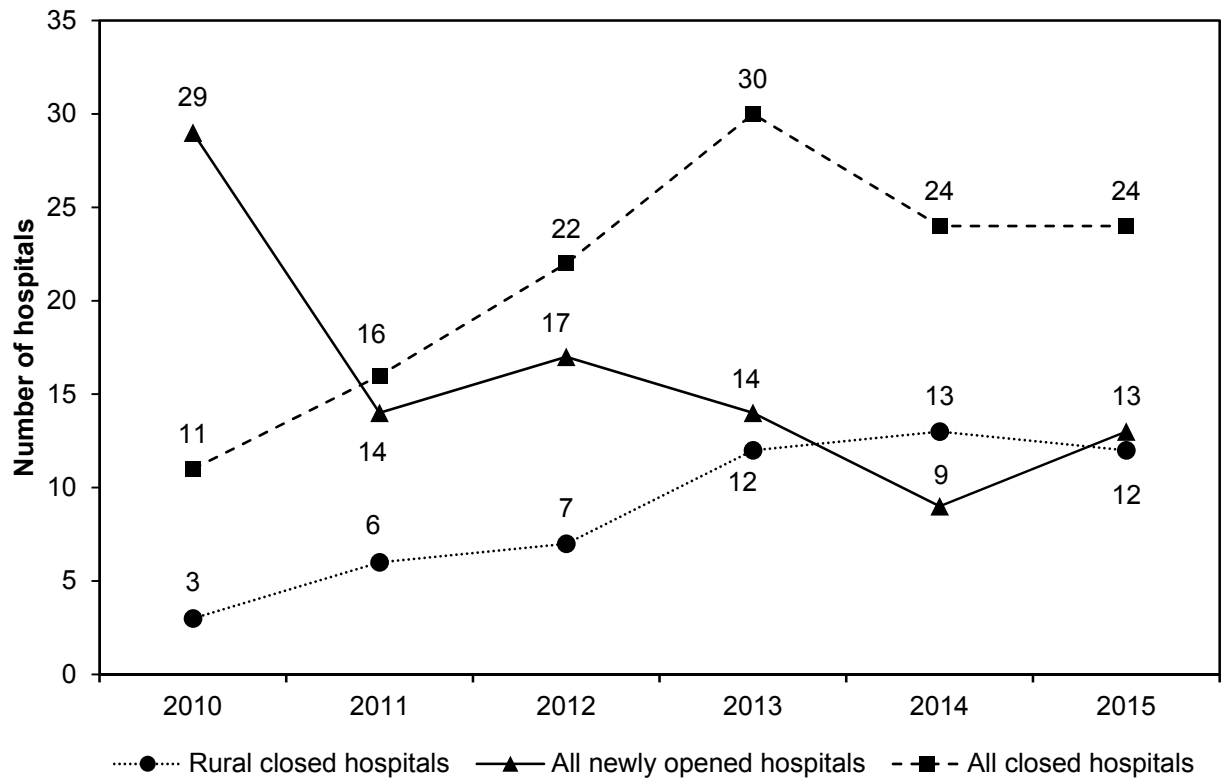


SECTION

6

Acute inpatient services
Short-term hospitals
Inpatient psychiatric facilities

Chart 6-1. Annual changes in number of acute care hospitals participating in the Medicare program, 2010–2015

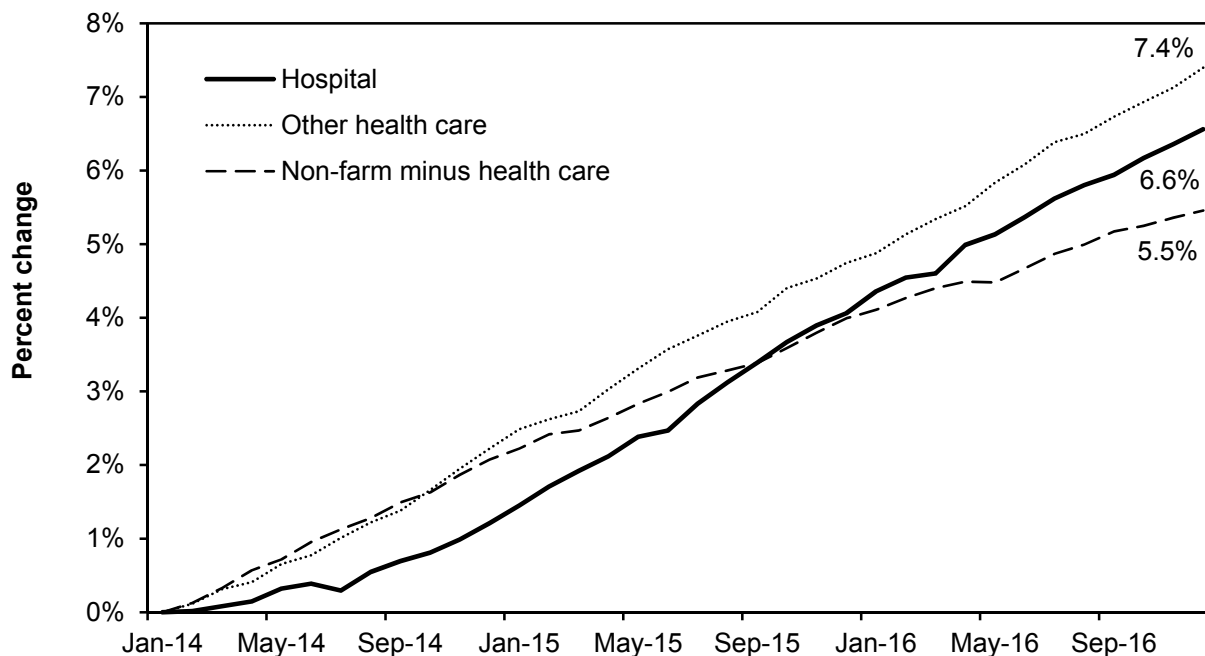


Note: "Hospitals" refers to general short-term acute care hospitals. The Commission's reported number of open and closed hospitals can change from year to year based on hospitals that enter Medicare as an acute care facility and later convert to a more specialized type of facility, such as a long-term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

Source: MedPAC analysis of CMS's Provider of Service file, inpatient prospective payment system final rule impact file, and hospital cost reports.

- The number of hospital closures exceeded the number of openings in 2015, with 24 acute care hospitals closing (less than 1 percent of all acute care hospitals participating in the Medicare program) and 13 hospitals starting participation in the Medicare program.
- In 2015, rural hospital closures accounted for half of all hospital closures. Roughly a dozen rural hospitals have closed in each of the three most recent years (2013 to 2015). Rural hospital closures could in part reflect declining inpatient volume at many rural hospitals.

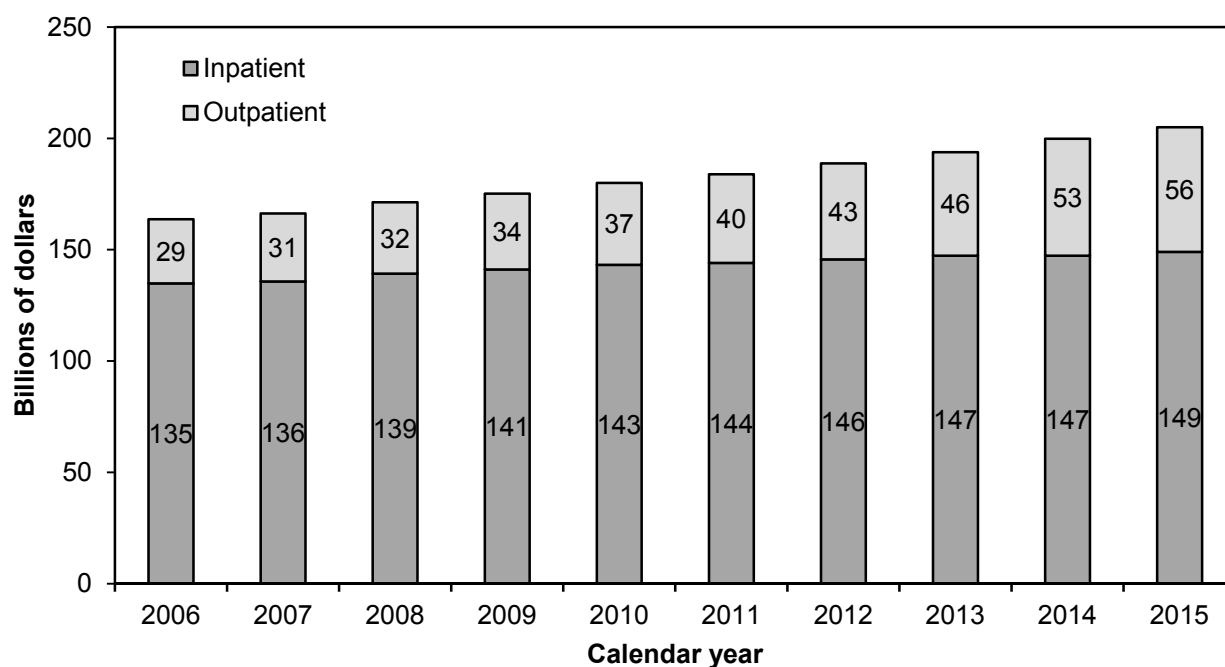
Chart 6-2. Percent change in hospital employment, 2014–2016



Source: MedPAC analysis of Bureau of Labor Statistics, Current Employment Statistics data set as of March 2017.

- The Bureau of Labor Statistics survey of current employment data concludes that the number of individuals employed within the hospital industry directly increased 6.6 percent from January 2014 to December 2016.
- In the most recent year (from 2015 to 2016), hospital employment increased 2.1 percent, the rest of the health care sector increased 2.4 percent, and employment across the rest of the economy (non-farm minus health care) increased 1.3 percent.
- From 2014 to 2016, the number of hospital staff in health care clinical and technical occupations overall increased 5 percent (data not shown). Within this category, larger than average increases occurred for physician assistants (18 percent); pharmacists (8 percent); and registered nurses (6 percent). Licensed practical nurses/licensed vocational nurses were among the few occupations in this category with a decline in employment (–8 percent).
- From 2014 to 2016, the number of hospital staff in nonclinical occupations increased for just a few occupational categories: community and social services (10 percent); computer and math science (9 percent); and business and finance (6 percent). By contrast, the number of employed individuals declined in occupational categories such as management (–2 percent); building and grounds (–1 percent); and food service (–1 percent). Some of these functions may have been outsourced in recent years.

Chart 6-3. Growth in Medicare’s FFS payments for hospital inpatient and outpatient services, 2006–2015



Note: FFS (fee-for-service). Analysis includes inpatient services covered by the acute inpatient prospective payment system (PPS); psychiatric, rehabilitation, long-term care, cancer, and children’s hospitals and units; outpatient services covered by the outpatient PPS; and other outpatient services. Payments include program outlays and beneficiary cost sharing, including hospital cost sharing for beneficiaries eligible for Medicare through end-stage renal disease.

Source: CMS, Office of the Actuary.

- Aggregate Medicare FFS inpatient spending was \$149 billion and outpatient spending was \$56 billion in 2015. From 2014 to 2015, inpatient spending increased 1.2 percent, while outpatient spending increased nearly 7.4 percent.
- From 2008 to 2011, the growth in inpatient and outpatient spending began to increase from previous years. However, in 2011 inpatient spending growth slowed as outpatient spending grew significantly.
- Outpatient spending has increased as a share of total Medicare hospital spending in the past 10 years. In 2006, outpatient spending accounted for almost 18 percent of all hospital spending; in 2015, outpatient spending grew to over 27 percent of total Medicare hospital spending.

