care spending for the Medicare population
- Efforts to increase program participation
- Federalizing MSP
Increasing participation in the Medicare Savings Programs and the low-income drug subsidy enrollment processes. State policymakers face mixed incentives to increase enrollment in MSPs. On the one hand, the programs improve access to care for beneficiaries with limited incomes. On the other hand, states must cope with the increased Medicaid expenditures that result from increased MSP enrollment. State officials, particularly in states that provide additional drug coverage to enrollees in Part D, may have more incentive to expand beneficiary participation in LIS because it is funded entirely by the federal government. Beneficiaries enrolled in MSPs are deemed eligible for LIS.

This chapter includes three recommendations to increase participation in programs designed to aid beneficiaries with limited incomes. They are largely based on evaluations of past programs that have achieved some success targeting and enrolling these beneficiaries.

Medicare beneficiaries, particularly those who are hard to reach, get most of their information from personal contact. Beneficiaries who qualify for MSPs need help finding out about the programs and applying for them. The National Medicare Education program provides funds for beneficiary education and counseling through the Medicare call center, the beneficiary handbook, the Medicare website, multimedia campaigns, State Health Insurance Assistance Programs (SHIPs), and community-based outreach. SHIPs are the only part of the federal program that provides personal counseling to beneficiaries, but their resources are limited. Increased funding for SHIPs, which provide this one-on-one counseling, will permit more beneficiaries to have access to programs for which they are eligible.

**Recommendation 5-1**

The Secretary should increase State Health Insurance Assistance Program funding for outreach to low-income Medicare beneficiaries.

In establishing the LIS, the Congress recognized that beneficiaries with incomes below 150 percent of the poverty level and with limited assets had difficulty meeting their out-of-pocket health care costs. Federal minimum
MSP income and asset levels have not been revised since the programs were established. If MSP criteria were aligned with LIS levels, beneficiaries could apply for both programs at one time. Beneficiaries would find the process simpler and states and the federal government would realize administrative savings.

**Recommendation 5-2**

The Congress should raise Medicare Savings Program income and asset criteria to conform to low-income drug subsidy criteria.

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If this recommendation were adopted by the Congress, beneficiaries with incomes up to 150 percent of the poverty level would be eligible for Qualifying Individual benefits.

The Social Security Administration (SSA) is responsible for determining eligibility for LIS for those individuals who are not deemed eligible for the subsidy. Beneficiaries can apply for LIS without facing the possible stigma associated with applying for help at a state Medicaid office. If MSP and LIS eligibility were based on the same criteria, SSA could screen and enroll beneficiaries for both programs simultaneously, providing MSP access to eligible beneficiaries who have not heard of it but have heard of LIS.

**Recommendation 5-3**

The Congress should change program requirements so that the Social Security Administration screens low-income drug subsidy applicants for federal Medicare Savings Program eligibility and enrolls them if they qualify.

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Having the federal government assume the full costs of care for individuals dually eligible for Medicare and Medicaid, as it has under the LIS program, may be the most efficient policy approach. Individuals participating in MSP programs are Medicare beneficiaries receiving assistance with Medicare costs. States vary in the way they determine eligibility and payment. However, to federalize MSP, policymakers would have to answer a number
of design questions, each involving significant trade-offs: Which of the eligibility groups that receive MSP benefits would be covered by full federal funding? What set of rules would govern program eligibility—a national standard or a higher level chosen by the state? Would Medicare assume all coinsurance for Qualified Medicare Beneficiaries? Given the potential high cost of federalizing MSPs, would states be required to maintain a level of effort?
Beginning with the Qualified Medicare Beneficiary (QMB) program in 1988, the Congress has created a number of programs to help beneficiaries with limited incomes pay for Medicare premiums and cost sharing. Most recently, the Congress designed a low-income drug subsidy (LIS) to augment the Medicare drug benefit for individuals with limited incomes. Although these programs provide significant financial benefits to enrollees, most eligible beneficiaries do not participate. There are many reasons why individuals might not take advantage of these programs, but researchers have found that the main barriers to enrollment are beneficiaries’ lack of knowledge of the programs and the complexity of the application and enrollment processes.

In this paper, we discuss income and health spending for the Medicare Savings Program (MSP)-eligible population. Overall, Medicare beneficiaries aged 65 or over are more likely to be poor or near poor than the general population under 65. They spend a larger percentage of their income on out-of-pocket health costs. In addition, disabled beneficiaries are twice as likely to have incomes below the poverty level as the population aged 65 or older. Those beneficiaries eligible for but not enrolled in MSPs are more likely than those enrolled in MSPs to report that they did not receive needed health care because of cost.

The Commission recognizes that Medicare beneficiaries with limited incomes may have difficulty paying Medicare premiums and cost sharing. Some believe that payments to Medicare Advantage (MA) plans that exceed the cost of furnishing services to the same population under fee-for-service (FFS) Medicare are a way of providing extra help for these beneficiaries. Low-income beneficiaries are more likely to enroll in MA plans and a reduction in government payments, as the Commission has recommended, would likely affect their benefits. While some of the MA payments above FFS expenditures are used to finance extra benefits for MA enrollees, all beneficiaries, through their Part B premium, are paying for these benefits. Furthermore, these benefits do not go only to low-income beneficiaries; all MA enrollees receive the same level of benefits. The Commission argues that direct assistance provided through MSP and LIS is a more targeted and efficient way to provide this help than with overpayments to MA plans (MedPAC 2007).

The federal government, some states, and private foundations have initiated campaigns to increase awareness of MSPs, simplify the application and enrollment process, and provide assistance to individuals seeking to apply for help. These campaigns have had limited success. State policymakers face mixed incentives to increase enrollment in MSPs. On the one hand, the programs improve access to care for beneficiaries with limited incomes. On the other hand, states must cope with rising Medicaid expenditures as the programs expand. State officials, particularly in states that provide wraparound drug coverage to enrollees in Part D, may have more incentive to expand beneficiary participation in LIS, which is funded entirely by the federal government. Beneficiaries enrolled in MSP programs are deemed eligible for LIS, so states may facilitate MSP participation to increase LIS enrollment.

In this chapter we will:

- present data on income and out-of-pocket health care costs for Medicare beneficiaries,
- compare differences in health care utilization between MSP enrollees and beneficiaries who are eligible but not enrolled,
- present information on best practices to increase MSP participation,
- present recommendations designed to increase participation in these programs, and
- discuss issues related to federalizing MSPs.

**Why is the participation rate in MSPs and other programs for beneficiaries with limited incomes so low?**

While all beneficiaries have many decisions to make when they enroll in Medicare, those with limited incomes need more information if they are to take advantage of the help available to defray some of the costs for medical care. MSPs (including QMB, Specified Low-income Medicare Beneficiary (SLMB), and Qualifying Individual (QI)) can reduce the financial burden and thereby improve access to needed medical services for beneficiaries with limited incomes. Beneficiaries who meet income and resource (or asset) criteria pay no Medicare Part B premiums and, in some cases, no deductibles or coinsurance for Medicare-covered services (Table 5-1, p. 312). They are also deemed eligible for LIS under Part D. Despite the benefits available, participation in the programs has been low. An estimated 33 percent of eligible beneficiaries are enrolled.
in the QMB program and fewer eligible beneficiaries (13 percent) are taking part in the SLMB program.

For MSPs, researchers have found that lack of awareness of the programs and the complexity of the application process are the main barriers qualified beneficiaries face (Haber et al. 2003).

In one survey, analysts found that 79 percent of eligible nonenrollees had never heard of the program. Even some state Medicaid workers and other outreach counselors did not know about it (Haber et al. 2003).

Additional reasons researchers identified for low participation rates in these programs include:

- The eligible population is hard to reach because of age, linguistic barriers, isolated location, or cognitive impairment.
- Some beneficiaries are reluctant to go to a state Medicaid office because of perceived welfare stigma. Many state Medicaid offices have limited resources to seek out eligible beneficiaries.
- Beneficiaries find the application process too complex. Haber and colleagues (2003) found that two-thirds of MSP enrollees needed help applying for assistance.
- Beneficiaries are concerned that the state will try to recover expenses spent on MSP benefits after they are deceased, even though states generally do not do this for MSP-only enrollees.
- Beneficiaries have difficulty quantifying their resources (e.g., the cash value of a life insurance policy) and producing documentation.¹

Some researchers have studied how MSP enrollees differ from other eligible beneficiaries who have not enrolled in the program. Beneficiary advocates suggest that eligible nonenrollees are more likely to be homebound, live in isolated rural communities, and have little interaction with medical institutions. For example, Cusick and Nibali (2005) noted that hospital admission often leads to MSP enrollment. Hospitals have an incentive to enroll patients to increase possible sources of payment for their services.

### Table 5–1

<table>
<thead>
<tr>
<th>Medicare Savings Program</th>
<th>Income</th>
<th>Asset limit (individual/couple)</th>
<th>Covered costs and services</th>
</tr>
</thead>
<tbody>
<tr>
<td>QMB</td>
<td>&lt;100% of poverty</td>
<td>$4,000/$6,000</td>
<td>Medicare premiums and cost-sharing</td>
</tr>
<tr>
<td>SLMB</td>
<td>100–120% of poverty</td>
<td>$4,000/$6,000</td>
<td>Medicare premiums</td>
</tr>
<tr>
<td>QI–block grant funded by federal government</td>
<td>120–135% of poverty</td>
<td>$4,000/$6,000</td>
<td>Medicare premiums</td>
</tr>
</tbody>
</table>

Note: QMB (Qualified Medicare Beneficiary), SLMB (Specified Low-income Medicare Beneficiary), QI (Qualifying Individual). States have the flexibility to adjust countable income and assets.

### Figure 5–1

**Most beneficiaries receiving the low-income drug subsidy were deemed eligible**

- 52% Full/partial dual eligibles and SSI recipients deemed eligible and receiving subsidy
- 17% Found eligible by SSA and receiving subsidy
- 6% Eligible but estimated to have creditable coverage
- <1% Additional autoenrolled
- 25% Eligible but not receiving subsidy
- <1% Additional autoenrolled

Note: SSI [Supplemental Security Income], SSA [Social Security Administration]. Auto-enrolled refers to beneficiaries randomly assigned to prescription drug plans meeting the benchmarks. Creditable coverage is equivalent or more comprehensive than Part D coverage. Total may not add to 100 percent due to rounding.

the first program (QMB) was implemented. As a result, an increasing number of people meet the income threshold but fail the asset test. For example, a beneficiary with a life insurance policy with a cash value greater than $1,500 would not be eligible. Although the resource limit is higher for LIS eligibility, SSA reported that 57 percent of those turned down for LIS would have qualified based on income, but their assets exceeded the eligibility standards.

3

Bank accounts were the most common source of additional assets (Wu 2005).

