

CHAPTER

3

**Hospital inpatient and
outpatient services**

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

- 3** The Congress should increase payment rates for the inpatient and outpatient prospective payment systems in 2014 by 1 percent. For inpatient services, the Congress should also require the Secretary of Health and Human Services to use the difference between the statutory update and the recommended 1 percent update to offset increases in payment rates due to documentation and coding changes and to recover past overpayments.

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

Hospital inpatient and outpatient services

Chapter summary

From 2010 to 2011, Medicare payments per fee-for-service beneficiary for inpatient and outpatient services in acute care hospitals (ACHs) grew by 1.6 percent. The 4,800 ACHs paid under the Medicare prospective payment system and critical access payment system received \$158 billion for roughly 10 million Medicare inpatient discharges and 181 million outpatient services.

Assessment of payment adequacy

To evaluate whether aggregate payments were adequate, we consider beneficiaries' access to care, changes in the volume of services provided, hospitals' access to capital, quality of care, and the relationship of Medicare's payments to the average cost of caring for Medicare patients. In addition to examining the costs of the average provider, we compare Medicare payments with the costs of relatively efficient hospitals.

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

- **Capacity and supply of providers**—The number of hospitals and the range of services offered both continue to grow.
- **Volume of services**—From 2004 to 2011, outpatient services per beneficiary grew 34 percent and inpatient admissions declined by 8

In this chapter

- Are Medicare payments adequate in 2013?
- How should Medicare payments change in 2014?

percent due to two factors. First, services continued to shift from inpatient to outpatient settings. Second, hospitals increasingly billed for outpatient services that had previously been billed as services provided in physicians' offices. For example, physician evaluation and management (E&M) visits billed as outpatient services increased by 7 percent in 2010 and 8 percent in 2011. Similarly, outpatient echocardiograms increased by 18 percent in 2011. In 2012, the Commission recommended equalizing E&M payment rates between physicians' office and hospital settings. This change would remove the financial incentive to shift E&M visits from lower cost office visits to higher cost outpatient visits (Medicare Payment Advisory Commission 2012c).

Quality of care—Quality continues to improve on most measures. Hospitals reduced 30-day mortality rates across five prevalent clinical conditions and readmission rates improved slightly from 2008 to 2011. A penalty for above-average readmission rates started in fiscal year 2013. However, it is too soon to know if the penalty will stimulate greater reductions in readmissions.

Providers' access to capital—Access to capital is good due to strong hospital earnings in recent years and low interest rates. Hospitals' level of construction spending remains stable at \$26 billion per year, with a slight decline in bond offerings.

Medicare payments and providers' costs—The overall hospital Medicare margin declined from -4.5 percent in 2010 to -5.8 percent in 2011. The margin declined primarily because CMS reduced inpatient payment rates in 2011 to recover overpayments in 2008 and 2009 due to documentation and coding changes. The result was a slight decline in inpatient payment rates in 2011 and a decline in inpatient revenues. Overall margins declined only 1.3 percentage points in part because of temporary payments for health information technology and other policy changes that increased payments by over \$2 billion in 2011. We project that margins in 2013 will remain roughly equal to 2011 levels. We expect payment rates to grow more slowly than costs and we expect an increase in supplemental Medicare payments to hospitals that achieve meaningful use of electronic medical records, resulting in Medicare margins remaining at roughly -6 percent from 2011 through 2013.

Efficient providers—While Medicare payments are currently less than costs for the average hospital, a key question is whether current Medicare payments are adequate to cover the costs of efficient hospitals. To explore this question, we examined financial outcomes for a set of hospitals that consistently perform relatively well on cost, mortality, and readmission measures. We find that Medicare payments

covered the fully allocated costs of the median efficient hospital, which generated a 2 percent Medicare margin in 2011.

The inpatient payment update recommendation is based on four factors. First, updates must be restrained to maintain pressure to control costs. Second, most payment adequacy indicators (including access to care, quality of care, and access to capital) are positive. Third, hospitals changed their documentation and coding in response to the introduction of Medicare severity–diagnosis related groups in 2008, and the effect of these documentation and coding changes on payments needs to be offset. Fourth, while hospitals’ aggregate Medicare margin is projected to remain at roughly –6 percent, the set of relatively efficient hospitals had a median overall Medicare margin of 2 percent. Balancing these factors, we recommend increasing payment rates for the inpatient and outpatient prospective payment systems in 2014 by 1 percent. In other words, all else being equal, the per case payment a hospital receives in 2014 should be 1 percent higher than it was in 2013. For inpatient services, CMS should use the difference between the 2014 statutory update and the recommended 1 percent increase to offset the costs to the Medicare program from changes in hospitals’ documentation and coding.

Despite negative overall Medicare margins, the Commission also recommends a 1 percent increase in outpatient rates in 2014 for three reasons: First, pressure to constrain costs should be maintained. Second, outpatient volume has grown significantly, by more than 4 percent. Third, hospital outpatient payment rates are already substantially higher than payment rates for similar services in other sectors. This difference in payment rates has contributed to a shift in the site of care from less expensive settings to the hospital setting. Any higher increase in hospital outpatient rates would exacerbate this problem. ■

**TABLE
3-1**

Growth in Medicare inpatient and outpatient spending

Hospital services	2006	2010	2011	Average annual change 2006-2010	Change 2010-2011
Inpatient services					
Total FFS payments (in billions)	\$107	\$117	\$117	2.2%	0.1%
Payments per FFS beneficiary	3,065	3,373	3,340	2.4	-1.0
Outpatient services					
Total FFS payments (in billions)	28	37	41	7.2	10.4
Payments per FFS beneficiary	863	1,178	1,285	8.1	9.1
Inpatient and outpatient services					
Total FFS payments (in billions)	135	154	158	3.3	2.5
Payments per FFS beneficiary	3,928	4,550	4,624	3.7	1.6

Note: FFS (fee-for-service). Reported hospital spending includes all hospitals covered by Medicare’s inpatient prospective payment system as well as critical access hospitals. Maryland hospitals are excluded. Fiscal year 2011 payments include partial imputation to account for hospitals that typically do not submit their cost reports to CMS before CMS makes the most recent year available to the public. Although the number of Medicare beneficiaries grew significantly from 2006 to 2010, the number of FFS beneficiaries declined over that time because of the shift of beneficiaries to the Medicare Advantage program. The number of FFS beneficiaries increased slightly from 2010 to 2011. To calculate payments per beneficiary, we identified populations of beneficiaries eligible for inpatient (Part A) and outpatient (Part B) coverage and excluded enrollees in Maryland.

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

Background

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

Medicare spending on hospitals

In 2011, Medicare paid ACHs approximately \$117 billion for fee-for-service (FFS) inpatient care and \$41 billion for FFS outpatient care (Table 3-1). Acute inpatient and outpatient services represented more than 92 percent of Medicare FFS spending on ACHs. From 2010 to 2011, Medicare inpatient spending per FFS beneficiary—including spending at critical access hospitals (CAHs)—decreased by 1 percent, and outpatient spending per FFS beneficiary grew 9.1 percent. The decline in inpatient payments reflects a shift in the site of services to OPDs

and a slight decline in inpatient payment rates from 2010 to 2011.

Medicare’s payment systems for inpatient and outpatient services

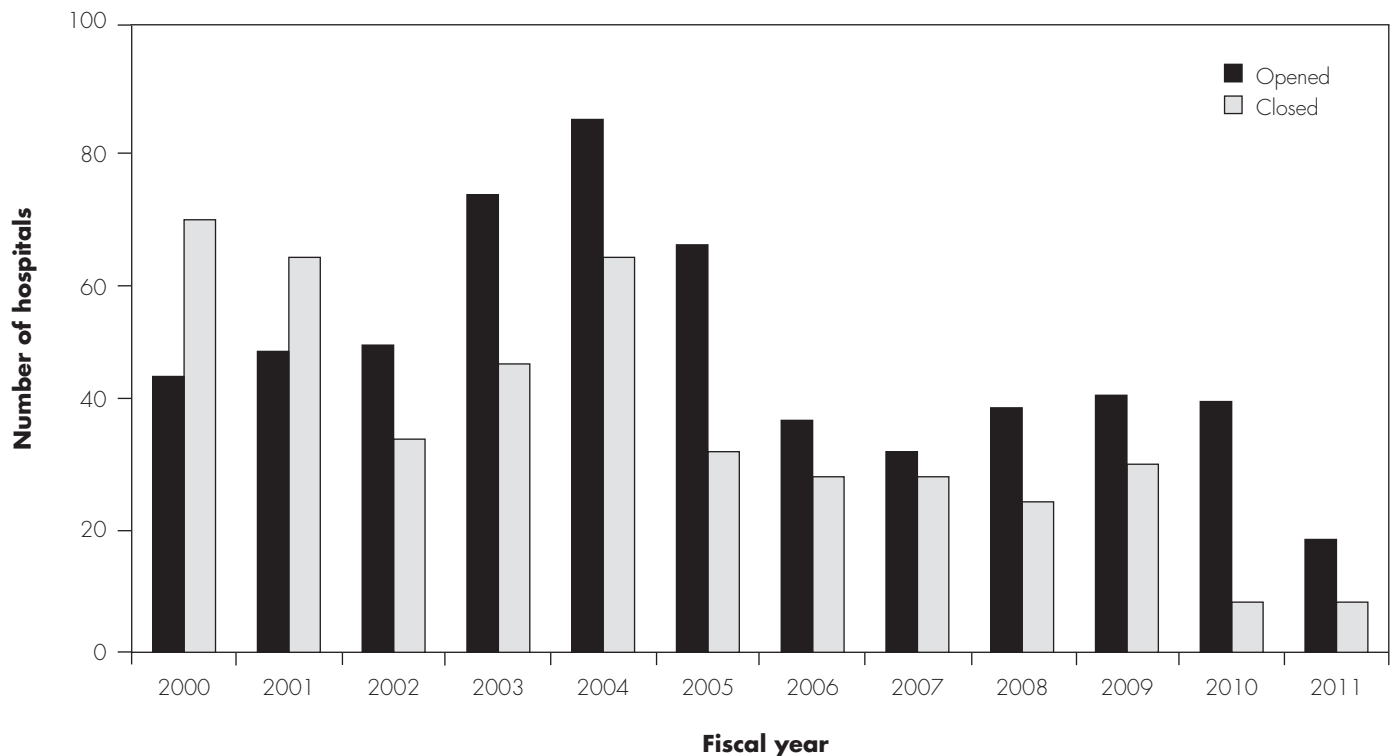
Medicare’s inpatient prospective payment system (IPPS) and its outpatient prospective payment system (OPPS) have a similar basic structure. Each has a base rate modified for the differences in type of case or service, as well as geographic differences in wages. However, each PPS has different units of service and a different set of payment adjustments.

Acute inpatient payment system

Medicare’s IPPS pays ACHs a predetermined amount for most admissions. The payment rate is the product of a base payment rate and a relative weight that reflects the expected costliness of cases in a particular clinical category compared with the average of all cases. The labor-related portion of the base payment rate is adjusted by a hospital geographic wage index to account for differences in area wages, and adjustments are made for hospitals that train residents or serve large numbers of low-income patients. Payment rates are updated annually.

**FIGURE
3-1**

More hospitals opened than closed in the last 10 years



Note: "Hospital" refers to general short-term acute care hospitals. MedPAC's reported number of open and closed hospitals can change from year to year based on hospitals that enter Medicare as an acute care facility and later convert to a more specialized type of facility, such as a long-term care hospital or critical access hospital.

Source: MedPAC analysis of Medicare provider of service file, inpatient prospective payment system final rule impact file, and hospital cost reports.

To set inpatient payment rates, CMS uses a clinical categorization system called Medicare severity–diagnosis related groups (MS–DRGs). The MS–DRG system (which replaced the prior DRG system in 2008) classifies patient cases in one of 750 groups, which reflect similar principal diagnoses, procedures, and severity levels. The severity levels are determined according to whether patients have a complication or comorbidity (CC) associated with the base DRG (no CC, a nonmajor CC, or a major CC). A more detailed description of the acute IPPS, including payment adjustments, can be found at http://www.medpac.gov/documents/MedPAC_Payment_Basics_12_hospital.pdf.