Chart 6-4. Share of Medicare acute care hospital inpatient discharges by hospital group, 2015

Hospital group	Hospitals		Medicare discharges	
	Number	Share of total	Number (thousands)	Share of total
All PPS and CAHs	4,624	100%	9,586	100%
CAHs	1,340	29.0	326	3.4
PPS hospitals	3,284	71.0	9,260	96.6
Urban (PPS only)	2,452	53.0	8,269	86.3
Large urban	1,340	29.0	4,505	47.0
Other urban	1,112	24.1	3,764	39.3
Rural (PPS only)	832	18.0	991	10.3
Rural referral	94	2.0	232	2.4
Sole community	375	8.1	489	5.1
Medicare dependent	141	3.1	106	1.1
Other rural, <50 beds	113	2.4	45	0.5
Other rural, ≥50 beds	109	2.4	119	1.2
Tax status (PPS only)				
Voluntary	1,887	41.0	6,461	67.4
Proprietary	877	19.0	1,691	17.6
Government	520	11.3	1,108	11.6
Teaching status (PPS only)				
Major teaching	302	6.5	1,629	17.0
Other teaching	750	16.2	3,490	36.4
Nonteaching	2,232	48.3	4,141	43.2

Note: PPS (prospective payment system), CAH (critical access hospital). Maryland hospitals are excluded. Large urban areas are those with populations of more than 1 million. Major teaching hospitals are defined by a ratio of interns and residents to beds of at least 0.25. Other teaching hospitals have a ratio below 0.25. Data are limited to providers with complete 2014 cost reports. Hospitals in urban, rural, tax status, and teaching status categories are all PPS hospitals. Components may not sum to totals due to rounding.

Source: MedPAC analysis of PPS impact files and Medicare cost report data from CMS.

- In 2015, 3,284 hospitals provided almost 9.3 million discharges under Medicare’s acute inpatient PPS, and 1,340 CAHs provided 326,000 discharges. The number of PPS discharges increased slightly from 2014 to 2015, in part because of an increase in the number of Medicare beneficiaries (data not shown).
- Approximately 13.2 percent of PPS hospitals are covered by three special payment provisions (rural referral centers (RRCs), sole community hospitals (SCHs), and Medicare-dependent hospitals (MDHs)) intended to help rural facilities that are not CAHs; these facilities account for 8.6 percent of all discharges.
- About 90 percent of rural hospitals were paid through the CAH, RRC, SCH, or MDH program in 2015. Collectively, these four types of hospitals accounted for 88 percent of all rural Medicare discharges (not shown in chart).

Chart 6-5. Change in share of discharges by major diagnostic categories, 2006 to 2015

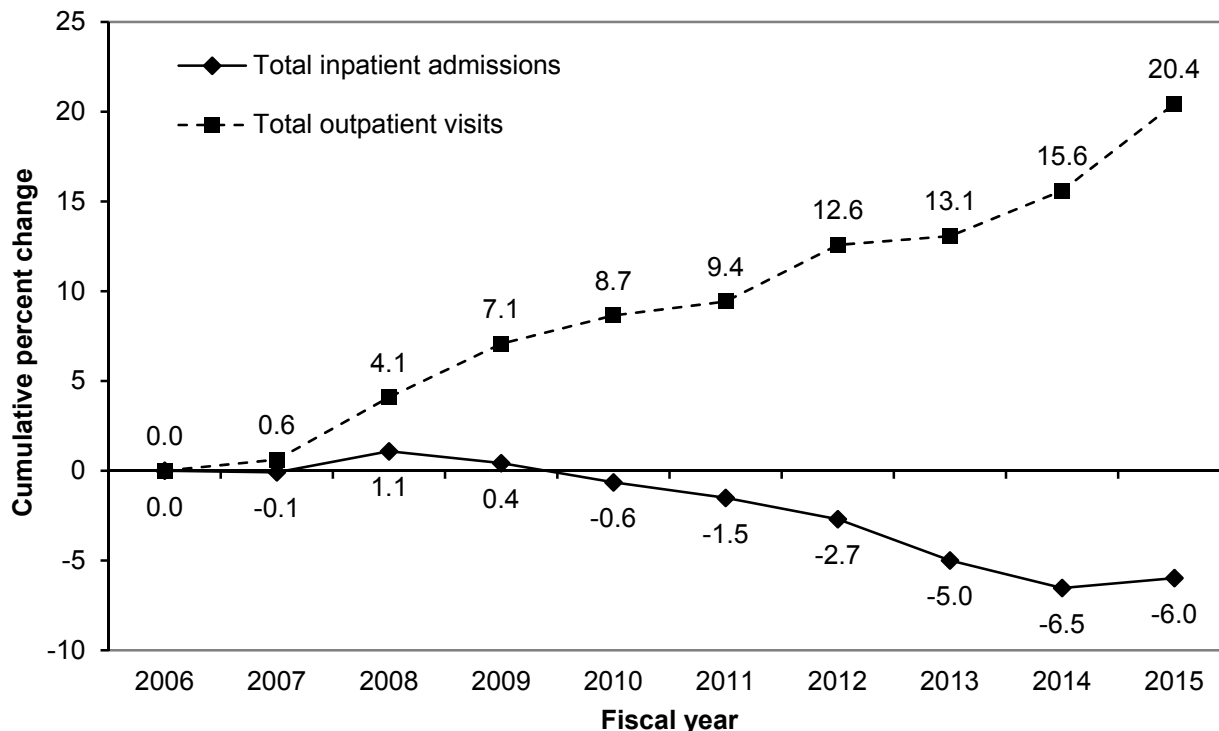
MDC number	MDC name	Share of all discharges 2006	Share of all discharges 2015	Percentage point change
5	Circulatory system	27%	20%	-7
4	Respiratory system	14	14	0
8	Musculoskeletal system	12	14	2
6	Digestive system	11	11	0
1	Nervous system	8	8	0
18	Infectious and parasitic diseases	4	9	5
11	Kidney and urinary tract	6	8	2
10	Endocrine, nutritional and metabolic	4	4	0
7	Hepatobiliary system and pancreas	3	3	0
9	Skin, subcutaneous tissue and breast	3	2	-1
	Total	92	93	1

Note: MDC (major diagnostic category). Numbers may not sum to totals due to rounding.

Source: MedPAC analysis of Medicare Provider Analysis and Review data from CMS.

- In 2015, 10 major diagnostic categories accounted for 93 percent of all discharges from hospitals paid under the inpatient prospective payment system.
- Circulatory system cases accounted for one-fifth of all inpatient discharges in 2015, a decline of 7 percentage points from 2006.
- Musculoskeletal system cases accounted for 14 percent of all inpatient discharges in 2015, up 2 percentage points from 2006.
- Infectious and parasitic disease cases accounted for 9 percent of all inpatient discharges in 2015, up 5 percentage points from 2006.
- Kidney and urinary tract cases accounted for 8 percent of all inpatient discharges in 2015, up 2 percentage points from 2006.

Chart 6-6. Cumulative change in all-payer hospital outpatient visits and inpatient admissions, 2006–2015

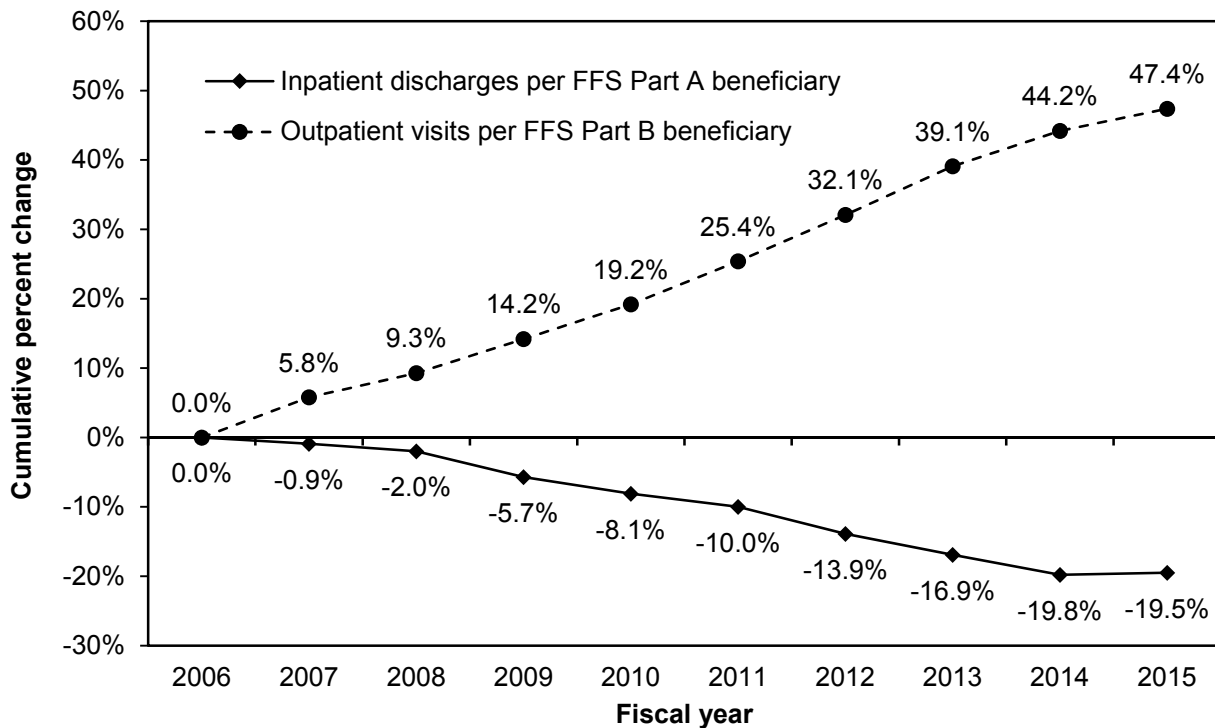


Note: Cumulative change is the total percent increase from 2006 through 2015. Data are admissions to and outpatient visits at about 5,000 community hospitals.

Source: American Hospital Association, AHA Hospital Statistics.

- In 2015, community hospitals provided a total of nearly 722 million outpatient visits and 33 million inpatient admissions across all patients (not shown in chart).
- All-payer hospital outpatient service use grew rapidly from 2006 to 2015, while inpatient service use declined overall. From 2006 to 2015, the number of outpatient visits increased about 20 percent. By contrast, over the same period, the number of all-payer inpatient admissions declined 6 percent.
- All-payer outpatient and inpatient service use both increased from 2014 to 2015. Over this period, the number of outpatient visits increased 4.8 percentage points, and the number of inpatient admissions increased 0.5 percentage points, the first annual increase in inpatient admissions in since 2008.

Chart 6-7. Cumulative change in Medicare outpatient visits and inpatient discharges per FFS beneficiary, 2006–2015

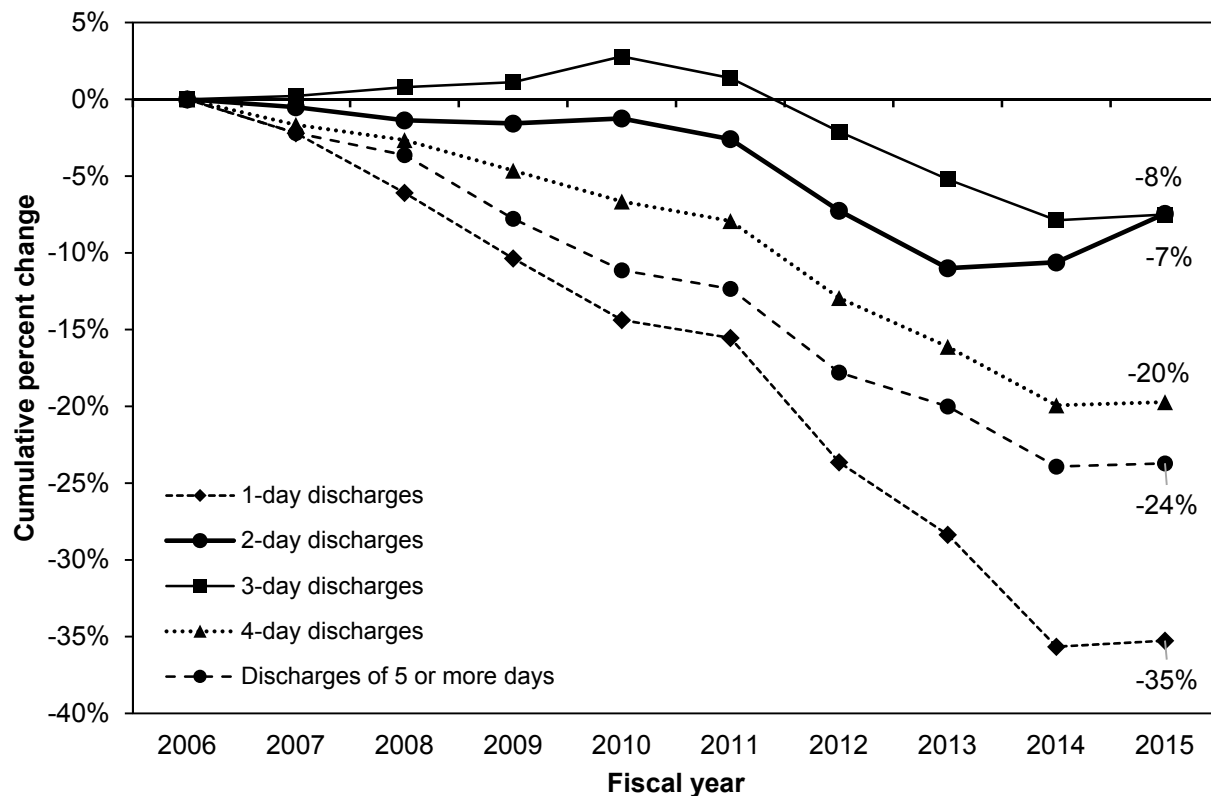


Note: FFS (fee-for-service). Data are for short-term general and surgical hospitals, including critical access and children's hospitals.

