

CHAPTER

3

**Hospital inpatient and
outpatient services**

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

- 3-1** The Secretary should require hospitals to add a modifier on claims for all services provided at off-campus stand-alone emergency department facilities.

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

-
- 3-2** The Congress should update the inpatient and outpatient payments by the amounts specified in current law.

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

.....

(Additionally, the Commission reiterates its March 2012 and March 2014 recommendations on hospital outpatient department site-neutral payments. See text box, p. 71.)

Hospital inpatient and outpatient services

Chapter summary

In 2015, the Medicare fee-for-service (FFS) program paid 4,700 hospitals \$178 billion for about 10 million Medicare inpatient admissions, 200 million outpatient services, and \$8 billion of non-Medicare uncompensated care costs. This sum represents a 3 percent increase in hospital spending from 2014 to 2015. On net, inpatient payments increased by \$2 billion, and outpatient payments increased by almost \$4 billion. Inpatient payments increased because of slight increases in prices, patient severity, and inpatient volume. Outpatient payments rose by about \$4 billion because of volume increases, price increases, and the continued shift of services from lower cost physician offices to higher cost hospital outpatient settings. The increase in overall hospital payments between 2014 and 2015 is equivalent to payments per FFS beneficiary increasing from \$4,824 to \$4,957.

Assessment of payment adequacy

In brief, most payment adequacy indicators (including access to care, quality of care, and access to capital) are positive. Average Medicare margins continue to be negative, although hospitals with excess capacity still have an incentive to see more Medicare beneficiaries because Medicare payment rates remain about 9 percent higher than the variable costs associated with Medicare patients.

In this chapter

- Are Medicare payments adequate in 2017?
- How should Medicare payment rates change in 2018?

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

- **Capacity and supply of providers**—The average hospital occupancy rate was 62 percent in 2015, suggesting hospitals have excess inpatient capacity in most markets.
- **Volume of services**—Inpatient use per beneficiary increased by 0.4 percent in 2015 and outpatient services increased by 2.2 percent. The slight increase in inpatient admissions per capita follows years of steady declines.

Quality of care—Hospital mortality and readmission rates have improved in recent years. Patient satisfaction has also improved somewhat: The share of patients who rated their hospital a 9 or 10 on a 10-point scale increased from 69 percent in 2011 to 72 percent in 2015.

Providers' access to capital—Access to bond markets remains strong. While some hospitals struggle with low occupancy and limited access to capital, most hospitals have good access to capital because of strong all-payer profit margins. All-payer operating margins reached a record high in 2015.

Medicare payments and providers' costs—In 2015, hospitals' aggregate Medicare margin was -7.1 percent. Under current law, Medicare margins are projected to decline from 2015 to 2017 to approximately -10 percent. This decline in part reflects the sunset of information technology subsidies and lower uncompensated care payments. Uncompensated care payments declined as more individuals enrolled in Medicaid or private insurance from 2015 to 2017. Cost growth per discharge has remained relatively low in recent years with the exception of drug and device costs. While average Medicare payments were lower than average costs, Medicare payments were higher than the variable costs of treating Medicare patients in 2015—resulting in a marginal profit of about 9 percent. Therefore, hospitals with excess capacity still have a financial incentive to serve more Medicare patients.

Stand-alone emergency departments: Collecting Medicare claims data

As discussed in this chapter, stand-alone emergency departments (EDs) have expanded in recent years. However, CMS is currently unable to track growth in stand-alone ED claims because the claims are not distinguished from hospitals' on-campus ED claims. We recommend claims be modified to allow CMS to track this growing category of providers.

Recommendations

The Commission recommends that the Secretary require hospitals to add a modifier on claims for all services provided at off-campus stand-alone emergency department facilities. In addition, the Commission recommends that the Congress update the inpatient and outpatient payments by the amounts specified in current law. ■

**TABLE
3-1**

Growth in Medicare inpatient and outpatient spending

Hospital services	2006	2014	2015	Average annual change 2006-2014	Change 2014-2015
Inpatient services					
Total FFS payments (in billions)	\$110	\$110	\$112	0%	2%
Payments per FFS beneficiary	3,085	2,939	3,002	-1	2
Outpatient services					
Total FFS payments (in billions)	29	54	58	8	7
Payments per FFS beneficiary	885	1,637	1,753	8	7
Uncompensated care payments					
Total (in billions)	N/A	9	8	N/A	-19
Payments per FFS beneficiary	N/A	248	202	N/A	-18
Inpatient, outpatient, and uncompensated care payments					
Total FFS payments (in billions)	139	173	178	3	3
Payments per FFS beneficiary	3,970	4,824	4,957	3	3

Note: FFS (fee-for-service), N/A (not applicable). Reported hospital FFS spending includes all hospitals covered by Medicare’s inpatient prospective payment system along with critical access hospitals and Maryland hospitals. Fiscal year 2015 payments include partial imputation to account for the hospitals that had not yet submitted cost reports covering fiscal year 2015. The combined amount for inpatient and outpatient services per capita is based on a weighted average of Part A and Part B services. Data included in the columns representing change were calculated using unrounded figures.

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

Background

Medicare spending on hospitals

In 2015, the Medicare fee-for-service (FFS) program paid acute care hospitals \$112 billion for inpatient care, \$58 billion for outpatient care, and approximately \$8 billion in uncompensated care payments (Table 3-1). Between 2014 and 2015, inpatient payments increased by \$2 billion, resulting from an increase in payment rates of about 1 percent and a slight increase in inpatient volume. In the same period, outpatient spending per FFS beneficiary grew by 7 percent, driving a 3 percent increase in overall Medicare inpatient, outpatient, and uncompensated care payments in 2015.¹ The nearly \$4 billion increase in outpatient payments resulted from a 2.2 percent increase in 2015 payment rates, a 15 percent increase in payments for Part B drugs, increasing outpatient visit volume, and a shift in some services from physician offices to

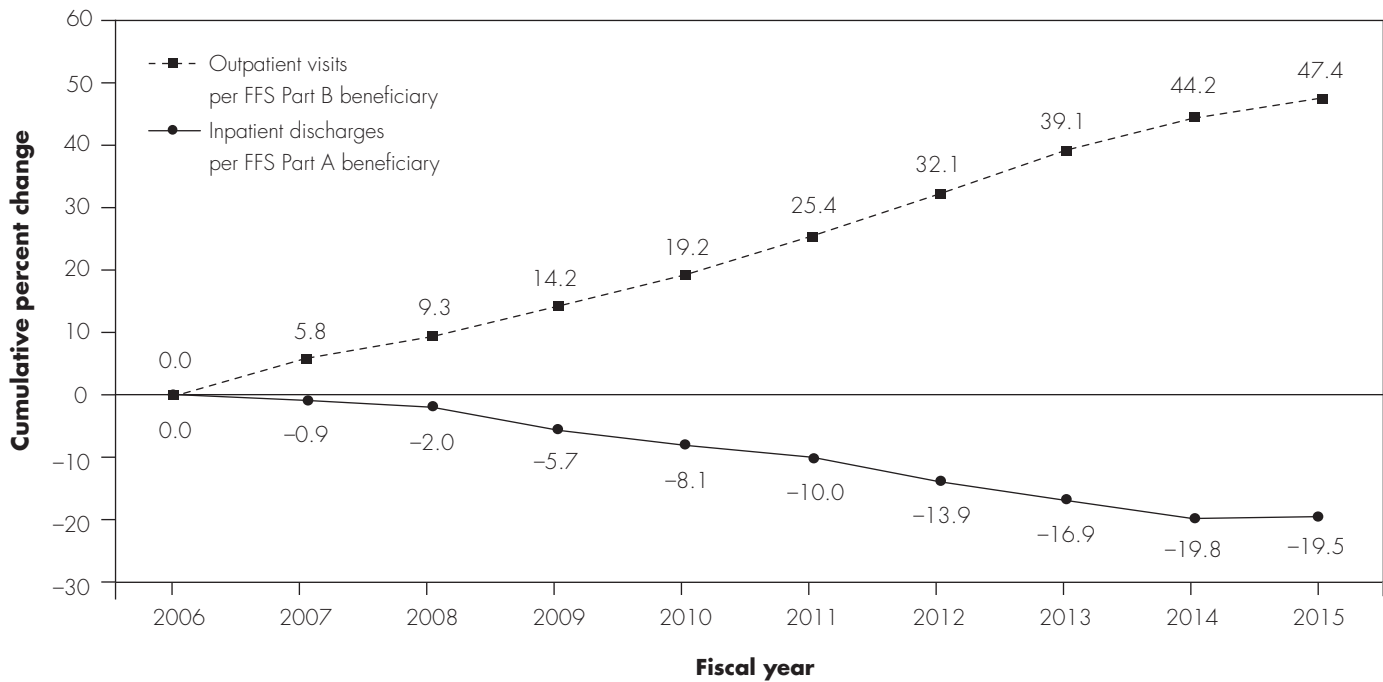
higher paying hospital sites of care. Overall inpatient and outpatient payments increased \$5 billion from 2014 to 2015 (not shown in table).

Medicare’s payment systems for inpatient and outpatient services

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

Acute inpatient prospective payment system

Medicare’s inpatient prospective payment system (IPPS) pays acute care hospitals a predetermined amount for most discharges. The payment rate is the product of a base rate and a relative weight that reflects the expected costliness

**FIGURE
3-1****Medicare inpatient discharges per beneficiary increased slightly in 2015 and outpatient visits per beneficiary continued to increase**

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

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

of cases in a particular clinical category compared with the average of all cases. The labor-related portion of the base payment rate is adjusted by a hospital geographic wage index to account for differences in hospital input prices among market areas. Payment rates are updated annually.

To set inpatient payment rates, CMS uses a clinical categorization system called Medicare severity–diagnosis related groups (MS–DRGs). The MS–DRG system classifies each patient case into 1 of 756 groups, which reflect similar principal diagnoses, procedures, and severity levels. The severity levels are determined according to whether patients have a complication or comorbidity (CC) associated with the base MS–DRG (the categories are no CC, a nonmajor CC, or a major CC). A more detailed description of the acute IPPS, including payment adjustments, can be found at http://www.medpac.gov/docs/default-source/payment-basics/medpac_payment_basics_16_hospital_finalcfc0fadfa9c665e80adff00009edf9c.pdf?sfvrsn=0.

Hospital outpatient prospective payment system

The outpatient prospective payment system (OPPS) pays hospitals a predetermined amount per service. CMS assigns each outpatient service to 1 of about 700 ambulatory payment classification (APC) groups. Each APC has a cost-based relative weight, and a conversion factor translates these relative weights into dollar payment amounts. In 2014, CMS started to package additional laboratory tests (previously paid separately under the laboratory fee schedule) into outpatient APCs; CMS estimated that this change shifted \$2.4 billion of payments from the laboratory fee schedule to the outpatient fee schedule. In 2015, CMS implemented comprehensive ambulatory payment classifications (C–APCs) in the OPPS and expanded the inclusion of certain services in the payment package for some APCs. A more detailed description of the OPPS can be found at http://www.medpac.gov/docs/default-source/payment-basics/medpac_payment_basics_16_opd_final.pdf?sfvrsn=0.

Are Medicare payments adequate in 2017?

To judge whether payments in 2017 are adequate for relatively efficient hospitals, we examine several indicators of payment adequacy. We consider beneficiaries' access to care, changes in the quality of care, hospitals' access to capital, and the relationship of Medicare's payments to hospitals' costs for both average and relatively efficient hospitals. Most of our payment adequacy indicators for hospitals are positive, but 2015 Medicare margins remained negative for most hospitals and were approximately zero for relatively efficient providers.

Beneficiaries' access to care remained good: Excess inpatient capacity persisted and inpatient volume increased

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

Medicare beneficiaries' access to hospital services remains good, in part because of excess hospital capacity in most markets. Between 2014 and 2015, inpatient discharges per Medicare beneficiary increased 0.4 percent, a reversal from the eight prior years of declines, including a nearly 3 percent annual decline in 2012, 2013, and 2014 (Figure 3-1). Driving this reversal is an increase in the number of medical cases and the number of short-stay cases (those lasting two days). Medical stays increased 1.8 percent from 2014 to 2015, compared with a 0.8 percent decline in surgical cases. Over the longer term (2006 to 2015), surgical cases declined more rapidly than medical cases (–26 percent vs. –15 percent, respectively) as surgeries moved to outpatient settings.