Hospital outpatient payment system

The OPSS pays hospitals a predetermined amount per service. CMS assigns each outpatient service to one of approximately 850 ambulatory payment classification (APC) groups. Each APC has a relative weight based on its median cost of service compared with the median cost of a midlevel clinic visit. A conversion factor translates

relative weights into dollar payment amounts. A more detailed description of the OPSS can be found at http://www.medpac.gov/documents/MedPAC_Payment_Basics_12_OPD.pdf.

Are Medicare payments adequate in 2013?

To judge whether payments for 2013 are adequate to cover the costs that efficient hospitals incur, we examine several indicators of payment adequacy. We consider beneficiaries' access to care, hospitals' access to capital, changes in the quality of care, and the relationship of Medicare's payments to hospitals' costs for both average and relatively efficient hospitals. Most of our payment adequacy indicators for hospitals are positive, but on average, margins on Medicare patients remain negative for most hospitals.

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

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

More hospitals opened than closed

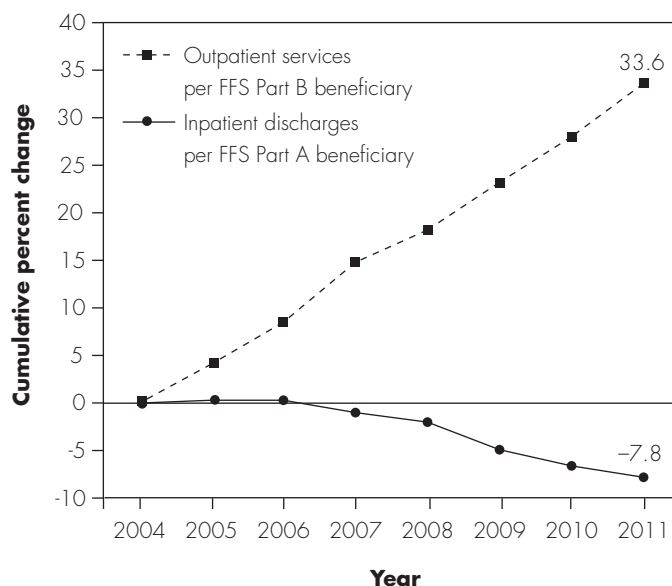
In 2011, 18 ACHs opened and 8 closed (Figure 3-1). For the 10th consecutive year, hospital openings exceeded closings.¹ Overall, approximately 4,800 short-term ACHs participated in the Medicare program in 2011. Of them, 1,329 were CAHs (Flex Monitoring Team 2012).

Hospitals that entered the Medicare program in 2011 were generally the same size as those that left the program. The 18 hospitals that entered the program in 2011 had 98 beds on average, representing approximately 1,800 new acute care beds. All but two of these hospitals opened in urban areas, and slightly more than half were nonprofit hospitals. Four of the hospitals that entered the program opened in Florida, three opened in California, and the remaining hospitals were dispersed across the country. In earlier years, many new entrants appeared to be specialty hospitals, but in 2011 most were small or mid-sized hospitals offering a slightly broader range of services. This shift reflects the new rules enacted in 2010 as part of the Patient Protection and Affordable Care Act of 2010 (PPACA), which prohibited physicians from referring patients to new physician-owned hospitals in which they were investors.

The eight hospitals that exited the program in 2011 were similar in size and geographic location. With an average size of 85 beds, the exit of these hospitals amounted to roughly 700 closed acute care beds. Six closures occurred in urban locations and two in rural locations. For most of these facilities, we observed a decline in their total (all-payer) margins over each of the last three years, which were less than -10 percent in one or more of the years between 2008 and 2010. These hospitals had an average inpatient occupancy rate of 37 percent, significantly lower than the national average of approximately 60 percent. Although the shares of Medicaid patients varied across each of these hospitals over their last three years of service, their share of Medicaid inpatient admissions generally increased. In addition, hospitals that closed were

FIGURE 3-2

Medicare inpatient discharges per beneficiary declined as outpatient visits per beneficiary increased



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

Source: Medicare hospital cost reports and Medicare outpatient claims data.

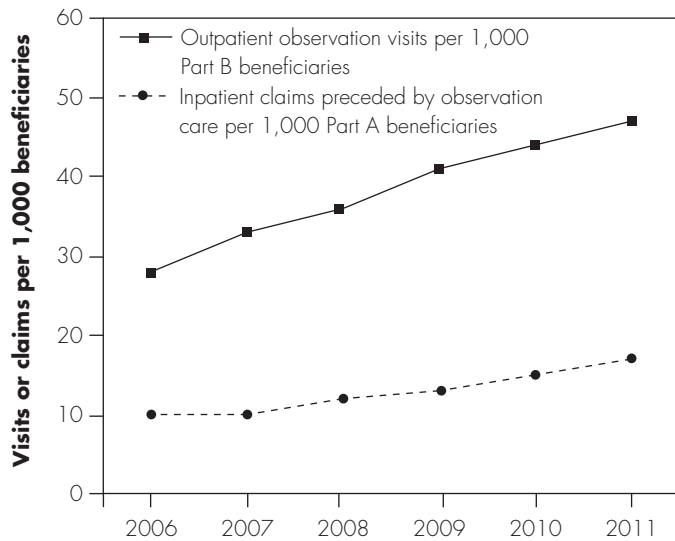
located an average of six miles from the nearest hospital, and the average occupancy rate of that hospital was typically 15 to 20 percentage points higher.

Volume of services: Inpatient declines as outpatient grows

The shift of services from the inpatient to the outpatient setting continued in 2011. To examine changes in volume in the two settings, we used the number of admissions per FFS beneficiary as an indicator of inpatient volume and the number of services per beneficiary to measure outpatient volume. In 2011, Medicare inpatient admissions per FFS beneficiary declined 1.3 percent per Part A beneficiary and had a cumulative reduction of 7.8 percent from 2004 to 2011 (Figure 3-2).² The decline in inpatient admissions occurred while outpatient volume increased by 4.4 percent per Part B beneficiary from 2010 to 2011 and by 33.6 percent cumulatively from 2004 to 2011. This shift in the site of service from inpatient to outpatient settings occurred across all types of insurance (American Hospital Association 2011). In particular, surgeries shifted from inpatient to outpatient settings. From 2010 to 2011,

**FIGURE
3-3**

Number of Medicare outpatient observation visits and inpatient claims preceded by observation care per 1,000 beneficiaries increased from 2006 to 2011



Source: Medicare hospital cost reports and Medicare outpatient claims data.

hospital surgical discharges declined 3.8 percent per beneficiary, compared with a decline in medical discharges of less than 0.5 percent per beneficiary. From 2005 to 2011, inpatient surgical discharges declined nearly 17 percent per beneficiary, or 3 percent per year, compared with the decline in inpatient medical discharges of 7 percent per beneficiary, or 1 percent per year.

The rate of decline in inpatient discharges also differed depending on the location and size of the hospital. While inpatient discharges declined in the aggregate, a more rapid decline occurred in small rural hospitals from 2005 to 2011. For the same cohort of hospitals over this period, inpatient discharges declined 7 percent at urban hospitals and 18 percent at rural hospitals. The drop in inpatient discharges was most pronounced for the smallest rural hospitals (those with less than 100 beds), declining approximately 21 percent.

As services shifted from inpatient to OPDs, hospital inpatient occupancy rates declined. From 2006 to 2010, the average hospital bed occupancy rate declined slightly from 64 percent to 62 percent despite a decrease during this period in the number of available beds, from 2.8 beds to 2.7 beds per 1,000 people.³ Occupancy rates vary widely across markets, suggesting that the level of

excess capacity varies by market. For example, in 2010 Washington State had 1.8 beds per 1,000 people and an average occupancy of 69 percent in Seattle. By contrast, West Virginia had an average 4.0 beds per 1,000 people and an average occupancy of 50 percent in Charlestown. Nationally, the decline in occupancy rates suggests that, on average, there is no need to expand the number of hospital beds despite population growth.

The volume of observation visits is increasing. Between 2006 and 2011, observation visits increased from 28 visits per 1,000 Part B beneficiaries to approximately 47 visits per 1,000, a nearly 65 percent increase in visits over the period (Figure 3-3).⁴ It appears that at least some of these outpatient observation visits would have been short inpatient stays in the past; during the corresponding time period (2006 to 2011), the number of inpatient stays lasting one day declined by more than 15 percent. Despite the reduction in one-day stays, the average Medicare length of inpatient stay declined between 2006 and 2011 from 4.9 days to 4.7 days due to a decline in longer inpatient stays. Over the same period, the number of inpatient claims preceded by an observation visit, which is bundled with inpatient claims, increased from approximately 10 claims to 17 claims per 1,000 Part A beneficiaries, a 70 percent increase.

Services shift from physicians' offices to outpatient departments

Another factor contributing to the growth of outpatient services is the shift in services from a freestanding physician's office to an office that is deemed part of a hospital's OPD. For example, evaluation and management (E&M) visits per beneficiary in hospital OPDs grew by 7 percent from 2009 to 2010 and 8 percent from 2010 to 2011, compared with a 1 percent decline in these visits at physicians' offices between 2009 and 2011. Growth was particularly strong in cardiac testing in outpatient departments. Echocardiograms (APCs 269, 270, and 697) per beneficiary grew by 18 percent, and other cardiac imaging (APCs 377 and 398) grew by 14 percent. In contrast, from 2010 to 2011, services in physicians' offices fell by 7 percent for echocardiograms and 13 percent for other cardiac imaging. The increase in volume of these three services together represented 24 percent of the increase in OPD service volume. This shift in service volume toward OPDs is consistent with the financial incentives in the current payment system. For example, compared with rates in physicians' offices, Medicare payment rates for E&M visits are 80 percent

**TABLE
3-2**

Shares of hospitals offering specific services, 2005–2010

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

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

Source: American Hospital Association annual surveys of hospitals.

higher and echocardiograms are over 70 percent higher when billed as outpatient services, even after adjusting for differences in packaging. In 2010, the Medicare program and beneficiaries paid hospitals \$1.3 billion more than they would have if OPD rates were set equal to physicians’ office rates for E&M and echocardiograms; in 2011, the difference was \$1.5 billion due to the shift in site of care for these services toward OPDs.

The Commission has expressed concern that higher payment rates in OPDs may induce hospitals to acquire physician practices and deem these practices part of the OPD. The result is that care is being shifted from a lower to a higher cost site of care without any identifiable improvement in quality. For that reason, the Commission recommended equalizing payment rates for E&M services (Medicare Payment Advisory Commission 2012c). By equalizing payment rates across sectors, hospitals will still be rewarded if their physician–hospital integration reduces inpatient costs, improves quality, or results in a bonus

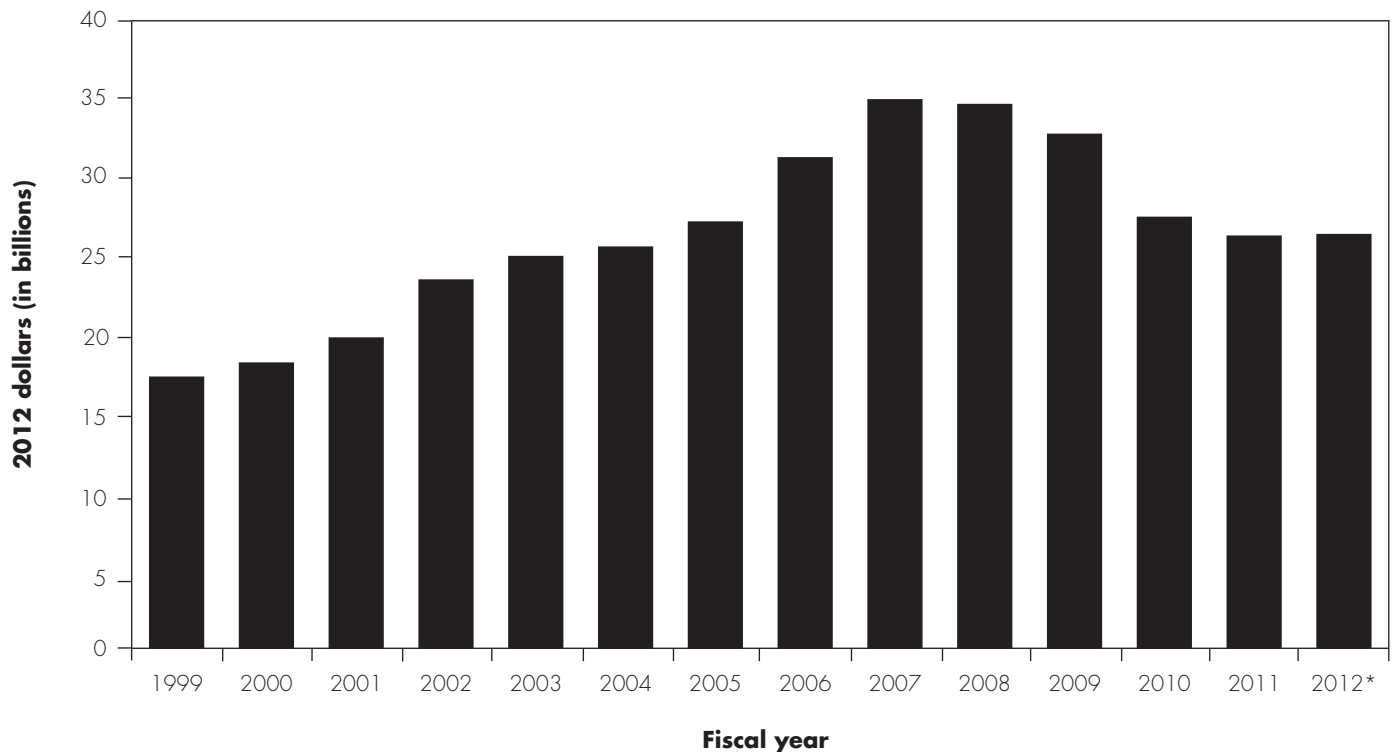
through Medicare’s value-based performance incentives. But hospitals would not be rewarded purely for changes in corporate structure that do not change patient care.