Source: MedPAC analysis of Medicare Provider Analysis and Review and hospital outpatient claims data from CMS.

- In 2015, Medicare accounted for approximately 52 million outpatient visits and 10 million inpatient admissions (not shown in chart).
- From 2006 to 2015, the number of Medicare outpatient visits per beneficiary increased about 47 percent. By contrast, over the same period, the number of Medicare inpatient admissions per beneficiary declined nearly 20 percent.
- Together, these two trends suggest a shift in services from the inpatient to the outpatient setting. The growth in outpatient services also reflects a shift in some services from those provided in physician offices to those being billed as outpatient hospital services.
- From 2014 to 2015, the number of Medicare outpatient services per FFS beneficiary increased 3.2 percentage points, and Medicare inpatient discharges per FFS beneficiary increased 0.3 percentage points. Compared with growth in recent prior years, outpatient visits increased slightly slower and inpatient discharges increased for the first time in eight years. On net, from 2014 to 2015, the demand for all hospital services increased.

Chart 6-8. Cumulative change in Medicare inpatient discharges per FFS beneficiary, by length of stay, 2006–2015

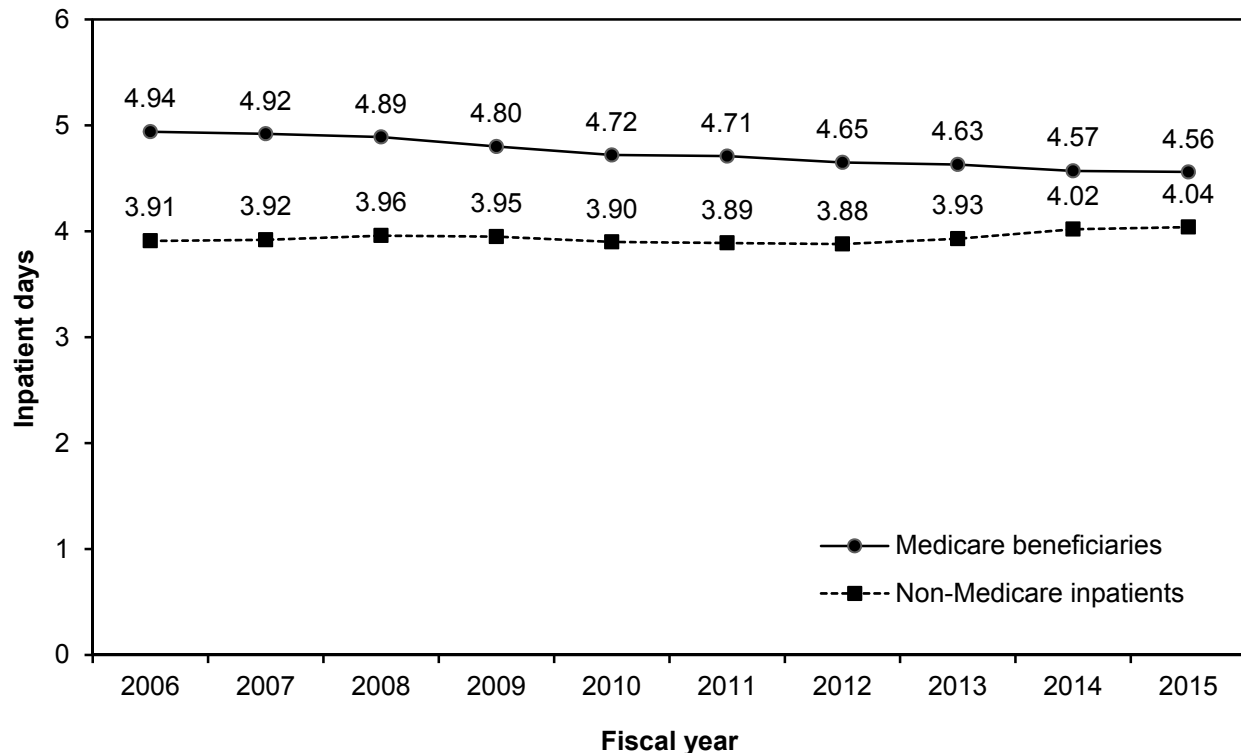


Note: FFS (fee-for-service). Data are for short-term general and surgical hospitals, including critical access and children's hospitals.

Source: MedPAC analysis of Medicare Provider Analysis and Review data from CMS.

- From 2013 to 2015, the number of two-day inpatient discharges increased 4 percent (number not shown in chart), the only length-of-stay category to experience an increase during a period when the number of inpatient discharges overall was declining rapidly. This finding might reflect changes in Medicare's guidance in 2013 regarding the appropriateness of admissions. In 2015, there were approximately 1.8 million 2-day discharges, representing 16 percent of all discharges (data not shown).
- From 2013 to 2015, the number of one-day inpatient discharges declined nearly 10 percent per FFS beneficiary. In 2015, there were approximately 1.2 million 1-day inpatient discharges, representing 11 percent of all discharges (data not shown).
- From 2013 to 2015, the number of three-day inpatient discharges declined 2 percent. In 2015, there were approximately 1.9 million 3-day discharges, representing 18 percent of all discharges (data not shown).

Chart 6-9. Trends in Medicare inpatient and non-Medicare inpatient length of stay, 2006–2015



Note: Length of stay is calculated from discharges and patient days for more than 3,000 hospitals covered by the acute inpatient prospective payment system. Chart excludes critical access hospitals.

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

- In 2015, the average length of inpatient stays for Medicare beneficiaries was approximately one-half a day longer than for non-Medicare inpatients. In 2006, the difference was more than a full day.
- The average length of inpatient stays for Medicare beneficiaries was flat between 2014 and 2015.
- While Medicare length of stay fell between 2006 and 2015, the average length of stay for non-Medicare inpatients increased. Between 2006 and 2015, Medicare inpatient length of stay fell 7.7 percent and the inpatient length of stay for all non-Medicare inpatients increased 3.3 percent.

Chart 6-10. Share of inpatient admissions preceded by emergency department visit by location, 2006–2015

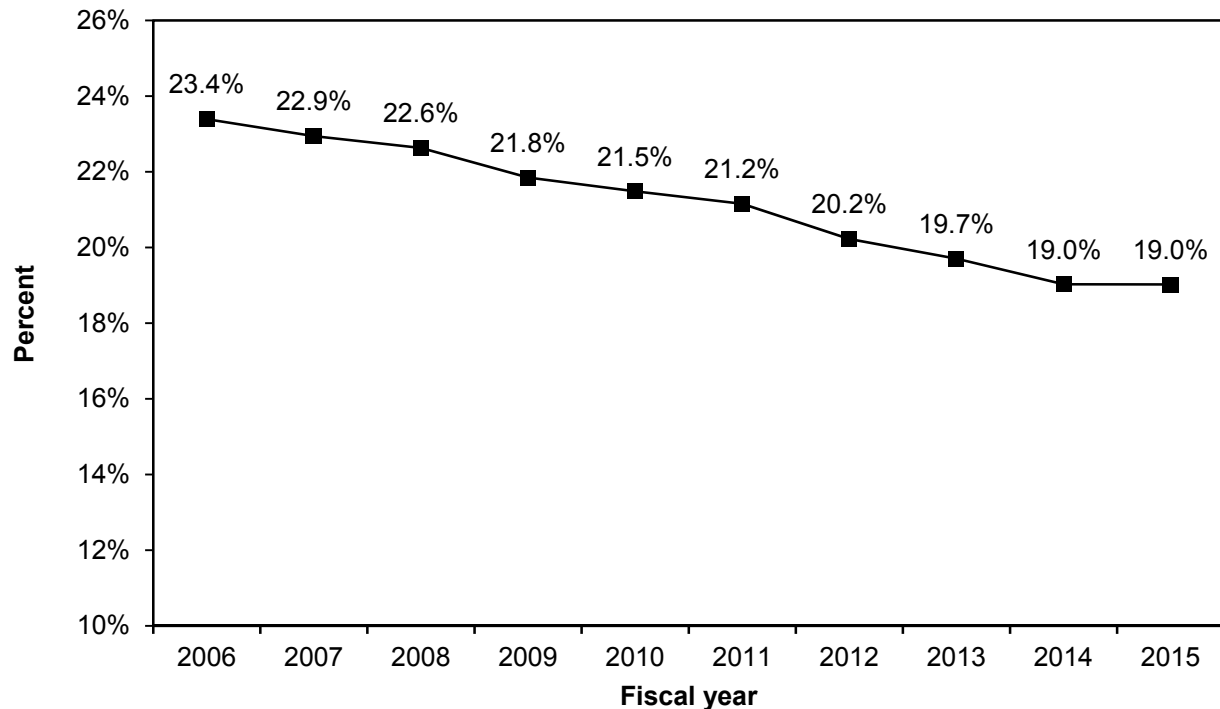
	Percent 2015	Average annual percent change 2006–2014	Percent change 2014–2015
All hospitals	72.5%	1.7%	1.7%
Urban	72.1	1.7	1.7
Large urban	73.5	1.5	1.2
Other urban	70.6	2.0	2.4
Rural	75.7	1.9	1.6
Rural referral	75.8	1.9	2.1
Sole community	75.1	1.9	1.4
Medicare dependent	78.3	1.9	2.4
Other rural, <50 beds	65.6	1.0	-0.4
Other rural, ≥50 beds	79.4	2.1	1.6
Tax status			
Voluntary	72.5	1.6	1.7
Proprietary	73.8	1.9	1.7
Government	70.5	2.1	1.4
Teaching status			
Major teaching	64.8	1.5	1.8
Other teaching	71.5	1.8	1.8
Nonteaching	76.4	1.8	1.5

Note: Years are fiscal years. Analysis excludes Medicare Advantage claims and claims for non-inpatient prospective payment system hospitals such as critical access hospitals and hospitals located in Maryland. Large urban areas are those with populations of more than 1 million. Major teaching hospitals are defined by a ratio of interns and residents to beds of at least 0.25. Other teaching hospitals have a ratio below 0.25.

Source: MedPAC analysis of Medicare Provider Analysis and Review data from CMS.

- In 2015, approximately 73 percent of inpatient admissions entered the hospital through the emergency department (ED).
- From 2014 to 2015, the share of inpatient admissions entering the hospital through the ED increased nearly 2 percent, the same as the average annual rate of increase from 2006 to 2014.
- The share of inpatient admissions preceded by an ED visit is consistently higher for rural hospitals than for urban hospitals. In 2015, nearly 76 percent of inpatient admissions provided at rural hospitals were preceded by an ED visit. By contrast, approximately 72 percent of inpatient admissions provided at urban hospitals were preceded by an ED visit.

