

J U N E 2 0 1 4

A DATA BOOK

Health Care Spending
and the
Medicare Program

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Medicare Program

MEDPAC Medicare
Payment Advisory
Commission

Introduction

The MedPAC Data Book provides information on national health care and Medicare spending as well as Medicare beneficiary demographics, dual-eligible beneficiaries, quality of care in the Medicare program, and Medicare beneficiary and other payer liability. It also examines provider settings—such as hospitals and post-acute care—and presents data on Medicare spending, beneficiaries’ access to care in the setting (measured by the number of beneficiaries using the service, number of providers, volume of services, length of stay, or through direct surveys), and the sector’s Medicare profit margins, if applicable. In addition, it covers the Medicare Advantage program and prescription drug coverage for Medicare beneficiaries, including Part D.

MedPAC began producing its annual Data Book at the suggestion of congressional staff. Some of the information it contains is derived from MedPAC’s March and June reports to the Congress; other information presented is unique to the Data Book. The information is presented through tables and figures with brief discussions.

We produce a limited number of printed copies of this report. It is, however, available through the MedPAC website: www.medpac.gov.

Notes on data

Several charts in this Data Book use data from the Medicare Current Beneficiary Survey (MCBS). We use the MCBS to compare beneficiary groups with different characteristics. The MCBS is a survey, so expenditure amounts that we show may not match actual Medicare expenditure amounts from CMS’s program offices or the Office of the Actuary.

A number of charts in the Data Book use information that is typically published in the annual report of the Boards of Trustees of the Medicare Trust Funds. At the time this Data Book was prepared, the trustees’ report had not yet been released for 2014. Charts that use data from the trustees’ report reflect data from the 2013 report and are flagged accordingly. The reader is advised to consult the 2014 trustees’ report directly, when available, for the most current data.

Changes in aggregate spending among the fee-for-service sectors presented in this Data Book reflect changes in Medicare enrollment between the traditional fee-for-service program and Medicare Advantage. Increased enrollment in Medicare Advantage may be a significant factor in instances in which Medicare spending in a given sector has leveled off or even declined. In these instances, fee-for-service spending per capita may present a more complete picture of spending changes. We present both measures (aggregate and per capita) where warranted.

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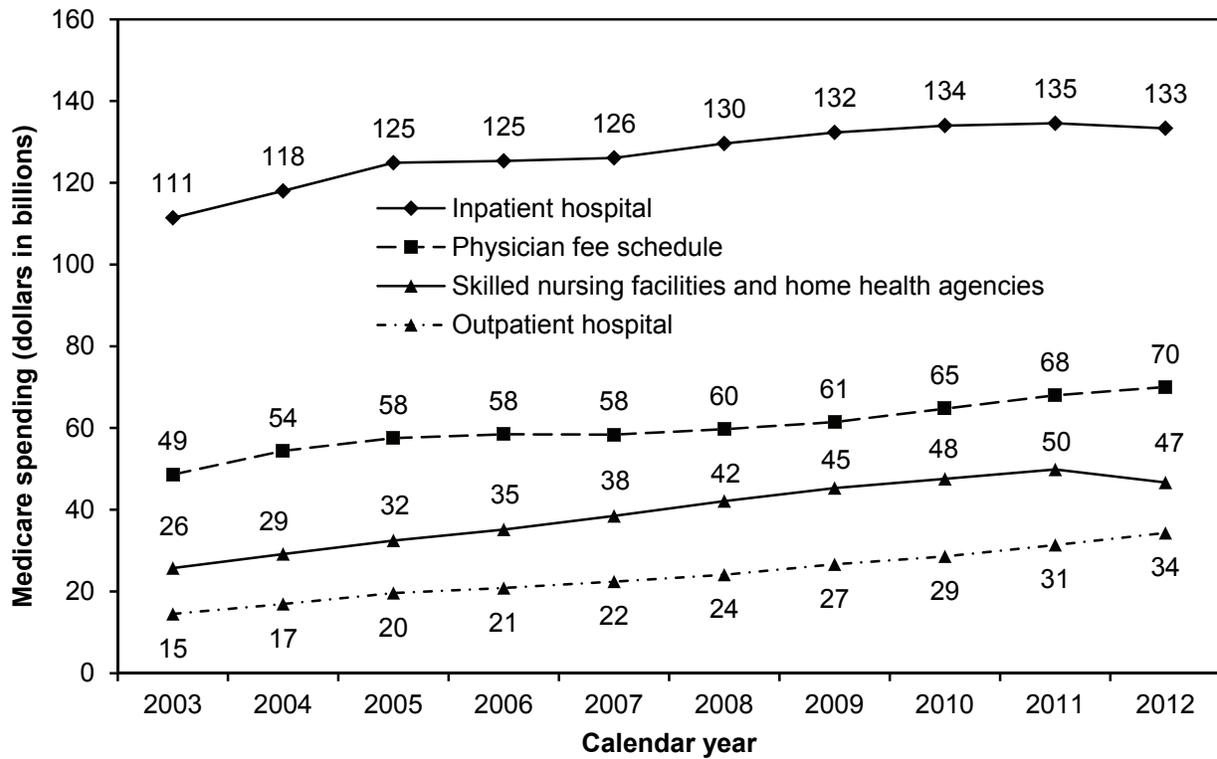
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SECTION