From 2014 to 2015, overall inpatient discharges declined 0.4 percent per beneficiary at rural hospitals receiving IPPS rates compared with a 1.3 percent increase at urban hospitals. Inpatient volume increased in each racial and age group. In 2015, similar to previous years, African Americans and Native Americans were slightly higher users of inpatient services (more than 20 percent of beneficiaries in each category used inpatient services)

than White Americans (18 percent), Hispanic Americans (17 percent), and Asian Americans (13 percent). In 2015, as in previous years, beneficiaries ages 90 years and older were higher users of inpatient services, with 42 percent of these older beneficiaries having at least 1 admission in 2015. On a combined basis (called “adjusted discharges”), total inpatient and outpatient volume across all payers (Medicare and other) increased by 3.8 percent from 2014 to 2015. For 2016, existing reports through the first three quarters of 2016 show relatively flat all-payer inpatient admissions and moderate growth in outpatient services (Census Bureau 2016a, Community Health Systems 2016, Lifepoint Health 2016, Morningstar Document Research 2016a, Morningstar Document Research 2016b).

The increase in inpatient volume in 2015 may also be attributable to the decline in the growth rate of outpatient observation stays caused by the implementation of CMS's two-midnight rule. Past declines in inpatient volume corresponded with significant growth in the number of observation stays. From 2010 to 2014, the number of observation stays per beneficiary increased 8 percent per year while inpatient volume declined 3 percent per year as hospitals, in part, responded to pressure from CMS auditors to control their short inpatient stays. In 2014, CMS implemented the two-midnight rule to reduce the growth in observation stays and improve guidance regarding permissible short stays (Medicare Payment Advisory Commission 2015a). Between 2014 and 2015, the volume of outpatient observation stays increased roughly 2 percent, and the volume of inpatient stays lasting two days increased by 3.5 percent. Therefore, the increase in inpatient volume in 2015 may be due to some stays that were previously treated in the observation setting reverting to the inpatient setting.

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

From 2014 to 2015, the use of outpatient services increased by 2.2 percent per Medicare FFS beneficiary. Over the decade ending in 2015, volume per beneficiary grew by 47 percent. One-third of the growth in outpatient volume from 2014 to 2015 was due to an increase in the number of evaluation and management (E&M) visits billed as outpatient services. This growth in part reflects hospitals purchasing freestanding physician practices and converting the billing from the physician fee schedule to higher paying hospital outpatient department

**TABLE
3-2**

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

Type of service	Share of ambulatory services performed in HOPDs, 2012	Per beneficiary volume growth, 2012-2015	
		HOPD	Freestanding physician office
E&M office visits	11%	22%	-1%
Echocardiography	34	20	-16
Nuclear cardiology	39	1	-25

Note: E&M (evaluation and management), HOPD (hospital outpatient department). In 2012, the E&M office visits had Current Procedural Terminology (CPT) codes 99201-99215. In 2014 and 2015, all E&M office visit facility fees were billed under a single CPT code, G0463. Echocardiography includes services in ambulatory payment classification (APC) 0269, APC 0270, and APC 0697 as defined in 2012. Nuclear cardiology includes services in APC 0377 and APC 0398 as defined in 2012. These APCs changed slightly from 2012 to 2015, but the changes are small enough not to affect the qualitative results in this table if we had used the APC definitions from 2015.

Source: MedPAC analysis of standard analytic claims files from 2012 and 2015.

(HOPD) visits. The conversions shift market share from freestanding physician offices to HOPDs (Table 3-2). From 2012 to 2015, hospital-based E&M visits per beneficiary grew by 22 percent, compared with a 1 percent decline in physician office-based visits. Other categories of services such as echocardiograms and nuclear cardiology are also shifting to hospital-based billing. Hospital-based echocardiograms per capita grew by 20 percent, compared with a 16 percent decline in physician office-based echocardiograms. Nuclear cardiology grew by 1 percent in HOPDs compared with a 25 percent decline in physician offices.

We have documented how the billing for these services has shifted from physician offices to higher cost outpatient sites of care in previous reports (Medicare Payment Advisory Commission 2014b, Medicare Payment Advisory Commission 2013b, Medicare Payment Advisory Commission 2012). Among other effects, the shift in care setting increases Medicare program spending and beneficiary cost-sharing liability because Medicare payment rates for the same or similar services are generally higher in HOPDs than in freestanding offices. For example, we

estimate that the Medicare program spent \$1.0 billion more in 2009, \$1.3 billion more in 2014, and \$1.6 billion more in 2015 than it would have if payment rates for E&M office visits in HOPDs were the same as freestanding office rates. Analogously, beneficiaries' cost sharing was \$260 million higher in 2009, \$325 million higher in 2014, and \$400 million higher in 2015 than it would have been because of the higher rates paid in HOPD settings. Other studies have examined the effect of practice acquisition on prices private insurers pay for outpatient services. Those studies found that prices for physician services increased after hospitals acquired physician practices (Capps et al. 2015, Neprash et al. 2015). Inpatient and outpatient volume did not appear to change enough to offset the higher prices (Neprash et al. 2015). Thus, practice acquisitions, at least in the short run, appear to increase costs to private and public payers.

To address the increased spending that results when services shift from freestanding offices to HOPDs, the Commission recommended adjusting OPSS payment rates so that Medicare payment for E&M office visits is equal in freestanding physician offices and HOPDs (Medicare Payment Advisory Commission 2012). The Commission also recommended adjusting OPSS rates for a set of other services so that payment rates are equal or more closely aligned across these two settings (Medicare Payment Advisory Commission 2014b). A brief overview of these two recommendations can be found in the text box (opposite page). The key principle in the Commission's recommendations is that the payment for the selected outpatient services would not depend on the location of service delivery.

In 2015, the Congress took a somewhat different approach to address these concerns. The Congress chose to equalize rates between new off-campus HOPDs and physician offices. However, under the Bipartisan Budget Act of 2015, stand-alone emergency departments (EDs) and existing off-campus HOPDs will continue to receive the higher HOPD facility fees. This measure could give hospital systems an incentive to invest capital in new stand-alone EDs or mini-hospitals even if the hospital system does not need additional ED or inpatient capacity. Hospitals may want to bill for off-campus E&M services and other services at higher hospital rates. Therefore, the current site-based payment creates an incentive for the misallocation of capital toward higher cost sites of care that could result in higher costs for providers, taxpayers, and beneficiaries. Once the capital is allocated, the costs may be difficult to reverse.

The Commission reiterates its hospital outpatient department site-neutral recommendations

The Commission reiterates its two recommendations to the Congress related to site-neutral payment between hospital outpatient departments and physicians' offices. The first was made in 2012 and the second in 2014. The recommendation language, rationales, and implications are shown below.

Recommendation from the March 2012 report to the Congress

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

The rationale was that hospitals have been acquiring physician practices and employing physicians at an increasing rate. As more physicians become employed by hospitals, evaluation and management (E&M) office visits will shift from being billed as physician office services to being billed as outpatient department services. This shift causes Medicare program payments and beneficiary cost sharing to be

higher than they would have been had the services been billed as clinician office visits. Further, there may be a broader loss of efficiency because it can be more costly to operate a physician practice once it becomes hospital owned and is operated as a hospital outpatient department.

The implication of equalizing rates for E&M services would be a reduction in program payments to hospitals of \$1.6 billion and a \$400 million reduction in beneficiary cost sharing to hospitals, based on 2015 claims data.

Recommendation from the March 2014 report to the Congress

The Congress should direct the Secretary of Health and Human Services to reduce or eliminate differences in payment rates between outpatient departments and physician offices for selected ambulatory payment classifications.

The rationale for this second recommendation was to reduce the incentive to shift patient billing to hospital-owned outpatient facilities for certain services (e.g., echocardiograms) that can safely be provided in physician offices.

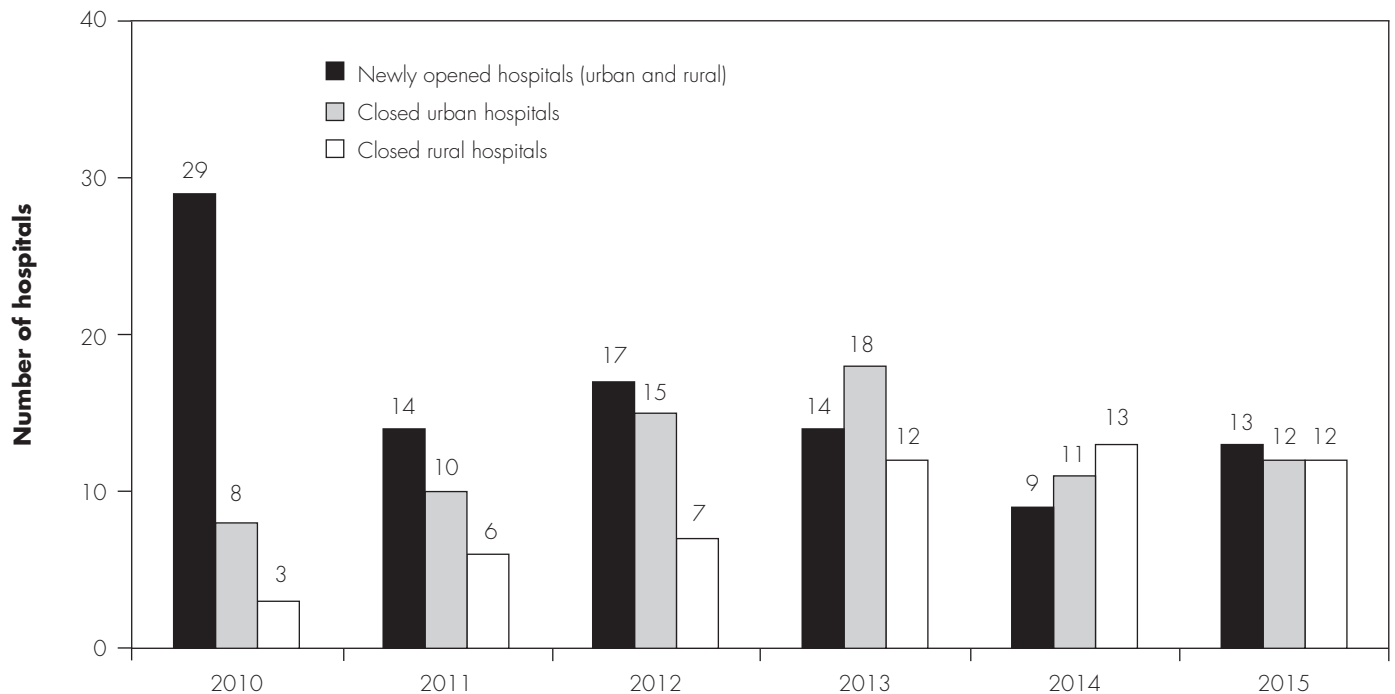
If we expanded the equalizing of rates beyond E&M services to other selected ambulatory payment classifications, there would be reductions in payments by the program and by beneficiaries to hospitals. ■

Excess inpatient capacity

Aggregate occupancy rates for hospitals increased in 2015 for the first time since 2008; however, there continues to be excess inpatient capacity in the industry broadly and to varying degrees by region. From 2014 to 2015, hospital occupancy rates showed a small increase from 61 percent to 62 percent. Occupancy rate growth from 2014 to 2015 was driven by urban hospitals, which saw their rates increase from 64 percent to 65 percent. Occupancy rates at rural hospitals were unchanged at 41 percent. Rural hospitals with fewer than 50 beds had the lowest occupancy rates in 2015, at 33 percent. Between 2010

and 2015, occupancy rates at these small rural hospitals declined 5 percentage points, suggesting individuals from rural areas often bypass small rural hospitals and travel to urban hospitals for inpatient care (Medicare Payment Advisory Commission 2016a).

Nationally, from 2006 to 2014, inpatient bed capacity declined from 2.8 inpatient hospital beds per 1,000 residents to 2.5 beds per 1,000 residents (American Hospital Association 2016). The largest declines in beds were for adult general medical and surgical beds and for skilled nursing beds. The number of intensive care unit

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

Source: MedPAC analysis of the CMS Provider of Services file, Internet searches, and personal communication with the Department of Health and Human Services Office of Rural Health Policy.

(ICU) beds did not decline, causing the ICU share of total beds to increase from 11.5 percent in 2010 to 12.0 percent in 2014. Bed capacity varies by market. For example, the major metropolitan statistical area of Portland, OR, had 1.5 beds per 1,000 residents in 2014, compared with Buffalo, NY, with 3.9 beds per 1,000 residents.

Hospital closures increased slightly

In light of the 4,700 hospitals that Medicare paid in 2015, there have been slightly more hospital closures than hospital openings over the past 4 years. In 2015, we identified 24 closures and 13 openings (Figure 3-2). Among those that closed in 2015, 12 were in urban counties and 12 were in rural counties. All but one of the openings were urban hospitals.

Hospitals that closed in 2015 were smaller than average, they had low occupancy and poor profitability, and a large share were located in states that did not expand their Medicaid program in recent years. These 24 hospitals had an average of 80 inpatient beds. The average occupancy rate of these hospitals was 26 percent, and their average

total all-payer margin in the most recent year available was -12 percent. Two-thirds of the 24 hospitals that closed (16 facilities) were in states that did not expand their Medicaid programs under the Patient Protection and Affordable Care Act of 2010. In addition, the urban hospitals that closed were an average of 16 miles from the nearest hospital, and the rural hospitals were an average of 19 miles from the nearest hospital.