Table 5–2
Eligibility criteria for low-income drug subsidy, 2008

<table>
<thead>
<tr>
<th>Beneficiary category</th>
<th>Income</th>
<th>Asset limit (individual/couple)</th>
<th>Covered costs and copayments</th>
</tr>
</thead>
</table>
| Full benefit dual eligibles | Deemed eligible                      | Deemed eligible                  | No premium  
No deductible  
$1.05 generic, $3.10 brand copays  
No copays after drug spending reaches $4,050  
No copays if institutionalized |
| QMB, SLMB, QI | Deemed eligible                      | Deemed eligible                  | No premium  
No deductible  
$2.25 generic, $5.60 brand copays  
No copays after drug spending reaches $4,050 |
| Other beneficiaries | <135% of poverty | $7,790/$12,440                    | No premium  
No deductible  
$2.25 generic, $5.60 brand copays  
No copays after drug spending reaches $4,050 |
| Other beneficiaries | <150% of poverty | $11,990/$23,970                  | Sliding scale (25–100% of low-income benchmark premium)  
$53 deductible  
Assigned copay or 15% of drug costs (whichever is lower)  
$2.25 generic, $5.60 brand copays after drug spending reaches $4,050 |

Note: QMB (Qualified Medicare Beneficiary), SLMB (Specified Low-income Medicare Beneficiary), QI (Qualifying Individual). States have the flexibility to adjust countable income and assets.

For Medicare Part D, LIS limits copayments and provides coverage in the standard benefit’s coverage gap for beneficiaries who meet eligibility requirements. Despite considerable publicity, participation in LIS remains limited. As of January 2007, about 9.5 million beneficiaries were receiving the drug subsidy. Of these, about 7 million, or 57 percent, of the eligible population were dual eligibles who were deemed eligible because of their Medicaid status. Another 2.3 million, or 17 percent, of the eligible population individually applied for LIS and were found eligible by the Social Security Administration (SSA) (Figure 5-1). Of those beneficiaries not automatically enrolled in LIS, the National Council on Aging estimates that between 35 percent and 42 percent of those eligible have enrolled (ABC 2007).2 CMS estimates that most Medicare beneficiaries who have not signed up for Part D and do not have other creditable drug coverage are eligible for LIS.

Beneficiary advocates suggest that the resource test is a barrier to enrollment in both MSP and LIS. The federal MSP resource limits have not changed since 1989 when

Relationship between MSP and LIS

When the Congress established the Medicare prescription drug benefit, it included additional benefits and protections for dual eligibles and other beneficiaries with limited incomes. Qualified beneficiaries pay no premiums, have limited cost sharing, and have no gap in their coverage. The Congress set income and asset criteria for LIS at higher levels than for MSP, making it easier to qualify for LIS. Table 5-2 lists the eligibility criteria and benefits...
for LIS. Individuals may have assets valued as high as $11,990 and still qualify for LIS. In addition, dual eligibles and those enrolled in MSPs are deemed eligible for LIS and do not have to apply. If these beneficiaries do not choose a drug plan, CMS will randomly assign them to a Part D plan with premiums at or below the low-income benchmark. Other beneficiaries may apply for the LIS subsidy at Social Security offices and do not have to go to state Medicaid offices, a perceived source of stigma to some.

Beneficiaries may apply for LIS through SSA or their state Medicaid office. To date, almost all beneficiaries who have applied for LIS have done so through SSA. However, some beneficiaries might have more success applying for LIS through their state Medicaid program. There is one national set of criteria for LIS, but each state can adjust MSP criteria according to its needs, although a state cannot set conditions more stringent than federal standards. Federal minimum criteria for MSPs are more restrictive than those for the drug subsidy, but, as noted, states are allowed to have more liberal MSP eligibility standards than federal minimum requirements. Thus, individual state MSP criteria may be less restrictive than LIS. In these states, those who qualify for MSP are deemed eligible for LIS. They do not have to demonstrate that they meet LIS income and asset standards. As a result, beneficiaries with similar incomes and assets can qualify for LIS in some states but not others. For example, Maine allows beneficiaries with incomes at or below 150 percent, 170 percent, and 185 percent of the federal poverty level to qualify for the QMB, SLMB, and QI programs, respectively (see text box).

Administrative requirements for state Medicaid workers are also different from those that apply to SSA employees. If beneficiaries apply for LIS at a Medicaid office, state employees are required to screen them for MSP eligibility. SSA employees do not have this responsibility. Some policymakers have recommended that SSA workers also be required to screen applicants for MSP eligibility.

**Income and health care spending for the Medicare population**

While MSP enrollment is low, the incomes and out-of-pocket health care expenditures of the elderly Medicare-eligible population suggest that the programs could fill a need for beneficiaries with limited income. In general, Medicare beneficiaries have lower incomes than individuals under age 65 and they are more likely to be poor or near poor. The median income of an individual aged 65 or over in 2006 was $17,045, compared with $28,077 for an individual younger than 65, a difference of $11,032. The income distributions of individuals aged 65 or older and those under 65 years of age also differ considerably (not shown). Roughly 35 percent of the population aged 65 or older have an annual income between $10,000 and $19,999, compared with slightly more than 15 percent of their younger counterparts. In 2006, the poverty threshold was $9,669 for an individual aged 65 or older. Thus, more of the aged are near poor than their younger counterparts.

The income disparity is more pronounced between the population aged 65 or older and the population between the ages of 55 and 64. At $31,895, the median income of an individual aged 55 to 64 was $14,850 greater than the median income of an individual aged 65 or older. Like the entire under-65 population, the income distributions of individuals aged 55 to 64 and individuals aged 65 or older also differ considerably (Figure 5-3, p. 318). Roughly 30 percent of individuals aged 55 to 64 with an income fall within the lowest two income brackets, compared with almost 60 percent of individuals aged 65 or older who have similar incomes.

Older individuals tend to have lower incomes than their younger counterparts (Figure 5-4, p. 319). More than 40 percent of the Medicare population aged 75 or older have annual incomes between $10,000 and $19,999, while 30 percent of the population aged 65 to 74 fall within this income bracket. Individuals aged 75 or older have a median income almost $5,000 less than that of individuals aged 65 to 69 (not shown). This difference is due in part to the predominance of nonmarried women in the older age bracket.

It is difficult to accurately assess the cost of living for the elderly and the sufficiency of their income. On the one hand, the cost of living for the elderly may rise faster than the cost of living for the nonelderly because of greater medical expenditures. However, the elderly are less likely to have the kinds of financial obligations that younger individuals have, such as home mortgages.

Differences in household composition and variations among survey instruments complicate comparisons of individual income and health care spending between the under-65 and 65-or-older populations. We use the Current Population Survey as our measure of median individual...
Medicare Savings Program expansion in Maine

Maine is one of a number of states that initiated policies in 2006 and 2007 to increase enrollment in Medicare Savings Programs (MSPs). Commission staff, with the help of contractors from Georgetown University and NORC, conducted a site visit in July 2007 to discuss policy changes with state officials, beneficiary counselors, advocates, beneficiaries, and providers.

In 2007, Maine broadened the Medicare Savings Programs’ eligibility criteria. On January 1, the state instituted a policy to disregard all assets—effectively eliminating the asset test for the programs. Higher income eligibility limits for the Medicare savings programs became effective in April 2007. The new limits are at or below 150 percent, 170 percent, and 185 percent of the federal poverty level for the Qualified Medicare Beneficiary (QMB), Specified Low-income Medicare Beneficiary (SLMB), and Qualifying Individual (QI) programs, respectively. These are significantly higher than current federal limits, which are 100 percent, 120 percent, and 135 percent of the federal poverty level for the programs. Maine’s policymakers set the QI income eligibility limit at a level corresponding to the income limits for the State Pharmacy Assistance Program called “the low-cost Drugs for the Elderly and Disabled Program” (DEL). With the new eligibility rules in effect, the state deemed all DEL enrollees eligible for MSPs.

In broadening the eligibility criteria for MSPs, the state effectively expanded LIS eligibility criteria for Maine residents and increased the number of beneficiaries eligible for the drug subsidy. Since the federal government subsidizes Part D premiums and cost sharing for Medicare beneficiaries who qualify for LIS, officials in Maine reasoned that the state could achieve some savings as larger numbers of individuals enrolled in DEL became eligible for LIS. They anticipated that savings could then be used to provide wraparound benefits for DEL enrollees.

As anticipated, enrollment in MSP increased substantially in Maine—from almost 9,000 enrollees in January 2006 to more than 30,000 in July 2007. The largest increase occurred in April 2007 when the new income limits went into effect and the state deemed DEL enrollees eligible for MSPs. Approximately 13,500 beneficiaries were added to the MSP rolls that month.

Within the MSPs, a dramatic shift occurred as SLMB and QI enrollees became eligible for the QMB program. Officials found that, because the new income eligibility limit of 150 percent of the federal poverty level for the QMB program is higher than the former highest limit for both the SLMB and QI programs, all previous MSP participants became QMB participants (Figure 5-2, p. 316).

With the shift of so many enrollees to the QMB program, the federal government now covers a substantial portion of the cost of providing drugs under DEL, leaving state funds available, which can be redirected to provide other benefits for DEL enrollees. At the same time, however, the shift to the QMB program meant that the state Medicaid program took on a significant new financial responsibility. The state must now subsidize Medicare premiums for about 4,000 enrollees whose status changed from QI to QMB. In addition, the QMB program covers Medicare deductibles and cost sharing as well as premiums.

Figures are not yet available for the cost of this change in terms of new Medicaid spending. Spending for Medicare premiums and deductibles is fairly predictable. The outstanding question is how costly payments for Medicare services for the new QMBs will be as the state assumes responsibility for Medicare cost sharing. Officials anticipate that the cost will be modest.

When Medicaid coverage wraps around Medicare coverage of a service, Medicare pays providers according to its payment methods and costs. In theory, Medicaid pays the associated cost sharing. However, state Medicaid programs are not required to pay the full cost-sharing amount so long as their payment policies are written in their state plan. States are free to cap their liability so that providers receive no more than the state

*continued next page*
Increasing participation in the Medicare Savings Programs and the low-income drug subsidy

Medicare Savings Program expansion in Maine (continued)

would have paid if the beneficiary had only Medicaid. Because so many states’ Medicaid payment rates are lower than the total Medicare payment rates (program payments plus coinsurance), and often below the program payment alone, providers caring for QMBs (or dual eligibles in general) frequently do not receive the full coinsurance. This is the case in Maine. In general, the provider cannot bill the beneficiary for any portion of the coinsurance unless the state permits providers to charge a nominal copayment for the service.

In our interviews with state officials, counselors, and advocates, we were told that MSP enrollment increased for reasons other than the deeming of DEL enrollees.

Although opinions differed, advocates told us that the publicity surrounding the Part D program and the efforts to reach and enroll beneficiaries in LIS led to increased enrollment in MSPs. They note that people do not know what the MSPs are called, but now they know about the programs, owing in great part to publicity related to Part D. The state has a strong tradition of collaboration among state agencies and community organizations that work with the elderly and individuals with disabilities, so there was a concerted effort to publicize other programs for low-income Medicare beneficiaries along with the Part D LIS.

continued next page

FIGURE 5–2

Maine has moved many of its residents into Medicare Savings Programs with more benefits

<table>
<thead>
<tr>
<th>Enrollment</th>
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<tbody>
<tr>
<td>30000</td>
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<tr>
<td>25000</td>
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<td>10000</td>
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<td>5000</td>
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<td>0</td>
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</tbody>
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Note: QMB (Qualified Medicare Beneficiary), SLMB (Specified Low-income Medicare Beneficiary), QI (Qualifying Individual).