Breadth of services continues to grow

Hospitals have continued to expand the scope of services they offer. Our analysis of 50 specialized hospital services from 2005 to 2010 found that the share of hospitals and their affiliates providing these services increased for most services.⁵ New technologies such as robotic surgery and positron emission tomography scan services were among those that grew most rapidly. Core hospital services—such as trauma care, cardiac services, and oncology—generally were offered by more hospitals in 2010 than in 2005. Post-acute care was the only type of service for which the share of hospitals offering this service declined by more than 1 percent. Rural hospitals tended to offer fewer services but have been expanding their imaging and orthopedic surgery offerings (Table 3-2). (The change from 2009 to 2010 was

**FIGURE
3-4**

Hospital construction spending remains strong



Note: Spending is for nonfederal hospital construction and inflated to September 2012 dollars using McGraw-Hill's construction cost index.
*Data for 2012 are an annualized estimate based on data for the first five months of 2012.

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

similar to the average change over the five-year period (not shown in table.)

Access to capital remains positive

Overall, the hospital industry has strong access to bond markets. Interest rates across the various classes of bonds on tax-exempt debt decreased significantly in 2012. As of November 12, 2012, the interest rate on double-A tax-exempt 30-year hospital bonds was 3.75 percent. In mid-November of 2010 and 2011, interest rates for similarly classified bonds were approximately 5.0 percent (Cain Brothers 2012).

The dollar value of hospital construction projects in the United States remained steady in 2011 and the first half of 2012. Hospital construction spending increased steadily from 1999 to 2005, followed by a four-year period of heavy construction spending from 2006 to 2009 (Figure 3-4). During that period, construction spending peaked in 2007, reaching approximately \$35 billion. By 2011,

spending moderated but remained at relatively high levels, exceeding \$26 billion. Construction spending in 2012 is also estimated to exceed \$26 billion. These findings are consistent with what Moody's Investment Service noted concerning a slight increase in the median capital spending ratio—1.2 times depreciation in 2011 compared with 1.1 times depreciation in 2010. This suggests that hospitals are spending slightly more than would be necessary to replace aging existing facilities (Moody's Investors Service 2012). Given that construction has continued at a stable rate, there appears to be adequate access to capital.

Hospital industry consolidation increased

Hospital industry consolidation has increased in recent years, indicating that hospital systems still see acquisitions of other hospitals as a good use of their capital. In 2011, the hospital sector saw 90 separate merger and acquisition (M&A) deals, and as a part of these deals, 156 individual hospitals were acquired (Irving Levin Associates Inc.

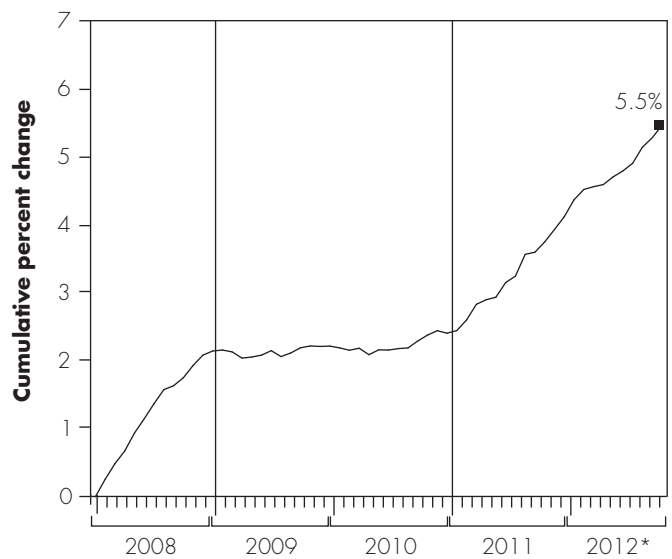
2012).⁶ Both the number of deals and the number of hospitals involved in the 2011 deals represent a marked increase from 2009 and 2010. For the third consecutive year, most of these hospital deals involved regional hospital systems acquiring either smaller local hospital systems or small independent hospitals. However, in 2011, large national hospital systems became more active once again in making hospital acquisitions. In 2011, 41 percent of hospital M&A deals involved regional systems acquiring hospitals or other systems. In 33 percent of deals, national hospital systems were the acquirers; in 16 percent, hospitals were acquiring other individual hospitals; and in 14 percent, private equity firms were the acquirers.⁷ Similar to 2010, in 2011, most acquired hospitals were small, having 160 or fewer inpatient beds, and the majority of deals involved for-profit entities acquiring nonprofit facilities. The acquisitions in 2011 reflected a long-standing trend of consolidation in the industry, which could affect prices insurers pay in the non-Medicare market (Gaynor and Town 2012). In 2012, the merger trend continued, with the merger of the Trinity and Catholic Healthcare East systems forming an 82-hospital system.

Hospital employment growth indicates growing capacity

The hospital industry continues to grow, with hospital employment increasing. Hospital industry employment is trending upward again after two years of slower growth. Bureau of Labor Statistics (BLS) employment data reveal that the number of individuals employed by hospitals increased 5.5 percent over the last five years (January 2008 to November 2012), adding 320,000 jobs (Figure 3-5). Overall, BLS estimates that as of November 2012, hospitals employed over 6.2 million individuals. During the last four-plus years, the rate of growth in hospital employment varied in three general periods. In the first period, from January 2008 to January 2009, hospital employment increased approximately 2 percent. In the second period, from January 2009 to January 2011, employment growth slowed to less than 1 percent over the two years. This period started during the nation's recession. In the third period, from January 2011 to November 2012, hospital employment accelerated again, increasing more than 3 percent. While the hospital industry has added jobs in recent years, an increase in the number of individuals employed by a given industry may not translate to an improvement in economic efficiency (Baicker and Chandra 2012).

FIGURE 3-5

Hospital employment grew at beginning and end of five-year period



Note: *Data through November 2012.

Source: Bureau of Labor Statistics.

According to data from a separate BLS survey that best corresponds to the four-year period described above, growth in employment varied among hospital occupations. From 2007 to 2011, the occupations that experienced the largest increases in hospital employment were physical and social scientists (25 percent), physician assistants (22 percent), computer and math science occupations (18 percent), management occupations (14 percent), pharmacists (13 percent), and imaging technicians (11 percent). A handful of occupations experienced an overall decline in hospital employment. The employment of licensed practical nurses and licensed vocational nurses declined by 18 percent (31,000 fewer); however, the number of registered nurses (RNs) increased by nearly 10 percent (148,000 more RNs). Hospitals also trimmed the number of social workers, office staff, food service staff, and various clinician support occupations such as nursing aides and orderlies. Yet data from the American Hospital Association (AHA) describe a steady increase over the last decade in the number of physicians employed by hospitals, and anecdotal sources suggest this trend has increased rapidly in more recent years. The AHA reported a 35 percent increase from 2007 to 2010 in the number

of physicians employed directly by a consistent cohort of hospitals over that time period.

Quality of care: Overall, quality indicators show improvement

Our analysis of several inpatient quality indicators (IQIs) shows generally positive trends. We use five of the IQIs developed and maintained by the Agency for Healthcare Research and Quality (AHRQ) to measure in-hospital and 30-day postdischarge mortality rates (Agency for Healthcare Research and Quality 2007a). We also analyze six of the AHRQ patient safety indicators (PSIs), which measure the frequency of potentially preventable adverse events that can occur during an inpatient stay, such as the development of postoperative blood clots or deaths from treatable surgical complications (Agency for Healthcare Research and Quality 2007a, Agency for Healthcare Research and Quality 2007b). To assess sector-wide quality trends, we calculate risk-adjusted rates for these measures across all IPPS hospitals for a rolling four-year period and determine whether there was a statistically significant change in each rate from the first year to the fourth year. We use the IQIs and PSIs that AHRQ has concluded have the strongest base of clinical and statistical evidence (Agency for Healthcare Research and Quality 2009a). We calculate the IQIs and PSIs using Medicare Provider Analysis and Review inpatient hospital data files for 2008 through 2011 and version 4.1b of the AHRQ mortality and PSI software (Agency for Healthcare Research and Quality 2009b).

Most in-hospital and 30-day mortality rates declined

In-hospital and 30-day postdischarge mortality rates, as measured by the AHRQ IQIs, declined by a statistically significant amount for four of the five conditions we monitor. From 2008 through 2011, risk-adjusted in-hospital and 30-day mortality rates declined by a statistically significant amount for acute myocardial infarction (AMI), congestive heart failure, stroke, and pneumonia, as measured by AHRQ methods. The in-hospital and 30-day mortality rate for patients admitted with hip fracture also declined but not by a statistically significant amount.

Patient safety indicators improved

Rates improved from 2008 to 2011 for five of the six PSIs we analyzed, including iatrogenic pneumothorax, postoperative respiratory failure, postoperative pulmonary embolism or deep-vein thrombosis, postoperative wound

dehiscence, and accidental puncture or laceration. The PSI that did not improve from 2008 to 2011 was the rate of deaths among surgical inpatients with treatable serious complications. Caution should be used in interpreting all the reported PSI rates. The PSIs measure rates of very rare events, and it is difficult to detect statistically significant changes in these indicators. In addition, AHRQ and other researchers have found that changes over time in providers' coding practices and variations among providers in how patient safety events are captured and reported can affect the accuracy and reliability of some of the PSIs (Agency for Healthcare Research and Quality 2007a, Agency for Healthcare Research and Quality 2007b, Agency for Healthcare Research and Quality 2009a, Rosen et al. 2012). Nonetheless, we monitor sector-level trends in selected PSIs as indicators, though not definitive evidence, of increases and decreases in rates of harm to patients resulting from their medical care that can be avoided if providers adhere to known clinical safety practices.

Readmission rates have improved slightly following public reporting

The Commission recommended implementation of a readmissions policy in June 2008 because avoidable readmissions represent poor outcomes for beneficiaries and unnecessary costs to the Medicare program. CMS began to publicly report readmission rates in 2009. In addition, a penalty for high AMI, pneumonia, and heart failure readmissions started in fiscal year 2013, creating further pressure for hospitals to reduce readmission rates. From 2009 to 2011, potentially preventable readmission rates decreased 0.7 percentage point. The full effect of the readmission policy will not be known until after the readmission penalty takes effect in 2013.

The benefits of reducing readmissions accrue to both the beneficiary and the Medicare program. The benefits for the patient can include improved care in the hospital, more help with transitioning to other settings, better care coordination outside the hospital, and avoiding unnecessary subsequent hospital stays. The benefit to the Medicare program has two parts: savings from the avoided readmissions plus any revenue from penalties on hospitals with excessive readmission rates. The current policy has penalties of about \$300 million in 2013 (0.2 percent of total payments), whereas potential savings from reducing avoidable readmissions is much higher. For example, a 20 percent decline in potentially preventable

readmissions (from 12.3 percent to 9.8 percent) would reduce readmission spending by more than \$2.5 billion.