Among all the hospitals that closed, nearly half closed their inpatient capacity and converted to outpatient-only facilities. Specifically, 14 hospitals closed completely, 6 converted to stand-alone EDs and outpatient centers, and 4 converted to outpatient facilities without ED services. All of these stand-alone EDs were urban facilities, and the majority of hospitals that closed completely were rural. The rural closures raise questions about whether there are more efficient and financially stable ways to ensure access to emergency services in these communities. One option could be to adopt models that are focused on emergency and outpatient access rather than maintaining inpatient services,

as discussed in our June 2016 report to the Congress (Medicare Payment Advisory Commission 2016a).

Quality of care has been improving

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

In 2017, hospitals' performance on quality metrics has the potential to increase a hospital's base IPPS payment rates by as much as 3.5 percent and lower payments by as much as 6.0 percent. Three payment adjustments are responsible for these potential changes: the Hospital Readmission Reduction Program (HRRP) (which can result in up to a 3.0 percent reduction), the hospital value-based purchasing (VBP) program (which can account for between a 3.5 percent increase and a 2.0 percent reduction to payments), and the Hospital-Acquired Condition (HAC) Reduction Program (which can result in a 1.0 percent reduction to payments for 25 percent of hospitals). While these adjustments have the potential to change inpatient payments, they do not alter outpatient payments. In 2017, a little more than a quarter of hospitals will see a net increase in payments (averaging about \$83,000) and a little more than two-thirds will see a net decrease in payments (averaging around \$436,000) under the combined effect of these programs. On net, these three programs lower Medicare payments by about \$900 million, or 0.5 percent of overall Medicare payments.

Overall hospital quality metrics show improvement

To assess aggregate trends in quality of care across all IPPS hospitals, we use mortality rates, readmission rates, and patient satisfaction. We find that from 2011 to 2015, mortality declined, readmissions declined, and the share of patients rating their hospital a 9 or 10 on a 10-point scale has increased from 69 percent to 72 percent. The quality improvements reflect the efforts hospitals have made to improve patient outcomes, but also reflect the closure or restructuring of some of the poorest performing hospitals. In 2014, we examined 112 hospitals that from 2009 through 2011 had a combination of low occupancy, high readmission rates, and poor patient experience (Medicare Payment Advisory Commission 2014b). By 2015, 13 of the 112 hospitals closed, a quarter of the hospitals changed

ownership, and others replaced their facilities. This finding is consistent with a recent study that suggests market share is flowing to higher quality hospitals (Chandra et al. 2015).

Readmission rates declining The Congress enacted the Medicare HRRP in 2010, and since that time the program has expanded to include more conditions. Penalties under the HRRP started in fiscal year 2013, based on three conditions for which the maximum penalty was capped at 1 percent. In fiscal year 2017, hospitals are penalized if they have above-average readmission rates (from a prior three-year period (July 1, 2012, through June 30, 2015)) for one of six clinical conditions (acute myocardial infarction (AMI), heart failure, pneumonia, congestive obstructive pulmonary disease (COPD), elective total hip or knee replacement, or coronary artery bypass graft (CABG) surgery). As stated earlier, the HRRP reduction is capped at 3 percent of base inpatient payments.

In 2017, 80 percent of hospitals will have payments reduced because of the HRRP, with 19 percent receiving a penalty of between 1 percent and 3 percent of base payments. A larger share of major teaching hospitals and hospitals serving large shares of poor patients (92 percent and 89 percent, respectively) will receive a readmission penalty; 22 percent of these facilities are receiving a penalty of 1 percent or more. A large share of hospitals will receive an HRRP penalty in 2017 because a hospital needs to have an above-expected rate for only one of the six conditions to receive a penalty. The average penalty was \$205,000 per hospital in 2017. Total penalties are expected to be \$526 million in 2017, or 0.3 percent of overall Medicare payments going to hospitals.²

In 2013, the Commission suggested several improvements to the HRRP. One called for setting a fixed target for readmission rates so aggregate penalties would go down when industry performance improves. We also suggested using an all-condition readmission measure to increase the number of observations and reduce the random variation that single-condition readmission rates face under current policy. A third improvement would be to evaluate hospitals' readmission rates against rates for peer hospitals with similar shares of poor patients as a way to adjust penalties for the effects of socioeconomic status on hospitals' readmission rates (Medicare Payment Advisory Commission 2013a). The Congress adopted this idea in the 21st Century Cures Act (Public Law 114–255). The act includes a provision (Section 15002) that would require the Secretary of the Department of Health and Human Services to adjust readmission penalties using peer groups

**TABLE
3-3**

Potentially preventable readmission rates have declined

Reason for initial admission	2010	2011	2012	2013	2014	2015	Percentage point change, 2010-2015
All conditions	12.9%	12.4%	11.9%	11.3%	11.0%	10.5%	-2.4
AMI	17.3	16.9	16.1	15.0	14.3	13.7	-3.6
Heart failure	19.5	19.2	18.4	17.6	17.0	16.4	-3.1
Pneumonia	13.1	12.6	12.1	11.5	11.5	10.6	-2.5
COPD	16.8	16.5	15.9	15.1	14.7	14.2	-2.6

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

Source: MedPAC analysis of 2010 through 2015 Medicare claims data and 3M™ potentially preventable readmissions software.

of hospitals based on the share of Medicare patients that are fully dual-eligible beneficiaries starting in fiscal year 2019.

The readmission reduction payment policy and other efforts, such as the Partnership for Patients and Community-Based Care Transitions Program, have encouraged hospitals to improve care coordination with providers outside the hospital to reduce readmissions and make other quality improvements. These programs provide funds for external organizations to help support hospitals' efforts to improve patient outcomes. The Commission has also recommended a redesign of the Quality Improvement Organization Program to allow the Secretary to provide funding for time-limited technical assistance directly to providers and communities to help improve quality of care (Medicare Payment Advisory Commission 2011a). Such a reform could increase the likelihood that providers and communities receive the technical assistance the hospitals deem relevant to their quality improvement efforts.

Through 2015, readmission rates continued to fall for all conditions and for conditions included in the HRRP (Table 3-3). From 2010 to 2015, potentially preventable readmissions declined by 2.4 percentage points across all cases, after adjusting for changes in the mix of patients. Potentially preventable readmission rates dropped 3.6 percentage points for AMI, 3.1 percentage points for heart failure, and 2.5 percentage points for pneumonia. During the same period, readmission rates for COPD (which was added to the program in 2015) fell 2.6 percentage points. Increases in the use of 24-hour-plus observation care accounted for only a small portion of the drop in readmission rates,

meaning that care (not just coding) is improving (Medicare Payment Advisory Commission 2016b).

Mortality rates are declining From 2011 to 2015, risk-adjusted mortality rates have continued to decline with the average 30-day risk-adjusted mortality rate across all conditions declining 0.9 percentage points (Table 3-4). Raw (non-risk-adjusted) mortality rates, however, actually increased over this period, but this growth was due to less severe cases—with low expected mortality rates—not being admitted to the hospitals because of increased use of outpatient observation care and shifting of other low-severity surgeries to outpatient settings. Other studies have found similar improvements for specific conditions (Hines 2015, Krumholz 2015). The combination of a decline in readmissions and a decline in hospital mortality is strong evidence of improving quality.

Hospital value-based purchasing incentives are increasing The Congress mandated a VBP program for IPPS hospitals beginning in fiscal year 2013. Under the program, CMS reduces all IPPS hospitals' base operating diagnosis related group (DRG) payment amounts by 2 percent in fiscal year 2017 to create a pool of funds from which the performance-based VBP incentive payments will be distributed.³ As required by law, the hospital VBP program is budget-neutral; that is, the pool of withheld payments must be redistributed to hospitals based on their performance on the VBP program's quality measures.

In 2017, the VBP program will redistribute on net approximately \$350 million in Medicare inpatient payments from low performers to high performers. The

**TABLE
3-4**

Risk-adjusted 30-day postdischarge mortality rates have declined

Mortality rate	2011	2012	2013	2014	2015
Unadjusted mortality	8.1%	8.1%	8.5%	8.4%	8.6%
Expected mortality	8.1	9.6	10.2	10.5	11.1
Risk-adjusted mortality	8.1	7.8	7.7	7.4	7.2

Source: MedPAC analysis of 2011 through 2015 Medicare claims using 3M™ all-patient refined–diagnosis related group risk of mortality V32 grouper and beneficiary age and gender to calculate risk-adjusted mortality rates (using 2010 through 2012 data to set expected rates).

program uses a combination of measures from four quality domains to develop hospital scores under the program:

- 25 percent based on patient and caregiver experience of care and care coordination using 8 measures from the Hospital Consumer Assessment of Healthcare Providers and Systems® (H-CAHPS®) survey;
- 20 percent based on patient safety measures, which include a composite patient safety measure (the Agency for Healthcare Research and Quality’s (AHRQ’s) patient safety indicator (PSI) 90) and 6 health care–associated infection measures from the Centers for Disease Control and Prevention’s National Healthcare Safety Network;⁴
- 25 percent based on efficiency measures, which use a 30-day Medicare spending per beneficiary measure; and
- 30 percent based on clinical care measures, which includes 3 process of care measures (5 percent) and 3 condition-based outcome measures of 30-day mortality for AMI, heart failure, and pneumonia (25 percent).⁵

In 2017, the VBP program will increase payments to 55 percent of IPPS hospitals (by an average of \$95,000) and decrease payments to 38 percent of them (by an average of \$140,000). For roughly a third of these hospitals, the change in payments under the program will be small, less than 0.25 percent of base payments. However, 10 percent of hospitals will see an increase of between 1 percent and 3 percent, and another 10 percent will see a decrease equal to more than 0.5 percent of their base inpatient payments. Performance under the VBP program varies by hospital group, with 33 percent of major teaching hospitals receiving rewards compared with 63 percent

of nonteaching hospitals. Further research is needed to evaluate reasons for the differences across hospital groups.

The VBP program gives a hospital credit for achievement (relative to other hospitals) and improvement (relative to its own baseline performance). Some of the quality metrics included in the VBP program overlap with other quality programs, particularly the program to reduce hospital-acquired conditions.

Hospital-Acquired Condition Reduction Program implemented in 2015

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

The HAC program includes hospital measures from two domains. In the first domain, patient safety, hospitals’ performance is examined using a blended set of eight patient safety indicators (PSI 90), including pressure ulcers, various postoperative complications, and certain hospital-acquired infections. The second domain, infections, includes six measures: central line–associated bloodstream infections (CLABSIs), catheter-associated urinary tract infections (CAUTIs), surgical site infections (SSIs) for colon and hysterectomy surgeries, methicillin-resistant *Staphylococcus aureus*, and *Clostridium difficile* (the latter two were added in 2017). In fiscal year 2017, the patient-safety domain is weighted at 15 percent and the infection measures are weighted at 85 percent. HAC

measures are also included in the hospital VBP program's patient outcome domain. The HAC penalty for fiscal year 2017 is based on performance data from 2013 to 2015. In 2017, the HAC program will reduce payments to 742 hospitals, with penalties totaling around \$370 million, or an average of \$500,000 per penalized hospital. Penalties will vary by type of hospital, with 46 percent of major teaching hospitals and 56 percent of high DSH hospitals receiving a penalty compared with an average of 23 percent across all hospitals and just 13 percent of rural hospitals. This variance may in part reflect types of cases (e.g., ICU cases) and procedures (e.g., surgical cases) that occur more frequently in major teaching hospitals.

Hospitals have been successful in reducing the number of HACs. A recent AHRQ study reported that, from 2010 to 2015, HACs per discharge declined by 21 percent. This study also estimated that about 125,000 fewer patients died in the hospital as a result of the reduction in HACs, and about \$28 billion in health care costs were avoided (Agency for Healthcare Research and Quality 2016). Similarly, data for the years 2008 to 2013 from the Centers for Disease Control and Prevention demonstrate substantial declines in hospital-associated infections, including a 46 percent decline in CLABSIs and a 19 percent decline in SSIs for 10 procedures collectively (Centers for Disease Control and Prevention 2015).