Source: Data provided by Maine Department of Health and Human Services, July 2007.
Income because it provides the most recent data. Data on sources of income for the 65-or-older population are reported for married couples and nonmarried persons. The data we present on out-of-pocket health care spending are from the Consumer Expenditure Survey, which uses the consumer unit (CU) as the unit of analysis. This refers to related individuals living together, individuals living alone or with others but keeping separate finances, or unrelated persons living together and pooling income and expenditures. CUs can consist of one or more people, but we restrict ourselves to comparing out-of-pocket spending between one-person CUs aged 65 or older and one-person CUs under 65 years of age to facilitate comparisons on an individual basis.

Sources of beneficiary income
Medicare beneficiaries are most likely to rely on Social Security as their major source of income (Figure 5-5, p. 320). In 2004, 89 percent of individuals aged 65 or older received income from Social Security; 55 percent received income from assets; 41 percent received retirement benefits other than Social Security; 24 percent received income from earnings; 4 percent received public assistance; and 4 percent received veterans’ benefits.

While reliable asset data are not available, data on income derived from assets show that most beneficiaries receive little income from this source. Beneficiaries receive most asset income from interest earned on personal savings (dividends and rent also fall within this category). More than half of individuals aged 65 or older collected income from assets in 2003 but the median interest earned from personal savings was $438, suggesting that assets do not provide a large source of income.

Medicare beneficiaries with higher incomes were more likely to have income from assets. Nearly 82 percent of individuals aged 65 or older in the highest income
Increasing participation in the Medicare Savings Programs and the low-income drug subsidy

The 65-or-older population has higher out-of-pocket health care expenses than those under 65 because of poorer health status and the structure of the Medicare benefit package (MedPAC 2006). In a recent report, researchers quantified this difference in out-of-pocket health care spending by age (Desmond et al. 2007).

They found that the median total annual health care expenditure for individuals aged 65 or older was $1,939 in 2003, almost three times as high as the $664 expenditure of their under-65 counterparts. These out-of-pocket health care expenditures represented 12.5 percent of income for the 65-or-older population, compared with 2.2 percent of income for the under-65 population. Even when prescription drug spending was omitted, the population 65 or older had higher out-of-pocket spending than the under-65 population (Figure 5-6, p. 321).

quintile had income from assets, while only 34 percent of individuals aged 65 or older in the lowest income quintile had such income. Median income from assets in the highest income quintile was $4,384, compared with the median asset income of $200 in the lowest income quintile.

Median income and income distribution among the disabled

It is difficult to find recent income and out-of-pocket health care spending data on the under-65 disabled Medicare beneficiary population. Researchers using 1998 data found that disabled Medicare beneficiaries were twice as likely as the population 65 or older to have incomes below the poverty line. Disabled beneficiaries with mental impairments were particularly likely to fall below the poverty line (Briesacher et al. 2002).9

Out-of-pocket health care spending

FIGURE 5-3
Older people tend to have lower incomes

The population 65 or older has out-of-pocket health care expenditures nearly twice as high as their closest age cohort. The population aged 55 to 64 spent a per capita median amount of $843 on out-of-pocket health care expenses in 2002, compared with $1,616 for the population 65 or older (not shown). These out-of-pocket health care expenditures represented a much larger share of total expenditures for the 65-or-older population than for their younger counterparts. Out-of-pocket health care expenditures accounted for 5 percent of total expenditures for the population aged 55 to 64 and 12.3 percent of expenditures for the population aged 65 or older.

**Health care avoidance and MSP participation**

Because of lower incomes and greater out-of-pocket health care costs, Medicare beneficiaries, particularly those near the poverty line, may avoid necessary health care. MSP enrollees are less likely to forgo treatment. A 2005 study attempted to quantify the extent to which patients avoid health care because of the cost by examining physician visit, hospital visit, and prescription drug avoidance using 2001 self-reported data. "Avoidance was determined based on responses to the following questions: (1) Have you gone without getting care from a doctor because it cost too much? (2) Was there a time you thought you needed to be admitted to the hospital but you did not go because you worried about what it would cost you? (3) How many times did you decide not to fill a prescription because it was too expensive? After controlling for demographic differences and health status, QMB enrollees were found to be half as likely as QMB-qualifying nonenrollees to avoid physician visits because of cost. Researchers did not find a significant difference in use.

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**FIGURE 5-4**

Within the older population, the oldest have lower incomes

![Graph showing the distribution of annual income by age group](image_url)

of prescription drugs and hospital visits between the two populations, but non-QMBs were more likely to use the emergency room (Federman et al. 2005).

While the research suggests that MSPs improve access to care, participation rates for eligible beneficiaries are low. The following section describes some of the ways the federal government, states, and community organizations have tried to increase participation.

**Efforts to increase program participation**

Policymakers, beneficiary advocates, and researchers have suggested a number of strategies to increase participation in the subsidy programs. Strategies can be classified into two categories: improve outreach to increase awareness of the programs and simplify the eligibility, application, and retention procedures. The second strategy includes aligning MSP and LIS requirements so that beneficiaries can apply for both types of aid simultaneously. The federal government, many states, community groups, and health plans have initiated programs that address one or more of these strategies. Most efforts have had a significant but limited impact on program participation. In this section, we draw from some of the more successful campaigns to suggest policy recommendations.

**Increasing outreach**

Medicare beneficiaries, providers, and even many beneficiary counselors do not know about the availability of MSPs. Medicare beneficiaries, particularly those with limited incomes, are difficult to reach. Beneficiaries who are eligible but not enrolled in MSPs or LIS are more likely to live in rural areas or be homebound, have limited English proficiency, have difficulty seeing or hearing, or have cognitive difficulties. Even the most effective outreach strategies may have only limited success enrolling beneficiaries in the programs. However, federal resources could be more efficiently targeted to reach this population.

CMS (then the Health Care Financing Administration (HCFA)) sponsored an early effort to increase MSP participation. The agency produced and distributed information on the programs and created a task force with state and community activists to promote program participation. It identified increased program enrollment as a goal of the Government Performance Results Act and provided grants to states to increase enrollment (Nemore et al. 2006). The agency’s goal was to increase program participation nationally by 4 percent in the first year. As part of the initiative, the agency, in consultation with the states, developed a methodology for measuring baseline enrollment in MSPs (HCFA 1999). Although the goal remains, the agency no longer provides targeted grants for these purposes.

In response to a congressional mandate, SSA notified beneficiaries about their potential eligibility for MSP participation. The agency produced and distributed information on the programs and created a task force with state and community activists to promote program participation. It identified increased program enrollment as a goal of the Government Performance Results Act and provided grants to states to increase enrollment (Nemore et al. 2006). The agency’s goal was to increase program participation nationally by 4 percent in the first year. As part of the initiative, the agency, in consultation with the states, developed a methodology for measuring baseline enrollment in MSPs (HCFA 1999). Although the goal remains, the agency no longer provides targeted grants for these purposes.

In response to a congressional mandate, SSA notified beneficiaries about their potential eligibility for MSPs in 2002. The Government Accountability Office estimated that the SSA mailings from May through November 2002 to 16.4 million potentially eligible beneficiaries increased enrollment by 74,000 additional beneficiaries (GAO 2004). In the year following the mailings, MSP enrollment increased nationally 2.4 to 2.9 percentage points over the previous three years. In particular, enrollment increased for beneficiaries under age 65, racial and ethnic minorities, and residents in southern states.

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The Robert Wood Johnson Foundation and the Commonwealth Fund sponsored an initiative, State Solutions, to increase participation by low-income beneficiaries in MSPs. Beginning in 2002, the foundations gave five states grants of up to $450,000 over a three-year period to boost enrollment.\(^13\) States were required to provide matching support at a 50 percent rate (which could include in-kind contributions and local grant support). The foundations also provided technical assistance. State efforts have included using data from SSA to identify and recruit potential enrollees, contacting participants in other programs that serve similar populations like senior housing projects and food stamp programs, and simplifying processes for participants to apply and renew enrollment in the programs. Over the period of the grant, QMB and SLMB enrollment increased by 45 percent in the five states compared with 22 percent nationally (Fox 2007). Data suggest that the most successful outreach efforts carefully targeted eligible individuals and provided specific information on how and where to get help with the enrollment process (Summer 2006).

One large health plan, with technical assistance from the National Council on Aging, developed a model to identify plan members who might be eligible for LIS and other benefit programs including MSPs. The targeted population was contacted through mailings and phone calls and advised to contact the plan’s LIS call center. Plan members who contacted the center were screened for program eligibility and told where to apply for benefits. As a result of this initiative, almost 11,000 beneficiaries (or 13 percent of plan members contacted) applied for LIS. Of those who applied, about 2,600 (or 25 percent) were eligible and received the subsidy in 2006. In addition, nearly 45 percent were found to be eligible for but not enrolled in Medicaid, Supplemental Security Income (SSI), or MSPs (22 percent, 16 percent, and 7 percent, respectively) (Kiefer et al. 2007).

**The National Medicare Education Program**

The federal government provides funds for Medicare beneficiary education and counseling through the National Medicare Education Program. The program’s funding goes to the *Medicare & You* beneficiary handbook, the 1–800–Medicare call center, the Medicare website, multimedia campaigns, and community-based outreach. More than half the money dedicated to beneficiary education goes to the Medicare call center.

CMS intends the call center to be a single point of contact for all Medicare inquiries, although the center is not equipped to answer questions on LIS or MSPs. The call system includes an interactive voice response system that can provide information and can also direct calls. In fiscal year 2006, beneficiaries made about 29 million calls to Medicare call centers, an increase of 68 percent in call volume from 2004 at more than double the cost.\(^14\) During this period, caller satisfaction decreased by 13 percentage points to 71 percent of callers who completed their calls. An additional 21 percent of callers hung up before they received answers to their questions (OIG 2007).

Most call center representatives are trained to read prepared scripts with answers to frequently asked Medicare questions. The Office of Inspector General reports that call center staff are not Medicare specialists and sometimes have difficulty understanding questions well enough to find the right script (OIG 2007). They refer questions on LIS to SSA and do not have the state-specific knowledge needed to provide information on MSPs. A modest increase in the call center budget is unlikely to resolve these problems.

While the 1–800–Medicare call center is an important resource, CMS allocates much less funding to sources...
Increasing participation in the Medicare Savings Programs and the low-income drug subsidy

that individually counsel beneficiaries. Researchers have emphasized that the Medicare population responds best to personal contacts with trusted sources (Hibbard et al. 2001, 1998). In our previous work on how beneficiaries learned about the Medicare drug benefit, the Commission learned that a relatively small percentage of beneficiaries, or those that helped them, used the Medicare call center (19 percent). Most preferred to get information through personal contact with family, friends, insurance agents, and health care providers (MedPAC 2006).

State Health Insurance Assistance Programs (SHIPs) are the main federal source of individual-level counseling for beneficiaries. SHIPs are state-based organizations that receive federal funds to provide information and counseling to Medicare beneficiaries. Other community-based groups also provide information, particularly about the Medicare drug benefit. These groups include senior centers, retirement communities, and beneficiary advocacy groups. Groups that address the needs of individuals with specific diseases or disabilities also provide counseling.

In 2006, SHIPs received about $30 million from CMS. SHIPs vary in the amount of resources available to them. Most depend on a limited number of paid employees and volunteers. SHIPs could use additional resources to train volunteers and community organizers on the local criteria for MSP eligibility and how to enroll beneficiaries in LIS and MSPs. They could use funds to employ an individual dedicated to resolving Part D or MSP issues. Additional funds would allow SHIPs to increase outreach, education, and counseling efforts to more isolated communities including rural areas, beneficiaries with limited English proficiency, or those with cognitive difficulties. Some SHIPs might use the additional funding to train local SSA workers to screen and enroll beneficiaries in MSPs. Some funding could be used to expand SHIP data collection efforts to allow policymakers to assess the success of various initiatives undertaken to educate and enroll these hard-to-reach populations.