While readmission rates have improved, research suggests further progress can be made. For example, Silow-Carroll and colleagues cited improving the process within the hospital to reduce complications in order to indirectly prevent readmissions (Silow-Carroll et al. 2011). Other strategies include scheduling follow-up visits, reconciling medications before discharge, and using case managers for complex cases (Jack et al. 2009, Kanaan 2009). Better transition planning and execution reduce readmissions by encouraging and facilitating communication among providers, as well as encouraging patient education and self-management (Naylor et al. 2011). In patients with low cognitive function or poor health literacy, these efforts are bolstered by a postdischarge plan that is comprehensible to both patient and caregiver, in addition to the guidance of a health coach (Chugh et al. 2009, Parry and Coleman 2010). Efforts in the hospital setting can be made in conjunction with coordination across the post-acute care sector. Interventions by pharmacists, home health nurses, and skilled nursing facilities may prevent further hospitalizations after the patient has been discharged (Bellone et al. 2012, Kanaan 2009).

While the current financial incentive to reduce readmissions is a clear improvement over the past when hospitals had a financial disincentive to take action to reduce readmission rates, refinements to the readmission policy will eventually be needed as the program matures. Future revisions to the policy should be designed to maintain or increase the average hospital's incentive to reduce readmissions, increase the share of hospitals that have an incentive to reduce readmissions, make penalties a constant multiple of the costs of readmissions, and continue to generate savings that are at least equal (budget neutral) to current policy (Medicare Payment Advisory Commission 2012a). The Commission plans to discuss issues with the current readmission policy in future analyses.

Value-based incentive payments

In an effort to move from purely paying for volume toward paying for value, Medicare has begun to publicly report quality metrics and (starting in 2013) to adjust hospital payments based on a series of quality metrics. As mandated by PPACA, the value-based purchasing (VBP) program started in fiscal year 2013. For the first year of the VBP program, CMS will reduce all DRG payments

to about 3,100 participating PPS hospitals by 1 percent of base inpatient payments. The funds will be used to create a pool of funds from which value-based (i.e., performance-based) incentive payments will be made. CMS estimates that this payment redistribution will total \$850 million in fiscal year 2013. As required by law, the VBP program must be budget neutral, meaning that the total amount of withheld payments must be redistributed to hospitals participating in the VBP program.

In 2013, each hospital's performance score will be based on 12 process measures and 1 patient experience measure; in fiscal year 2014, CMS will add one clinical process measure and three outcome measures (condition-specific mortality rates) to the VBP program. The Commission has expressed concern regarding the relatively low weight (25 percent) assigned to outcomes (Medicare Payment Advisory Commission 2012a). Given some of the concerns regarding coding and process measures as well as the importance of outcomes, a stronger emphasis on outcomes may be warranted.

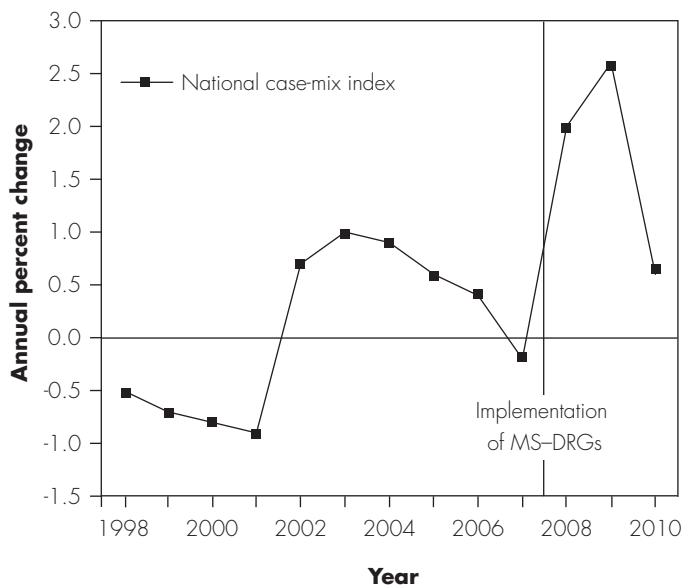
While quality as measured by process, patient safety, and outcomes has been improving, some have questioned whether financial incentives affect quality any more than public reporting alone. For example, the 260 hospitals that participated in the CMS/Premier pay-for-performance demonstration improved their performance by an amount equal to the 780 control hospitals that were involved only in CMS's public reporting (Werner et al. 2011). In addition, other work shows that the downward trajectory in central catheter-associated bloodstream infections was not affected by a 2008 change in Medicare policy that stopped allowing these cases to count as a complication that would increase DRG rates (Lee et al. 2012). However, in this case, because other comorbidities and complications almost always exist, the magnitude of this penalty was minimal. It may take several years of observation to determine if the financial incentives in the current VBP program generate greater improvements than were observed when these quality metrics were subject only to public reporting. It is also possible that greater incentives are needed for certain changes (such as reducing readmissions that generate revenue for hospitals) than are needed for other changes (such as reducing central-line infections that generate additional costs for hospitals).

Medicare payments and providers' costs

In assessing payment adequacy, the Commission also considers the estimated relationship between Medicare

**FIGURE
3-6**

**After implementation of MS-DRGs,
the change in reported case mix
was more than twice the
rate in previous years**



Note: MS-DRG (Medicare severity–diagnosis related group).

Source: MedPAC analysis of inpatient prospective payment system hospital inpatient claims in the final-rule Medicare Provider Analysis and Review (MedPAR) files for fiscal years 1997–2009 and the proposed-rule MedPAR file for fiscal year 2010, from CMS. Case-mix indexes (CMI) are based on the diagnosis related group grouper, relative weights, and transfer policies in effect for each fiscal year. Claims for hospitals designated as critical access hospitals as of December 31, 2010, were excluded from the CMI for all years.

payments for and hospitals' costs of providing care to Medicare patients as one of the five key indicators of payment adequacy. We assess the adequacy of Medicare payments for the hospital as a whole, and thus our primary indicator of the relationship between payments and costs is the overall Medicare margin. This margin includes all payments and Medicare-allowable costs attributable to Medicare patients for the six largest revenue-generating services hospitals provide plus graduate medical education payments and costs.

We report the overall Medicare margin across service lines because no hospital service is a purely independent business. For example, we find that operating a skilled nursing facility (SNF) improves the profitability of acute inpatient care services when an in-hospital SNF allows hospitals to safely discharge patients sooner from their acute care beds, thus reducing the cost of the inpatient

stay. In addition, the precise allocation of costs presents challenges. By combining data for all major services, we can estimate Medicare margins without the influence of how overhead costs are allocated.

To measure the pressure hospitals are under to control costs, we also examine hospital total (all-payer) profit margins and hospital cash flows. When total margins and cash flows are strong, hospitals are under less pressure to control their costs.

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

Medicare payment changes

Growth in Medicare hospital payments per discharge under the IPPS depends primarily on three factors: (1) annual payment updates, (2) changes in reported case mix, and (3) policy changes that are not implemented in a budget-neutral manner. In 2011, IPPS hospitals received a 2.3 percent payment update to operating rates, case mix grew by 0.5 percent, and the low-volume adjustment substantially increased payments to rural hospitals. However, these increases were largely offset by a 2.9 percent downward adjustment implemented in 2011 to recover overpayments in 2008 and 2009 that stemmed from changes in documentation and coding of clinical diagnoses (see below). The net effect was that the average per case payment rate increased by 0.7 percent from 2010 to 2011. While the average was 0.7 percent, rural hospitals received a 3.0 percent increase, and small hospitals with under 50 beds received an 8.1 percent increase because of a temporary low-volume adjustment discussed below. This low-volume increase initially expired at the end of fiscal year 2012 but was extended through the end of fiscal year 2013 by the American Taxpayer Relief Act of 2012.

Corrections for past documentation and coding changes decreased rate increases for 2011 and 2012 Medicare implemented MS-DRGs in 2008, which gave hospitals an opportunity to increase their payments by changing their coding practices. Analyses by both CMS and the Commission have concluded that the increases in case mix reported from 2008 through 2010 (2.0 percent, 2.6 percent, and 0.5 percent, respectively) resulted from changes in hospitals' documentation and coding

rather than from an actual shift toward patients whose care required greater resources (Figure 3-6) (Medicare Payment Advisory Commission 2010b). This finding explains how hospitals could record high growth in case mix from 2008 to 2010 without a corresponding increase in cost growth (Table 3-3). We estimate that documentation and coding changes led to more than \$6 billion of additional payments in 2008 and 2009, which CMS recovered through a temporary reduction in hospital payments in 2011 and 2012. Hospital payment rates increased in fiscal year 2013 by 2.7 percent when the two-year temporary reductions expired.⁸ For a more detailed description of this issue, see the Commission’s comment letter on the 2012 proposed rule, June 17, 2011, at http://www.medpac.gov/documents/06172011_FY12IPPS_MedPAC_COMMENT.pdf.

Reported case mix increased by 0.5 percent In fiscal year 2011, the reported case mix for Medicare patients in hospitals increased by 0.5 percent. Case-mix growth has slowed over time as the effects of documentation and coding changes have diminished. It is not clear the extent to which the reported growth of case mix in 2011 represents increases in patient severity and to what extent it represents continued changes in coding. Given the small magnitude of case-mix change, we have not performed the analysis done in prior years to categorize this change in reported case mix.

Policy change: Low-volume adjustments temporarily increased rural hospital payments PPACA instituted a temporary low-volume payment adjustment that initially applied to fiscal year 2011 and fiscal year 2012 payments to hospitals with fewer than 1,600 Medicare discharges that are more than 15 road miles from another hospital. Hospitals with 200 or fewer Medicare discharges received a 25 percent payment add-on to their IPPS payments. The add-on declined linearly from 25 percent to 0 percent for hospitals with 1,600 Medicare discharges. The temporary low-volume adjustment added \$380 million to low-volume hospitals’ payments and helped to increase rural hospital inpatient payments by 3.0 percent in 2011, compared with a 0.4 percent increase for urban hospitals. Smaller rural hospitals saw the biggest percentage increases; rural hospitals with fewer than 50 beds saw Medicare payments per case rise by 8.1 percent. This temporary adjustment applied mostly to rural hospitals and will remain in effect through fiscal year 2013, when it will be replaced by the original empirically based low-volume adjustment—a 25 percent

TABLE 3-3

Cost growth slowed close to input price inflation after 2008

Cost measure	Annual cost growth				
	2007	2008	2009	2010	2011
Inpatient costs per admission	4.3%	5.5%	2.9%	2.0%	2.8%
Outpatient costs per service	5.6	5.1	4.8	0.1*	2.7
Weighted average	4.5	5.4	3.3	1.6	2.8
Input price inflation	3.4	4.3	2.6	2.1	2.6

Note: Cost growth numbers are not adjusted for reported changes in case mix. Analysis excludes critical access hospitals and Maryland hospitals. The weighted average is based on services provided to Medicare patients by hospital staff, including costs for inpatient, outpatient, skilled nursing facility, inpatient rehabilitation, and home health services.
*Outpatient cost growth was 1.7 percent if we adjusted for complexity of services provided. Input price inflation reflects a weighted average of the hospital operating and capital market baskets.

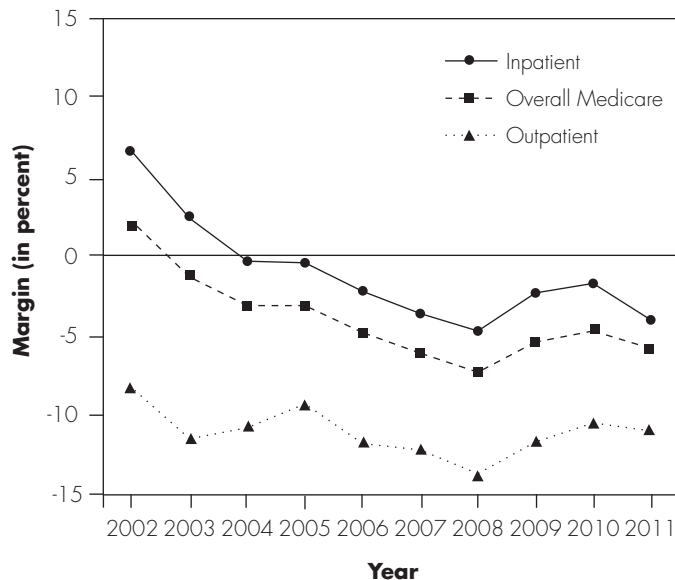
Source: MedPAC analysis of Medicare hospital cost reports and claims files.

add-on to hospitals with fewer than 200 total discharges that are more than 25 miles from the nearest hospital.