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

Hospitals' access to capital and employment is strong

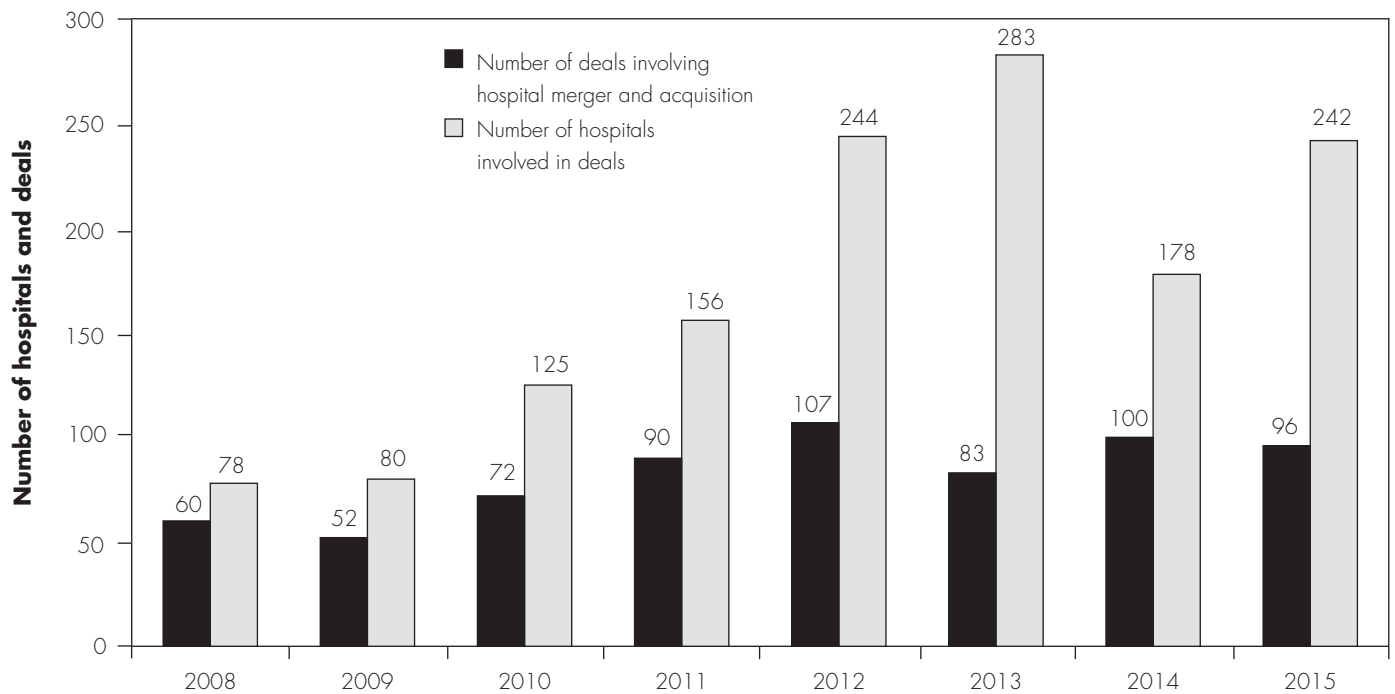
Hospitals' access to capital remained strong because of continued improvement in profitability and low interest rates. The three major bond-rating agencies (Fitch Ratings, Moody's Investor Services, and Standard & Poor's Ratings Services) reported higher revenue growth and lower expense growth at nonprofit hospitals, resulting in improved facility-wide operating profits in 2015 (Fitch Ratings 2016, Moody's Investors Service 2016, Standard & Poor's Ratings Services 2016). The agencies attributed revenue growth to price increases and improvements in

patient payer mix as insurance coverage was expanded. For example, Moody's reported that between 2013 and 2015, the self-pay share of hospital patients declined from 7.9 percent to 5.9 percent; Fitch reported, for the same period, that bad debt and charity care costs as a share of patient revenue declined from 5.8 percent to 4.4 percent.

The three ratings agencies attributed hospitals' lower expense growth to several factors. They cite modest growth in capital expenditures because hospitals are building outpatient capacity rather than more expensive inpatient capacity, and hospitals' investment projects in electronic health records systems are nearly complete. Standard & Poor's reported a decline between 2013 and 2015 in capital expenditures' share of depreciation expense from 118 percent to 113 percent (Standard & Poor's Ratings Services 2016). The agencies also cite declining debt burden as a reason expenses have declined. Moody's reported that from 2013 to 2015, total debt as a share of total operating revenues declined from 39 percent to 35 percent (Moody's Investors Service 2016). The agencies also cite continued cost containment strategies as a reason for expense reduction (Fitch Ratings 2016, Moody's Investors Service 2016, Standard & Poor's Ratings Services 2016).

The level of hospital bond issuances increased dramatically from 2015 to 2016. Through the first three quarters of 2016, nonprofit hospitals issued \$36 billion in bonds, surpassing the \$25 billion of bond offerings in 2015 and 2014. The 2016 bond issuances consisted of more than \$22 billion in new financing and more than \$13 billion in pure refinancing, both of which were proportionately higher than in previous years. The rebound of bond offerings in 2016 reflects hospitals' strong financial position and continuing low interest rates. The average interest rate for double-A tax-exempt 30-year nonprofit hospital bonds remained low, at 3.25 percent in October 2016 compared with 3.63 percent in October 2015 (Cain Brothers 2016).

In 2015, 242 individual hospitals were acquired in 96 transactions, sustaining the high level of transactions in recent years (Figure 3-3) (Irving Levin Associates Inc. 2016). Several merger deals involved large hospital corporations divesting their interests in groups of hospitals in certain states to smaller, more regional or local health systems. The long-term trend is greater consolidation in the industry, with independent hospitals joining larger hospital corporations and regional systems merging to create a broader network. The outcome is greater market

**FIGURE
3-3****Hospital merger and acquisition activity continued at a high level**

Source: MedPAC analysis of 2015 data from Irving Levin Associates Inc.

power for hospitals in negotiating contracts with insurers, physicians, and manufacturers.

Annualized hospital construction spending was \$25 billion through July 2016, the same level as 2015, but lower than the \$31 billion in average annual spending from 2008 to 2012 (Census Bureau 2016b). Spending remained lower than in the prior period because hospitals built outpatient rather than inpatient capacity. In addition, based on a survey of nonprofit hospital executives, Fitch reported that executives' top capital investment priorities are information technology, clinics, and outpatient capacity (Fitch Ratings 2015).

Hospital employment increased

Between October 2014 and October 2016, the number of individuals employed by hospitals increased from 4.8 million to 5.1 million, a rate of 6.5 percent, faster than in the rest of the health care sector (5.8 percent) and the rest of the economy (3.4 percent) (Bureau of Labor Statistics 2016). Hospital employment growth was similar to

employment growth in physician offices (6.4 percent), but slower than in outpatient care centers (10.1 percent).

Based on data from a separate Bureau of Labor Statistics (BLS) survey, hospitals are hiring individuals in certain high-skill occupational categories and reducing the number of staff in certain lower skilled occupations. Over this two-year period, hospitals increased their employment of computer specialists (6 percent) and social service staff (6 percent) more than other occupations. The number of physicians employed by hospitals increased by 2.3 percent but varied by type of physician. For example, the number of family and general physicians increased 15 percent and the number of anesthesiologists decreased 17 percent. Overall, the number of nurses employed by hospitals increased 1.4 percent during this period, with the number of higher skilled registered nurses increasing by about 40,000 individuals and the number of licensed practice or vocational nurses declining by about 17,000. Hospitals also reduced operational staff from categories such as health care support (-1.5 percent) and food services (-3.0

percent). Hospital employment growth and occupational employment growth within hospitals may have been more rapid than BLS reports because BLS estimates of workers in hospitals do not include contract workers paid outside the hospitals' payroll system, which some suggest have increased in recent years (Government Accountability Office 2015). For example, the decline in food service workers could reflect a decrease in employment or an increase in the use of outside contractors.

Stand-alone emergency departments are growing, but are not tracked by CMS

Roughly 65 percent of these facilities are hospital-affiliated off-campus emergency departments (OCED). OCEDs are recognized by Medicare for payment if they are "provider-based" departments of a given hospital (or are hospital affiliated) under the regulations at 42 CFR 413.65 and within 35 miles of the affiliated hospital's campus. We estimate that between 2008 and 2016, the number of hospitals with an OCED increased 97 percent. The remaining 35 percent of stand-alone EDs are independent freestanding emergency centers (IFEC). Medicare does not recognize IFECs for payment because they are not hospital affiliated. The majority of these facilities are in Texas, and they have all developed since 2010. Within the last two years, we have observed several owners of IFECs partnering with hospitals and health systems to gain hospital affiliation and to begin billing Medicare.

Two Medicare policies may contribute to stand-alone ED growth:

- Medicare and private payers pay EDs higher rates for evaluation visits and ancillary services than they pay for these services at physician offices and urgent care centers. This disparity encourages providers to shift services from these lower paying settings to higher paying settings such as EDs.
- The exemption given to OCEDs (or "dedicated EDs") under the 2015 site-neutral law (Section 603 of the Bipartisan Budget Act of 2015), enabling hospital-affiliated OCEDs to bill Medicare as an HOPD and receive higher payment rates, may encourage the development of more stand-alone EDs. Under the site-neutral law, new off-campus departments are prohibited from billing Medicare at higher hospital outpatient payment rates. However, the exemption allows OCEDs to continue billing Medicare at higher hospital outpatient payment rates for all ED and non-ED services (e.g., E&M visits) provided at the facility.

Despite the growth of stand-alone EDs and the various reasons for their development, CMS does not track claims for ED and non-ED services delivered at provider-based off-campus departments. Specifically, CMS cannot separately identify the number of these facilities billing Medicare, the services they provide, the types of beneficiaries they serve, or the quality of the care they provide. ED claims from OCEDs are submitted to Medicare for reimbursement through the affiliated hospitals' provider identification number and are therefore not separately identifiable. As a result, CMS and the policy and oversight communities are unable to differentiate between ED services provided at a hospital ED and those at an OCED. Mechanisms exist in the claim submission process that would enable providers to flag ED claims occurring in OCEDs without adding significant burden to OCEDs or their affiliated hospitals. For example, CMS could require OCEDs and their affiliated hospitals to include a standard two-digit modifier on the claim to flag claims from OCEDs. CMS has recently required a similar modifier to be included with claims occurring in hospitals' other off-campus departments, as a part of the site-neutral law's rule-making process.

RECOMMENDATION 3-1

The Secretary should require hospitals to add a modifier on claims for all services provided at off-campus stand-alone emergency department facilities.

RATIONALE 3-1

This recommendation will allow CMS and the Congress to be informed regarding the expansion of off-campus emergency department facilities, the services they provide, and the beneficiaries they treat.

IMPLICATIONS 3-1

Spending

- The recommendation will not increase program spending.

Beneficiaries and providers

- The recommendation has no implications for beneficiaries and is likely to increase only minimally hospitals' administrative burden as they initially adapt to the requirement to add a modifier on claims occurring at off-campus stand-alone emergency departments.

Medicare payments and providers' costs

In assessing payment adequacy, the Commission also considers the relationship between Medicare payments and the costs of providing care to Medicare patients. We assess the adequacy of Medicare payments for the hospital as a whole (across all Medicare services), thus measuring the relationship between payments and costs using an overall Medicare margin. This margin includes all Medicare payments and all Medicare-allowable costs for the six hospital departments covered by the inpatient, outpatient, and post-acute PPS systems, as well as uncompensated care payments and graduate medical education payments and costs.⁶

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

To determine whether hospitals have an incentive to treat additional Medicare patients, we also examine the marginal profits for treating additional Medicare patients. This measure examines whether Medicare payments cover the variable cost of treating an additional Medicare patient. We find that, while average Medicare payments do not cover all costs (fixed and variable), they are sufficient to cover the variable costs of treating additional Medicare patients, which is an indicator of whether hospitals with excess capacity have an incentive to see more Medicare patients.