SHIPs could also use some funds to support the work of community-based organizations. For example, they could use the funds to train local volunteers on program eligibility. They could purchase laptop computers so that volunteers could submit applications for eligible beneficiaries from their homes, churches, or other community sites. They could also support funding for written materials and translators to help beneficiaries who are not English speakers.

Programs supported by the State Solutions grants provide examples of successful local outreach programs (Summer 2006):

- Minnesota trained 50 SHIP volunteers to work with Indian Health Service workers to find and enroll eligible Medicare beneficiaries in regions where reservations were located. MSP enrollment in these areas increased by 43 percent in two years.

- State SHIPs worked with managers at senior public housing sites in Pennsylvania and New Hampshire to screen and enroll eligible Medicare beneficiaries in these states. Resident managers at the sites were able to identify potentially eligible applicants and assure residents that the programs were legitimate (Blume 2006).

- Louisiana Medicaid developed partnerships with local representatives at SSA, Meals on Wheels, physicians, pharmacists, and home health providers. Outreach to Medicare beneficiaries was coupled with administrative changes to MSPs and resulted in a 44 percent increase in enrollment (Kennedy 2007).

On our site visit to Maine, beneficiary counselors told us that the most efficient way to target information to homebound and rural beneficiaries was to use local media to inform them about the programs. All messages would include a local number and tell beneficiaries to call for additional information. SHIP counselors could then arrange appointments with callers to screen them for eligibility and help them enroll in appropriate programs.

**Recommendation 5-1**

The Secretary should increase State Health Insurance Assistance Program funding for outreach to low-income Medicare beneficiaries.

**Rationale 5-1**

Medicare beneficiaries, particularly those who are hard to reach, get most of their information from personal contact. Beneficiaries who qualify for MSPs need help finding out about the programs and applying for them. Increased funding for groups that provide this expertise and one-on-one counseling will encourage more beneficiaries to enroll in programs for which they are eligible.
Report to the Congress: Medicare Payment Policy | March 2008

Counselors to screen and enroll individuals for both programs simultaneously. Officials in states that have liberalized the asset test have found that the change did not result in large increases in enrollment but did provide administrative cost savings and simplified the enrollment process for beneficiaries (Tiedemann and Fox 2004). (A number of databases are available that permit states to check the accuracy of income data. Information on beneficiary assets is more difficult to examine unless the assets produce income.) In addition, research has found that few beneficiaries who meet the income requirements have significant assets (Rice and Desmond 2006).

States already have considerable flexibility to adjust countable income and resources above federal requirements. For example, eight states have eliminated the asset test for some or all of the MSP programs and others do not consider certain sources of income or resources. Generally, these states have experienced small increases in beneficiary participation and report administrative savings.

In 2001, Arizona Medicaid analyzed the number of beneficiaries who would qualify for MSPs if the state eliminated the asset test. They also studied the cost of verifying assets and the potential administrative cost savings if verification were no longer necessary. They found that 475 applicants would have become eligible for MSPs if assets were not counted. On the other hand, cost savings would result from less postage, fewer forms, and less employee time spent on verifying assets. Overall, analysts found that the state would spend only about $75,000 more annually on MSPs if the asset test were eliminated (Tiedemann and Fox 2004). If the Congress raises the asset limit rather than eliminating it, administrative savings will be lower but alignment with LIS limits will still permit one eligibility determination and enrollment process for both programs.

**Recommendation 5-2**

The Congress should raise Medicare Savings Program income and asset criteria to conform to low-income drug subsidy criteria.

Federal MSP asset criteria have not been revised since 1989, but many states have chosen to raise income and asset limits to meet the needs of their elderly population. In establishing LIS, the Congress recognized that beneficiaries with incomes below 150 percent of the

**Rationale 5-2**

Spending
- Indeterminate. Program spending would increase based on increased participation in MSPs.

Beneficiaries
- Low-income beneficiaries who enroll in MSPs would save money. Individuals who enroll in the QMB program may also have increased access to medical services.

Simplifying eligibility and enrollment
While it would increase the visibility of the programs, analysts find that more targeted outreach has only a limited effect on participation rates if the application process is too complicated and documentation requirements are too onerous. Researchers have found that beneficiaries are largely unable to apply for MSPs themselves because of the complexity of the application process. More than two-thirds of enrolled individuals had help applying for the programs. States also face high administrative costs processing applications and verifying data. The Congress and the states can make changes to eligibility criteria and enrollment processes for these programs that would simplify enrollment and increase participation. If the Congress aligned income and asset requirements for the MSPs with those that apply to LIS, outreach workers could use one application and screening process for both programs. States could also make changes to their administrative processes that would simplify enrollment for beneficiaries.

As noted on p. 313, the Congress set income and asset criteria for LIS at higher levels than minimum federal MSP criteria, making it easier for beneficiaries to qualify. For example, beneficiaries must have incomes below 135 percent of the poverty level to qualify for the QI program but can have incomes up to 150 percent of the poverty level and qualify for some help under LIS. In addition, the minimum federal resource limit for MSPs ($4,000 for individuals and $6,000 for couples) has not changed since the program was implemented in 1989. Beneficiaries may have assets valued as high as $11,990 for an individual or $23,970 for a couple and still qualify for LIS.

Raising the federal asset limit for MSPs would increase the number of people eligible for the programs but its main effect would be to ease the documentation requirements for beneficiaries and make it simpler for counselors to screen and enroll individuals for both programs simultaneously. Officials in states that have liberalized the asset test have found that the change did not result in large increases in enrollment but did provide administrative cost savings and simplified the enrollment process for beneficiaries (Tiedemann and Fox 2004). (A number of databases are available that permit states to check the accuracy of income data. Information on beneficiary assets is more difficult to examine unless the assets produce income.) In addition, research has found that few beneficiaries who meet the income requirements have significant assets (Rice and Desmond 2006).
poverty level and with limited assets had difficulty meeting their out-of-pocket health care costs. If MSP criteria were aligned with LIS levels, beneficiaries could apply for both programs at one time. Beneficiaries with incomes up to 150 percent of the poverty level would be eligible for QI benefits. Beneficiaries would find the process simpler and state and federal governments would realize administrative savings.

**IMPLICATIONS 5-2**

**Spending**
- If the QI program is reauthorized, as we expect, this recommendation would increase spending between $250 and $750 million for one year and between $1 and $5 billion over five years.16

**Beneficiaries**
- Low-income beneficiaries who enroll in MSPs would save money. Individuals who enroll in the QMB program may also have increased access to medical services.

This recommendation mainly affects federal spending. Income eligibility for QMBs and SLMBs would remain the same—the increased income limit of 150 percent of the poverty level affects only the fully federal QI program. The asset limit for QMBs and SLMBs would increase modestly, while the asset limit for QIs would increase more substantially. In addition, the federal government currently is responsible for more than half the cost of QMB and SLMB benefits under Medicaid, with the federal match rate varying from 50 percent to 76 percent of the cost.

**SSA and MSPs**

SSA is responsible for determining LIS eligibility for those individuals who are not deemed eligible for the subsidy. Beneficiaries can apply for LIS without facing the possible stigma associated with applying at a state Medicaid office. If MSP and LIS eligibility were based on the same criteria, SSA could screen and enroll beneficiaries for both programs simultaneously. Under current law, states must screen beneficiaries for both programs if they apply at a Medicaid office, but SSA does not have this requirement.

SSA has experience determining eligibility for aged and disabled Medicare recipients who qualify for Medicaid. Currently, 32 states and the District of Columbia contract with SSA to determine Medicaid eligibility for SSI beneficiaries (Ebeler et al. 2006). In those states, the SSI application is also the Medicaid application and Medicaid eligibility starts the same month as SSI eligibility. SSA notifies the state through a computer network called the State Data Exchange System. The state sends the Medicaid card to the individual based on the computer file information from SSA.17 By law, states that contract with SSA for this purpose pay SSA one-half the cost of carrying out the agreement, including only costs that are additional to determining SSI eligibility.18 By law, SSA cannot use money from the Social Security trust funds to administer programs outside their core mission.

**RECOMMENDATION 5-3**

The Congress should change program requirements so that the Social Security Administration screens low-income drug subsidy applicants for federal Medicare Savings Program eligibility and enrolls them if they qualify.

**RATIONALE 5-3**

This recommendation would simplify application and enrollment for beneficiaries. Administrators could use a single application for MSP and LIS eligibility. Since LIS participation is higher than MSP rates, it would increase participation in the program by eligible beneficiaries who have not heard of it. If income and asset requirements were the same for both programs, SSA workload would not increase substantially. However, administrative funding for SSA has not kept pace with the work level. For example, SSA is currently facing a record high backlog of disability claims. As of October 2007, roughly 758,000 disability claims cases were awaiting a hearing or an appealed claim. This is almost double the caseload in 2001. We recognize that the agency would need more resources to implement this recommendation.

**IMPLICATIONS 5-3**

**Spending**
- We do not have a separate estimate for this recommendation. The Commission believes the cost is largely included within Recommendation 5-2. Program spending would increase based on increased participation in MSPs.

**Beneficiaries**
- Low-income beneficiaries who enroll in MSP would save money. Individuals who enroll in the QMB program may also have increased access to medical services.
**State actions to simplify application and enrollment**

States can take additional steps to simplify application and enrollment processes for MSPs. In general, state efforts to increase participation in these programs have varied. Officials have had to balance their desire to provide more assistance to their residents with limited incomes with the need to balance their budgets in an era of increasing Medicaid expenditures. Responses have differed significantly. For example, states’ administrative processes vary. Some require beneficiaries to apply for MSPs at the state Medicaid office while others permit mail-in applications, an easier method for beneficiaries. Similarly, some states require original documents to support applications while others permit beneficiaries to submit copies. Some states have simplified their application forms while others have not. Federal law requires states to facilitate MSP enrollment by instituting processes to ensure that a resident who applies for one type of assistance is screened for all types of assistance for which the person may be eligible, but advocates indicate that this rule is not always followed.

With the help of a grant from the State Solutions Project, Louisiana Medicaid has been particularly active in efforts to increase participation in MSPs through administrative simplification. For example, the state simplified the application form, permitted mail-in applications, reduced requirements for verification of assets, and used less restrictive requirements for countable assets (Kennedy 2007).

Louisiana policymakers also simplified the annual renewal process. Noting that the income of low-income beneficiaries rarely changes much annually, the state began conducting renewals through use of online data collected for other programs like the food stamp program. Beneficiaries were contacted only if this type of review was not possible. Administrative costs to the state fell from $31.73 for a full renewal to $9.84 for this abbreviated process. Savings resulted from reduced personnel, postage, and printing costs (Summer 2004). As a result of all the state’s efforts, enrollment in MSPs increased from about 97,000 in 2001 to 137,000 in 2005, a nearly 41 percent increase (Sofaer 2006).