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

Following a period of rapid cost growth from 2002 to 2008, a combination of low input price inflation and financial uncertainty has resulted in relatively slow hospital cost growth. From 2009 through 2011, Medicare inpatient costs per case continued to rise at rates close to underlying input price inflation, growing by 2.9 percent in 2009, 2.0 percent in 2010, and 2.8 percent in 2011—cumulatively just 0.4 percentage point faster than input price inflation (the hospital market basket index) during this period. While cost growth ticked up slightly in 2011 from a more than 10-year low in 2010, it still remained lower than the growth rates experienced through most of the 2000s, when hospital cost growth averaged 1 or more percentage points faster than the hospital market basket increase. Our analysis also shows that growth in outpatient costs per service rose at close to input price inflation, rising by 2.7 percent in 2011 (Table 3-3).

The lower cost growth from 2009 through 2011 was partly due to lower input price inflation facing hospitals, reflecting lower general economy-wide inflation for goods and services and slower wage growth. Compensation costs

**FIGURE
3-7****Hospital Medicare margins:
Inpatient, outpatient, and overall**

Note: A margin is calculated as payments minus costs, divided by payments; margins are based on Medicare-allowable costs. Analysis excludes critical access and Maryland hospitals. Medicare inpatient margins include services covered by the acute inpatient prospective payment system. Overall Medicare margin covers acute inpatient, outpatient, hospital-based home health and skilled nursing facility (including swing bed), and inpatient psychiatric and rehabilitation services, plus graduate medical education.

Source: MedPAC analysis of Medicare cost reports.

for hospital workers, for example, grew by less than 2.5 percent in each year from 2009 through 2012. These increases are the smallest ones in hospital compensation costs in more than a decade (Bureau of Labor Statistics, <http://www.bls.gov/web/eci/echistrynaics.pdf>). Hospitals may also have tried to control cost growth in response to the recession and the financially difficult year they had in 2008, when the industry experienced historically low total all-payer margins (1.8 percent) and had steep declines in their balance sheets.

Lower cost growth could also be the result of shifting more expensive surgical patients to an outpatient setting. Although the reported inpatient case mix increased, after accounting for documentation changes, inpatient case mix declined slightly as some high-cost surgical services shifted from the inpatient setting to outpatient settings. Growth in cost per unit of outpatient services was 0.1 percent in 2010 (Table 3-3, p. 55). However, this reflects

the decline in outpatient service mix as physicians' office visits (a relatively inexpensive service) increased as a share of overall outpatient services. Without this change in service mix, outpatient cost growth would have been 1.7 percent in 2010.

This lower cost growth, however, is not uniform across provider groups. In 2011, smaller hospitals had higher cost growth. This higher growth could be in response to higher revenues associated with two temporary policies: the low-volume adjustment and the temporary low-spending county payment. Rural hospitals with fewer than 50 beds, for example, saw inpatient payments per case increase by 8.1 percent in 2011 but also had much higher cost growth—7.3 percent per case.

Trend in the overall Medicare margin

We define Medicare margins as Medicare payments minus the allowable costs of treating Medicare patients divided by Medicare payments. In analyzing hospital margins, we compute margins with and without CAHs, which are 1,300 rural hospitals paid based on their incurred costs. We also exclude hospitals in Maryland, which are excluded from the IPPS and paid under a state-wide all-payer PPS. The overall Medicare margin trended downward from 1997 through 2008.⁹ However, from 2008 to 2010, the overall Medicare margin went up from -7.3 to -4.7 percent, largely due to documentation and coding changes and lower cost growth. In 2011, it declined to -5.8 percent as CMS started to recover past overpayments (Figure 3-7). Both inpatient and outpatient margins improved in 2010 but declined in 2011 as cost growth exceeded payment growth. The overall Medicare margin is dominated by inpatient and outpatient services, which, when combined, represent 92 percent of hospitals' Medicare revenues.

2011 Medicare margins by hospital type

We further examined the overall aggregate Medicare margin by hospital type. In 2011, the -3.2 percent overall Medicare margin for rural PPS hospitals was higher than the -6.2 percent margin for urban hospitals (Table 3-4). Smaller rural hospitals saw the greatest improvement in their overall Medicare margins. Between 2010 and 2011, overall margins increased from -2.5 percent to 0.9 percent for rural hospitals in the bottom quartile of inpatient volume. This improvement is likely temporary, however, as many of these hospitals received

a combination of low-volume and other temporary payments that they will not receive in fiscal year 2014.

Overall Medicare margins at for-profit hospitals remained above those at nonprofit hospitals. In 2011, for-profit hospitals' overall Medicare margins were -1.0 percent compared with -7.2 percent at nonprofit hospitals. Both Medicare inpatient and outpatient margins are higher on average in for-profit hospitals.

In 2011, the overall Medicare margin was -2.4 percent for major teaching hospitals (Table 3-4). Major teaching hospitals have higher overall Medicare margins than the average IPPS hospitals, in large part due to the extra inpatient payments they receive through the indirect medical education and disproportionate share (DSH) adjustments. A Commission analysis shows that both of these adjustments provide payments that substantially exceed the estimated effects that teaching intensity and service to low-income patients have on hospitals' average cost per admission. In June 2010, the Commission made recommendations to use teaching hospital payments as incentives to train physicians for the skill sets needed by future Medicare beneficiaries (Medicare Payment Advisory Commission 2010a). Nonteaching hospitals, most of which are in urban areas, have lower Medicare margins on average, -8.3 percent in 2011.

Three sets of temporary payments increased revenues for many hospitals: the revised low-volume adjustment, the low-spending county payment add-on, and special payments for health information technology. In 2011, we estimate that these payments added over \$2 billion to hospital revenues. This extra revenue likely contributed to some of the improvement in the margins for many facilities. If these temporary revenues were not included, the overall Medicare margin would have stood at -6.7 percent rather than the -5.8 percent we are reporting. For hospitals to maintain their Medicare margins when the health information technology payments expire in 2016, they will need to constrain cost growth below the growth in input price inflation.

Medicare margins are expected to remain steady through 2013

In 2013, we project margins will remain roughly equal to 2011 levels. Inpatient and outpatient payments rates are expected to increase by roughly 3 percent to 4 percent, and case mix is expected to continue to increase slightly. Costs are expected to grow by 5 percent to 6

**TABLE
3-4**

Overall Medicare margins by hospital group

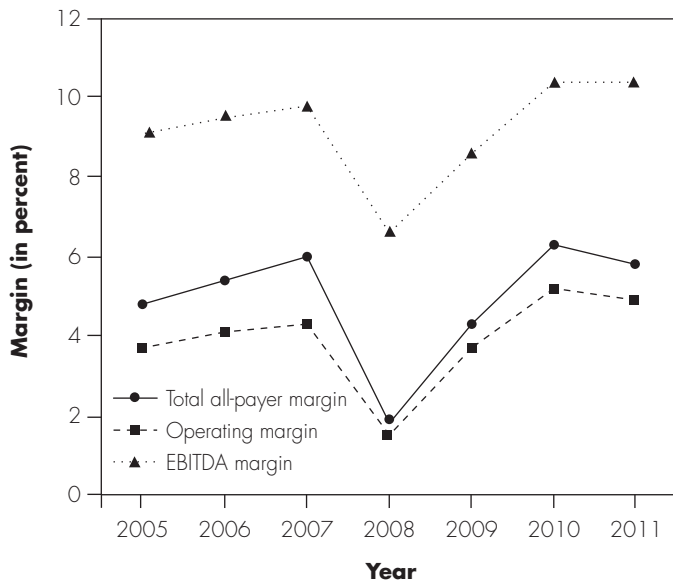
Hospital group	2007	2008	2009	2010	2011
All hospitals	-6.1%	-7.3%	-5.4%	-4.7%	-5.8%
Urban	-6.2	-7.5	-5.5	-4.9	-6.2
Rural					
Excluding CAHs	-5.2	-6.0	-4.6	-2.8	-3.2
Including CAHs	-3.6	-4.1	-3.1	-1.8	-1.8
Nonprofit	-7.0	-8.5	-6.7	-5.9	-7.2
For profit	-3.5	-2.8	-0.2	-0.1	-1.0
Government*	N/A	N/A	N/A	N/A	N/A
Major teaching	-0.2	-2.1	-0.8	-0.5	-2.4
Other teaching	-6.5	-7.5	-5.4	-4.7	-5.4
Nonteaching	-9.4	-10.3	-8.1	-7.2	-8.3

Note: CAH (critical access hospital), N/A (not applicable). Data are for all hospitals covered by the Medicare acute inpatient prospective payment system in 2010, as well as CAHs where indicated. A margin is calculated as payments minus costs, divided by payments; margins are based on Medicare-allowable costs. Overall Medicare margins cover acute inpatient, outpatient, hospital-based skilled nursing facility (including swing bed), home health, and inpatient psychiatric and rehabilitation services, plus graduate medical education. The rural margins are shown with and without 1,300 CAHs, which are paid 101 percent of costs for inpatient and outpatient services. The margins without CAHs illustrate the profitability of rural hospitals paid prospective payment system rates; the rural margins with CAHs give a fuller picture of rural hospital profitability.
*Government-owned providers operate in a different context from other providers, so their margins are not necessarily comparable.

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

percent over two years, which is roughly in line with input price inflation. Therefore, we expect payment rates to grow roughly 2 percent more slowly than costs. However, we also expect an increase in supplemental Medicare payments to hospitals that achieve meaningful use of electronic medical records. These temporary supplemental payments will contribute to Medicare margins remaining at roughly -6 percent from 2011 through 2013.¹⁰

The projection of -6 percent depends upon hospitals maintaining their rate of cost growth at the rate of input price inflation. It is uncertain whether hospitals will be under sufficient pressure to maintain that level of growth in cost given the strong growth in all-payer profitability that has occurred in recent years. In the past, we have seen cost growth accelerate when hospitals are under less pressure to constrain costs.

**FIGURE
3-8****Hospitals' financial performance
has been improving after
poor performance in 2008**

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

Source: MedPAC analysis of Medicare hospital cost reports.

Total (all-payer) profitability of hospitals recovered after 2008 because of restrained cost growth and strong growth in private-payer payment rates

Hospitals' total (all-payer) profit margins are an indicator of how much financial pressure hospitals are under to control costs. Total (all-payer) margins for hospitals increased to 6.0 percent in 2007 (Figure 3-8). Following this relatively high all-payer profitability, cost growth was high in 2008 (5.5 percent), as many hospitals started the year with little pressure to constrain costs. However, the picture changed rapidly in September 2008 with the collapse of the bond and stock markets. In part due to investment losses, total all-payer margins in 2008 fell to 1.8 percent, the lowest level in more than two decades. Operating margins fell, investment income declined dramatically, some defined-benefit pension plans needed larger contributions from their hospital sponsors, and the economic outlook was uncertain. This situation created financial pressure to constrain costs. In response, hospitals pulled back from the unsustainable levels of capital expenditures and cost growth seen in 2007 and 2008 to more moderate levels from 2010 through 2012. As capital

and wage growth slowed, cost growth slowed in 2010 to the lowest level recorded in more than 10 years, reflecting both slowing input price growth and hospitals' efforts to constrain cost growth. For the first time in 10 years, cost growth slowed to near the rate of input price inflation. All-payer profit margins rose because of increases in private-payer rates in the range of over 6 percent per year (roughly double cost growth in recent years), which more than offset slower growth in Medicare payments (Health Care Cost Institute 2012).