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

The source of Medicare revenues to hospitals has shifted

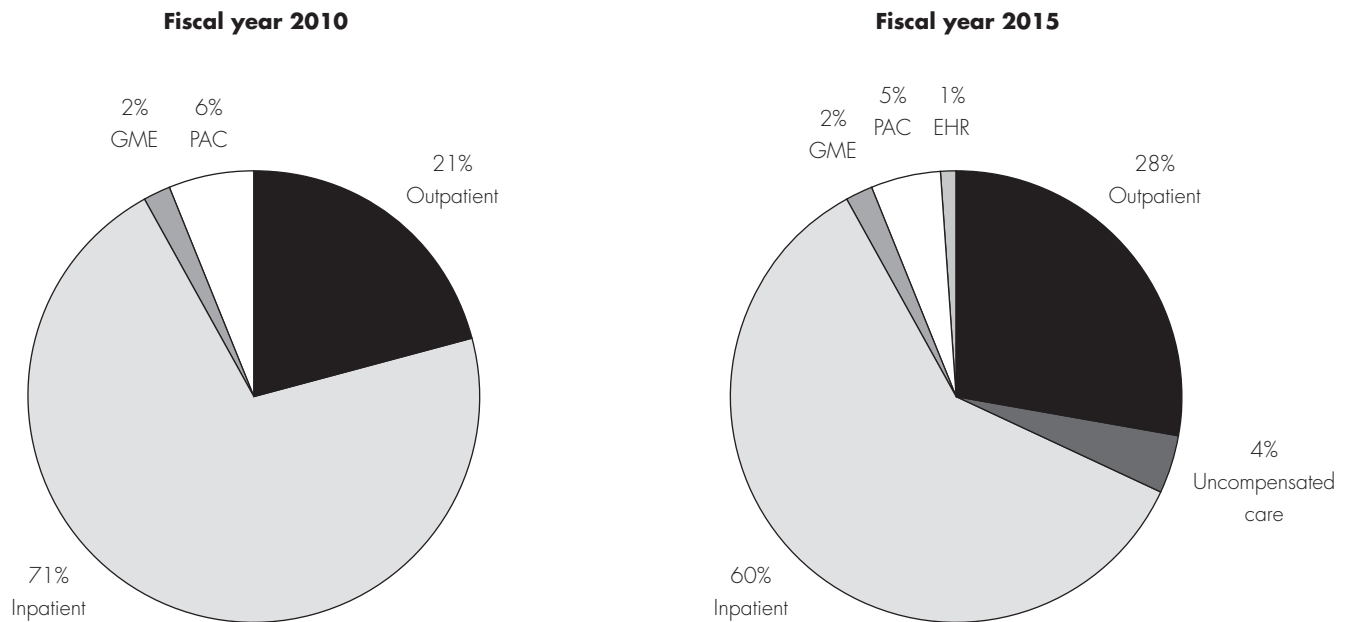
Over time, the share of hospitals' revenue coming from the outpatient setting has grown (Figure 3-4, p. 80). From 2010 to 2015, the share of revenues coming from the outpatient setting increased from 21 percent to 28 percent. The increase resulted from several changes: a shift in services from the inpatient to the outpatient setting (including surgical and observation cases), a general increase in beneficiary outpatient service use, the billing of physician office services shifting from the physician fee schedule to the OPPTS, and changes made to the outpatient payment system that packaged many lab services into outpatient payment rates previously paid on a separate fee schedule rather than under the OPPTS.⁷

In contrast, between 2010 and 2015, the share of revenues coming from inpatient services fell from 71 percent to 60 percent in 2015. This decline resulted from (1) a shift in services from the inpatient setting to the outpatient setting and (2) changes in Medicare DSH payments. Starting in fiscal year 2014, Medicare DSH payments (which are included in inpatient payments) are paid at 25 percent of the historical payment formula that uses the hospitals' current low-income patient share percentage. This decrease in inpatient DSH payments, however, is offset in large part by a new payment for uncompensated care costs (accounting for 4 percent of Medicare revenues in 2015) that goes to DSH hospitals. The uncompensated care payments, however, are not tied to hospitals' Medicare inpatient payment rates or case volume. They were intended to be allocated to DSH hospitals based on each hospital's share of total uncompensated care costs, but they are currently being distributed based on each DSH hospital's share of total Medicaid and low-income Medicare patient days (Medicare Payment Advisory Commission 2016b). In 2016, the Commission recommended that CMS distribute uncompensated care payments based on actual uncompensated care data rather than the Medicaid and low-income Medicare patient day proxies. CMS has proposed adopting this recommendation starting no later than 2021.

The additional temporary payments that hospitals have received as a part of the Medicare Electronic Health Records (EHR) Incentive Program also increased total Medicare payments. The EHR program was designed to stimulate hospitals' investment in and installation of EHR systems to help improve quality of care and potentially reduce health care costs. Between 2011 and

**FIGURE
3-4**

Share of revenue from inpatient services has declined, outpatient and uncompensated care increased



Note: GME (graduate medical education), PAC (post-acute care), EHR (electronic health record). Uncompensated care payments were not a separate payment category in 2010. Beginning in 2014, uncompensated care payments were paid separately from inpatient payments. The uncompensated care payments that were started in 2015 are payable only to hospitals serving a disproportionate share of low-income patients. The uncompensated care payments are funded through a reduction in traditional disproportionate share payments to these hospitals. There were no EHR payments in 2010 because the EHR Incentive Program was not implemented until 2011.

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

2013, Medicare EHR payments rose from \$0.7 billion to \$3.2 billion, but since have been declining, to \$2.5 billion in 2014 and \$1.5 billion in 2015, as the program phases out. In 2015, these payments accounted for 0.9 percent of total Medicare payments made to IPPS hospitals.⁸ EHR payments, however, will gradually decline as the program continues to phase out.

Between 2010 and 2015, the share of revenues coming from hospital-based post-acute care providers fell from 6 percent to 5 percent as some hospitals closed certain post-acute services.

Medicare payment growth

Changes in Medicare inpatient hospital payments per discharge under the IPPS depend primarily on three factors: (1) annual updates to base payment rates, (2) changes in reported case mix, and (3) policy changes

that are not implemented in a budget-neutral manner. In 2015, the average Medicare inpatient payment per case increased 1.7 percent. While inpatient payments increased, uncompensated care payments declined in 2015 because of a decline in the number of uninsured patients. In 2015, hospitals received \$11 billion in DSH and uncompensated care payments (down from \$12.2 billion in 2014). There were three key changes to inpatient payments from 2014 to 2015:

- a 1.3 percent increase in base payment rates,
- a 0.75 percent increase in inpatient case mix, and
- a \$1.2 billion reduction in DSH and uncompensated care payments.

Medicare continues to see growth in the use of outpatient services. From 2014 to 2015, outpatient payments grew by 7.2 percent. This growth was from a combination of

**TABLE
3-5**

Cost increases in 2014 and 2015 closer to input price inflation than previous years

Cost measure	Annual cost growth					Average annual cost growth 2011-2015
	2011	2012	2013	2014	2015	
Inpatient costs per discharge	2.7%	3.2%	2.7%	2.2%	2.2%	2.6%
Inpatient case-mix index	0.5	1.4	2.0	2.0	0.8	1.4
Input price inflation*	2.6	2.1	1.9	1.8	1.8	2.0

Note: Cost growth numbers are not adjusted for reported changes in case mix. Analysis excludes critical access hospitals and Maryland hospitals.
*Input price inflation reflects a weighted average of changes in the hospital operating and capital market basket indexes.

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

increases in the number of beneficiaries, increases in Medicare rates, increases in outpatient visits, and a \$1.2 billion increase (15 percent growth) in payments for separately payable Part B drugs administered in hospitals’ outpatient departments. The 15 percent increase was due to an increase in the volume and prices of Part B drugs. Medicare pays hospitals 106 percent of pharmaceutical companies’ average sales prices for most Part B drugs. Therefore, manufacturer price increases for Part B drugs can drive up hospitals’ drug costs and Medicare program payments.

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

Hospitals’ inpatient per case cost increases have been relatively low since 2011, averaging 2.6 percent over the period, about 0.6 percentage points faster than input price inflation (the hospital market basket index) (Table 3-5). This growth is much slower than experienced through most of the 2000s, when costs per case increased at twice this rate, an average of 5.6 percent per year, or 1.4 percentage points faster than underlying input price inflation (data not shown).

The lower cost growth from 2011 through 2015 was partly due to lower input price inflation facing hospitals, reflecting low economy-wide inflation and slow wage growth. Hospitals benefited from this low economy-wide wage growth, with compensation costs for hospital workers growing by less than 2 percent in each year from 2010 through 2015 (Bureau of Labor Statistics 2014). While compensation grew relatively slowly, costs of inpatient drugs and devices grew relatively fast at rates

of 4.1 percent and 4.0 percent, respectively, from 2014 to 2015. On a combined basis, drugs and devices represented 18 percent of all hospital costs and 35 percent of all cost growth per Medicare discharge in 2015.

From 2012 through 2015, inpatient case mix increased substantially, rising by 1.4 percent in 2012, 2.0 percent in both 2013 and 2014, and 0.8 percent in 2015 (Table 3-5). We presume that most of this growth was due to increases in the relative complexity of the cases seen rather than to coding changes seen after implementation of the MS-DRGs. If we control for this case-mix increase, the hospital cost increase for the past three years would be substantially less than underlying input price inflation. The Commission argues that hospitals must continue to maintain this lower cost growth in the coming years for the financial health of the Medicare program and the costs of the overall health care system.

Outlier payments mitigate the effects of extremely high-cost cases

The MS-DRG system does not always fully capture the expected costs of the most difficult cases. Because these cases are not randomly distributed and tend to be transferred to hospitals that have the most capabilities, there is a need to compensate hospitals willing to take the most difficult cases. Therefore, CMS provides hospitals with outlier payments for extremely costly cases. However, the accuracy of Medicare’s IPPS outlier system can be improved, thus targeting these funds to the hospitals that most warrant them (see the text box on improving Medicare outlier payments, pp. 82-84).

Improving Medicare outlier payments

Outlier payments, which account for about 5 percent of Medicare inpatient hospital payments, are intended to help protect hospitals from large losses due to extraordinarily high-cost cases. To receive an outlier payment, the cost of a case must exceed the sum of the hospital's applicable Medicare severity–diagnosis related group (MS–DRG) payment and a fixed loss threshold that is currently set at \$23,573 in fiscal year 2017. After a hospital reports exceeding this threshold for an individual case, Medicare pays the hospital 80 percent of its costs above that threshold as an outlier payment.

A case becomes an outlier because of high relative costs. In determining costs for outlier cases, Medicare uses a simplified method to determine those costs by multiplying total covered charges for a case by an overall hospital cost-to-charge ratio. This ratio reflects total Medicare-covered inpatient costs for all hospital services divided by total Medicare-covered inpatient

charges. Hospitals, however, generally do not mark up services uniformly across all lines of service (Figure 3-5). Certain service lines, such as the operating room or radiology services, generally have much higher charge markups than other services, such as routine days or special care (intensive care) days.

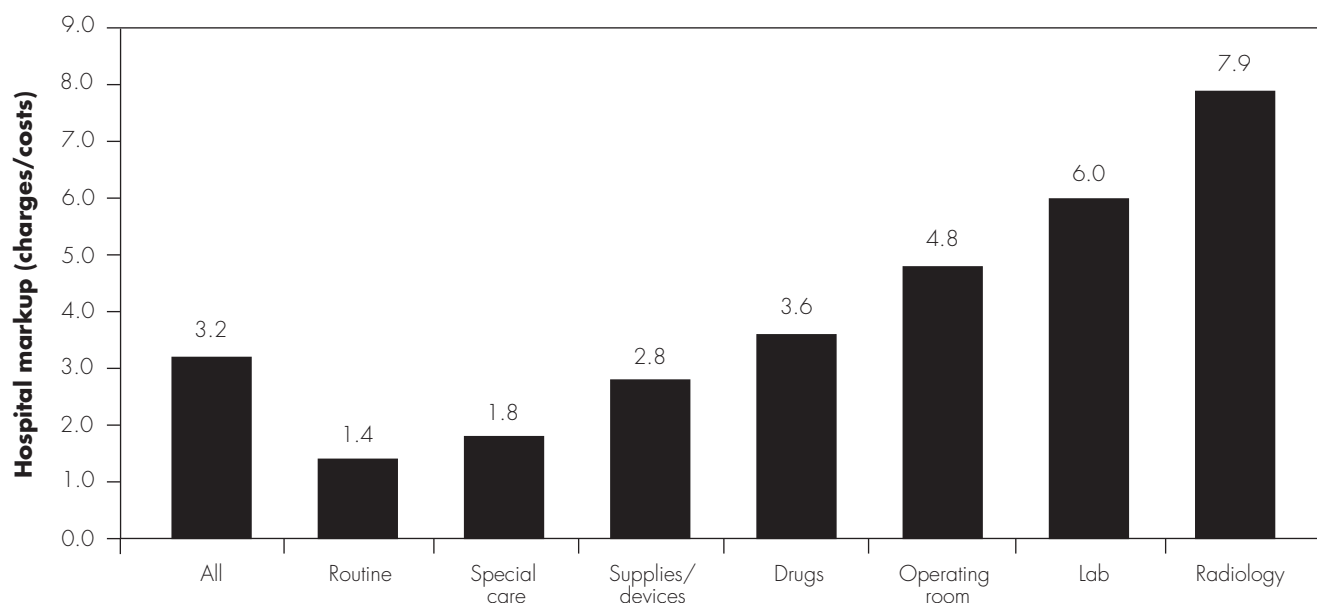
In general, outlier cases have high costs due to greater use of services over longer stays and higher service use per day. Outlier cases have longer inpatient stays, 12 days longer than the national average for the DRG. They also have higher daily costs (40 percent higher on average). The higher daily costs often reflect greater use of special care units and higher daily expenses for pharmaceuticals, supplies, lab services, and therapy. They also tend to be in higher weighted DRGs.