In mid-2007, the state further simplified the renewal process by adopting the procedure used by SSA for LIS. The state currently sends letters to enrollees providing previous state data on income and assets for the individual and directs beneficiaries to contact the program only if the information is no longer correct. If beneficiaries do not contact the Medicaid office, their enrollment is renewed (Kennedy 2007). (The state can still check the accuracy of the data through online databases.)

**Incentives for states to promote increased MSP participation**

States that provide additional drug coverage to beneficiaries have greater incentives to enroll residents in MSPs. At least 42 states have established or authorized some type of program to provide pharmaceutical coverage or assistance. Programs include those that provide wraparound coverage for Part D, those that provide discounts, and others that support drugs that are not covered by Part D. The wraparound subsidy programs (State Pharmacy Assistance Programs (SPAPs)) use state funds to pay for a portion of the costs, usually for a defined population that meets enrollment criteria. As of July 2007, 29 states had programs in operation. Since MSP enrollees are deemed eligible for LIS, the state can increase the number of SPAP members with LIS by enrolling more people in MSPs. Because LIS is federally funded, states with SPAPs save money because the federal drug subsidy covers most beneficiary cost sharing and gap coverage that the state would otherwise pay. In addition, if beneficiaries qualify for the QI program, the federal government finances all covered benefits.

Some states with SPAPs have changed their eligibility and enrollment procedures to increase MSP enrollment. For example, Vermont and Maine eliminated the asset test for MSP applicants (see text box, pp. 315–317). States have also improved their information management systems to allow them to verify beneficiary financial eligibility information through existing databases (e.g., check food stamp records or tax records to verify income). Some states have developed electronic record systems that can be accessed remotely. Thus, eligibility workers can use laptop computers to make eligibility determinations at SSA offices or other community locations.

Five states increased MSP enrollment by more than 50 percent in 2006: Vermont, Montana, Illinois, Maine, and New York. All these states offer SPAPs to qualified residents but researchers cannot prove a causal relationship between the existence of SPAPs and the expansion of MSP enrollment (Reinhard 2007).

States may have additional incentives to increase MSP participation. Some policymakers have suggested that state Medicaid programs can save money by increasing
Increasing participation in the Medicare Savings Programs and the low-income drug subsidy

Having the federal government assume the full costs of all care (including long-term care) for individuals dually eligible for Medicare and Medicaid, as it has under the LIS program, might be the most efficient policy approach. However, the Medicare program is not financially sustainable and such a broad program expansion would make the situation worse. Although still costly, federalizing MSPs is a more incremental strategy—individuals participating in the programs are Medicare beneficiaries receiving assistance with Medicare premiums and coinsurance. If MSPs were federalized, federal funds would cover the Part B premiums for QMBs and SLMBs as well as the deductibles and coinsurance for Medicare-covered services for QMBs.

However, before the Congress decided to federalize MSPs, it would have to resolve significant issues of equity among states and beneficiaries. Unlike the recommendations in this chapter that focus on how to increase participation in the current programs, federalizing MSPs mostly involves Medicare buying out the cost of a benefit currently paid by Medicaid. Since states have different eligibility and payment rules, a single federal standard would produce winners and losers. In other words, some states gain and some lose, and some beneficiaries within states gain and some lose.

Currently, states have considerable flexibility to determine eligibility for Medicaid and MSPs. As a result, beneficiaries in some states receive full Medicaid coverage, while others with the same level of income and assets are eligible only for MSP benefits or for no benefits at all. For example, some states provide full Medicaid benefits to beneficiaries with incomes below 100 percent of the poverty level while others do not. Depending on how federal criteria are applied, states that provide more generous benefits to beneficiaries could receive less financial savings from federalization than those that provide fewer benefits to beneficiaries with limited incomes. Additionally, some states use income and asset levels that are higher than federal MSP criteria. If all beneficiaries had to meet federal standards, some individuals who currently qualify for MSPs in their states could lose both MSP and LIS benefits unless the state chose to cover them with state-only funds.

To address these issues, policymakers would have to answer a number of design questions:

- Which of the eligibility groups that receive MSP benefits would be covered by full federal funding?
• What set of rules would govern program eligibility—that is, a national standard or a higher level chosen by the state?

• Would Medicare assume all coinsurance for QMBs?

• Would states be required to maintain a level of effort?

**Which of the eligibility groups that receive MSP benefits would be covered by full federal funding?**

MSPs currently consist of three programs: QMB, SLMB, and QI. QMB is by far the largest of the programs. Under current law, QMBs are individuals who are entitled to Medicare Part A, have incomes that do not exceed the federal poverty level, and have resources that do not exceed twice the eligibility limit for SSI. Within the QMB category, Medicare distinguishes two groups. Individuals who are not otherwise eligible for Medicaid but meet the QMB criteria are defined as QMB Only. The discussion in this paper generally applies to beneficiaries in this group. A larger group of beneficiaries (80 percent of all MSP enrollees) meet the QMB criteria but are also eligible for full Medicaid benefits in their state (Table 5-3). CMS refers to this group as QMB Plus. Medicaid pays MSP benefits for all QMBs.

Under current law, QMB eligibility varies by state. In any state, beneficiaries with a given level of income and assets may be QMB Plus and in another state they may be QMB Only. If policymakers decided to federalize MSP benefits, they would need to determine whether the policy applied to all QMB enrollees or to those designated QMB Only.

In about one-third of states, Medicare beneficiaries with incomes below 100 percent of the poverty level who meet the asset test receive full Medicaid benefits, including long-term care benefits. In other states, individuals with the same income and assets would be QMB Only. If federalization applied to the QMB Only population, states that provide more generous benefits to their beneficiaries (by making them QMB Plus) would receive less savings from federalization than states that limit QMB Plus benefits to fewer individuals. Federalization to QMB Only beneficiaries could lead states to switch some beneficiaries from QMB Plus to QMB Only. If a state no longer provided full Medicaid benefits to this population, it would receive more federal payments but beneficiaries with limited incomes would lose benefits.

If federalization applied to all QMBs, most of whom are QMB Plus, the federal cost would be significantly higher since the program would cover many more people. States would realize considerable savings. They would still need to provide non-Medicare benefits like nursing home and dental care to beneficiaries receiving full Medicaid coverage.

**What set of rules would govern program eligibility?**

As noted earlier, some states disregard higher levels of beneficiary income or assets when determining MSP eligibility. If federalization applied to all beneficiaries currently eligible for MSPs, eligibility for the programs would continue to vary by state, albeit with the federal government paying the full cost. If states were not permitted to use flexible eligibility standards, some individuals who currently receive benefits would no longer be eligible unless states chose to cover them with state-only funds. Those who received LIS because they were enrolled in MSPs could also lose eligibility for the drug subsidy since they would no longer be deemed eligible.

Policymakers would also have to decide how the program would be administered. Eligibility determination might follow the model adopted for LIS. People could apply at SSA offices for MSP assistance only or they could apply through the state Medicaid agency; those choosing the latter course would also be screened for full-benefit eligibility. As in Recommendation 5-3, SSA would need increased resources if this approach were adopted but the amount of funds required would be higher.

**Would Medicare assume all coinsurance for QMBs?**

The Part B premium is set nationally but cost sharing for Medicare-covered services (a benefit received by QMBs) is determined by the Medicaid state plan. The Balanced Budget Act of 1997 clarified that states could limit cost-sharing payments for Medicare-covered services to the lesser of the difference between the Medicare payment and the maximum the state would have paid for the same service under Medicaid. Medicaid payment rates vary by setting, by service, and by state but most states do not pay the full Medicare cost sharing for all services. Providers must accept the Medicaid payment as payment in full. If cost sharing for QMBs were federalized, Medicare would likely set payment levels nationally. The federal government could pay the full cost-sharing amount, which would further increase the cost of federalization. Alternatively, it could pay a fixed percentage of the cost-sharing amount. For example, instead of paying 20 percent...
coinsurance for Part B services, Medicare could pay 15 percent.

**Would states be required to maintain a level of effort?**

To estimate the cost of federalizing MSP benefits within the context of the Commission’s three recommendations, we made two assumptions: Federalization would include all QMBs and Medicare would pay full cost sharing for Medicare-covered services. Under these assumptions, we estimate that the cost of MSP federalization would fall into the Commission’s highest financial impact category, which is greater than $2 billion for one year and greater than $10 billion for five years.

As with the Part D benefit, the Congress could reduce the federal cost by requiring states to maintain a level of effort. This policy would again raise issues of equity among states. In general, states that currently have high per capita costs for MSP benefits have more generous eligibility requirements, higher provider payment rates, and a lower federal match. For example, Minnesota permits beneficiaries to retain more assets than under the federal LIS standard. It pays full Medicare coinsurance for QMBs and has a 50 percent federal match, the lowest possible matching rate. If MSPs were federalized using one national standard, the state would likely pay one of the highest maintenance-of-effort rates. Further, the state might have to use state-only funds to continue covering beneficiaries eligible under their current asset test.

The Commission concludes that the three recommendations in this chapter can increase participation in MSPs and LIS at a modest federal cost. They are designed to relieve beneficiaries with limited incomes of the increasing cost of the Part B premium and some of the high out-of-pocket health care costs they face. Yet, even with these recommendations, some beneficiaries will have difficulty with cost sharing, particularly those with high use of medical services. Medicare does not include catastrophic protection. As a longer term project, we plan to examine the benefit design of the program.
Endnotes

1 For discussion of barriers to enrollment, see Ebeler and colleagues (2006) and Nemore and colleagues (2006).

2 Data are limited on the assets of beneficiaries with low incomes, so all counts of the eligible population are estimates. For example, the Congressional Budget Office estimates that 14.2 million beneficiaries were eligible for LIS in 2006, while CMS placed the number at 13.2 million.

3 An estimated 2.4 million Medicare beneficiaries would have qualified based on income but were turned down for LIS because their assets exceeded the eligibility standards.

4 Additional cash savings of up to $1,500 per person are permitted if the individual intends to use the money for burial expenses.

5 Because Maine uses beneficiary-centered assignment to place its DEL and Medicaid enrollees in plans that officials believe best suit their needs, the state was the authorized representative of the enrollees. Thus, the state could enroll residents in the programs without having to contact them.

6 CMS required that the increase for all MSP categories be equal in value. Therefore, to increase the former QI limit to 185 percent of the federal poverty level to match the DEL income limits, the limits for the other MSPs also had to increase by 50 percent.

7 As with other Medicaid services, QMB and SLMB benefits are financed by state and matching federal funds. The QI program is federally funded.

8 Since the beginning of the Medicaid program in 1965, states have been permitted to recover the costs of benefits received from the estates of deceased Medicaid recipients who were over age 65 when they received benefits and who had no surviving spouse, minor child, or adult disabled child.

9 Researchers used data from the 1998 Medicare Current Beneficiary Survey.

10 Researchers used Consumer Expenditure Survey data from 1998 to 2003 to compare the ratio of out-of-pocket health care spending with self-reported annual pretax dollar income among Medicare eligibles with the ratio among people under age 65. Out-of-pocket health care spending included premiums for private insurance and Medicare Part B, medical services and supplies, and prescription drugs.

11 Federman and colleagues (2005) used the 2001 study of seniors’ prescription coverage, use, and spending to compare self-reported avoidance of health care due to costs between QMB-Only enrollees and QMB-qualifying nonenrollees.