Cost growth may start to increase in response to the rebound in hospitals' total all-payer margin, which climbed back to roughly 6 percent in 2010 and 2011 (Figure 3-8). This 6 percent is roughly the peak level of margins achieved in more than 20 years. In addition, cash flow—as measured by earnings before interest, taxes, depreciation, and amortization—held steady at 10.4 percent in 2011, showing that hospitals maintained a relatively strong cash flow position. It is unclear whether cost growth will remain at current levels or rebound to levels above input price inflation due to strong all-payer profits. In the past, the Commission has shown that the hospital industry's level of cost growth has depended on its financial resources (Medicare Payment Advisory Commission 2012c). In general, in periods when hospitals were under pressure because of managed care pressures or contractions in the economy, cost growth per admission grew slowly. In periods when profit margins were high, cost growth per admission grew more rapidly.

Hospital-level financial pressure and hospital costs

The effect of financial pressure on hospital costs is not only evident over time, it is also evident when comparing hospitals facing different levels of financial pressure to constrain costs. Some hospitals have strong profits on non-Medicare services and investments and are under relatively little pressure to constrain their costs. Other hospitals, with thin profits on non-Medicare services, face overall losses (and possibly closure) if they do not constrain costs and generate profits on Medicare patients. To determine the effect of financial pressure on costs, we grouped hospitals into three levels of financial pressure from private payers (high, medium, and low) based on their median non-Medicare profit margins and other factors from 2006 to 2010. For these years, the hospitals under high pressure had non-Medicare profits of less than 1 percent, while the low-pressure hospitals had non-Medicare profit margins of more than 5 percent. We found that hospitals under high pressure from 2006 to 2010 ended up with lower costs

per admission in 2011 than hospitals under low levels of financial pressure during the same five-year period. For more details on our analytic methods, see our prior year's analysis of payment adequacy (Medicare Payment Advisory Commission 2011b).

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

- *High pressure = low cost:* The 26 percent of hospitals under the most financial pressure had median standardized costs per case that were roughly 8 percent lower than the national median for all 2,893 IPPS hospitals with available data. Because of their lower costs, hospitals under pressure generated a median overall Medicare profit margin of 4 percent, which is 9 percentage points above the national median.
- *Low pressure = high cost:* The 59 percent of hospitals that were under a low level of financial pressure had median standardized costs per case that were 4 percent above the national median. Because of higher costs, they generated a median Medicare profit margin of -10 percent, which is 5 percentage points below the national median.
- *Recent cost growth is similar:* Both low-pressure and high-pressure hospitals have constrained cost growth to about 3 percent per year from 2009 to 2011. This growth is roughly the rate of input price inflation. The similar rate of cost growth for the two groups suggests that most hospitals under financial pressure have been so for many years, and the differential between costs and margins for the two groups has remained constant.
- *For profits have different incentives:* For-profit hospitals tended to keep their median standardized costs per case at the national median even when they were under little financial pressure. This finding suggests that if both types of hospitals receive high payment rates from private payers, the higher revenues tend to result in higher costs in nonprofit hospitals, but in for-profit hospitals, a larger share of the revenue is retained as operating profit for shareholders.

The overarching conclusion is that costs are at least partially under hospitals' control, and those hospitals with the strongest cost control often generated profits treating Medicare patients in 2011. The next question is whether a set of hospitals can have both low costs and high-quality outcomes.

Relatively efficient hospitals

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

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

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

Categorizing hospitals as relatively efficient We assigned hospitals to the relatively efficient group or the control group according to each hospital's performance relative to the national median on a set of risk-adjusted cost and quality metrics from 2008 to 2010. We then examined the performance of the two hospital groups in fiscal year 2011.

Hospitals were identified as relatively efficient if they met four criteria every year of the 2008 to 2010 period:

- Risk-adjusted mortality levels were in the best two-thirds of all hospitals.

**TABLE
3-5**

Performance of efficient hospitals relative to the national average

Relative performance measure	Type of hospital	
	Relatively efficient during 2008-2010	Other hospitals
Number of hospitals	297	1,864
Share of hospitals	14%	86%
Historical performance, 2008-2010 (percent of national median)		
Risk-adjusted:		
Composite 30-day mortality (AHRQ)	84%	103%
Readmission rates (3M)	95	101
Standardized cost per admission	90	102
Performance metrics, 2011 (percent of national median)		
Risk-adjusted:		
Composite 30-day mortality (AHRQ)	87%	103%
Composite 30-day readmission (3M)	95	101
Standardized cost per discharge	90	102
Percent of patients highly satisfied, 2011 (H-CAHPS®)	69	67
Median:		
Overall Medicare margin, 2011	2%	-6%
Non-Medicare margin, 2011	5	7
Total (all-payer) margin, 2011	4	4
Median occupancy, 2011	63%	57%

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

Source: MedPAC analysis of impact file, Medicare Provider Analysis and Review file, Medicare hospital cost reports, and CMS hospital compare data.

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

The objective is to identify hospitals that have consistently performed at an above-average level on at least one measure (cost or quality) and that have always performed reasonably well on all measures. The rationale for this methodology is discussed in detail in our March 2010 report (Medicare Payment Advisory Commission 2010b).

Examining performance of relatively efficient and other hospitals from 2008 to 2010 Of the 2,161 hospitals that met our screening criteria, 297, or about 14 percent, were found to be relatively efficient during the 2008 to 2010 period. The set of relatively efficient providers was a diverse array of hospitals, including large teaching hospitals and smaller rural hospitals. Roughly 19 percent of teaching hospitals, 11 percent of nonteaching hospitals, 9 percent of rural hospitals, 15 percent of urban hospitals, 10 percent of proprietary hospitals, and 15 percent of nonprofit hospitals were in the group of relatively efficient providers. Teaching and urban hospitals are overrepresented because they often have lower than

average mortality rates, in part due to their higher volume of patients. While 63 percent of for-profit hospitals in our sample had below-average costs, only 40 percent had below-average mortality, and 37 percent had below-average readmissions. The net result is that for-profit hospitals are one-third less likely to be in our relatively efficient category (10 percent of for profits vs. 15 percent of nonprofits), even though they tend to be low-cost providers. This result illustrates how efficiency reflects more than the cost of care. CAHs were excluded from the analysis because they are not paid under the IPPS and have different cost-accounting rules.

We examined the performance of relatively efficient hospitals for the 2008 to 2010 period according to the three measures by reporting the group's median performance divided by the median for the set of 2,130 hospitals in our analysis (Table 3-5). The median efficient hospital's relative risk-adjusted 30-day mortality rate from 2008 through 2010 was 84 percent of the national median, meaning that the 30-day mortality rate for the efficient group was 16 percent better than the national median. The median readmission rate for the efficient group was 5 percent below the national median. Standardized cost per admission for the efficient group was 10 percent below the national median.

Historically strong performers had lower mortality and readmissions in 2011 The composite mortality level for the efficient group was 13 percent below the national median in 2011. In addition, the efficient group's risk-adjusted 30-day readmission rate was 5 percent lower than the national median. The efficient group also performed slightly better than other hospitals on patient satisfaction. The share of patients who were highly satisfied was 69 percent of those treated in the efficient group, compared with 67 percent in the comparison group.

Historically strong performers continued to have lower costs in 2011 Hospitals that were low-cost and low-mortality providers from 2008 through 2010 continued to have lower costs in 2011. The median standardized Medicare cost per admission in the efficient group was 10 percent lower than the national median, compared with 2 percent higher for the other group. The lower costs allowed the relatively efficient hospitals to generate higher overall Medicare margins. The median hospital in the efficient group had an overall Medicare margin of 2 percent, while the median hospital in the comparison group had an overall Medicare margin of -6 percent. Among the relatively efficient hospitals, 57 percent had positive

overall Medicare margins, compared with 31 percent for other hospitals. The distribution of Medicare margins for the efficient hospitals ranged from -5 percent to 8 percent at the 25th percentile and 75th percentile, respectively. For the comparison group, the distribution of Medicare margins was -16 percent to 2 percent at the 25th percentile and 75th percentile, respectively. Part of the relatively efficient group's higher profitability is explained by higher hospital occupancy: The relatively efficient hospitals had roughly 10 percent higher occupancy (63 percent for the efficient group vs. 57 percent for the others). Pressure to constrain costs could also play a role in efficiency; among the relatively efficient hospitals, 50 percent were under high or medium financial pressure to constrain their costs compared with 40 percent for the other hospitals.

2014 payment policies will differ significantly from 2011

By 2014, there will be several significant changes in Medicare payment policy, including changes to incentive payments for electronic health records (EHRs) and scheduled reductions in Medicare DSH payments that are tied to expected decreases in the numbers of uninsured individuals. In addition, starting in 2013, a small offset to updates will occur because of the enactment of a readmission penalty and the expiration of certain special payments directed at rural hospitals, as discussed below. Therefore, we expect payments to rise faster than the update in 2012 but then start to rise more slowly than the current law update from 2013 onward due to policy changes that reduce payments to hospitals.

EHR Incentive Program increases Medicare payments from 2011 through 2016

The Medicare EHR Incentive Program was enacted in the Health Information Technology for Economic and Clinical Health (HITECH) Act, part of the American Recovery and Reinvestment Act of 2009. Hospitals that have met the EHR requirements received a total of roughly \$300 million in EHR payments in fiscal year 2011 and \$2.5 billion in fiscal year 2012 because of an increase in hospitals meeting the meaningful-use criteria. We expect payments to rise to roughly \$3 billion in 2013 and then start to decline each year until the program ends in 2016. While only 31 percent of hospitals had received their first payment by the end of fiscal year 2012, 81 percent of hospitals (3,955 of 4,855) had registered to participate in the Medicare EHR Incentive Payment Program by the end of fiscal year 2012 and are expected to receive EHR payments in future years.¹¹ As part of the HITECH

Act, the EHR Incentive Program also includes a nearly equivalent Medicaid EHR Incentive Program, with its own set of provider eligibility criteria and incentive payment amounts.¹²

Changes to Medicare DSH policy in 2014 will eventually lower Medicare payments to hospitals

In 2011, Medicare paid roughly \$11 billion in DSH payments to IPPS hospitals, which represents 7 percent of all Medicare payments to short-term ACHs. DSH payments are supplementary inpatient payments given to hospitals with high shares of low-income patients. For purposes of computing DSH payments, the low-income patient share is defined as the sum of two ratios: the share of Medicare patients on Supplemental Security Income (SSI) plus the share of Medicaid days relative to all inpatient days.

The original justification for Medicare DSH payments was that low-income Medicare patients were thought to be more expensive in ways that were not accounted for by the original DRG system. By 2011, the Commission and other researchers concluded that, at most, 25 percent of the DSH payments were empirically justified by the higher Medicare costs at hospitals treating low-income patients (Medicare Payment Advisory Commission 2007a, Nguyen and Sheingold 2011).

Some have argued that DSH payments should continue in order to assist hospitals that serve low-income patients because of their higher non-Medicare uncompensated care burdens. However, in 2007 the Commission noted that DSH payments were not well targeted at hospitals with high uncompensated care costs (Medicare Payment Advisory Commission 2007a). Because at most 25 percent of DSH payments were empirically justified as covering higher Medicare costs and DSH payments were poorly targeted at hospitals with high uncompensated care costs, the Congress made several changes in the DSH payments as part of PPACA. The key changes scheduled to take place in fiscal year 2014 are:

- DSH payments will be reduced to 25 percent of what they would have been under prior DSH formulas.
- The remaining 75 percent of the pool of DSH dollars will be divided into two parts:
 - One part will be used to create a pool of dollars to pay for uncompensated care at hospitals. We expect CMS to define uncompensated care as non-Medicare bad debts and charity care, as in

current Medicare cost reports. Each hospital will receive a share of the uncompensated care pool proportionate to its share of all IPPS hospitals' uncompensated care costs.

- The remainder of the DSH pool will be retained by the Medicare trust fund as savings. For every 1 percent decline in the rate of uninsurance among those under 65 years of age, the share of the DSH pool allocated to uncompensated care will decline by 1 percent, and that decline will be retained by the Medicare program.
- The amount of uncompensated care is expected to decline as the subsidized insurance exchanges become operational in 2014 and states expand Medicaid eligibility.