Chart 6-11. Share of Medicare Part A fee-for-service beneficiaries with at least one hospitalization, 2006–2015

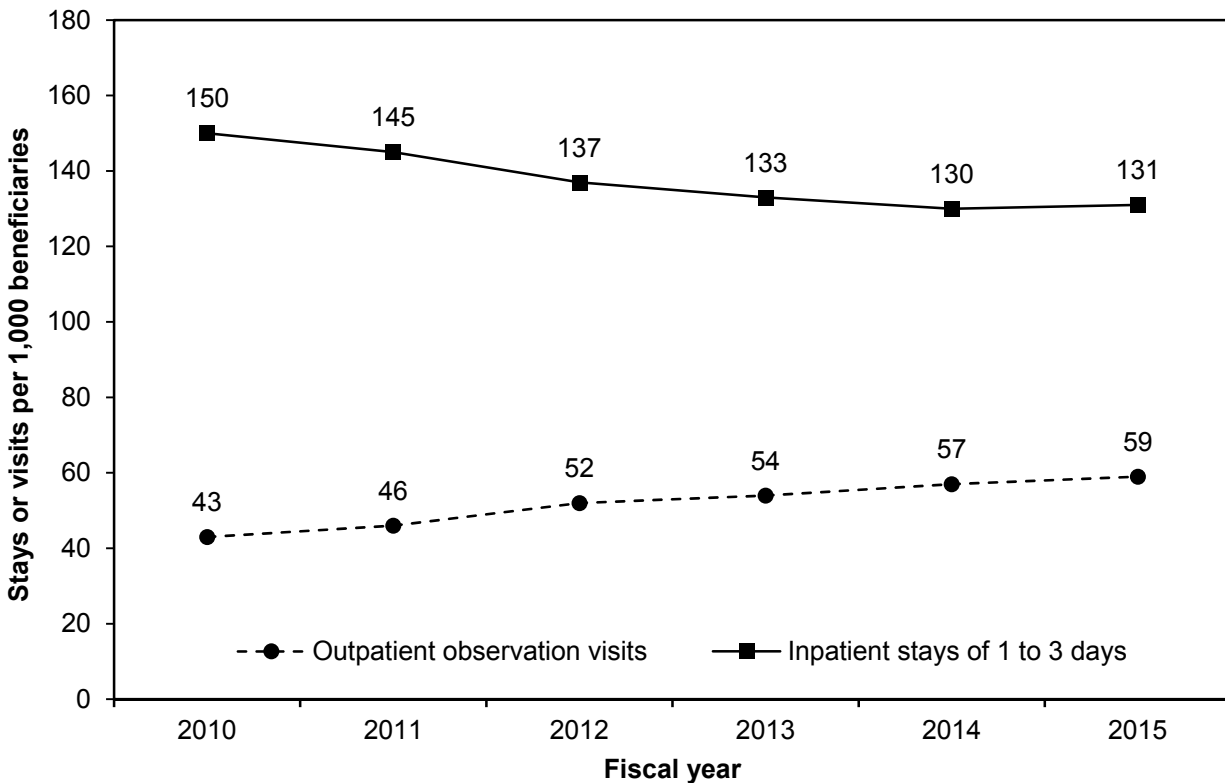


Note: Analysis excludes Medicare Advantage claims and claims for non-inpatient prospective payment system hospitals such as critical access hospitals and hospitals located in Maryland.

Source: MedPAC analysis of Medicare Provider Analysis and Review data from CMS.

- From 2006 to 2015, the share of Medicare fee-for-service beneficiaries with Part A coverage who had at least one inpatient hospitalization declined 4.4 percentage points, from more than 23 percent of beneficiaries to 19 percent of beneficiaries.
- From 2014 to 2015, the share of Medicare fee-for-service beneficiaries with Part A coverage who had at least one inpatient hospitalization was unchanged.
- Medicare fee-for-service beneficiaries with Part A coverage who used inpatient hospital services in 2015 had an average of 1.69 inpatient claims over the course of the year (not shown in chart), a decline of approximately 2 percent from 1.73 inpatient claims per year in 2006.
- A portion of the long-term decline in beneficiaries' utilization of inpatient services could reflect the increase in the number of cases in which beneficiaries are served in outpatient observation status.

Chart 6-12. Number of Medicare outpatient observation visits per 1,000 beneficiaries relative to short inpatient stays, 2010 to 2015



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

- In 2015, Medicare paid for approximately 2 million outpatient observation visits (data not shown).
- From 2010 to 2015, the increase in the number of outpatient observation visits (16 visits per 1,000 beneficiaries) was similar to the combined decline in inpatient discharges lasting between 1 and 3 days (19 discharges per 1,000 beneficiaries). This finding suggests that outpatient observation visits may account for a portion of the decline in short inpatient discharges.
- In 2015, the average length of an outpatient observation visit was 28.1 hours (not shown in chart).
- In 2015, nearly 240,000 outpatient observation visits were 48 hours or longer, representing approximately 12 percent of all observation stays (not shown in chart).

Chart 6-13. Hospital patient experience measures, 2011–2015

H-CAHPS® measure	2011	2012	2013	2014	2015	Percentage point change, 2011–2015
Hospital rating	69%	70%	71%	71%	72%	3
Communication with nurses	77	78	79	79	80	3
Communication with doctors	81	81	82	82	82	1
Responsiveness of hospital staff	65	67	68	68	68	3
Communication about medicines	62	64	64	65	65	3
Cleanliness of hospital environment	72	73	74	74	74	2
Quietness of hospital environment	59	60	61	62	62	3
Discharge information	83	85	86	86	87	4
Recommend the hospital	70	71	71	71	72	2
Care transition*	--	--	51	52	52	--

Note: H-CAHPS® (Hospital Consumer Assessment of Healthcare Providers and Systems®). H-CAHPS is a standardized 32-item survey of patients' evaluations of hospital care. The survey items are combined to calculate measures of patient experience for each hospital. The H-CAHPS measures included in the table are "top-box," or the most positive, response to H-CAHPS survey items. The top-box response is "Always" for four H-CAHPS composite measures (communication with nurses, communication with doctors, responsiveness of hospital staff, and communication about medicines) and two individual items (cleanliness of hospital environment and quietness of hospital environment), "Yes" for the discharge information composite, "9" or "10" (high) for the hospital rating item, "Definitely yes" for the recommend the hospital item, and "Strongly agree" for the care transition composite. Each year's results are based on a sample of hospital surveys of their patients from January to December. About 4,239 hospitals are included, and, on average, these hospitals had patient-level survey response rates of 29 percent.

*The care transition measure was added to the H-CAHPS survey in 2013, and CMS began publicly reporting it in 2014.

Source: CMS summary of H-CAHPS public report of survey results tables.

- In 2008, CMS began publicly reporting H-CAHPS results on the Hospital Compare website. In 2013, Medicare began the value-based purchasing program, which makes incentive payments to hospitals based on the outcomes of certain quality measures. This program incorporates results from H-CAHPS.
- 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.
- All nine hospital patient experience measures improved from 2011 to 2015. Five of the measures (hospital rating, communication with nurses, responsiveness of hospital staff, communication about medicines, quietness of hospital environment) had a difference of 3 percentage points. Discharge information improved by 4 percentage points.

Chart 6-14. Potentially preventable readmission rates for selected conditions, 2010–2015

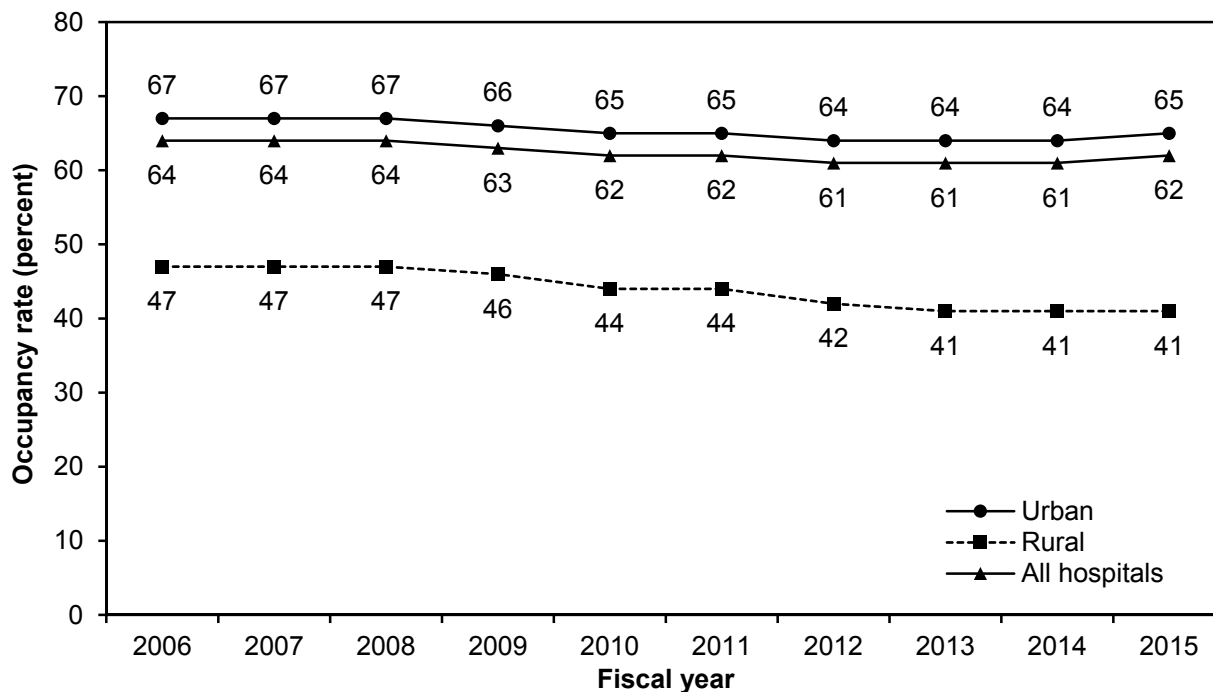
Reason for initial admission	2010	2011	2012	2013	2014	2015	Percentage point change 2010–2015
All	12.9%	12.4%	11.9%	11.3%	11.0%	10.5%	–2.4
AMI	17.3	16.9	16.1	15.0	14.3	13.7	–3.6
Heart failure	19.5	19.2	18.4	17.6	17.0	16.4	–3.1
Pneumonia	13.1	12.6	12.1	11.5	11.5	10.6	–2.5
COPD	16.8	16.5	15.9	15.1	14.7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

Note: AMI (acute myocardial infarction), COPD (chronic 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.

- The Congress enacted the Hospital Readmission Reduction Program (HRRP) in 2010, with penalties for hospitals that have above-average readmission rates for select conditions starting in 2013.
- Rates of potentially preventable readmissions declined across all conditions between 2010 and 2015, not just those covered by the readmission reduction program. Across all conditions, potentially preventable readmission rates declined 2.4 percentage points, from 12.9 percent of discharges in 2010 to 10.5 percent in 2015.
- The three conditions covered under the HRRP beginning in 2013 have experienced declines in potentially preventable readmission rates. Readmissions for AMI declined 3.6 percentage points from 2010 to 2015. Over the same period, readmissions for heart failure declined 3.1 percentage points, and readmissions for pneumonia cases declined 2.5 percentage points. COPD was not included in the HRRP until 2015, but from 2010 to 2015, COPD readmissions declined 2.6 percentage points.

Chart 6-15. Hospital occupancy rates, 2006–2015



Note: "Hospital occupancy rates" were defined as total bed days (including swing bed days) and observation bed days used, minus nursery bed days used, over total bed days available. A consistent cohort of approximately 3,300 prospective payment system and critical access hospitals was used in this analysis.

Source: MedPAC analysis of Medicare's Hospital Cost Reports.

- In the aggregate, hospital occupancy rates have been relatively stable over the past decade. From 2006 to 2014, occupancy rates declined slowly, by 3 percentage points, but in 2015, occupancy rates increased slightly to 62 percent across all hospitals.
- Occupancy rates are generally higher for urban than rural hospitals. In 2015, the aggregate occupancy rate for urban hospitals was 65 percent, and the aggregate occupancy rate for rural hospitals was 41 percent.
- The decline in occupancy rates from 2006 to 2015 has been greater for rural hospitals than for urban hospitals. During this period, rural occupancy rates declined almost 6 percentage points, whereas urban occupancy rates declined almost 2 percentage points.