12 Note that neither population received prescription drug coverage from Medicare or Medicaid during this period.

13 Louisiana, Minnesota, New Hampshire, New York, and Pennsylvania received awards from the project.

14 The implementation of Part D and the expansion of MA were largely responsible for the increased volume of calls.

15 The most common assets are bank accounts and life insurance policies.

16 The majority of this cost is the extension of the QI program under current law, estimated at $300 million annually.

17 Seven additional states use SSI criteria to determine Medicaid eligibility but the beneficiary must make a separate application to the state for Medicaid benefits. SSA refers these individuals to the state Medicaid agency but estimates that from 10 percent to 20 percent never file an application (Cusick and Nibali 2005).

18 Section 1634(a) of the Social Security Act: The Commissioner of Social Security may enter into an agreement with any State which wishes to do so under which the Commissioner will determine eligibility for medical assistance in the case of aged, blind, or disabled individuals under such State’s plan approved under title XIX. Any such agreement shall provide for payments by the State, for use by the Commissioner of Social Security in carrying out the agreement, of an amount equal to one-half of the cost of carrying out the agreement, but in computing such cost with respect to individuals eligible for benefits under this title, the Commissioner of Social Security shall include only those costs which are additional to the costs incurred in carrying out this title.

19 Many other states have developed applications that permit beneficiaries to “self-declare” their income or asset data while the state uses data match systems to verify the figures. Examples include Arizona, Arkansas, Connecticut, Hawaii, Minnesota, North Dakota, Rhode Island, Texas, Vermont, and Washington (Tiedemann and Fox 2004).

20 Overall, MSP enrollment in the six states increased by 170,000 during 2006 (Reinhard 2007).

21 State payments for full dual eligibles account for the vast majority of these costs.

22 QIs are fully federally funded.

23 Any beneficiary enrolled in MSPs is automatically eligible for LIS without regard to income or assets.
References


Commissioners' voting on recommendations
Commissioners’ voting on recommendations

In the Medicare, Medicaid and SCHIP Benefits Improvement and Protection Act of 2000, the Congress required MedPAC to call for individual Commissioner votes on each recommendation and to document the voting record in its report. The information below satisfies that mandate.

Chapter 1: Context for Medicare payment policy

No recommendations

Chapter 2: Assessing payment adequacy and updating payments in fee-for-service Medicare

Section 2A: Hospital inpatient and outpatient services

2A-1 The Congress should increase payment rates for the acute inpatient and outpatient prospective payment systems in 2009 by the projected rate of increase in the hospital market basket index, concurrent with implementation of a quality incentive payment program.

Yes: Behroozi, Bertko, Borman, Castellanos, Crosson, DeParle, Durenberger, Ebeler, Hackbarth, Hansen, Kane, Milstein, Reischauer, Scanlon, Stuart, Wolter
Absent: Dean

2A-2 The Congress should reduce the indirect medical education adjustment in 2009 by 1 percentage point to 4.5 percent per 10 percent increment in the resident-to-bed ratio. The funds obtained by reducing the indirect medical education adjustment should be used to fund a quality incentive payment program.

Yes: Behroozi, Bertko, Borman, Castellanos, Crosson, DeParle, Durenberger, Ebeler, Hackbarth, Hansen, Kane, Milstein, Reischauer, Scanlon, Stuart, Wolter
Absent: Dean
**Section 2B: Physician services**

The Congress should update payments for physician services in 2009 by the projected change in input prices less the Commission’s adjustment for productivity growth. The Congress should enact legislation requiring CMS to establish a process for measuring and reporting physician resource use on a confidential basis for a period of two years.

Yes: Behroozi, Bertko, Borman, DeParle, Durenberger, Ebeler, Hackbarth, Hansen, Kane, Milstein, Reischauer, Scanlon, Stuart  
No: Castellanos, Wolter  
Not voting: Crosson  
Absent: Dean

**Section 2C: Outpatient dialysis services**

The Congress should update the composite rate in calendar year 2009 by the projected rate of increase in the end-stage renal disease market basket index less the Commission’s adjustment for productivity growth. The Commission reiterates its recommendation that the Congress implement a quality incentive program for physicians and facilities that treat dialysis patients.

Yes: Behroozi, Bertko, Borman, Castellanos, Crosson, DeParle, Durenberger, Ebeler, Hackbarth, Hansen, Kane, Milstein, Reischauer, Scanlon, Stuart, Wolter  
Absent: Dean

**Section 2D: Skilled nursing facility services**

2D-1 The Congress should eliminate the update to payment rates for skilled nursing facility services for fiscal year 2009.

Yes: Behroozi, Bertko, Borman, Castellanos, Crosson, DeParle, Durenberger, Ebeler, Hackbarth, Hansen, Kane, Reischauer, Scanlon, Stuart, Wolter  
Absent: Dean, Milstein

2D-2 The Congress should establish a quality incentive payment policy for skilled nursing facilities in Medicare.

Yes: Behroozi, Castellanos, Crosson, DeParle, Ebeler, Hackbarth, Hansen, Kane, Reischauer, Stuart  
No: Bertko, Durenberger, Scanlon  
Not voting: Borman, Wolter  
Absent: Dean, Milstein
To improve quality measurement for skilled nursing facilities, the Secretary should:

- add the risk-adjusted rates of potentially avoidable rehospitalizations and community discharge to its publicly reported post-acute care quality measures;
- revise the pain, pressure ulcer, and delirium measures currently reported on CMS’s Nursing Home Compare website; and
- require skilled nursing facilities to conduct patient assessments at admission and discharge.

Yes: Behroozi, Bertko, Borman, Castellanos, Crosson, DeParle, Durenberger, Ebeler, Hackbarth, Hansen, Kane, Reischauer, Scanlon, Stuart, Wolter
Absent: Dean, Milstein

**Section 2E: Home health services**

The Congress should eliminate the update to payment rates for home health care services for calendar year 2009.

Yes: Behroozi, Bertko, Borman, Castellanos, Crosson, DeParle, Durenberger, Ebeler, Hackbarth, Hansen, Kane, Milstein, Reischauer, Scanlon, Stuart, Wolter
Absent: Dean

**Section 2F: Inpatient rehabilitation facility services**

The update to the payment rates for inpatient rehabilitation facility services should be eliminated for fiscal year 2009.

Yes: Behroozi, Bertko, Borman, Castellanos, Crosson, DeParle, Durenberger, Ebeler, Hackbarth, Hansen, Kane, Milstein, Reischauer, Scanlon, Stuart, Wolter
Absent: Dean

**Section 2G: Long-term care hospital services**

The Secretary should update payment rates for long-term care hospitals for rate year 2009 by the projected rate of increase in the rehabilitation, psychiatric, and long-term care hospital market basket index less the Commission’s adjustment for productivity growth.

Yes: Behroozi, Bertko, Borman, Castellanos, Crosson, DeParle, Durenberger, Ebeler, Hackbarth, Hansen, Kane, Milstein, Reischauer, Scanlon, Stuart, Wolter
Absent: Dean
Chapter 3: Update on the Medicare Advantage program

3-1 The Congress should require the Secretary to establish additional, tailored performance measures for special needs plans and evaluate their performance on those measures within three years.

Yes: Behroozi, Bertko, Borman, Castellanos, Crosson, Dean, DeParle, Durenberger, Ebeler, Hackbarth, Hansen, Kane, Milstein, Reischauer, Scanlon, Stuart, Wolter

3-2 The Secretary should furnish beneficiaries and their counselors with information on special needs plans that compares their benefits, other features, and performance with other Medicare Advantage plans and traditional Medicare.

Yes: Behroozi, Bertko, Borman, Castellanos, Crosson, Dean, DeParle, Durenberger, Ebeler, Hackbarth, Hansen, Kane, Milstein, Reischauer, Scanlon, Stuart, Wolter

3-3 The Congress should direct the Secretary to require chronic condition special needs plans to serve only beneficiaries with complex chronic conditions that influence many other aspects of health, have a high risk of hospitalization or other significant adverse health outcomes, and require specialized delivery systems.

Yes: Behroozi, Bertko, Borman, Castellanos, Crosson, Dean, DeParle, Durenberger, Ebeler, Hackbarth, Hansen, Kane, Milstein, Reischauer, Scanlon, Stuart, Wolter

3-4 The Congress should require dual-eligible special needs plans within three years to contract, either directly or indirectly, with states in their service areas to coordinate Medicaid benefits.

Yes: Behroozi, Bertko, Borman, Castellanos, Crosson, Dean, DeParle, Durenberger, Ebeler, Hackbarth, Hansen, Kane, Milstein, Reischauer, Scanlon, Stuart, Wolter

3-5 The Congress should require special needs plans to enroll at least 95 percent of their members from their target population.

Yes: Behroozi, Bertko, Borman, Castellanos, Crosson, Dean, DeParle, Durenberger, Ebeler, Hackbarth, Hansen, Milstein, Reischauer, Scanlon, Stuart, Wolter

Not voting: Kane

3-6 The Congress should eliminate dual-eligible and institutionalized beneficiaries’ ability to enroll in Medicare Advantage plans, except special needs plans with state contracts, outside of open enrollment. They should also continue to be able to disenroll and return to fee-for-service at any time during the year.

(Note: This recommendation includes a two-word, technical correction that Commissioners voted on at their January meeting. That vote was 14 yes and 3 absent.)

Yes: Behroozi, Bertko, Borman, Castellanos, Crosson, Dean, DeParle, Durenberger, Ebeler, Hackbarth, Hansen, Kane, Milstein, Reischauer, Scanlon, Stuart, Wolter

3-7 The Congress should extend the authority for special needs plans that meet the conditions specified in Recommendations 3-1 through 3-6 for three years.

Yes: Behroozi, Bertko, Borman, Castellanos, Crosson, Dean, DeParle, Durenberger, Ebeler, Hackbarth, Hansen, Kane, Milstein, Reischauer, Scanlon, Stuart, Wolter
Chapter 4: Part D enrollment, benefit offerings, and plan payments

The Congress should direct the Secretary to make Part D claims data available regularly and in a timely manner to congressional support agencies and selected executive branch agencies for purposes of program evaluation, public health, and safety.

Yes:  Behroozi, Bertko, Borman, Castellanos, Crosson, Dean, DeParle, Durenberger, Ebeler, Hackbarth, Hansen, Kane, Milstein, Reischauer, Scanlon, Stuart, Wolter

Chapter 5: Increasing participation in the Medicare Savings Programs and the low-income drug subsidy

5-1 The Secretary should increase State Health Insurance Assistance Program funding for outreach to low-income Medicare beneficiaries.

Yes:  Behroozi, Bertko, Borman, Castellanos, Crosson, Dean, DeParle, Durenberger, Ebeler, Hackbarth, Hansen, Kane, Reischauer, Scanlon, Stuart, Wolter

Absent: Milstein

5-2 The Congress should raise Medicare Savings Program income and asset criteria to conform to low-income drug subsidy criteria.

Yes:  Behroozi, Bertko, Borman, Castellanos, Crosson, Dean, DeParle, Durenberger, Ebeler, Hackbarth, Hansen, Kane, Reischauer, Scanlon, Stuart, Wolter

Absent: Milstein

5-3 The Congress should change program requirements so that Social Security Administration screens low-income drug subsidy applicants for federal Medicare Savings Program eligibility and enrolls them if they qualify.