With wide variation in charge markups across services, a concern is how accurately the overall hospital inpatient cost-to-charge ratio (CCR) captures the true underlying cost of outlier cases and whether some

(continued next page)

**FIGURE
3-5**

Markups varied widely across hospital cost centers, 2014



Source: MedPAC analysis of 2014 Medicare claims and cost reports.

Improving Medicare outlier payments (cont.)

hospitals use differential charge markups across departments to increase outlier payments. To examine this issue, we calculated case costs using hospital-specific departmental CCRs and compared these cost estimates with those using the hospital's total CCR for calculating costs under the current outlier policy. Our analysis finds that the overall CCR estimates costs reasonably well in the aggregate, but does not do a good job of accurately calculating case costs for outlier cases either by MS-DRG or at the hospital level.

Accuracy at the MS-DRG level

At an MS-DRG level, the total CCR may not adequately measure outlier case costs. On average, the total CCR method tended to understate total case costs for outlier cases in MS-DRGs that have a high prevalence of outlier cases (sometimes by more than \$10,000 per case) and tended to overstate costs for outlier cases in MS-DRGs that have a low incidence of outlier cases.⁹ We find that, on average, for a quarter of DRGs, outlier cases' costs are understated by at least \$1,700, and for 10 percent, they are understated by more than \$3,500. Conversely, we find a quarter of DRGs for which costs are overstated by at least \$2,500 and 10 percent for which costs are overstated by at least \$5,000. Differences in the mix of services used across DRGs are likely the main factor contributing to this variation.

Accuracy at the hospital level

We find that hospitals with the highest shares of outlier cases appear to be advantaged by the use of the total overall CCR in calculating outlier payments. Use of a total CCR produces a per case cost estimate for outlier cases that is over \$3,300 higher, on average, for the top 50 hospitals with the highest shares of outlier cases compared with a department-specific methodology. This difference suggests that using a total CCR rather than more refined estimates of costs can result in overpayment for some hospitals' outlier cases and underpayment for other hospitals.

Most of the hospitals with outlier shares over 15 percent do not look like the typical inpatient

prospective payment system hospital; the majority of these hospitals are small for-profit surgical specialty hospitals. Only a dozen of these hospitals could be classified as general acute care hospitals, and most of these 12 are relatively small, with fewer than one Medicare case per day; four are major teaching hospitals. The outlier cases in these surgical subspecialty hospitals do not look like the typical outlier case since the average length of stay for these cases is only 5.2 days compared with an average of 19.0 days for all outlier cases. Their higher costs tend to come from higher charge markups in the operating room, high device costs possibly resulting from selectively high markups on devices used by Medicare patients, and high per diem costs potentially due to their small size. These cost differences suggest that some outlier payments may be misdirected to pay for short-stay cases at small hospitals.

Options for improving Medicare's outlier payments

Two refinements could be made to Medicare's outlier payment policies that would help improve the accuracy of these payments and target payments to cases that are truly higher in costs. Both of these policies would be budget-neutral and would redistribute current outlier payments to the cases that have higher costs and away from hospitals that may be manipulating the system or may be extremely inefficient.

Use hospital-specific departmental cost-to-charge ratios to calculate case costs Use of hospital-specific departmental CCRs to calculate case costs for determining outlier payments would substantially improve the accuracy of outlier payments at the DRG level and at the hospital level; the case costs would reflect the differences in departmental markups attached to the mix of services actually used in the case. Use of this CCR would also help address charge manipulation at a departmental level, though it would not address charge manipulation within a department. However, this policy would increase the complexity of the outlier payment system since costs would need to be calculated at the departmental level rather than from total covered charges for the case.

(continued next page)

Improving Medicare outlier payments (cont.)

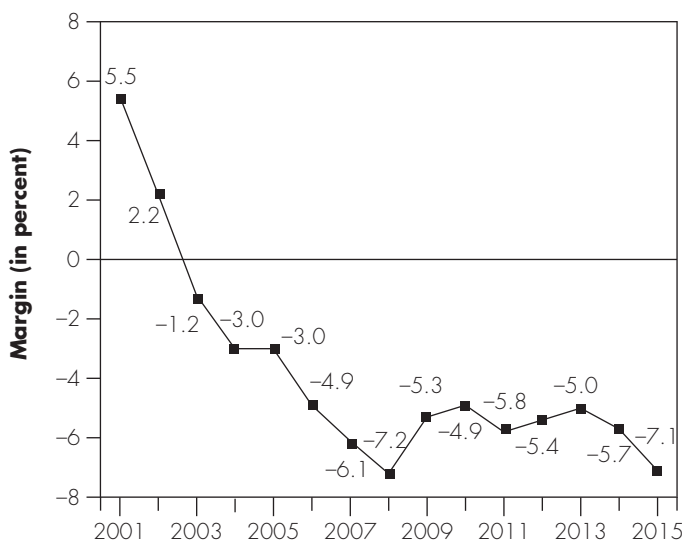
Establish a length-of-stay threshold for outlier claims

Many of the hospitals with a high incidence of outlier cases are small surgical specialty hospitals, with relatively short inpatient stays for their outlier cases. It is unclear why so many of these hospitals have such a high incidence of outlier cases. They may have high costs because they are inefficient. Alternatively, they may have charge structures that take advantage of the use of a total CCR for calculating outlier payments. One way to address the issue would be to require a case to meet a minimum relative length of stay differential (such as five days longer than the average for the

DRG) before it becomes eligible for outlier payments. However, the length of stay requirement would not apply to patients who died (or were transferred to another acute-care hospital). This option would reduce the number of cases identified as outliers in many of the small surgical specialty hospitals and other hospitals that tend to have much shorter than average stays for their outlier cases. It would not affect the traditional long-stay outlier cases and, in fact, would result in a better distribution of outlier payments since the fixed loss threshold might be reduced. ■

**FIGURE
3-6**

Overall Medicare margin is starting to trend downward after holding relatively steady since 2009



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

Source: MedPAC analysis of Medicare cost reports from CMS.

Trend in the overall Medicare margin

We define Medicare margins as Medicare payments minus the allowable costs of treating Medicare patients divided by Medicare payments. In analyzing hospital margins, we compute margins with and without critical access hospitals (CAHs), which are 1,300 rural hospitals whose payments are based on their incurred costs. We also exclude hospitals in Maryland, which are excluded from the IPPS and paid under a statewide all-payer prospective payment system. The overall Medicare margin trended downward from 2001 through 2008 (Figure 3-6).¹⁰ However, from 2008 to 2010, the overall Medicare margin went up, from -7.2 percent to -4.9 percent, largely because of increases in reported case mix—the result of documentation and coding changes hospitals made with the introduction of MS-DRGs in 2008—and lower cost growth as a result of the economy's downturn from the recession (Medicare Payment Advisory Commission 2013b). From 2009 to 2014, the overall Medicare margin held relatively steady, varying from -4.9 to -5.8 percent. From 2014 to 2015, it dropped from -5.7 percent to -7.1, its lowest level since 2008.

The Medicare margin held relatively steady from 2009 through 2014, despite the budget sequester, which reduced Medicare payments by almost 2 percent starting in 2013. Margins held relatively steady in part because CMS overestimated hospital wage inflation. Each year, the hospital update is based on a forecast of input price

**TABLE
3-6****Overall Medicare margins by hospital type**

Hospital group	2009	2010	2011	2012	2013	2014	2015
All hospitals (excluding CAHs)	-5.3%	-4.9%	-5.8%	-5.4%	-5.0%	-5.7%	-7.1%
Urban	-5.4	-5.2	-6.1	-5.9	-5.8	-6.0	-7.3
Rural							
Excluding CAHs	-4.1	-2.6	-2.6	-1.3	2.4	-3.4	-4.9
Including CAHs	-2.8	-1.7	-1.7	0.2	2.5	-1.7	-3.2
Nonprofit	-6.6	-6.3	-7.2	-7.0	-6.5	-7.3	-8.5
For profit	-0.4	-0.1	-0.5	0.9	1.0	0.8	-1.3
Major teaching	-1.2	-1.0	-2.4	-2.7	-3.6	-4.5	-5.2
Other teaching	-5.0	-4.6	-5.3	-5.0	-4.7	-4.7	-5.8
Nonteaching	-8.5	-8.0	-8.5	-7.7	-6.4	-7.5	-9.6

Note: CAH (critical access hospital). Data are for all hospitals covered by the Medicare acute inpatient prospective payment system in 2015 and for CAHs where indicated. A margin is calculated as payments minus costs, divided by payments; margins are based on Medicare-allowable costs. "Overall Medicare margin" covers acute inpatient, outpatient, hospital-based skilled nursing facility (including swing beds), hospital-based home health, and inpatient psychiatric and rehabilitation services, plus uncompensated care, graduate medical education, and electronic health record incentive payments. The rural margins are shown with and without 1,300 CAHs, which are paid 101 percent of costs for inpatient and outpatient services. The margins without CAHs illustrate the profitability of rural inpatient prospective payment system hospitals; the rural margins with CAHs give a fuller picture of rural hospital profitability.

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

inflation. In every year from 2012 to 2014, the forecast inflation exceeded actual input price inflation. This forecast error added over 2 percentage points to hospital payment rates. The overestimation more than offset the effects of the 2 percent sequester and allowed hospital margins to remain relatively constant.

Medicare margins by hospital type, 2015

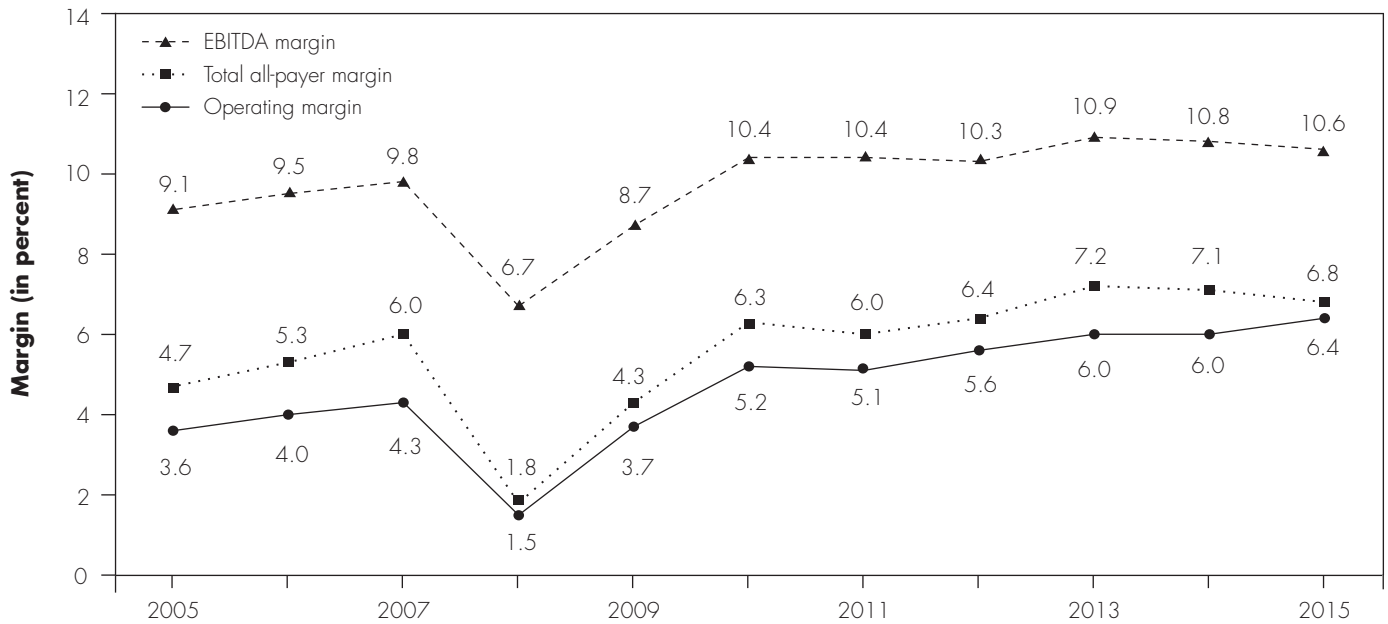
We further examined overall aggregate Medicare margins by hospital type for 2015. Rural IPPS hospitals (excluding CAHs) had a -4.9 percent overall Medicare margin, which was 2.4 percentage points higher than the -7.3 percent margin for urban hospitals (Table 3-6). Major teaching hospitals (i.e., hospitals with a high resident-to-bed ratio) had an overall Medicare margin of -5.2 percent. Major teaching hospitals have higher overall Medicare margins than the average IPPS hospital in large part because of the extra payments they receive through the IME and DSH adjustments and uncompensated care payments.