1

**National health care and
Medicare spending**

Chart 1-1. Aggregate Medicare spending among FFS beneficiaries, by sector, 2003–2012

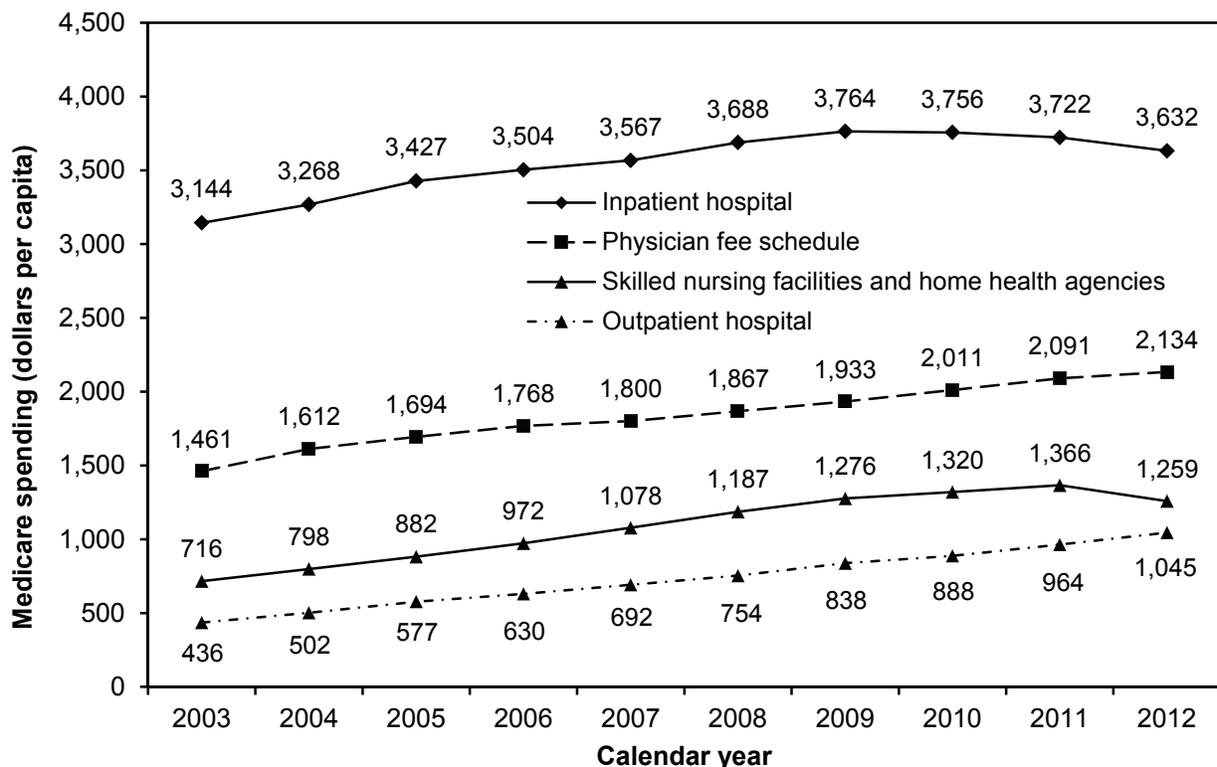


Note: FFS (fee-for-service). "Physician fee schedule" includes spending on services provided by physicians and other health professionals such as nurse practitioners, physician assistants, and physical therapists. Dollar amounts are Medicare spending only and do not include beneficiary cost sharing. Spending for Medicare Advantage enrollees is also not included.

Source: **AT THE TIME THIS DATA BOOK WAS PREPARED, THE MEDICARE TRUSTEES' REPORT (WHICH IS THE CUSTOMARY SOURCE OF DATA FOR THIS CHART) HAD NOT YET BEEN RELEASED FOR 2014. THIS CHART REFLECTS DATA FROM THE 2013 MEDICARE TRUSTEES' REPORT. THE READER IS ADVISED TO CONSULT THE 2014 TRUSTEES' REPORT DIRECTLY, WHEN AVAILABLE, FOR THE MOST CURRENT VERSION OF THESE DATA.**

- Medicare spending among FFS beneficiaries has increased significantly since 2003 across all sectors, even though recently spending growth has slowed. The slowdown in spending growth is partly attributable to a decline in the growth of FFS enrollment since the number of Medicare Advantage enrollees has increased.
- Spending growth for inpatient hospital services, the sector with the highest level of spending, declined from an average annual 4.0 percent from 2003 to 2006 to 1.8 percent from 2006 to 2009 to 0.3 percent from 2009 to 2012. That slowdown is partly attributable to a shift in service volume from the inpatient setting to the outpatient setting, as well as the decline in the growth of FFS enrollment, but it may also reflect broader economic conditions. Despite the slowdown, spending on inpatient hospital services increased, on aggregate, 19.7 percent from 2003 to 2012.
- Spending growth for outpatient hospital services remained strong throughout the period, averaging 12.8 percent per year from 2003 to 2006, 8.5 percent per year from 2006 to 2009, and 8.8 percent per year from 2009 to 2012. Spending on outpatient hospital services increased, on aggregate, 136.5 percent from 2003 to 2012.

Chart 1-2. Per capita Medicare spending among FFS beneficiaries, by sector, 2003–2012