Chart 6-16. Medicare inpatient payments, by source and PPS hospital group, 2015

Hospital group	Share of total payments						Total payments (millions)
	Base	IME	DSH	UC	Outlier	Additional rural hospital*	
All PPS hospitals	80.0%	5.4%	2.9%	6.6%	3.6%	1.5%	\$113,514
Urban IPPS	80.0	5.8	3.0	6.9	3.8	0.6	104,391
Rural IPPS	80.8	0.9	1.1	3.9	1.0	11.3	9,123
Large urban	78.2	7.1	3.2	7.5	4.3	0.0	59,830
Other urban	82.3	4.0	2.9	6.0	3.2	1.4	44,210
Rural referral	88.8	0.9	2.2	6.8	1.6	0.0	2,058
SCH (federal rate)	81.6	4.6	1.5	8.0	1.8	2.9	1,071
SCH (HSP rate)	74.2	0.1	0.0	0.0	0.3	25.4	3,938
Medicare dependent	80.0	0.0	1.5	4.8	1.1	13.1	830
Other rural, <50 beds	79.5	0.1	1.5	7.2	3.0	8.7	326
Other rural, ≥50 beds	85.5	1.2	1.9	8.0	1.4	2.4	885
Voluntary	80.8	5.7	2.7	6.0	3.6	1.4	80,271
Proprietary	83.9	2.2	3.1	7.4	2.7	1.1	18,350
Government	71.4	7.7	3.4	9.4	4.8	2.7	14,893
Major teaching	66.4	15.8	3.5	8.6	5.6	0.0	28,761
Other teaching	82.6	3.6	2.9	6.6	3.2	1.0	41,802
Nonteaching	86.8	0.0	2.4	5.4	2.7	2.9	42,583

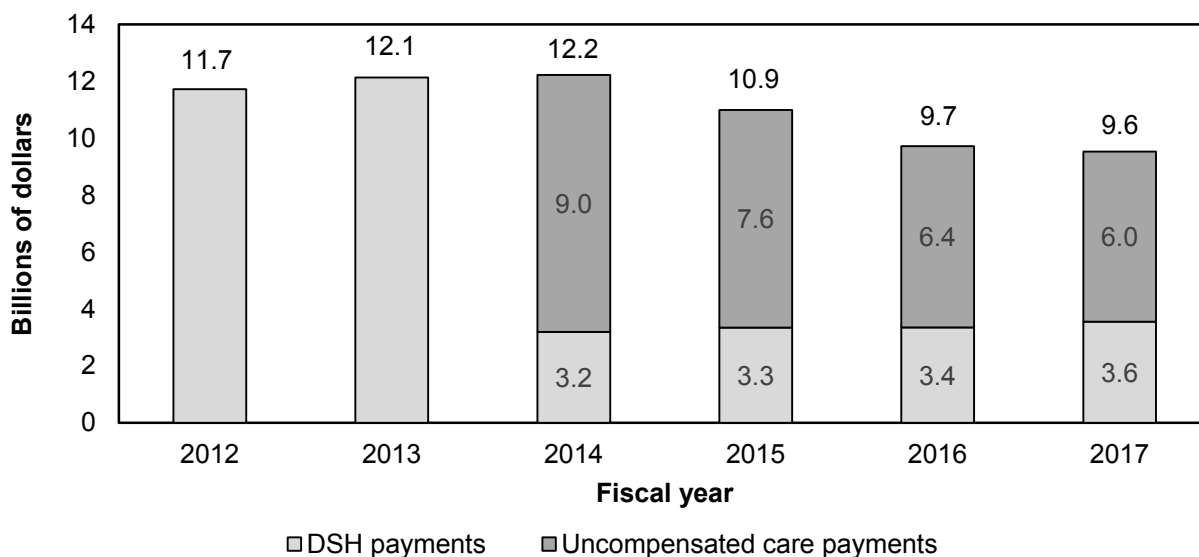
Note: PPS (prospective payment system), IPPS (inpatient prospective payment system), IME (indirect medical education), DSH (disproportionate share), UC (uncompensated care), SCH (sole community hospital), HSP (hospital-specific payment). Chart includes hospitals covered by the IPPS and excludes critical access hospitals. "Medicare-dependent" category includes facilities paid at either the HSP or the federal rate. Component percentages may not sum to 100 due to rounding. Simulated payments reflect 2015 payment rules applied to actual number of cases in 2015. Direct graduate medical education payments are excluded.

*"Additional rural hospital" payments are the total payments made to hospitals beyond the federal base rate, including SCH add-on payments, Medicare-dependent hospital add-on payments, and low-volume add-on payments. For SCHs paid the HSP, this category also includes the payments they received indirectly—attributable to the costs associated with residency programs, low-income patients, and outlier cases.

Source: MedPAC analysis of claims and impact file data from CMS.

- Medicare inpatient payments in 2015 to hospitals covered by the acute IPPS exceeded \$113 billion. About \$104 billion (92 percent) went to urban hospitals, and approximately \$9 billion (8 percent) went to rural hospitals. This figure does not reflect \$2.7 billion in payments to critical access hospitals (CAHs) for inpatient care. Cost-based reimbursement for CAHs results in payments significantly above what CAHs would have been paid under the IPPS.
- Base payments accounted for 80 percent of all inpatient payment in 2015. Special payments—including IME, DSH, UC, and outlier payments, as well as additional payments to rural hospitals through the SCH and Medicare-dependent hospital programs—accounted for 20 percent of all inpatient payments.
- In 2015, uncompensated care payments for each eligible hospital were based on each hospital's number of Medicaid and Medicare supplemental security income patient days.
- Outlier payments accounted for 3.6 percent of total inpatient payments in 2015, or about \$4.1 billion.

Chart 6-17. Medicare inpatient disproportionate share payments and uncompensated care payments, 2012–2017



Note: DSH (disproportionate share). Chart includes hospitals covered by the inpatient prospective payment system. Chart excludes hospitals not eligible for DSH payments: critical access hospitals, hospitals in Maryland, and sole community hospitals paid hospital-specific rates. Data represent DSH and uncompensated care payment levels finalized by CMS. Components may not sum to totals due to rounding.

Source: CMS hospital inpatient prospective payment systems (IPPS) for acute care hospitals and long-term care hospital prospective payment system final rules from fiscal years 2012 to 2017.

- In 2012 and 2013, hospitals received approximately \$12 billion in aggregate Medicare DSH payments annually. The traditional DSH payment formula was based on hospitals' share of Medicaid patients and Medicare patients with Social Security Disability Insurance.
- Beginning in 2014, DSH payments were calculated as 25 percent of the operating DSH payment the hospital would have received under the traditional DSH formula (noted above). Aggregate DSH payments have been approximately \$3 billion to \$4 billion per year since the policy change. For fiscal year (FY) 2018, CMS has proposed \$4.0 billion in DSH payments. The increase in DSH payments between 2017 and 2018 is due to CMS-estimated growth in inpatient discharges for FY 2018, and the annual update to IPPS payment rates (data not shown).
- Beginning in 2014, DSH-eligible hospitals are also eligible to receive uncompensated care payments. These payments are calculated as a fixed pool of dollars equal to 75 percent of the DSH payment received under the traditional DSH formula, minus an amount that increases in proportion to the decline in the share of the uninsured population. These payments are distributed based on the share of uncompensated care each hospital provides. The amount of uncompensated care payments declined more than \$3 billion between 2014 and 2017 because of declines in the uninsured population.
- From FY 2013 to 2014, inpatient DSH payments declined approximately \$9 billion, but hospitals were eligible to receive \$9 billion in uncompensated care payments that were paid separately from the inpatient payment system.
- On net, the sum of DSH and uncompensated care payments declined \$2.1 billion between 2012 and 2017 because the decline in the uninsured population more than offset the growth in the DSH percentage (due to Medicaid expansion) and the growth in Medicare discharges.

Chart 6-18. Discharge destination of Medicare fee-for-service beneficiaries served in acute care hospitals, 2006–2015

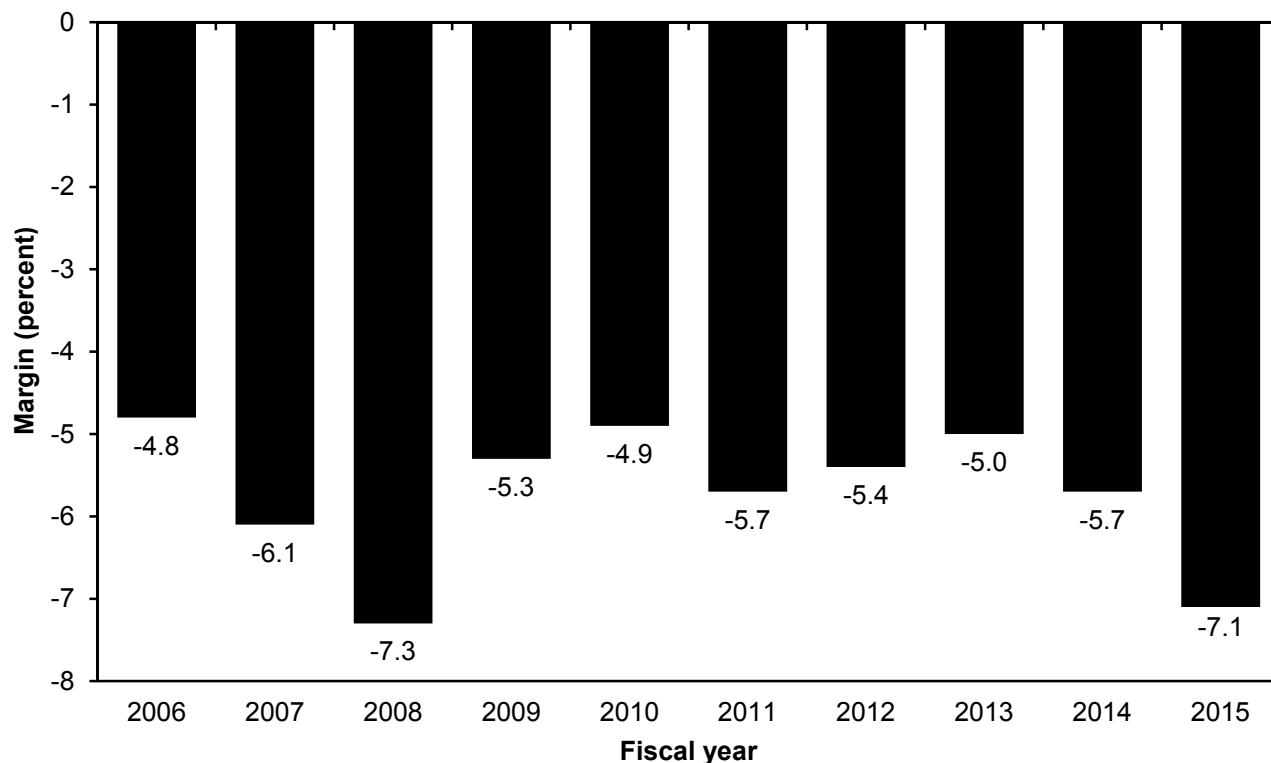
Destination	2006	2014	2015	Percentage Point change 2006–2015
Home self-care	52.3%	46.0%	45.5%	–6.8
Skilled nursing or swing bed	18.8	21.0	21.2	2.4
Home with organized home health care	13.8	16.8	16.9	3.1
Inpatient rehabilitation facility	3.4	3.8	3.9	0.5
Died in hospital	3.8	3.3	3.3	–0.5
Hospice	1.6	2.9	3.0	1.4
Transferred to other acute care hospital	2.5	2.2	2.1	–0.4
Other setting (e.g., ICF, nursing facility)	2.0	1.6	1.6	–0.4
Long-term care hospital	0.9	1.2	1.2	0.3
Left against medical advice	0.6	0.8	0.8	0.2
Inpatient psychiatric facility	0.4	0.5	0.4	0.0

Note: ICF (intermediate care facility). Numbers may not sum due to rounding. These data include hospitals reimbursed by the Medicare inpatient prospective payment system and critical access hospitals.

Source: Medicare inpatient claims data.

- In 2015, about 46 percent of all Medicare fee-for-service patients were discharged from an acute care hospital to home under self-care, without any organized post-acute care. The share of beneficiaries discharged home under self-care has decreased since 2006 with greater use of post-acute care providers, particularly home health care, skilled nursing care, and hospice.
- In 2015, about 43 percent of all Medicare fee-for-service patients discharged from an acute care hospital were discharged to post-acute care services (skilled nursing facility (SNF), home health care agency, inpatient rehabilitation facility, or long-term care hospital). The share of beneficiaries discharged to post-acute care services increased about 6 percentage points between 2006 and 2015.
- About one in five beneficiaries is discharged to skilled nursing care, either in a SNF or hospital swing bed. The share of beneficiaries discharged to SNF-level care increased 2.4 percentage points between 2006 and 2015.
- An increasing share of beneficiaries are being discharged home with organized home health care, increasing from 13.8 percent of discharges in 2006 to 16.9 percent in 2015.
- Discharges to hospice care have shown substantial growth, rising from 1.6 percent of discharges in 2006 to 3.0 percent of discharges in 2015. A little more than half of these hospice discharges are to medical facility–level care rather than home care.
- The share of patients dying in the hospital or being transferred to another acute care hospital declined between 2006 and 2015.