In 2015, for-profit hospitals had the highest overall Medicare margins (-1.3 percent), well above the -8.5 percent overall Medicare margin for nonprofit hospitals

(Table 3-6). Most of this differential can be explained by lower costs at for-profit hospitals; in particular, they have lower outpatient costs. A detailed analysis of 2009 outpatient services indicated that for-profit hospitals' outpatient margins also benefit somewhat from a more favorable service mix and from being less likely to incur outpatient teaching costs (Medicare Payment Advisory Commission 2014b).

Marginal profits

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

**FIGURE
3-7****Hospitals' financial performance has rebounded strongly after poor performance in 2008**

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

Source: MedPAC analysis of Medicare hospital cost report data.

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

$$\text{Marginal profit} = (\text{payments for Medicare services} - (\text{total Medicare costs} - \text{fixed building and equipment costs})) / \text{Medicare payments}$$

On average, the marginal profit across hospital services lines was approximately 9 percent in 2015.¹¹ Because hospitals would be expected to generate about 9 percent profit on a marginal increase in Medicare volume, hospitals with excess capacity have a financial incentive to serve more Medicare beneficiaries.

Total (all-payer) profitability remains robust

Hospitals' total (all-payer) profit margins are an indicator of how much financial pressure hospitals are under to

control costs. In 2015, total margins for hospitals were 6.8 percent, slightly lower than the preceding 2 years (Figure 3-7), but still at their highest levels since the beginning of the prospective payment system more than 30 years ago. All-payer margins remain strong because the growth of private-payer rates continues to rise faster than costs (Bureau of Labor Statistics 2013, Health Care Cost Institute 2015, Health Care Cost Institute 2014, Health Care Cost Institute 2012). Other measures of all-payer profitability are also strong. Cash flow—as measured by earnings before interest, taxes, depreciation, and amortization (EBITDA)—has remained steady and strong for the past six years, between 10 percent and 11 percent. In 2015, the all-payer operating margin also increased to 6.4 percent, its strongest level in recent years. This increase is an indication that hospitals continue to grow their private sector revenues faster than costs. While Medicare represents about one-third of all-payer revenues, commercially insured patients represent slightly more than one-third of patient revenues and generate almost all of the operating profits for a typical hospital.

In 2015, total margins varied across hospital types. For-profit hospitals had a relatively high total (all-payer) margin, reaching a record 11.2 percent, more than 4 percentage points higher than in 2007. In addition, the 21 frontier IPPS hospitals (those in low population-density counties) had an average total margin of 12.4 percent, the highest of any group. This figure suggests that isolated hospitals can do well in frontier areas when they have sufficient volumes of insured individuals. The total margin for critical access hospitals was 4.3 percent, their highest level since 2007 and the recession. In contrast, rural hospitals adjacent to urban areas had low total margins (0.3 percent in aggregate).

Fiscal pressure constrains costs

In aggregate, all-payer profit margins are at record highs. However, hospitals' market power, charges, and prices negotiated with insurers vary widely among hospitals. An analysis of Truven Health MarketScan® data shows that negotiated rates commercial insurers paid to hospitals varied widely (Medicare Payment Advisory Commission 2011a). For example, in 2013, 10 percent of hospital commercial claims were paid less than \$236 for a head computed tomography scan (Current Procedural Terminology code 70450), but another 10 percent of hospital commercial claims were paid over \$1,527 for the same service (Medicare Payment Advisory Commission 2016b). Given the variability in market power, charges, and the discounts hospitals negotiate with private insurers, we expect to see a wide variation both in hospital profits and in pressure to constrain costs.

Hospitals with strong profits on non-Medicare services and investments are under relatively little pressure to constrain their costs. Other hospitals, with losses on non-Medicare services, face overall losses unless they 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 2012 to 2014. For these years, the hospitals under high pressure had 2015 non-Medicare profits of less than 1 percent, while the low-pressure hospitals had non-Medicare margins of more than 5 percent. We found that hospitals under high pressure during the five-year period ended up with lower standardized Medicare costs per discharge in 2015 than hospitals under low levels of financial pressure. For more details on our analytic

methods, see our earlier analysis of payment adequacy (Medicare Payment Advisory Commission 2011b).

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

- **High pressure = low cost:** The 25 percent of hospitals under the most financial pressure had median standardized Medicare costs per case that were 8 percent lower than the national median for all 2,793 IPPS hospitals with available data. Because of their lower Medicare costs, hospitals under pressure generated a median overall Medicare profit margin of about 4 percent, which is more than 9 percentage points above the national median.
- **Low pressure = high cost:** The 61 percent of hospitals that were under a low level of financial pressure had median standardized Medicare costs per case that were 2 percent above the national median. Because of higher costs, they generated a median Medicare profit margin of nearly -9 percent, which is 4 percentage points below the national median.

Relatively efficient hospitals

The Commission follows two principles when selecting a set of efficient providers. First, the providers must do relatively well on cost and quality metrics. Second, the performance has to be consistent, meaning that the provider cannot have poor performance on any metric over the past three years. In the hospital sector, the variables we use to identify relatively efficient hospitals are hospital-level mortality rates (3M® risk-adjusted all-condition mortality), readmission rates (3M potentially preventable readmissions), and standardized inpatient Medicare costs per case. Our assessment of efficiency is not in absolute terms but, rather, relative to other IPPS hospitals.

Categorizing hospitals as relatively efficient We assigned hospitals to the relatively efficient group or the control group according to each hospital's performance relative to the national median on a set of risk-adjusted cost and quality metrics for the period 2012 to 2014.¹² We then examined the performance of the two hospital groups in fiscal year 2015.

Hospitals were identified as relatively efficient if they met four criteria in each year from 2012 to 2014:

- Risk-adjusted mortality rates were among the best two-thirds of all hospitals.

**TABLE
3-7**

Performance of relatively efficient hospitals

Relative performance measure	Type of hospital	
	Relatively efficient during 2012-2014	Other hospitals
Number of hospitals	285	1,712
Share of hospitals	14%	86%
Historical performance, 2012-2014 (percent of national median)		
Risk-adjusted:		
Composite 30-day mortality (3M™)	91%	101%
Readmission rates (3M)	94	102
Standardized Medicare costs per discharge	90	103
Performance metrics, 2015 (percent of national median)		
Risk-adjusted:		
Composite 30-day mortality (3M)	94%	101%
Composite 30-day readmission (3M)	94	101
Standardized Medicare costs per discharge	91	102
Median:		
Overall Medicare margin, 2015	0%	-6%
Non-Medicare margin, 2015	9	9
Total (all-payer) margin, 2015	7	5

Note: Relative measures are the median for the group as a share 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 3M methodology to compute risk-adjusted mortality for all conditions. We removed hospitals with low Medicaid patient loads (the bottom 10 percent of hospitals) and hospitals in markets with high service use (top 10 percent of hospitals) because of concerns that socioeconomic conditions and aggressive treatment patterns can influence unit costs and risk-adjusted quality metrics.

Source: MedPAC analysis of 2012 to 2015 Medicare cost report and claims-based quality data.

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

The objective was to identify hospitals that consistently performed at an above-average level on at least one measure (cost or quality) and that always performed reasonably well on all measures. The rationale for this methodology and the details of computing the various measures are discussed in our March 2011 report (Medicare Payment Advisory Commission 2011b). As a

secondary check on hospital quality, we also require that at least 60 percent of the hospital's patients rated the hospital a 9 or 10 on a 10-point scale.¹³

Examining performance of relatively efficient and other hospitals from 2012 to 2014 Of the 2,000 hospitals that met our screening criteria during the 2012 to 2014 period, 285 (14 percent) were found to be relatively efficient. We examined the performance of relatively efficient hospitals on three measures by reporting the group's median performance divided by the median for the set of hospitals in our analysis (Table 3-7). The median efficient hospital's relative risk-adjusted 30-day mortality rate for the 3-year assessment period was 91 percent of the national median, meaning that the 30-day mortality rate for the efficient group was 10 percent below (that is, better

than) the national median. The median readmission rate for the efficient group was 8 percent below the national median. The standardized Medicare cost per discharge for the efficient group was 13 percent lower than the national median. These relatively efficient hospitals were spread across the country and had a diverse set of characteristics, but they were more likely to be larger nonprofit hospitals because those hospitals tend to have better performance on the quality metrics we analyzed. For a more complete description of the methodology and other characteristics of relatively efficient providers, see online Appendix 3-B from our 2016 report to the Congress, available at <http://www.medpac.gov>.

Historically strong performers had lower mortality and costs in 2015

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 0 percent, while the median hospital in the comparison group had an overall Medicare margin of -6 percent (Table 3-7). The marginal profits (which ignore the roughly 20 percent of costs that are fixed) were about 15 percent for the relatively efficient provider. As shown in past years, it was possible to deliver relatively good quality care that patients value at a cost roughly equal to Medicare payment rates in 2015.

Summary of hospitals' financial performance

The financial measures presented for 2015 present a mixed picture. All-payer margins were 6.8 percent, but Medicare margins were at a relatively low -7.1 in aggregate and 0 percent for the relatively efficient providers. While Medicare payments do not cover the full costs (fixed and variable) of the average hospital, they are approximately 9 percent higher than the marginal cost of serving additional Medicare patients. Therefore, hospitals with excess capacity have an incentive to serve more Medicare patients.

How would current law changes for 2016, 2017, and 2018 affect hospitals' Medicare payments and beneficiaries' access?

We project Medicare margins for 2017 based on margins in 2015 and policy changes that take place in 2016 and 2017. The 2016 update for inpatient and outpatient payments was 1.10 percent. In 2017, the update is 1.65 percent for both inpatient and outpatient services. On net, the average update (across inpatient and outpatient services) is about 2.75 percent over the two-year period. In addition, for fiscal year 2017, CMS implemented an

adjustment increasing payments by a total of 0.8 percent to amend a prior payment reduction related to its two-midnight policy. However, as discussed in our March 2016 report to the Congress, several policy changes in current law are expected to partially offset that increase in payment rates from 2015 to 2017.

First, between 2016 and 2017, Medicare uncompensated care payments will fall from \$7.6 billion to \$6.0 billion because of a sizable drop in the number of uninsured individuals under the age of 65, which the Congressional Budget Office (CBO) estimates will decline from roughly 14 percent to 10 percent. CBO projects rates of uninsurance to remain flat from 2017 to 2018 (Congressional Budget Office 2016). Therefore, we do not expect to see a significant additional reduction in uncompensated care payments in 2018.

Second, payments from Medicare's EHR Incentive Program will sunset in 2016, declining by almost \$1.5 billion from 2015 to 2017, which is about 1 percent of overall Medicare payments.

Finally, mandated recovery of past overpayments due to documentation and coding improvement (DCI) changes following implementation of MS-DRGs resulted in a 0.8 percent adjustment to inpatient rates in 2016 and a 1.5 percent adjustment in 2017. These adjustments are temporary, and partially offsetting adjustments will increase rates by 0.5 percent from 2018 to 2023 until 3 percent (0.5 percent \times 6) of the DCI adjustment has been removed.

We expect cost growth per discharge to remain around 2.5 percent per year in 2016 and 2017, similar to this rate for the past several years. We expect case mix to increase by slightly less than 1 percent per year. On net, payment updates and case-mix increases in 2016 and 2017 will offset expected cost growth. However, the DCI adjustment will reduce payments by about 3 percent between 2015 and 2017. With this decline in payments and continued modest cost growth, we expect the overall Medicare margin to decline from -7 percent in 2015 to approximately -10 percent in 2017. We also expect the median overall Medicare margin for relatively efficient hospitals to be slightly negative in 2016.

Current law payment changes in 2018

When this chapter was drafted in the fall of 2016, the hospital market basket was projected to be 3.0 percent. The hospital update was projected to be 1.85 percent

in fiscal year 2018, the result of a 3.0 percent projected market basket increase, a 0.4 percent reduction for productivity, and a 0.75 percent reduction mandated by the Patient Protection and Affordable Care Act of 2010. Several policies that exerted significant downward pressure on hospital payments in recent years will sunset or moderate in fiscal year 2018. The congressionally mandated DCI adjustments sunset in fiscal year 2017, so we do not anticipate payment reductions related to this issue in 2018. As this policy sunsets and the temporary portion of this adjustment expires, inpatient payments will increase in 2018 by 0.5 percent. We do not anticipate further reductions in payments in 2018 stemming from Medicare's EHR Incentive Program because the program's final payments were made in fiscal year 2016. We do not expect further declines in uncompensated care payments coming from the Medicare trust fund in 2018 because CBO projects no change in the level of the uninsured from 2017 to 2018. For fiscal year 2018, aggregate penalties and rewards from the various quality incentive programs should hold relatively steady. The net result would be an expected increase in 2018 payment rates of about 2 percent under current law. The level of Medicare margins for 2018 may depend largely on hospitals' ability to control cost growth.