The change in aggregate Medicare payments to hospitals from new DSH payments and payments from the uncompensated care pool will depend on two key factors. First, PPACA will expand eligibility for Medicaid in 2014, which will result in a larger DSH pool. The Congressional Budget Office (CBO) has estimated that Medicaid enrollment will expand by roughly 20 percent under PPACA.¹³ If this estimate holds, Medicaid inpatient days are expected to expand by roughly 20 percent.¹⁴ The expansion of Medicaid days will result in a larger pool of DSH dollars because DSH is based on the share of Medicare patients on SSI plus the share of non-Medicare inpatient days that are Medicaid days.

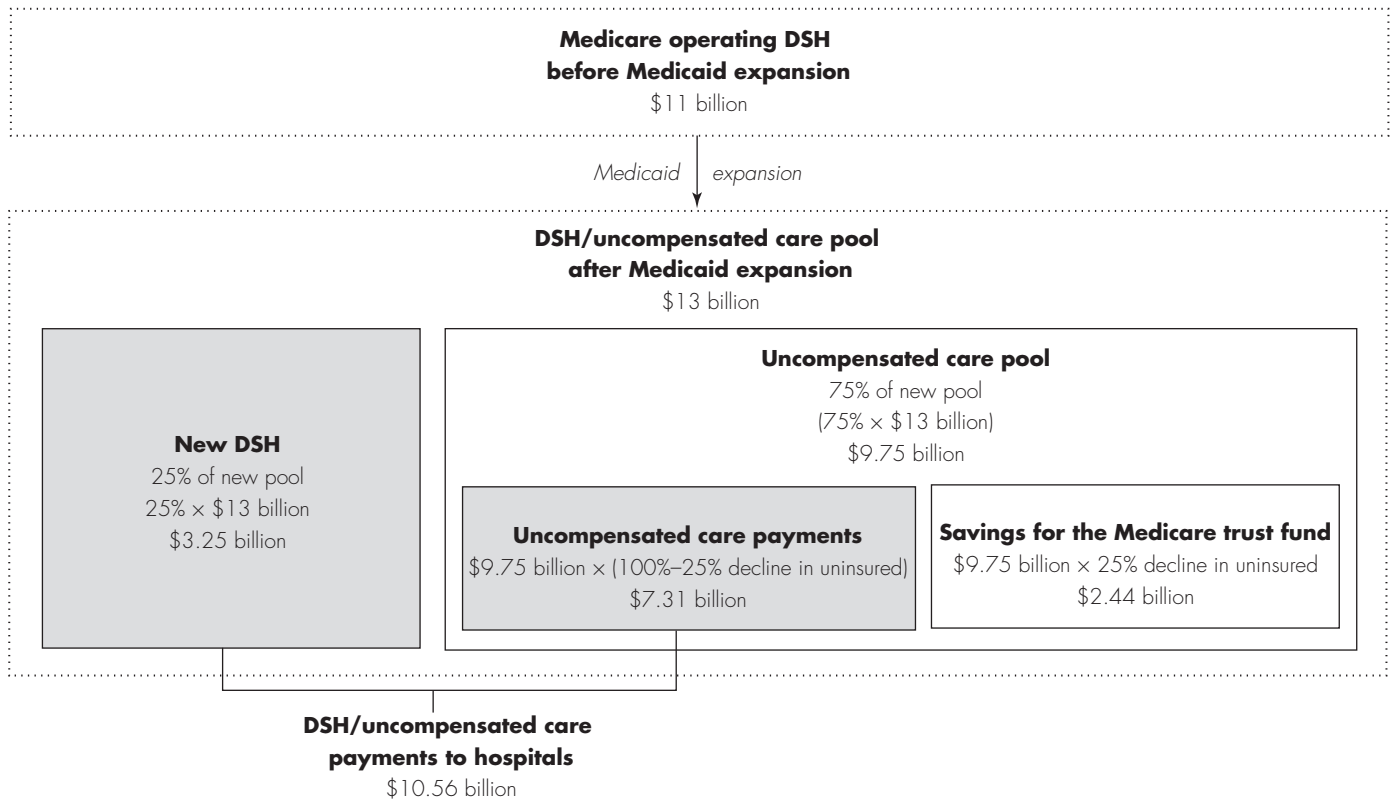
Second, the rate of uninsurance is expected to decline, which will shrink the share of the DSH pool allocated to uncompensated care and will increase the savings for the trust fund. The current policy is designed to decrease Medicare payments to hospitals for uncompensated care as the number of uninsured declines. As more people gain insurance through expanded Medicaid coverage or through the exchanges, the amount of money available for uncompensated care payments to hospitals declines.

It is difficult to predict the net change in Medicare payment to hospitals from these two factors (decreasing DSH payments and increasing uncompensated care payments) because of factors that introduce uncertainty into the computation. For example, some states may not expand their Medicaid eligibility, and the share of low-income individuals who will use the exchanges is uncertain. For these reasons, we have conducted a sensitivity analysis of how DSH payments will change with changes in Medicaid enrollment and the uninsured.

**FIGURE
3-9**

Illustration of DSH payment changes under new 2014 payment policy

- Key assumptions:**
- A 20 percent increase in Medicaid patients and inpatient days
 - A 25 percent decline in the rate of uninsured



- Net effects on hospital payments under illustrative scenario**
- Starting level of DSH payments \$11 billion
 - +\$2 billion in payments due to 20 percent expansion of Medicaid
 - –\$2.44 billion in payments due to 25 percent reduction in uninsured
 - Projected \$10.56 billion in DSH/uncompensated care payments to hospitals
 - If the rate of uninsurance declines further, payments will decline further.

Note: DSH (disproportionate share hospital). Computations were made using 2011 Medicare payment rates and 2011 cases to isolate the effect of policy changes.

Source: MedPAC simulation using Congressional Budget Office estimates of the rate of uninsurance.

Given a 20 percent increase in Medicaid enrollment and a 25 percent decline in the rate of the uninsured (as CBO estimated for 2014), we estimate that the net amount of payments to hospitals under the DSH and uncompensated care policies would decline by about \$0.44 billion in 2014 (Figure 3-9).¹⁵

In the future, if the insurance exchanges are successful and more people become insured, payments will decline

significantly. For example, if Medicaid enrollment expanded by 25 percent and the number of uninsured individuals fell by 50 percent (as CBO estimated for 2017), the pool of dollars going to hospitals would decline by roughly \$2.3 billion, or 1.5 percent of all Medicare payments. In general, as the rate of the uninsured declines, Medicare payments for uncompensated care will decline. We expect hospitals' uncompensated care costs to decline

as Medicaid expands, the new insurance exchanges are established, and the penalties for being uninsured go into effect.

Other inpatient policy changes

CMS and the Congress made a variety of policy changes affecting the acute IPPS for fiscal year 2012, fiscal year 2013, and future years. Among these changes are the series of adjustments for increases in payments due to hospitals' changes in medical record documentation and coding and several PPACA-mandated policy changes.

In 2009, CMS completed its implementation of MS-DRGs and cost-based relative weights. CMS and the Commission concur that hospitals responded to the financial incentives of the MS-DRG system by changing medical record documentation and diagnosis coding, which resulted in assignment of cases to higher weighted MS-DRGs. This change in assignments increased payments without an accompanying increase in resources used and thus resulted in unintended increases in payments.

Analyses by both CMS and the Commission found that changes in documentation and coding increased annual payments by 5.4 percent by 2009, resulting in a total of \$6 billion in extra payments to hospitals in 2008 and 2009. To correct for rates being 5.4 percent too high, CMS adjusted payments downward by a total of 5.4 percent (0.6 percent in 2008, 0.9 percent in 2009, 2.0 percent in 2012, and 1.9 percent in 2013). CMS also made a temporary 2.9 percent adjustment in 2011 and 2012 to recover past overpayments in 2008 and 2009.

In addition, CMS estimated that payments increased by another 0.8 percent in 2010 because of hospitals' continuing changes in documentation and coding. These changes raised hospitals' payments in 2011 and 2012 and will continue to raise payments in 2013 and into the future until CMS makes an offsetting adjustment. Our analysis finds that an adjustment of between -0.6 percent and -0.8 percent is needed to offset the effect of 2010 changes in documentation and coding. CMS has stated it will consider adjusting 2014 inpatient payment rates downward by as much as an additional 0.8 percent to account for the changes in 2010 (Centers for Medicare & Medicaid Services 2012). Our analysis also finds that the documentation and coding led to overpayments of more than \$11 billion during 2010 through 2012. The American Taxpayer Relief Act of 2012 mandates that

CMS recover the \$11 billion by lowering inpatient rates paid to hospitals from 2014 through 2017.

PPACA mandated several policy changes that affect inpatient hospital payments for fiscal year 2012, fiscal year 2013, and fiscal year 2014:

- PPACA mandated a series of reductions in Medicare payment rates to hospitals. For fiscal year 2013, the payment update is projected to be 1.8 percent (equal to the market basket rate increase of 2.6 percent, reduced by a 0.1 percentage point budget adjustment as well as by the projected 10-year moving average of nonfarm multifactor productivity for the period ending in fiscal year 2013 (0.7 percentage point)). The current projected inpatient update for 2014 starts in October 2013 and is forecast to equal 1.8 percent (2.6 percent projected market basket - 0.5 percent for productivity - 0.3 percent for budget adjustments). The projected outpatient update starts three months later, in January 2014, and is forecast to equal 2.0 percent (2.7 percent projected market basket - 0.4 percent for productivity - 0.3 for budget adjustments). These forecasts will be updated as new market basket and productivity data become available.
- In fiscal year 2013, the VBP program will redistribute a pool of dollars equal to 1 percent of inpatient DRG payments (\$850 million in fiscal year 2013) to hospitals based on their overall performance on a set of quality measures. The size of the VBP redistribution pool is mandated to increase 0.25 percentage point each year, reaching a maximum of 2 percent of DRG payments in fiscal year 2017.
- Also beginning in fiscal year 2013, the Hospital Readmissions Reduction Program will reduce payments to hospitals that have higher than expected risk-adjusted readmissions. The current readmission penalty formula is complex, but in essence the penalty is computed as the product of a hospital's adjusted cost of excess readmissions and a multiplier (see p. 53 for further discussion of the readmission policy). The net effect on industry-wide Medicare payments is equivalent to roughly -\$300 million, or a 0.2 percent reduction in overall Medicare payments. Each individual hospital's penalty is capped at 1 percent of base inpatient operating payments in

2013, 2 percent in 2014, and 3 percent in 2015 and thereafter.

- PPACA mandated the expansion of the low-volume adjustment policy for fiscal year 2011 and fiscal year 2012. This policy was intended to provide additional payments to rural hospitals that have a low volume of Medicare (not all-payer) inpatient discharges and are 15 miles or more from the nearest IPPS hospital. We estimate that the expansion of the low-volume adjustment increased payments to rural hospitals by approximately \$380 million in fiscal year 2011 and \$365 million in fiscal year 2012. We have determined that the program is not well targeted and provides payments in excess of amounts that can be empirically justified based on past studies of the relationship between volume and cost. We discussed the problems with this policy in detail in our report on rural health care (Medicare Payment Advisory Commission 2012b). The program was originally scheduled to expire at the end of 2012 but was extended through 2013 as part of the American Taxpayer Relief Act of 2012 (ATRA).
- PPACA authorized the creation of the low-spending county hospital payment policy for fiscal year 2011 and fiscal year 2012. This policy provides additional payments to hospitals in counties with relatively low levels of Medicare spending per beneficiary. In both years, approximately 400 hospitals qualified for the additional payments and, as mandated, shared the fixed pool of dollars available (\$150 million in fiscal year 2011 and \$250 million in fiscal year 2012). We are not aware of any empirical support for this policy. The program expired at the end of fiscal year 2012.
- The “rural floor” policy (which actually sets a floor for urban hospitals) specifies that a state’s urban areas cannot have a lower wage index than its rural areas. We are not aware of any empirical support for this policy, which implicitly assumes that rural areas always have wages that are equal to or below wages in urban areas. To pay for the additional payments that some hospitals receive due to the rural floor, PPACA mandated that the Secretary of Health and Human Services (HHS) enact a national budget-neutrality factor. For example, when the rural Nantucket Cottage Hospital deactivated its critical access hospital status, thus becoming the only rural IPPS hospital in Massachusetts, it set the rural floor for all of Massachusetts’s hospitals at the wages paid

in Nantucket, a high-cost community. This change yielded an estimated \$274 million in extra payments to 60 urban hospitals in Massachusetts, a nearly 9 percent increase in inpatient payments. These extra payments were offset by lowering payments to other IPPS hospitals across the country by up to 0.5 percent. The Commission recommended eliminating these special wage index adjustments and adopting a new wage index system to avoid geographic inequities that can occur due to current wage index policies (Medicare Payment Advisory Commission 2007b).