Chart 6-19. Overall Medicare margin, 2006–2015

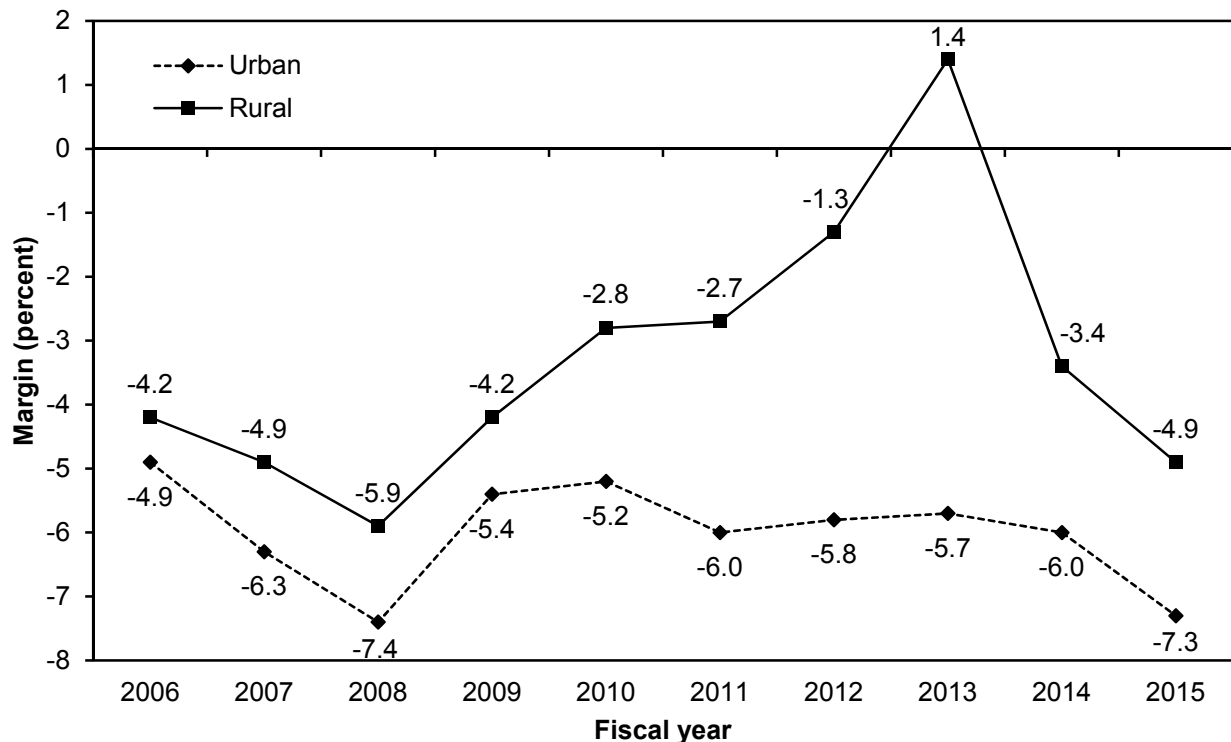


Note: A margin is calculated as revenue minus costs, divided by revenue. Data are based on Medicare-allowable costs and exclude critical access hospitals. Overall Medicare margins cover the costs and payments of acute inpatient, outpatient, inpatient psychiatric and rehabilitation unit, skilled nursing facility, and home health services, as well as graduate medical education, bad debts, Medicare payments for health information technology, and uncompensated care payments. Maryland hospitals are excluded from this analysis.

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

- The overall Medicare margin incorporates payments and costs for acute inpatient, outpatient, skilled nursing, home health care, and inpatient psychiatric and rehabilitative services, as well as direct graduate medical education, bad debts, Medicare payments for health information technology, and—starting in 2014—uncompensated care payments. The overall margin follows a trend similar to that of the Medicare inpatient margin.
- The overall Medicare margin in 2006 was –4.8 percent. In fiscal year 2015, it was –7.1 percent.
- In 2015, 25 percent of hospitals had overall Medicare margins of 3.9 percent or higher, and another 25 percent had margins of –17.3 percent or lower (not shown in chart). About 34 percent of hospitals had positive overall Medicare margins in 2015.

Chart 6-20. Overall Medicare margin, by urban and rural location, 2006–2015

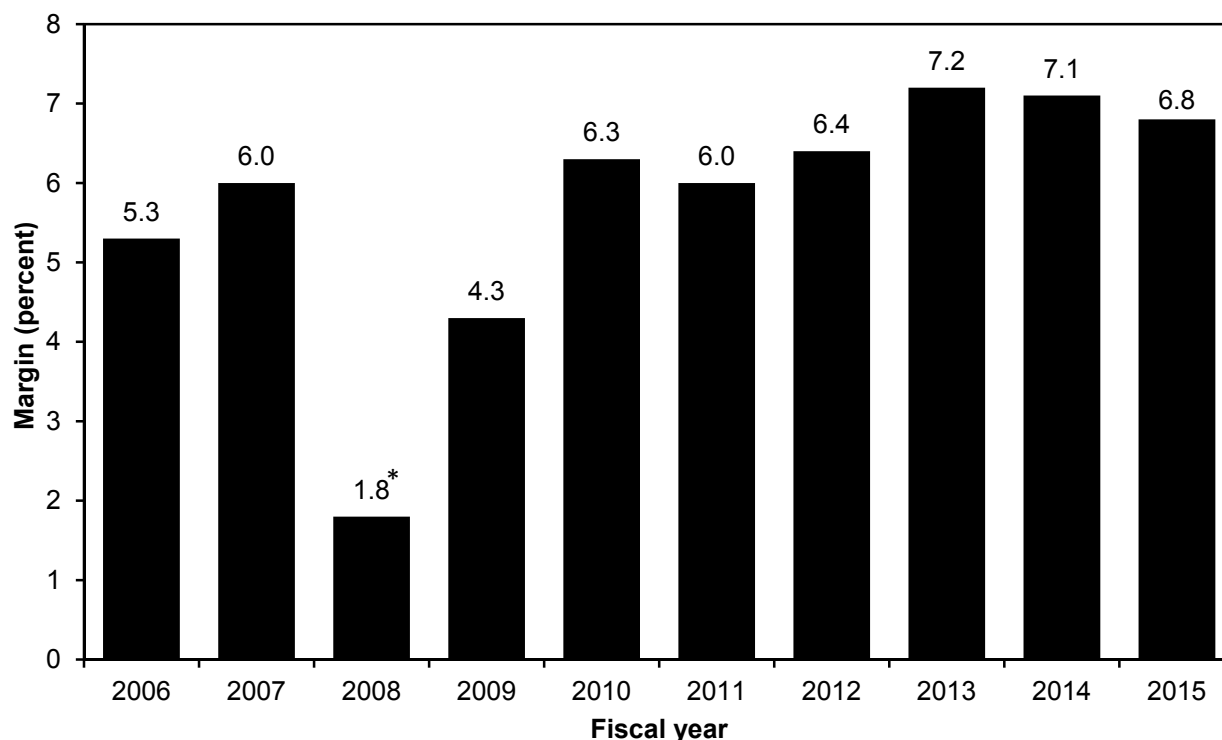


Note: A margin is calculated as revenue minus costs, divided by revenue. Data are based on Medicare-allowable costs and exclude critical access hospitals. Overall Medicare margins cover the costs and payments of acute inpatient, outpatient, inpatient psychiatric and rehabilitation unit, skilled nursing facility, and home health services, as well as graduate medical education, bad debts, Medicare payments for health information technology, and uncompensated care payments. Maryland hospitals are excluded from this analysis.

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

- Overall Medicare margins historically were higher for urban hospitals than for rural hospitals; however, over the last decade, overall Medicare margins for rural hospitals have exceeded those for urban hospitals. In 2015, the difference between urban and rural hospital margins was about 2.4 percentage points.
- The difference in overall Medicare margins between urban and rural hospitals narrowed throughout the middle of the past decade. In 2002, the overall margin for urban hospitals was 2.7 percent, compared with -2.5 percent for rural hospitals (not shown in chart). Policy changes made in the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 helped to improve the relative financial position of rural hospitals. Further legislation to assist rural hospitals was implemented after 2008. Most recently, in 2015, the overall Medicare margin for urban hospitals was -7.3 percent, compared with -4.9 percent for rural hospitals.
- The overall Medicare margin includes inpatient and outpatient services, but not laboratory services. The rural margin rose to 1.4 percent by 2013 in part because of low-volume add-on payments and health information technology payments. However, in 2014 the rural margin fell to -3.4 percent because some unprofitable services that had been paid as laboratory services shifted into the outpatient payment system. These outpatient tests were a disproportionately large share of rural hospital payments, causing rural margins to fall faster than urban margins. Because of special rural add-on payments, rural margins continue to be higher than urban hospitals' margins.

Chart 6-21. Hospital total all-payer margin, 2006–2015



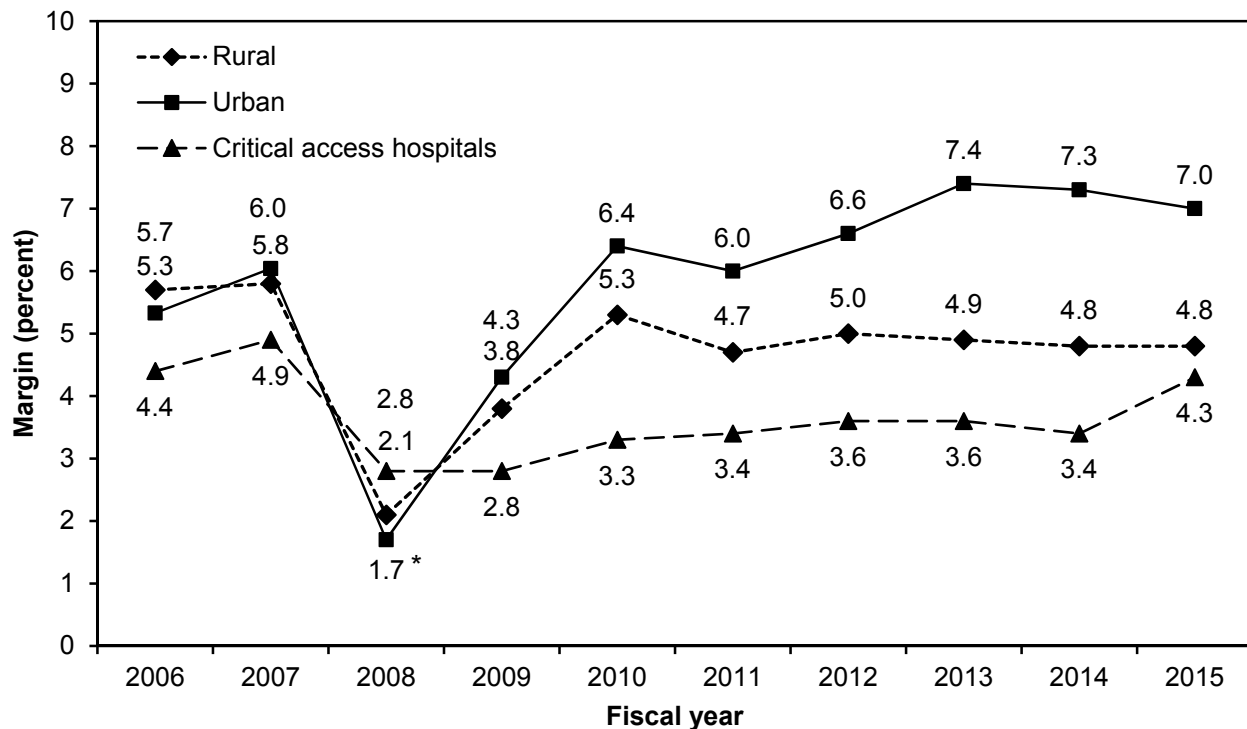
Note: A margin is calculated as revenue minus costs, divided by revenue. Total margin includes all patient care services funded by all payers, plus nonpatient revenue. Analysis excludes critical access hospitals and Maryland hospitals.

*The significant drop in total margin includes investment losses stemming from the decline of the U.S. stock market in 2008.