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

Despite Medicare margins of -7.1 percent in recent years, hospitals' all-payer margins (which include Medicare) in 2015 remained high at 6.8 percent. The all-payer margins are at historical highs due to rate increases of over 4 percent from private insurers that are well above cost growth, resulting in high margins for patients with commercial insurance (Health Care Cost Institute 2016, Health Care Cost Institute 2014, Medicare Payment Advisory Commission 2014a). While commercial rates vary widely across hospitals and insurers, on average, commercial rates are about 50 percent higher than hospital costs and are often far more than 50 percent above Medicare rates (Cooper et al. 2015, Health Care Cost Institute 2014, Medicare Payment Advisory Commission 2014a, Selden et al. 2015). For example, Selden and colleagues found that average private rates were 75 percent higher than Medicare rates in 2012; Aetna and Blue Cross of California paid hospitals rates in 2014 that were often 200 percent of Medicare's rate for inpatient care and 300 percent of Medicare's rate for outpatient services in California (California Department of Insurance 2014a, California Department of Insurance 2014b).

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

- Most hospitals have excess inpatient capacity.
- Medicare payment rates, while less than the total cost of care, are still sufficient to generate a marginal profit of about 9 percent on each additional Medicare patient. Therefore, it is still profitable for the average hospital to fill its empty beds with Medicare patients.
- Nonprofit hospitals have an incentive to take Medicare patients to maintain their nonprofit status.

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

How should Medicare payment rates change in 2018?

The Commission's recommendation for updating Medicare hospital payments for fiscal year 2018 is based on several indicators of beneficiary access to hospital care, hospital quality, and payment adequacy. Specifically, the Commission recommends:

RECOMMENDATION 3-2

The Congress should update the inpatient and outpatient payments by the amounts specified in current law.

This recommendation will increase providers' base payment rates by the amount stipulated in current law. In

December 2016, the hospital update for fiscal year 2018 was projected to be 1.85 percent, but this figure is likely to change before its implementation in October 2017 because of typical fluctuations in the hospital market basket index.

RATIONALE 3 - 2

An update equal to current law will be sufficient to maintain beneficiaries' access to care. While Medicare margins are negative on average, most providers have excess capacity and positive marginal profits, giving them an incentive to see more Medicare patients. In addition, providers' access to capital remains strong. Therefore, the update in current law is appropriate. It balances the need to have payments high enough to maintain access to care and the need to maintain fiscal pressure on hospitals to control their costs.

IMPLICATIONS 3 - 2

Spending

- The recommendation will not increase spending beyond requirements contained in current law and is therefore budget neutral.

Beneficiaries and providers

- The recommendation has no implications for beneficiaries or hospitals. ■

Endnotes

- 1 Payments include roughly \$7 billion of inpatient and outpatient payments to critical access hospitals (CAHs), which are paid 1 percent over their costs of inpatient, outpatient, and post-acute services in swing beds. CAHs do not receive disproportionate share payments or uncompensated care payments.
- 2 Twenty-two percent of hospitals avoided a penalty for one of two reasons. Seven percent were exempted because they did not have the minimum number of cases (25) over 3 years in any of the 6 conditions covered by the program. The remaining 15 percent of hospitals avoided penalties because they had better than average performance on all the conditions for which they had the minimum 25 cases.
- 3 The program began in fiscal year 2013 with 1 percent of base payments at risk, phasing in to a maximum of 2 percent starting in fiscal year 2017.
- 4 The PSI 90 measure is a composite of eight patient safety measures: PSI 03 (pressure ulcers), PSI 06 (iatrogenic pneumothorax), PSI 07 (central venous catheter-related bloodstream infections), PSI 08 (postoperative hip fracture), PSI 12 (perioperative pulmonary embolism or deep vein thrombosis), PSI 13 (postoperative sepsis), PSI 14 (postoperative wound dehiscence), and PSI 15 (accidental puncture or laceration).
- 5 In 2018, two of the process of care measures will be dropped from the VBP measure, and the one remaining process of care measure, PC-01 *elective delivery before 39 weeks*, will be moved into the patient safety domain, whose weight will increase from 20 percent to 25 percent.
- 6 The six largest services in order of Medicare patient revenues are inpatient acute care (60 percent), outpatient care (28 percent), inpatient rehabilitation (2.2 percent), inpatient psychiatric care (1.5 percent), home health care (0.9 percent), and skilled nursing services (0.4 percent).
- 7 In 2014, many lab services had been packaged into outpatient service rates, which shifted revenues and costs from the lab fee schedule to the outpatient payment system. CMS estimates that this change added approximately \$2.4 billion in covered services to the outpatient payment system, services that were previously paid on a separate fee schedule (Centers for Medicare & Medicaid Services 2015). This change makes it difficult for us to assess underlying outpatient cost growth.
- 8 The payments reported here include EHR payments to IPPS hospitals for FFS patients; they do not include payments for managed care patients or payments received by critical access hospitals under the program.
- 9 It is important to emphasize here, however, that this relationship was not uniform and that, for some DRGs within each of these groups, the reverse was true.
- 10 The services included in the overall Medicare margin are Medicare's acute inpatient, outpatient, graduate medical education, SNF (including swing beds), hospital-based home health care, and inpatient psychiatric and rehabilitation services. Also included in the overall margin are special payments associated with the Medicare Electronic Health Records Incentive Program, temporary extra payments to hospitals located in low-spending counties, and uncompensated care payments (as of fiscal year 2015).
- 11 Using a cost-accounting approach, we find that approximately 20 percent of hospital costs are fixed, resulting in a marginal profit of about 9 percent. This estimate is conservative because it ignores any potential managerial or clinical labor costs that are fixed. In the 2015 report, we also took an econometric approach to estimating hospitals' marginal costs and found that fixed costs were about 20 percent of overall costs. This amount also matches the 20 percent figure used in the Medicare outlier policy. For a discussion of our econometric results and the literature on hospital marginal costs, see online Appendix 3-A to our March 2015 report, available at <http://www.medpac.gov> (Medicare Payment Advisory Commission 2015b).
- 12 We use medians rather than means to limit the influence of outliers on our set of efficient providers.
- 13 While H-CAHPS surveys—and similar patient satisfaction surveys—have the limitation of being subjective, we add it as another way to screen out low-value providers because it has the advantage of not being dependent on coding. It is possible that overly aggressive coding by some providers could artificially lower their risk-adjusted cost and risk-adjusted mortality metrics.

References

- Agency for Healthcare Research and Quality, Department of Health and Human Services. 2016. *National scorecard on rates of hospital-acquired conditions 2010 to 2015: Interim data from national efforts to make health care safer*. Rockville, MD: AHRQ. <http://www.ahrq.gov/professionals/quality-patient-safety/pfp/2015-interim.html>.
- American Hospital Association. 2016. *AHA hospital statistics: 2016 edition*. Washington, DC: AHA.
- Bureau of Labor Statistics, Department of Labor. 2016. Current employment statistics, 2016. <https://www.bls.gov/ces/data.htm>.
- Bureau of Labor Statistics, Department of Labor. 2014. Employment cost index historical listing—Volume III. Current dollar, March 2001–September 2014 (December 2005=100). October. <http://www.bls.gov/web/eci/echistrynaics.pdf>.
- Bureau of Labor Statistics, Department of Labor. 2013. Consumer price index—all urban consumers. Data for Los Angeles–Riverside–Orange County, CA. http://data.bls.gov/pdq/SurveyOutputServlet?series_id=CUURA421SA0,CUUSA421SA0.
- Cain Brothers. 2016. *Industry Insights* no. 995. November 11.
- California Department of Insurance. 2014a. Aetna Life Insurance Company rate filing. https://interactive.web.insurance.ca.gov/apex/f?p=102:9:0::NO::P9_RATE_FILINGS_ID,P9_COMPANY_NAME,P9_REFERRING_PAGE_NUM:8347,%5CAetna%20Life%20Insurance%20Company%5C4&cs=1EC2866C2258A4653FBF2AB75773F8514.
- California Department of Insurance. 2014b. Blue Shield of California Life & Health Insurance Company rate filing. https://interactive.web.insurance.ca.gov/apex/f?p=102:9:0::NO::P9_RATE_FILINGS_ID,P9_COMPANY_NAME,P9_REFERRING_PAGE_NUM:8948,%5CBlue%20Shield%20of%20California%20Life%20%26%20Health%20Insurance%20Company%5C4&cs=19EB00AA77FC6C786F771ED7A07590A6F.
- Capps, C., D. Dranove, and C. Ody. 2015. *The effect of hospital acquisitions of physician practices on prices and spending*. Working paper. Evanston, IL: Institute for Policy Research, Northwestern University.
- Census Bureau. 2016a. Quarterly services survey, 2Q. <https://www.census.gov/services/index.html>.
- Census Bureau. 2016b. Value of construction put in place at a glance: November 2016. <http://www.census.gov/construction/c30/c30index.html>.
- Centers for Disease Control and Prevention. 2015. *National and state healthcare associated infections: Progress report*. Atlanta, GA: CDC. <http://www.cdc.gov/HAI/pdfs/progress-report/hai-progress-report.pdf>.
- Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2015. Medicare program; hospital outpatient prospective payment and ambulatory surgical center payment systems and quality reporting programs; short inpatient hospital stays; transition for certain Medicare-dependent, small rural hospitals under the hospital inpatient prospective payment system. Final rule. *Federal Register* 80, no. 219 (November 13): 70298–70607.
- Chandra, A., A. Finkelstein, A. Sacarny, et al. 2015. *Healthcare exceptionalism? Performance and allocation in the U.S. healthcare sector*. Working paper 21603. Cambridge, MA: National Bureau of Economic Research.
- Community Health Systems. 2016. Form 10–Q quarterly report to the Securities and Exchange Commission. September 30.
- Congressional Budget Office. 2016. *Federal subsidies for health insurance coverage for people under age 65: 2016 to 2026*. Washington, DC: CBO.
- Cooper, Z., S. V. Craig, M. Gaynor, et al. 2015. *That price ain't right? Hospital prices and health spending on the privately insured*. National Bureau of Economic Research working paper no. 21815. Cambridge, MA: NBER.
- Fitch Ratings. 2016. 2016 median ratios for nonprofit hospitals and healthcare systems. September 7.
- Fitch Ratings. 2015. Cap Ex rising. September 24.
- Government Accountability Office. 2015. *Contingent workforce: Size, characteristics, earnings, and benefits*. Washington, DC: GAO.
- Health Care Cost Institute. 2016. *2015 health care cost and utilization report*. Washington, DC: HCCI.
- Health Care Cost Institute. 2015. *2014 health care cost and utilization report*. Washington, DC: HCCI.
- Health Care Cost Institute. 2014. *2013 health care cost and utilization report*. Washington, DC: HCCI.
- Health Care Cost Institute. 2012. *2010 health care cost and utilization report*. Washington, DC: HCCI.

- Hines, A. 2015. *Trends in observed adult inpatient mortality for high-volume conditions, 2002–2012*. Washington, DC: Agency for Healthcare Research and Quality.
- Irving Levin Associates Inc. 2016. *The health care services acquisition report: 22nd edition*. Norwalk, CT: Irving Levin Associates Inc.
- Krumholz, H. 2015. Mortality, hospitalizations, and expenditures for the Medicare population aged 65 years or older 1999–2013. *JAMA* 314, no. 4: 355–365.
- Lifepoint Health. 2016. Form 10–Q quarterly report to the Securities and Exchange Commission. September 30.
- Medicare Payment Advisory Commission. 2016a. *Report to the Congress: Medicare and the health care delivery system*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2016b. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2015a. *Report to the Congress: Medicare and the health care delivery system*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2015b. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2014a. *A data book: Health care spending and the Medicare program*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2014b. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2013a. *Report to the Congress: Medicare and the health care delivery system*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2013b. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2012. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2011a. *Report to the Congress: Medicare and the health care delivery system*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2011b. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.
- Moody’s Investors Service. 2016. Not-for-profit and public healthcare: Medians – Growing revenue and demand support strong margins, contraction ahead. September 8.
- Morningstar Document Research. 2016a. HCA Holdings, for 10–Q. November 3.
- Morningstar Document Research. 2016b. Tenet Healthcare Corporation, for 10–Q. September 30.
- Neprash, H. T., M. E. Chernew, A. L. Hicks, et al. 2015. Association of financial integration between physicians and hospitals with commercial health care prices. *JAMA Internal Medicine* 175, no. 12 (December): 1932–1939.
- Selden, T. M., Z. Karaca, P. Keenan, et al. 2015. The growing difference between public and private payment rates for inpatient hospital care. *Health Affairs* 34, no. 12 (December 1): 2147–2150.
- Standard & Poor’s Ratings Services. 2016. U.S. not-for-profit acute health care ratios are calm on the surface but turbulent underneath. September 21.