Yes:  Behroozi, Bertko, Borman, Castellanos, Crosson, Dean, DeParle, Durenberger, Ebeler, Hackbarth, Hansen, Kane, Reischauer, Scanlon, Stuart, Wolter

Absent: Milstein
Acronyms
## Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACE</td>
<td>angiotensin-converting enzyme</td>
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<tr>
<td>ADL</td>
<td>activity of daily living</td>
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<td>AHA</td>
<td>American Hospital Association</td>
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<tr>
<td>AHRQ</td>
<td>Agency for Healthcare Research and Quality</td>
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<td>ALOS</td>
<td>average length of stay</td>
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<tr>
<td>AMA</td>
<td>American Medical Association</td>
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<tr>
<td>AMI</td>
<td>acute myocardial infarction</td>
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<tr>
<td>APC</td>
<td>ambulatory payment classification</td>
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<td>ARB</td>
<td>angiotensin receptor blocker</td>
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<tr>
<td>ASP</td>
<td>average sales price</td>
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<tr>
<td>AV</td>
<td>arteriovenous</td>
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<tr>
<td>BBA</td>
<td>Balanced Budget Act of 1997</td>
</tr>
<tr>
<td>BEA</td>
<td>Bureau of Economic Analysis</td>
</tr>
<tr>
<td>BETOS</td>
<td>Berenson-Eggers Type of Service</td>
</tr>
<tr>
<td>BoA</td>
<td>Banc of America</td>
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<tr>
<td>CABG</td>
<td>coronary artery bypass graft</td>
</tr>
<tr>
<td>CAD</td>
<td>coronary artery disease</td>
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<tr>
<td>CAH</td>
<td>critical access hospital</td>
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<tr>
<td>CAHPS®</td>
<td>Consumer Assessment of Healthcare Providers and Systems</td>
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<tr>
<td>CAHPS®–FFS</td>
<td>Consumer Assessment of Healthcare Providers and Systems for Medicare fee-for-service</td>
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<tr>
<td>CAPD</td>
<td>continuous ambulatory peritoneal dialysis</td>
</tr>
<tr>
<td>CBO</td>
<td>Congressional Budget Office</td>
</tr>
<tr>
<td>CC</td>
<td>complication or comorbidity</td>
</tr>
<tr>
<td>CCP</td>
<td>coordinated care plan</td>
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<tr>
<td>CCPD</td>
<td>continuous cyclo-assisted peritoneal dialysis</td>
</tr>
<tr>
<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
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<tr>
<td>CHF</td>
<td>congestive heart failure</td>
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<tr>
<td>CMI</td>
<td>case-mix index</td>
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<tr>
<td>CMS</td>
<td>Centers for Medicare &amp; Medicaid Services</td>
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<tr>
<td>COPD</td>
<td>chronic obstructive pulmonary disease</td>
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<tr>
<td>CR</td>
<td>continuous release</td>
</tr>
<tr>
<td>CT</td>
<td>computed tomography</td>
</tr>
<tr>
<td>CU</td>
<td>consumer unit</td>
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<td>DEL</td>
<td>Drugs for the Elderly and Disabled Program</td>
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<tr>
<td>DRA</td>
<td>Deficit Reduction Act of 2005</td>
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<tr>
<td>DRG</td>
<td>diagnosis related group</td>
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<tr>
<td>DSH</td>
<td>disproportionate share</td>
</tr>
<tr>
<td>DVT</td>
<td>deep vein thrombosis</td>
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<tr>
<td>E&amp;M</td>
<td>evaluation and management</td>
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<td>EGHP</td>
<td>employer group health plan</td>
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<tr>
<td>ESA</td>
<td>erythropoiesis-stimulating agent</td>
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<td>ESRD</td>
<td>end-stage renal disease</td>
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<td>FDA</td>
<td>Food and Drug Administration</td>
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<tr>
<td>FEHB</td>
<td>Federal Employees Health Benefits [Program]</td>
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<td>FFS</td>
<td>fee-for-service</td>
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<tr>
<td>FIM™</td>
<td>Functional Independence Measure™</td>
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<tr>
<td>FY</td>
<td>fiscal year</td>
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<tr>
<td>g/dl</td>
<td>grams per deciliter</td>
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<td>GAO</td>
<td>Government Accountability Office</td>
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<tr>
<td>GDP</td>
<td>gross domestic product</td>
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<tr>
<td>GPCI</td>
<td>geographic practice cost index</td>
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<tr>
<td>HbA₁c</td>
<td>hemoglobin A₁c</td>
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<tr>
<td>HCA</td>
<td>Hospital Corporation of America</td>
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<td>HCFA</td>
<td>Health Care Financing Administration</td>
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<td>HCl</td>
<td>hydrochloride</td>
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<td>HCPCS</td>
<td>Healthcare Common Procedure Coding System</td>
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<td>HDHP</td>
<td>high-deductible health plan</td>
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<td>HEDIS®</td>
<td>Healthcare Effectiveness Data and Information Set</td>
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<td>HFMA</td>
<td>Healthcare Financial Management Association</td>
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<td>HHA</td>
<td>home health agency</td>
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<td>HHRG</td>
<td>home health resource group</td>
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<tr>
<td>HHS</td>
<td>Department of Health and Human Services</td>
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<tr>
<td>HI</td>
<td>Hospital Insurance (Medicare Part A)</td>
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<td>HMO</td>
<td>health maintenance organization</td>
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<tr>
<td>HOS</td>
<td>Health Outcomes Survey</td>
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<td>HRET</td>
<td>Health Research and Educational Trust</td>
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<td>HSA</td>
<td>health savings account</td>
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<td>HSAG</td>
<td>Health Services Advisory Group</td>
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<tr>
<td>HSC</td>
<td>Center for Studying Health System Change</td>
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<td>HUD</td>
<td>Department of Housing and Urban Development</td>
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<tr>
<td>HWH</td>
<td>hospital within hospital</td>
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<tr>
<td>IDPN</td>
<td>intradialytic parenteral nutrition</td>
</tr>
<tr>
<td>IME</td>
<td>indirect medical education</td>
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<tr>
<td>IOM</td>
<td>Institute of Medicine</td>
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<tr>
<td>IPAA</td>
<td>intraperitoneal amino acids</td>
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<tr>
<td>IPPS</td>
<td>inpatient prospective payment system</td>
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<tr>
<td>IRF</td>
<td>inpatient rehabilitation facility</td>
</tr>
<tr>
<td>IRF–PAI</td>
<td>Inpatient Rehabilitation Facility–Patient Assessment Instrument</td>
</tr>
<tr>
<td>IT</td>
<td>information technology</td>
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<tr>
<td>LDL–C</td>
<td>low-density lipoprotein cholesterol</td>
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<tr>
<td>LDO</td>
<td>largest dialysis organization</td>
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</table>
**Acronyms**

- **LIS**: low-income [drug] subsidy
- **LTC–DRG**: long-term care diagnosis related group
- **LTCH**: long-term care hospital
- **MA**: Medicare Advantage
- **MACIE**: Medicare Ambulatory Care Indicators for the Elderly
- **MAGI**: modified adjusted gross income
- **MA–PD**: Medicare Advantage–Prescription Drug [plan]
- **MCBS**: Medicare Current Beneficiary Survey
- **MDH**: Medicare-dependent hospital
- **MDS**: Minimum Data Set
- **MedPAC**: Medicare Payment Advisory Commission
- **MedPAR**: Medicare Provider Analysis and Review [file]
- **MEI**: Medicare Economic Index
- **mg**: milligrams
- **MIS**: minimally invasive surgery
- **ml**: milliliters
- **MMA**: Medicare Prescription Drug, Improvement, and Modernization Act of 2003
- **MMSEA**: Medicare, Medicaid, and SCHIP Extension Act of 2007
- **MRI**: magnetic resonance imaging
- **MS**: Medicare severity
- **MSA**: medical savings account
- **MS–DRG**: Medicare severity diagnosis related group
- **MS–LTC–DRG**: Medicare severity long-term care diagnosis related group
- **MSP**: Medicare Savings Program
- **N/A**: not applicable
- **N/A**: not available
- **NAMCS**: National Ambulatory Medical Care Survey
- **NCQA**: National Committee for Quality Assurance
- **NDC**: national drug code
- **NIC**: National Investment Center
- **NIDDK**: National Institute of Diabetes and Digestive and Kidney Diseases
- **NKF**: National Kidney Foundation
- **NORC**: (formerly) National Opinion Research Center
- **NR**: not reported
- **NSAID**: nonsteroidal anti-inflammatory drug
- **NTA**: nontherapy ancillary
- **OACT**: Office of the Actuary
- **OASIS**: Outcome and Assessment Information Set
- **OECD**: Organisation for Economic Co-operation and Development
- **OEP**: open enrollment period
- **OEPI**: open enrollment period for institutionalized individuals
- **OIG**: Office of Inspector General
- **OMB**: Office of Management and Budget
- **OSCAR**: Online Survey, Certification, and Reporting [system]
- **P4P**: pay for performance
- **PAC**: post-acute care
- **PACE**: Program of All-Inclusive Care for the Elderly
- **PDP**: prescription drug plan
- **PE**: practice expense
- **PE**: pulmonary embolism
- **PFFS**: private fee-for-service
- **PHI**: private health insurance
- **PPO**: preferred provider organization
- **PPRC**: Physician Payment Review Commission
- **PPS**: prospective payment system
- **ProPAC**: Prospective Payment Assessment Commission
- **PSI**: patient safety indicator
- **PUF**: public use file
- **QI**: Qualifying Individual
- **QIO**: quality improvement organization
- **QMB**: Qualified Medicare Beneficiary
- **RAC**: recovery audit contractor
- **RDS**: retiree drug subsidy
- **RN**: registered nurse
- **RTI**: Research Triangle Institute
- **RUC**: Relative Value Scale Update Committee
- **RUG**: resource utilization group
- **RUG–III**: resource utilization group, version III
- **RVU**: relative value unit
- **S&P**: Standard & Poor’s
- **SCHIP**: State Children’s Health Insurance Program
- **SGR**: sustainable growth rate
- **SHIP**: State Health Insurance Assistance Program
- **SLMB**: Specified Low-income Medicare Beneficiary
- **SMI**: Supplementary Medical Insurance
- **SNF**: skilled nursing facility
- **SNP**: special needs plan
- **SOHCQ**: State of Health Care Quality [report]
- **SPAP**: State Pharmacy Assistance Program
- **SSA**: Social Security Administration
- **SSI**: Supplemental Security Income
- **SSO**: short-stay outlier
- **TBS**: Targeted Beneficiary Survey
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Name</th>
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<tbody>
<tr>
<td>TEFRA</td>
<td>Tax Equity and Fiscal Responsibility Act of 1982</td>
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<tr>
<td>TEP</td>
<td>technical expert panel</td>
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<tr>
<td>TRHCA</td>
<td>Tax Relief and Health Care Act of 2006</td>
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<td>UPIN</td>
<td>Unique Physician Identification Number</td>
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<td>USP</td>
<td>the U.S. Pharmacopeia</td>
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<td>USRDS</td>
<td>United States Renal Data System</td>
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<td>VA</td>
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Term expires April 2008

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Commissioners’ biographies

**Mitra Behroozi, J.D.,** is the executive director of 1199SEIU Benefit and Pension Funds. Ms. Behroozi oversees eight major benefit and pension funds for health care workers. Collectively, the funds are among the largest in the nation. 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. Ms. Behroozi has a law degree from New York University and an undergraduate degree in sociology from Brown University.