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

- The total hospital margin for all payers—Medicare, Medicaid, other government, and private payers—reflects the relationship of all hospital revenues to all hospital costs, including inpatient, outpatient, post-acute, and nonpatient services. The total margin also includes nonpatient revenue such as investment income. Other types of margins we track—Medicare inpatient margin and overall Medicare margin—are operating margins that do not include investment income.
- The 2008 decline of the U.S. stock market resulted in significant investment losses for hospitals, which resulted in a corresponding decline in total margin. From 2013 to 2015, all-payer margins were close to 7 percent, a level higher than the prior two decades.

Chart 6-22. Hospital total all-payer margin, by urban and rural location and critical access hospitals, 2006–2015

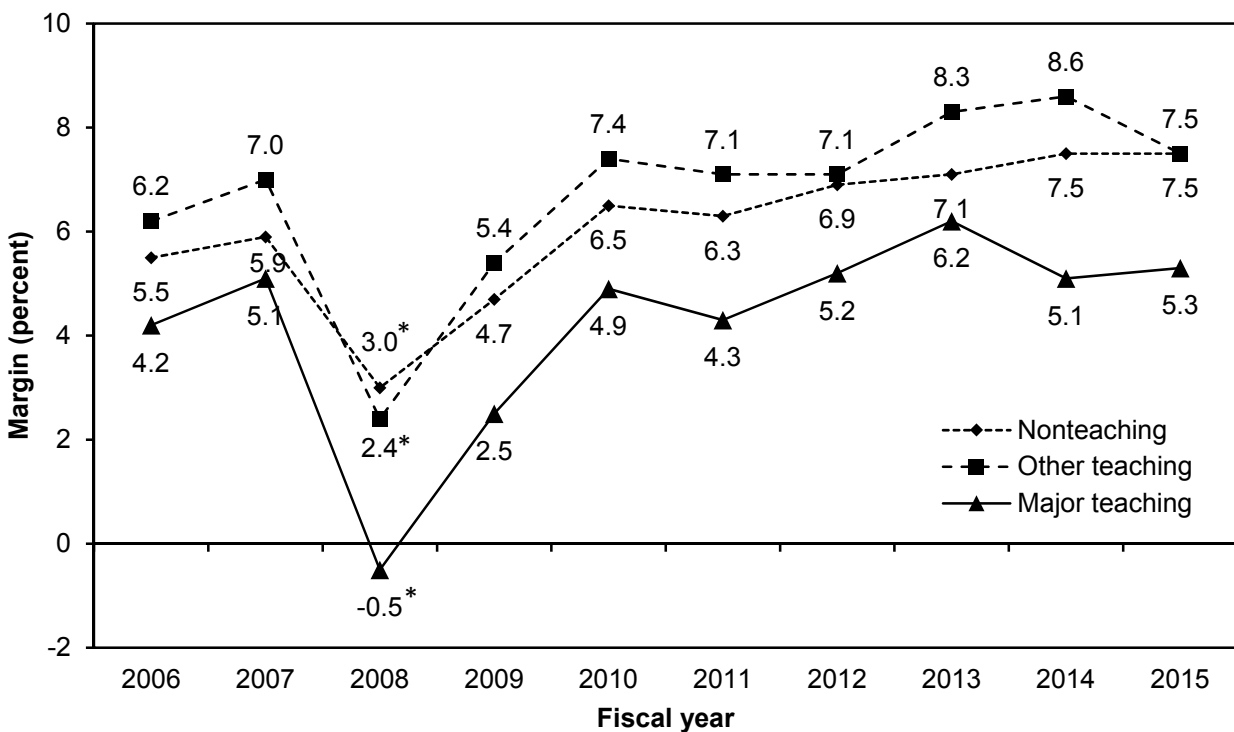


Note: A margin is calculated as revenue minus costs, divided by revenue. Total margin includes all patient care services funded by all payers, plus nonpatient revenue such as investment revenues. Analysis excludes Maryland hospitals.
 *Significant drop in total margin includes investment losses resulting from the U.S. stock market decline of 2008.

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

- Since 2009, urban hospitals have had higher total (all-payer) margins than rural hospitals. In 2015, total margins were 7.0 percent for urban hospitals and 4.8 percent for rural hospitals. From 2009 to 2013, the growth in urban and rural total all-payer margins reflects low cost growth and increasing private-payer reimbursement rates.
- In general, all-payer margins for critical access hospitals have historically been lower than for other urban or rural hospitals.

Chart 6-23. Hospital total all-payer margin, by teaching status, 2006–2015



Note: "Major teaching" hospitals are defined by a ratio of interns and residents to beds of 0.25 or greater, while "other teaching" hospitals have a ratio of greater than 0 and less than 0.25. A margin is calculated as revenue minus costs, divided by revenue. Total margin includes all patient care services funded by all payers, plus nonpatient revenue. Analysis excludes critical access hospitals and Maryland hospitals.

*Significant drop in total margin includes investment losses resulting from the U.S. stock market decline of 2008.

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

- The total all-payer margins for major teaching hospitals have consistently been lower than those for other teaching and nonteaching hospitals. In 2015, the total margin for major teaching hospitals stood at 5.3 percent, compared with other teaching hospitals and nonteaching hospitals at 7.5 percent.
- Following several years of increasing margins, in 2008, total (all-payer) margins declined significantly because of losses in investment revenues. As a result, total margins for major teaching hospitals were negative in 2008. Since 2008, total margins for major teaching hospitals have recovered and remain above their historic average.

Chart 6-24. Medicare margins by teaching and disproportionate share status, 2015

Hospital group	Share of hospitals	Overall Medicare margin
All hospitals	100%	-7.1%
Major teaching	11	-5.2
Other teaching	22	-5.8
Nonteaching	66	-9.6
Both IME and DSH	30	-5.1
IME only	3	-13.3
DSH only	54	-8.6
Neither IME nor DSH	13	-15.0

Note: IME (indirect medical education), DSH (disproportionate share). Components may not sum to 100 percent due to rounding. Maryland hospitals are excluded from this analysis.

Source: MedPAC analysis of 2015 Medicare cost report data from CMS.

- By contrast with all-payer total margins, major teaching hospitals had the highest overall Medicare margins in 2015. Their better financial performance was largely due to the additional payments they received from the IME and DSH adjustments to their inpatient payments.
- Hospitals that received neither IME nor DSH payments had the lowest Medicare margins. In 2015, the overall Medicare margin of these hospitals was -15.0 percent, well below the margins of major teaching hospitals (-5.2 percent) and the all-hospital average (-7.1 percent).
- Major teaching hospitals have higher Medicare margins than other hospitals, but they have lower total (all-payer) margins than other hospitals (see Chart 6-23).

Chart 6-25. Financial pressure leads to lower costs

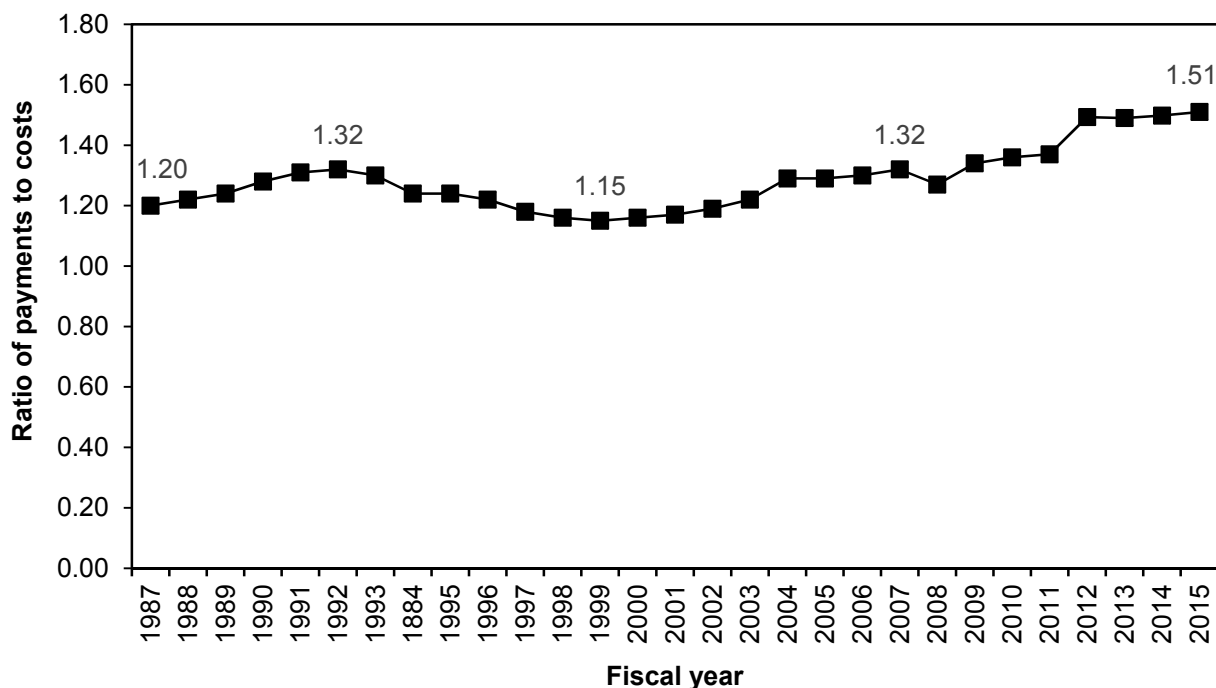
	Level of financial pressure, 2012–2014		
	High pressure (non-Medicare margin ≤ 1%)	Medium pressure	Low pressure (non-Medicare margin > 5%)
Number of hospitals	697	392	1,704
Financial characteristics, 2015 (medians)			
Non-Medicare margin (private, Medicaid, uninsured)	–3.2%	3.8%	13.6%
Standardized cost per discharge (as a share of the national median)			
For-profit and nonprofit hospitals	91	99	102
Nonprofit hospitals	93	99	103
For-profit hospitals	90	95	100
Annual growth in cost per discharge, 2012–2015	3%	3%	2%
Overall 2015 Medicare margin (medians)	4.1%	–3.3%	–9.1%
Patient characteristics (medians)			
Total hospital discharges in 2015	3,432	5,645	7,807
Medicare share of inpatient days	41%	38%	38%
Medicaid share of inpatient days	9%	9%	7%
Medicare case-mix index	1.36	1.50	1.59

Note: Standardized costs are adjusted for hospital case mix, wage index, outliers, transfer cases, interest expense, and the effect of teaching and low-income Medicare patients on hospital costs. The sample includes all hospitals that had complete cost reports on file with CMS by October 2016. “High-pressure hospitals” are defined as those with a median non-Medicare profit margin of 1 percent or less from 2012 to 2014 and with a net worth that grew by less than 1 percent per year over that period if the hospital’s Medicare profits had been zero. “Low-pressure hospitals” are defined as those with a median non-Medicare profit margin greater than 5 percent from 2012 to 2014 and a net worth that grew by more than 1 percent per year over that period if the hospital’s Medicare profits had been zero. “Medium-pressure hospitals” are those that fit into neither the high- nor the low-pressure categories.

Source: MedPAC analysis of Medicare cost report and claims files from CMS.

- Higher financial pressure tends to lead to lower standardized costs per discharge. Hospitals with lower volume, lower case mix, and higher Medicaid charges are more likely to be under financial pressure.
- In 2015, low-pressure hospitals had a lower percentage point increase in costs (2 percent) than other hospitals, but still ended with higher costs per discharge (102 percent of the average).