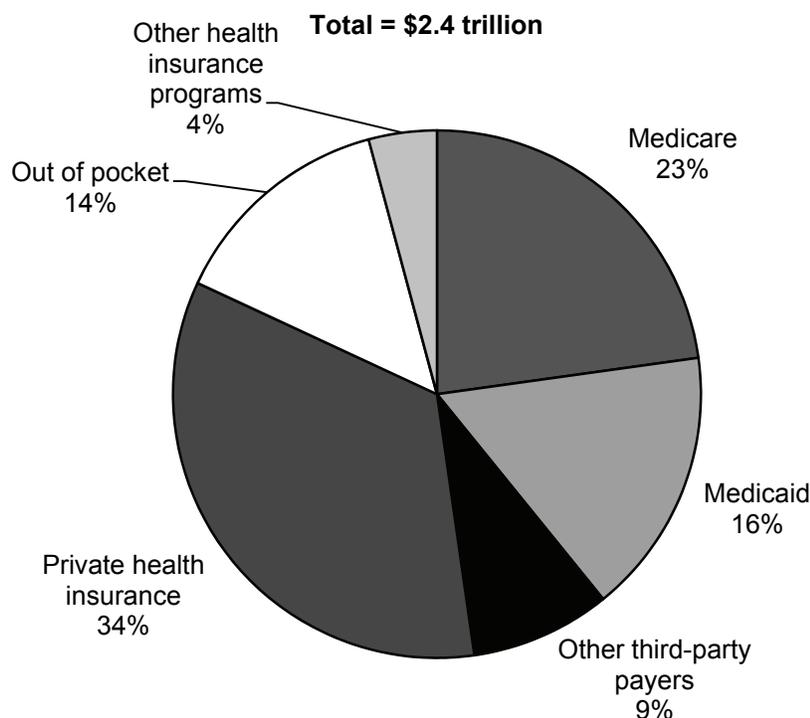
Note: FFS (fee-for-service). "Physician fee schedule" includes spending on services provided by physicians and other health professionals such as nurse practitioners, physician assistants, and physical therapists. Dollar amounts are Medicare spending only and do not include beneficiary cost sharing. Spending for Medicare Advantage enrollees is also not included. Spending per beneficiary for inpatient hospital services equals spending for the sector (Chart 1-1) divided by FFS enrollment in Part A. Spending per beneficiary for physician fee schedule services and outpatient hospital services equals spending for the sector (Chart 1-1) divided by FFS enrollment in Part B. Spending per beneficiary for skilled nursing facilities and home health agencies equals spending for those sectors (Chart 1-1) divided by total FFS enrollment.

Source: **AT THE TIME THIS DATA BOOK WAS PREPARED, THE MEDICARE TRUSTEES' REPORT (WHICH IS THE CUSTOMARY SOURCE OF DATA FOR THIS CHART) HAD NOT YET BEEN RELEASED FOR 2014. THIS CHART REFLECTS DATA FROM THE 2013 MEDICARE TRUSTEES' REPORT. THE READER IS ADVISED TO CONSULT THE 2014 TRUSTEES' REPORT DIRECTLY, WHEN AVAILABLE, FOR THE MOST CURRENT VERSION OF THESE DATA.**

- Medicare spending per beneficiary in FFS Medicare has increased substantially since 2003 across all sectors, despite slowing down recently.
- Growth in spending per beneficiary for inpatient hospital services, the sector with the highest level of spending, declined from an average annual 3.7 percent from 2003 to 2006 to 2.4 percent from 2006 to 2009 to –1.2 percent from 2009 to 2012. Despite the slowdown, spending per beneficiary for inpatient hospital services increased, on aggregate, 15.5 percent from 2003 to 2012.

Spending per beneficiary for outpatient hospital services remained strong throughout the period, averaging 13.1 percent per year from 2003 to 2006, 10 percent per year from 2006 to 2009, and 7.7 percent per year from 2009 to 2012. Spending per beneficiary for outpatient hospital services increased, on aggregate, 139.8 percent from 2003 to 2012.

Chart 1-3. Medicare is the largest single purchaser of personal health care, 2012