**John M. Bertko, F.S.A., M.A.A.A.,** serves as adjunct staff at RAND and as a visiting scholar at the Brookings Institution. He recently retired as the chief actuary for Humana Inc., where he managed the corporate actuarial group and coordinated the work of actuaries on Medicare Advantage, Part D, and consumer-directed health care products. Mr. Bertko has extensive experience with risk adjustment and has served in several public policy advisory roles, including design of prescription drug programs. He is also a member of the panel of health advisors of the Congressional Budget Office. He served the American Academy of Actuaries as a board member from 1994 to 1996 and as vice president for the health practice area from 1995 to 1996. He was a member of the Actuarial Board for Counseling and Discipline from 1996 through 2002. Mr. Bertko is a fellow of the Society of Actuaries and a member of the American Academy of Actuaries. He has a B.S. in mathematics from Case Western Reserve University.

**Karen R. Borman, M.D.,** is a professor of surgery and vice-chair for surgical education at the University of Mississippi Medical Center. She is a member of the American College of Surgeons’ General Surgery Coding & Reimbursement Committee and is on the board of directors of the American Board of Surgery. Dr. Borman was a member of the executive committee and vice-chair of the American Medical Association’s Current Procedural Terminology editorial panel. Dr. Borman frequently works with the Centers for Medicare & Medicaid Services on issues related to physician payment. She also has served in various positions at the American Association of Endocrine Surgeons, the Association for Academic Surgery, the Association of Program Directors in Surgery, and the Association for Surgical Education. Dr. Borman earned her medical degree from Tulane University. Her undergraduate degree in chemistry is from the Georgia Institute of Technology.

**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 last 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.

**Francis J. Crosson, M.D.,** is senior medical director of the Permanente Federation of medical groups that make up the physician component of Kaiser Permanente. He joined Kaiser Permanente in 1977. In 1988 he was appointed associate executive director of the Permanente Medical Group. He was the founder and executive director of the Federation from 1997 to 2007. He also has experience with prescription drug arrangements and has led efforts on comprehensive public report cards on clinical quality, management of a drug formulary, and adoption of a state-of-the-art electronic medical record. He serves on the boards of the California Medical Association Foundation, the American Medical Group Foundation, and the Advisory Board of the Mayo Health Policy Institute. Dr. Crosson received his undergraduate degree in political science from Georgetown University and his M.D. degree from Georgetown’s School of Medicine.

**Thomas M. Dean, M.D.,** is a board-certified family physician who has practiced in Wessington Springs, South Dakota, for 28 years. He is chief of staff at Avera Weskota Memorial Medical Center. Dr. Dean is on the board of directors of Avera Health Plan, the Bush Foundation Medical Fellowship, and 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. Dr. Dean earned his
medical degree from the University of Rochester School of Medicine and Dentistry. His undergraduate degree is from Carleton College.

Nancy-Anne DeParle, J.D., is managing director of CCMP Capital Advisors, LLC, and adjunct professor of health care systems at the Wharton School of the University of Pennsylvania. From 1997 to 2000, she served as administrator of the Health Care Financing Administration (HCFA), which is now the Centers for Medicare & Medicaid Services. Before joining HCFA, Ms. DeParle was associate director for health and personnel at the White House Office of Management and Budget. From 1987 to 1989 she served as the Tennessee Commissioner of Human Services. She has also worked as a lawyer in private practice in Nashville, TN, and Washington, DC. She is a trustee of the Robert Wood Johnson Foundation and a board member of Cerner Corporation, CareMore Health Plan, Noble Environmental, DaVita, and Boston Scientific. Ms. DeParle received a B.A. degree from the University of Tennessee; B.A. and M.A. degrees from Oxford University, where she was a Rhodes Scholar; and a J.D. degree from Harvard Law School.

David F. Durenberger, J.D., is president of Policy Insight, LLC; senior health policy fellow at the University of St. Thomas in Minneapolis, MN; and chairman of the National Institute of Health Policy. He is also president of the Medical Technology Leadership Forum, a member of the Kaiser Foundation Commission on Medicaid and the Uninsured, the Board of the National Committee for Quality Assurance, and the National Commission for Quality Long Term Care. From 1978 to 1995, he served as the senior U.S. Senator from Minnesota, as a member of the Senate Finance Committee, and chairman of its health subcommittee. He was a member of the Senate Environment Committee; Government Affairs Committee; and the committee now known as the Health, Education, Labor, and Pensions Committee. He chaired the Senate Select Committee on Intelligence. Senator Durenberger is a graduate of St. John’s University, received his J.D. degree from the University of Minnesota, and served as an officer in the U.S. Army.

Jack C. Ebeler, M.P.A., is a consultant in health care policy, focusing on federal policy and the changing health care marketplace. Previously, he served as president and CEO of the Alliance of Community Health Plans. Prior to that, Mr. Ebeler was senior vice president and director of the health care group at the Robert Wood Johnson Foundation, where he focused on the uninsured, health care quality, and chronic care issues. Mr. Ebeler served as deputy assistant secretary for planning and evaluation for health and as acting assistant secretary for planning and evaluation at the U.S. Department of Health and Human Services. Over the years, he has also held positions in the health care industry and on Capitol Hill. Mr. Ebeler serves on the health care services boards of the Institute of Medicine and Inova Health System in Virginia. He is also on the boards of directors of Families USA and the National Academy of Social Insurance. Mr. Ebeler holds an M.P.A. from the John F. Kennedy School of Government at Harvard University and his undergraduate degree is from Dickinson College.

Glenn M. Hackbarts, J.D., chairman of the Commission, lives in Bend, OR. He has experience as a health care executive, government official, and policy analyst. 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. Hackbarts previously served as senior vice president of Harvard Community Health Plan. From 1981 to 1988, he held positions at the U.S. Department of Health and Human Services, including deputy administrator of the Health Care Financing Administration. He currently serves on the Board of the National Committee for Quality Assurance and is a member of The Commonwealth Fund’s Commission on a High Performance Health System. He is also secretary/treasurer of the Foundation of the American Board of Internal Medicine. Mr. Hackbarts received his B.A. from Pennsylvania State University and his M.A. and J.D. from Duke University.

Jennie Chin Hansen, R.N., M.S.N., F.A.A.N., of San Francisco, is president-elect of AARP; a senior fellow at University of California’s Center for the Health Professions; and a part-time nursing faculty member at San Francisco State University. Ms. Hansen was executive director of On Lok Senior Health Services, the prototype for the Program of All Inclusive Care for the Elderly (PACE), which integrates Medicare and Medicaid finances and service delivery and was signed into federal legislation as a provider type in the BBA of 1997. She has practiced and taught nursing in both urban and rural settings. She currently serves in leadership roles with the National Academy of Social Insurance, Lumetra (California’s Quality Improvement Organization), and the Robert Wood Johnson Executive Nurse Fellows Program. Ms. Hansen consults with other foundations on leadership development and independent reviews. She also serves as a board
Robert D. Reischauer, Ph.D., is vice chairman of the Commission and president of The Urban Institute. Previously, he was a senior fellow with the Brookings Institution, and from 1989 to 1995 he was the director of the Congressional Budget Office. Dr. Reischauer currently serves on the boards of the Academy of Political Sciences, the Center on Budget and Policy Priorities, and the Committee for a Responsible Federal Budget. He also is a member of the Institute of Medicine, the National Academy of Public Administration, and Harvard Corporation. Dr. Reischauer received his A.B. degree from Harvard College and his M.I.A. and Ph.D. from Columbia University.

William J. Scanlon, Ph.D., is a senior policy advisor with Health Policy R&D. He is a consultant to the National Health Policy Forum and is a research professor with the Institute for Health Care Research and Policy at Georgetown University. Dr. Scanlon is a member of the National Committee on Vital and Health Statistics. Before his current positions, Dr. Scanlon was the managing director of health care issues at the U.S. Government Accountability Office. Previously, he was co-director of the Center for Health Policy Studies and an associate professor in the Department of Family Medicine at Georgetown University and was a principal research associate in health policy at the Urban Institute. Dr. Scanlon has a Ph.D. in economics from the University of Wisconsin-Madison.

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.

Arnold Milstein, M.D., M.P.H., is the medical director of the Pacific Business Group on Health (PBGH) and the chief physician at Mercer Health & Benefits. PBGH is the largest employer health care purchasing coalition in the U.S. Dr. Milstein’s work and publications focus on private and public sector health care purchasing strategy, clinical performance measurement, and the psychology of clinical performance improvement. He co-founded both the Leapfrog Group and the Consumer–Purchaser Disclosure Project. He heads performance measurement activities for both initiatives. The New England Journal of Medicine’s series on employer-sponsored health insurance described him as a “pioneer” in efforts to advance quality of care. In 2005, he was selected for the highest annual award of the National Business Group on Health (NBGH) for nationally recognized innovation and implementation success in health care cost reduction and quality gain. In 2006, he was elected to the Institute of Medicine. Dr. Milstein has a B.A. in economics from Harvard, an M.D. degree from Tufts University, and an M.P.H. in health services evaluation and planning from the University of California at Berkeley.

Nancy M. Kane, D.B.A., is professor of management in the Department of Health Policy and Management and associate dean of education at the Harvard School of Public Health. Dr. Kane directs the Masters in Healthcare Management Program, an executive leadership program for mid-career physicians leading health care organizations. She has taught health care accounting, payment systems, financial analysis, and competitive strategy. Her research interests include measuring hospital financial performance, quantifying community benefits and the value of tax exemption, the competitive structure and performance of hospital and insurance industries, and nonprofit hospital governance. Professor Kane consults with federal and state agencies involved in health system design, oversight, and payment. She is an outside director of the Urban Medical Group, a nonprofit physician group practice providing care to frail elderly in institutional and home settings, and PatientFlow Technology. Prior to obtaining her business training, she practiced as a hospital-based physical therapist. Dr. Kane earned her masters and doctoral degrees in business administration from Harvard Business School.

Robert D. Reischauer, Ph.D., is vice chairman of the Commission and president of The Urban Institute. Previously, he was a senior fellow with the Brookings Institution, and from 1989 to 1995 he was the director of the Congressional Budget Office. Dr. Reischauer currently serves on the boards of the Academy of Political Sciences, the Center on Budget and Policy Priorities, and the Committee for a Responsible Federal Budget. He also is a member of the Institute of Medicine, the National Academy of Public Administration, and Harvard Corporation. Dr. Reischauer received his A.B. degree from Harvard College and his M.I.A. and Ph.D. from Columbia University.

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Nicholas Wolter, M.D., is a pulmonary and critical care physician who serves as chief executive officer for Billings Clinic in Billings, MT. Billings Clinic is a regional, not-for-profit medical foundation consisting of a multispecialty group practice, tertiary hospital, critical access hospital affiliates, health maintenance organization, research division, and long-term care facility serving a vast rural area in the northern Rockies. Dr. Wolter began his Billings Clinic practice in 1982 and served as medical director of the hospital’s intensive care unit from 1987 to 1993. He began his leadership role with the successful merger of the clinic and hospital in 1993. Dr. Wolter is a diplomate of the American Board of Internal Medicine and serves on the boards of many regional and national health care organizations. He has a B.A. degree from Carleton College, an M.A. degree from the University of Michigan, and an M.D. degree from the University of Michigan Medical School.
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