In addition to PPACA-derived hospital payment policies, one non-PPACA policy, the Medicare-Dependent Hospital (MDH) program, will expire at the end of fiscal year 2013. It was scheduled to expire at the end of 2012 but was extended through 2013 by ATRA. As part of the MDH program, eligible hospitals can receive an additional payment to augment their standard IPPS payments if they are rural, if they have fewer than 100 beds, and if at least 60 percent of the inpatient days or discharges are covered under Medicare Part A. The program helps small hospitals but is not well targeted, as we discussed in our recent report on rural health care (Medicare Payment Advisory Commission 2012b). We estimate that the MDH program provided over \$120 million in additional payments to primarily rural hospitals in fiscal year 2012.

Prior to 2013, Medicare paid different rates for two alternative forms of stereotactic radiosurgery. ATRA equalized these rates by bringing the price of the higher cost procedure down to the price of the lower cost procedure in urban areas. CBO estimated that will reduce payments by roughly \$40 million per year.

Outpatient payments

Outpatient policy changes for rural hospitals change our projections of margins for fiscal year 2013. First, through 2012, sole-community hospitals and other rural hospitals with 100 or fewer beds received hold-harmless outpatient payments. Payment rates for these hospitals were based on the higher of the current outpatient PPS rates or the hospital’s historic payment-to-cost ratio applied to its current reported outpatient costs. As of January 2013, these adjustments expired, which resulted in a decline in outpatient payments for some rural hospitals. Second, for 2013, CMS has decided to pay for separately paid drugs and biologicals at a rate of each drug’s average sales price (ASP) plus 6 percent. In 2012, CMS had paid for separately paid drugs at a rate of ASP plus 4 percent. To maintain budget neutrality in the OPPS, the increased

rates for separately paid drugs result in lower rates for all other services.

How should Medicare payments change in 2014?

Each year, we provide update recommendations for services covered by Medicare's inpatient operating and outpatient prospective payment systems.¹⁶ These recommendations apply only to acute care inpatient and outpatient services; updates for services provided in hospital-owned rehabilitation, home health, skilled nursing, and psychiatric units are based on separate recommendations for those types of Medicare services.

Statutory update: Payment rates will be updated by the hospital market basket minus adjustments for productivity and budgetary factors

For both the acute IPPS and the OPPTS, the statutory update for fiscal year 2014 equals the projected increase in the hospital operating market basket index minus an adjustment equal to the HHS Secretary's forecast of the 10-year average productivity growth nationwide and a -0.3 percent budgetary adjustment. The operating market basket index is a projection of input price inflation for the goods and services hospitals use in producing inpatient and outpatient services. CMS's latest forecast of the market basket for October 2013, when the inpatient update takes place, is 2.6 percent, and the productivity forecast is 0.5 percent. The resulting projected statutory inpatient update on October 2013 is 1.8 percent (2.6 percent - 0.5 percent - 0.3 percent). CMS's latest forecast for January 2014, when the outpatient update takes place, is 2.7 percent, and the forecast for productivity is 0.4 percent. Therefore, the forecast statutory outpatient update is 2.0 percent (2.7 percent - 0.4 percent - 0.3 percent). The final update may differ because input prices and productivity estimates will change twice before the final updates are published in 2013.

CMS adjusted prior payment rates to correct for documentation and coding changes that took place in 2008 and 2009. In addition, CMS has stated that it still needs to reduce inpatient rates to account for further documentation and coding changes hospitals made in 2010. The Commission stated that an adjustment of between 0.6 percent and 0.8 percent is needed to correct

for coding changes from 2010 that will otherwise result in overpayments in the future (Medicare Payment Advisory Commission 2011a). The Commission also recommended in our March 2012 report that an adjustment be made to recover over \$11 billion in past overpayments that occurred from 2010 through 2012. In ATRA, the Congress authorized CMS to recover the \$11 billion from 2014 through 2017. The Secretary of HHS has authority with respect to the timing of the recoveries. If the recoveries were done equally over the four years, payments would be reduced by roughly 2.4 percent per year. This process would result in lower inpatient payment rates in 2014 than in 2013.

RECOMMENDATION 3

The Congress should increase payment rates for the inpatient and outpatient prospective payment systems in 2014 by 1 percent. For inpatient services, the Congress should also require the Secretary of Health and Human Services to use the difference between the statutory update and the recommended 1 percent update to offset increases in payment rates due to documentation and coding changes and to recover past overpayments.

RATIONALE 3

The Commission balanced several factors in reaching its inpatient update recommendation. First, updates must be constrained to maintain pressure on the industry to contain costs. There is a concern that high overall profit margins may lead hospitals to reduce their focus on cost control. Second, most payment adequacy indicators (including access to care, quality of care, and access to capital) are positive. Third, hospitals' documentation and coding changes in 2010 resulted in excessive payment rates from 2010 through 2013. The Medicare program has not recovered these overpayments. In addition, the update must be lowered to prevent further overpayments in 2014. Fourth, while relatively efficient hospitals roughly broke even caring for Medicare patients in 2011, most hospitals have negative overall Medicare margins (-5.8 percent in 2011 and a projected -6 percent in 2013). Balancing these factors, the Commission recommends increasing the payment rate from 2013 to 2014 by 1 percent. The difference between the current statutory update (projected to be 1.8 percent) and the 1 percent recommended update would be used for two purposes: first to prevent future overpayments in 2014, and second to recover past overpayments from 2010, 2011, 2012, and 2013. The pace of the Commission's recommended recoveries of overpayments is slower than that of current

law, but this slower pace is necessary to ensure that base payments in 2014 are 1 percent higher than in 2013 after all adjustments. Because the policy environment is fluid, we want to be clear: The recommendation should be interpreted as a net increase in per case payments to hospitals in 2014 relative to 2013. That is, when all policy changes affecting base payments are made (i.e., recovery of overpayment due to documentation and coding changes, prevention of future overpayments, and the sequester), the net increase in payment should be 1 percent.

For outpatient services, the Commission also recommends a 1 percent increase in payment rates. On the one hand, growth in the volume of outpatient services has been strong, suggesting that the statutory outpatient update (2 percent) is too high. In addition, there has been particularly strong growth in the volume of services such as evaluation and management visits and cardiac imaging services for which hospital payment rates exceed those in competing physicians' offices by a wide margin. On the other hand, overall Medicare margins are negative, suggesting a positive update is appropriate. A 1 percent update would balance these two considerations and help limit the disparity in payment rates between services provided in outpatient departments and payment rates for the same services provided in other sectors. The Commission

maintains, as in previous years, that Medicare should try to pay similar amounts for similar services, taking into account differences in the quality of care and the relative risks of patient populations.

IMPLICATIONS 3

Spending

- This recommendation would increase Medicare spending relative to the scheduled updates by between \$750 million and \$2 billion in 2014 and by \$5 billion to \$10 billion over the next five years. While the reduced update for outpatient services reduces spending, slowing the pace of recoveries due to documentation and coding increases spending and more than offsets the outpatient savings. Note that the Secretary has discretion in how to make the recoveries during the four-year window. Our spending implications assume that the overpayments are recouped in equal amounts in each of the four years.

Beneficiary and provider

- The 1 percent increase in payment rates is adequate to allow hospitals to continue caring for Medicare beneficiaries. The recommendation will increase payments to providers but should not materially affect beneficiary access to care or the financial viability of providers. ■

Endnotes

- 1 From 2002 to 2011, 479 hospitals entered the Medicare program and 301 exited. The count of hospital openings and closings is estimated from the raw count of hospitals participating in the Medicare program by excluding hospitals that changed ownership in the same year, obtained a new Medicare provider number, or converted to a different type of hospital.
- 2 The decline in inpatient discharges was based on a consistent cohort of approximately 4,300 hospitals in each year. In addition, these data represent the raw change in volume rather than case-mix-adjusted volume change.
- 3 Occupancy rate reflects the ratio of the hospital industry's inpatient beds occupied by all patients designated as inpatients, those in outpatient observation status, and post-acute patients who are occupying inpatient swing beds to the total inpatient beds available to be staffed. Swing beds are those that can be used for acute or post-acute care.
- 4 In 2011, CMS processed nearly 1.5 million outpatient observation claims and nearly 610,000 inpatient claims that were preceded by observation care. In 2006, CMS processed nearly 920,000 outpatient observation claims and nearly 350,000 inpatient claims that were preceded by observation care.
- 5 The share of hospitals and their affiliates providing each service was calculated as the share of hospitals indicating availability of the services within the hospital, network, system, or joint venture.
- 6 M&A data from Irving Levin Associates are gathered through media and government (state and federal) reports documenting merger or acquisition agreements reached between the interested parties. These data are likely to underestimate the total volume of M&A deals that occur each year because of the decentralized nature of market activity in this field.
- 7 Regional hospital systems are defined as those possessing multiple hospitals in one state or in multiple contiguous states. National hospital systems are defined as those that possess multiple hospitals in noncontiguous states.
- 8 The net increase of 2.7 percent results from several adjustments: the market basket (+2.6 percent), less a productivity adjustment (-0.7 percent), less a budget adjustment (-0.1 percent), less an adjustment to prevent further overpayments due to documentation and coding changes (-1.9 percent), plus the expiration of the 2.9 percent temporary downward adjustment that was in effect during fiscal year 2011 and fiscal year 2012 to recover past overpayments in fiscal year 2008 and fiscal year 2009.
- 9 The services included in the overall Medicare margin are Medicare acute inpatient, outpatient, graduate medical education, Medicare SNF (including swing beds), Medicare home health care, Medicare inpatient psychiatric, Medicare inpatient rehabilitation, as well as special payments for health information technology and the low-spending county payments.
- 10 The -6 percent projection does not factor in any effect of the sequestration that may or may not occur in 2013.
- 11 In its July 2012 report to the Congress concerning CMS's EHR Incentive Payment Program, the Government Accountability Office reported that as many as 4,855 hospitals were eligible to receive payments as part of this program. For hospitals that are not deemed meaningful users by 2015, their market basket update will be reduced 25 percent in 2015, 50 percent in 2016, and the 75 percent maximum in 2017 and beyond. For CAHs that are not deemed meaningful users by 2015, Medicare payments will be reduced from 101 percent of reasonable costs to 100.66 percent of costs in 2015 and then reduced a third of a percentage point for two more years until reaching the maximum of a 1 percent reduction in 2017. In other words, CAH payments will go no lower than 100 percent of reasonable costs. We expect the vast majority of PPS hospitals and a large share of CAHs to adopt EHRs and avoid the penalties.
- 12 Medicaid EHR incentive payments to hospitals equaled approximately \$2 billion in fiscal year 2012.
- 13 This 20 percent estimate takes into account the Supreme Court ruling of 2012, which allows states to choose not to expand their Medicaid rolls without losing their other Medicaid dollars.
- 14 We expect the newly insured to have a roughly similar number of inpatient days per capita compared with those currently on Medicaid. In survey data from the Massachusetts expansion of health care coverage, the health status reported by newly covered individuals was similar to that of individuals on Medicaid. In the lottery-based expansion of Medicaid in Oregon, the initial number of Medicaid days per capita for the newly insured was less than 1 standard deviation point higher than for the existing Medicaid population (Finkelstein et al. 2011, McCormick et al. 2012).
- 15 The 20 percent increase in Medicaid enrollment reflects CBO estimates for 2014, taking into consideration the Supreme

Court decision in the summer of 2012. Earlier estimates by CBO and others projected a greater expansion of Medicaid. CBO projected a 25 percent decline in uninsured in 2014, rising to 50 percent by 2017. The administration has projected greater reductions in the number of uninsured. The payments in 2014 will hinge on what data CMS uses to determine the rate of uninsurance. The lack of current data on uninsurance may cause CMS to use either 2013 data or projections of 2014 uninsurance rates to provide interim payments and then reconcile the DSH and uncompensated care payments after data on the uninsured become available. Currently, CMS

provides interim DSH payments based on projections and then reconciles after actual Medicaid and SSI share data for the year become available.

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

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