Chart 6-26. Change in the private-payer ratio of payments to costs for hospital services, 1987–2015

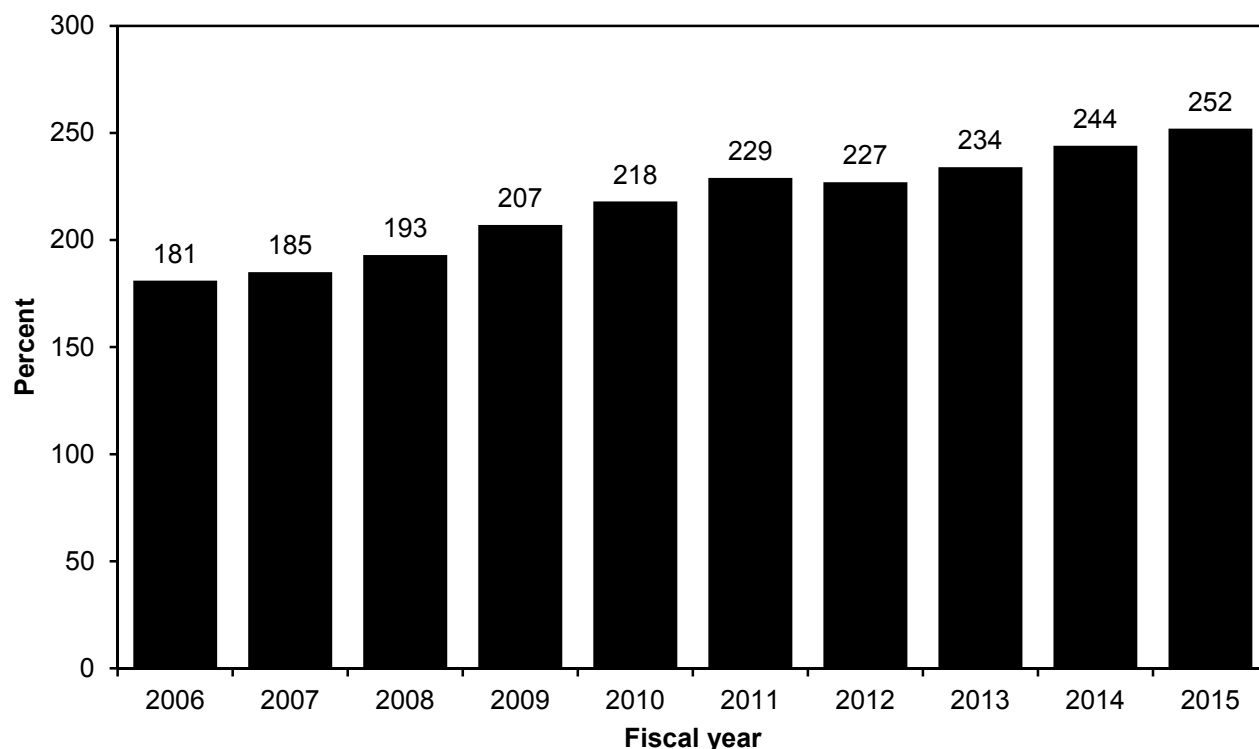


Note: Data are for community hospitals (including critical access hospitals and Maryland hospitals) and cover all hospital services. The private-payer ratio of payments to costs includes self-pay patients. Data for 2006 to 2010 exclude Medicare and Medicaid managed care patients from the private-payer ratio of payments to costs. In 2012, hospitals began excluding data related to bad debt and charity care from their reported charges and payments.

Source: MedPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

- The private-payer ratio of payments to costs reflects hospitals' weighted average profit margin on all service lines of business, such as inpatient, outpatient, and hospital-owned physician practices. In 2015, the private-payer ratio of payments to costs was 1.51. This ratio includes payments and costs attributed to uninsured patients who pay for their own services (self-pay).
- The private-payer payment-to-cost ratio for hospital services has fluctuated over time in part because of shifts in the relative bargaining power of hospitals and insurers. In 1992, hospitals' private-payer payment-to-cost ratio was 1.32. However, with the expansion of health management organizations and movements to narrow networks, the private-payer payment-to-cost ratio declined to 1.15 by 1999. It subsequently rose to the 2015 level of 1.51.
- From 2012 to 2015, the private-payer ratio of payments to costs was relatively flat at around 1.50. During this period, total hospital profits increased from 6.4 percent in 2012 to 30-year highs near 7 percent in 2013, 2014, and 2015 (see Chart 6-21), in part because of a decline in uncompensated care as more patients gained insurance.

Chart 6-27. Markup of hospital charges above costs for Medicare services, 2006–2015

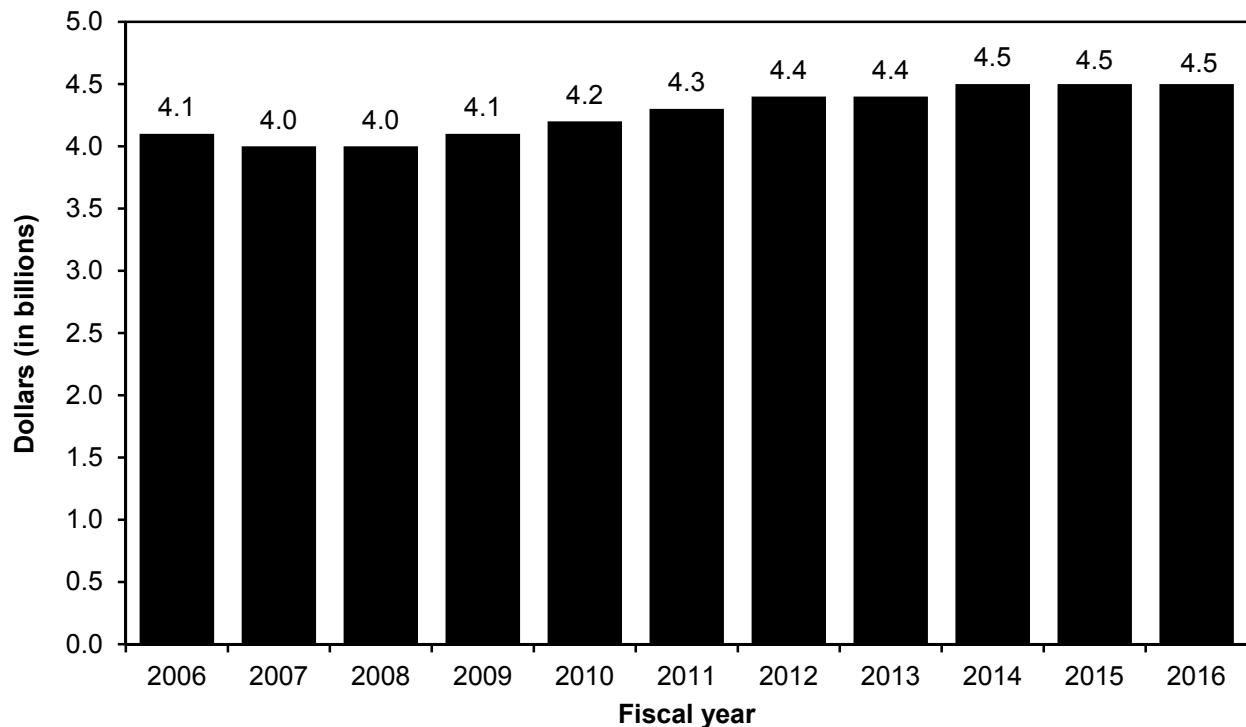


Note: Analysis includes all community hospitals (including critical access hospitals and hospitals in Maryland). Markups are calculated as the amount of charges over the amount of costs, minus the amount that charges equal costs ($\text{charges/costs} - 1$).

Source: American Hospital Association Annual Survey of Hospitals.

- The average markup of hospitals' charges above costs rose from 181 percent in 2006 to 252 percent in 2015. Hospital charges (\$686 billion) were over three times costs (\$195 billion) in 2015 (data not shown).
- Rapid growth in charges may have little impact on hospital financial performance because few patients pay full charges. However, charge growth may significantly affect uninsured patients, who may pay full charges. More rapid growth in charges (relative to growth in costs) may reflect hospitals' attempts to maximize revenue from private payers (who often structure their payments as a discount off charges).
- The markup of charges over costs in 2015 is generally higher for urban hospitals (262 percent) than for rural hospitals (176 percent) (not shown in chart).
- Among urban hospitals in 2015, the markup of charges over costs was higher for for-profit hospitals (489 percent) than for nonprofit hospitals (254 percent). Rural for-profit hospitals have a higher markup of charges over costs (388 percent) than nonprofit hospitals (196 percent) (not shown in chart).

Chart 6-28. Medicare payments to inpatient psychiatric facilities, 2006–2016



Note: Spending for inpatient psychiatric care furnished in scatter beds in acute care hospitals (and paid for under the acute care inpatient prospective payment system) is not included in this chart.

Source: CMS Office of the Actuary.

- The inpatient psychiatric facility prospective payment system started January 1, 2005. It was phased in over a three-year period.
- Medicare program spending for beneficiaries' care in inpatient psychiatric facilities grew an average of 2 percent per year between 2006 and 2016.

Chart 6-29. Inpatient psychiatric facilities, 2006–2015

Type of IPF	2006	2008	2010	2012	2014	2015	Average annual change	
							2006– 2014	2014– 2015
All	1,647	1,634	1,596	1,568	1,589	1,557	–0.4%	–2.0%
Urban	1,307	1,289	1,259	1,237	1,248	1,226	–0.6	–1.8
Rural	340	345	337	331	340	329	0.0	–3.2
Freestanding	396	419	447	450	474	477	2.3	0.6
Hospital-based units	1,251	1,215	1,149	1,118	1,115	1,080	–1.4	–3.1
Nonprofit	902	866	807	762	739	718	–2.5	–2.8
For profit	348	357	386	436	492	498	4.4	1.2
Government	397	411	403	370	358	341	–1.3	–4.7

Note: IPF (inpatient psychiatric facility). Data are from facilities that submitted valid Medicare cost reports in the given fiscal year. Numbers may not sum to totals due to missing data.

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

- Between 2006 and 2014, the number of IPFs that filed Medicare cost reports fell, on average, 0.4 percent per year. Between 2014 and 2015, the number of IRFs fell 2.0 percent.
- A growing share of Medicare IPF users receives care in for-profit facilities. Between 2006 and 2014, the number of for-profit IPFs grew, on average, more than 4 percent per year. Over the same period, the number of nonprofit IPFs fell 2.5 percent per year, on average. The number of nonprofit IPFs continued to decline in 2015.

Chart 6-30. One diagnosis accounted for almost three-quarters of Medicare IPF cases in 2015

MS-DRG	Diagnoses	Percentage
885	Psychosis	73.1%
884	Organic disturbances and mental retardation	6.9
057	Degenerative nervous system disorders without MCC	5.8
897	Alcohol/drug abuse or dependency, no rehabilitation, without MCC	5.0
881	Depressive neurosis	3.2
882	Neurosis except depressive	1.2
895	Alcohol/drug abuse or dependency with rehabilitation, without MCC	1.2
880	Acute adjustment reaction and psychosocial dysfunction	0.7
056	Degenerative nervous system disorders with MCC	0.5
883	Disorders of personality and impulse control	0.5
886	Behavioral and developmental disorders	0.4
894	Alcohol/drug use—left AMA	0.3
896	Alcohol/drug abuse or dependency without rehabilitation, with MCC	0.2
876	OR procedure with principal diagnosis of mental illness	0.1
081	Nontraumatic stupor and coma without MCC	0.1
887	Other mental disorders	0.1
080	Nontraumatic stupor and coma with MCC	0.0
	Nonpsychiatric MS-DRGs	0.8
	Total	100.0

Note: IPF (inpatient psychiatric facility), MS-DRG (Medicare severity–diagnosis related group), MCC (major comorbidity or complication), AMA (against medical advice), OR (operating room). Totals may not sum to 100 percent due to rounding.

Source: MedPAC analysis of Medicare Provider Analysis and Review data from CMS.

- Medicare patients in IPFs are generally assigned 1 of 17 psychiatric MS-DRGs.
- The most frequently occurring IPF diagnosis—accounting for about 73 percent of IPF discharges in 2015—was psychosis. This broad category includes patients with principal diagnoses of schizophrenia, bipolar disorder, and major depression.
- In 2015, the next most common discharge diagnosis, accounting for almost 7 percent of IPF cases, was organic disturbances and mental retardation.

Chart 6-31. Characteristics of Medicare IPF users, 2015

Characteristic	Share of all IPF users	Share of users with more than one IPF stay
Current eligibility status*		
Aged	41.4%	28.9%
Disabled	58.5	71.0
ESRD only	0.1	0.1
Age (years)		
<45	23.2	30.8
45–64	34.8	39.6
65–79	26.2	20.9
80+	15.8	8.6
All	100.0	27.7

Note: IPF (inpatient psychiatric facility), ESRD (end-stage renal disease). Numbers may not sum to totals due to rounding.
*Some aged beneficiaries are also disabled.

Source: MedPAC analysis of Medicare Provider Analysis and Review data from CMS.

- Almost 59 percent of Medicare beneficiaries who had at least one IPF stay in 2015 qualified for Medicare because of a disability. These beneficiaries tend to be younger and poorer than the typical fee-for-service beneficiary.
- Approximately 28 percent of Medicare beneficiaries who used an IPF in 2015 had more than one IPF stay during the year. These beneficiaries were far more likely than all IPF users to be disabled.