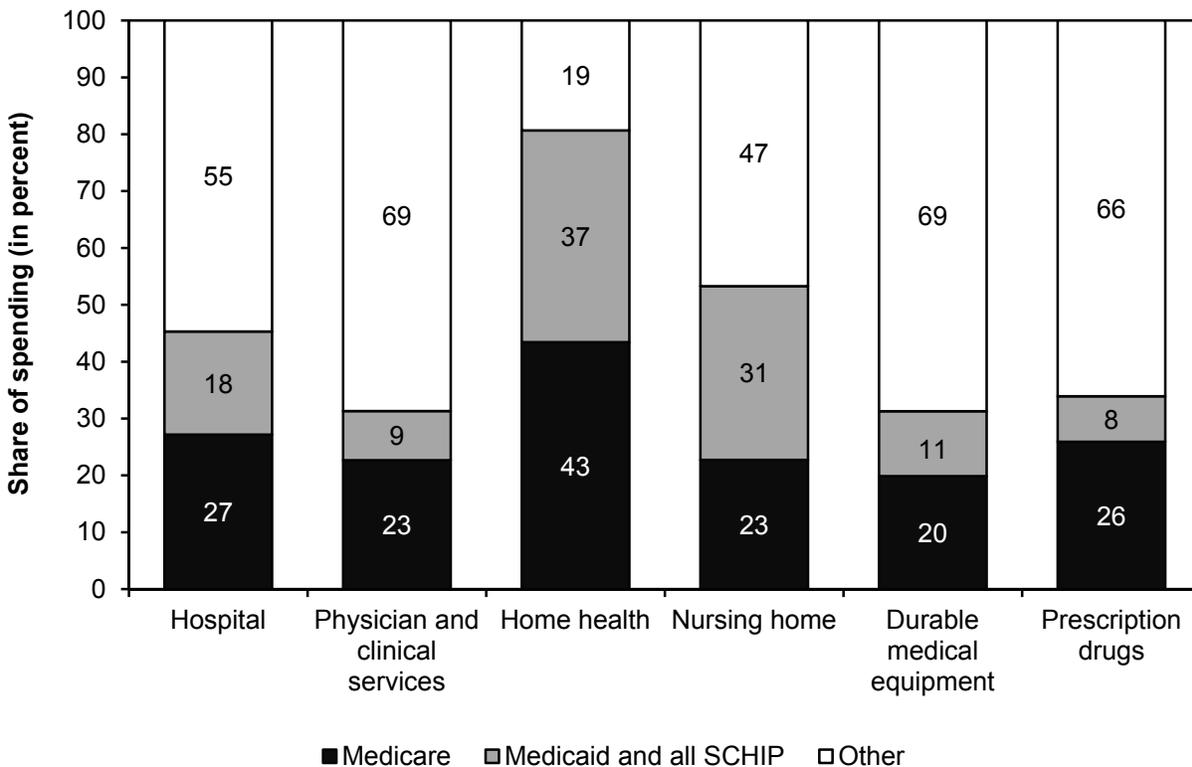


Note: "Personal health care" is a subset of national health expenditures. It includes spending for all medical goods and services that are provided for the treatment of an individual and excludes other spending, such as government administration, the net cost of health insurance, public health, and investment. "Out-of-pocket spending" includes cost sharing for both privately and publicly insured individuals. Premiums are included in the shares of each program (e.g., Medicare, private insurance) rather than in the share of out-of-pocket category. "Other health insurance programs" includes the Children's Health Insurance Program, Department of Defense, and Department of Veterans' Affairs. "Other third-party payers" includes worksite health care, other private revenues, Indian Health Service, workers' compensation, general assistance, maternal and child health, vocational rehabilitation, other federal programs, Substance Abuse and Mental Health Services Administration, other state and local programs, and school health.

Source: CMS Office of the Actuary, National Health Expenditure Accounts, "Table 6 Personal Health Care Expenditures; Levels, Percent Change and Percent Distribution, by Source of Funds: Selected Calendar Years 1970–2012," released January 2014.

- Medicare is the largest single purchaser of health care in the United States. Of the \$2.4 trillion spent on personal health care in 2012, Medicare accounted for 23 percent, or \$538 billion (as noted above, this amount includes spending on direct patient care and excludes certain administrative and business costs).
- Thirty-four percent of spending was financed through private health insurance payers, and 14 percent was from consumer out-of-pocket spending.
- Medicare and private health insurance spending include premium contributions from enrollees.

Chart 1-4. Medicare’s share of spending on personal health care varies by type of service, 2012

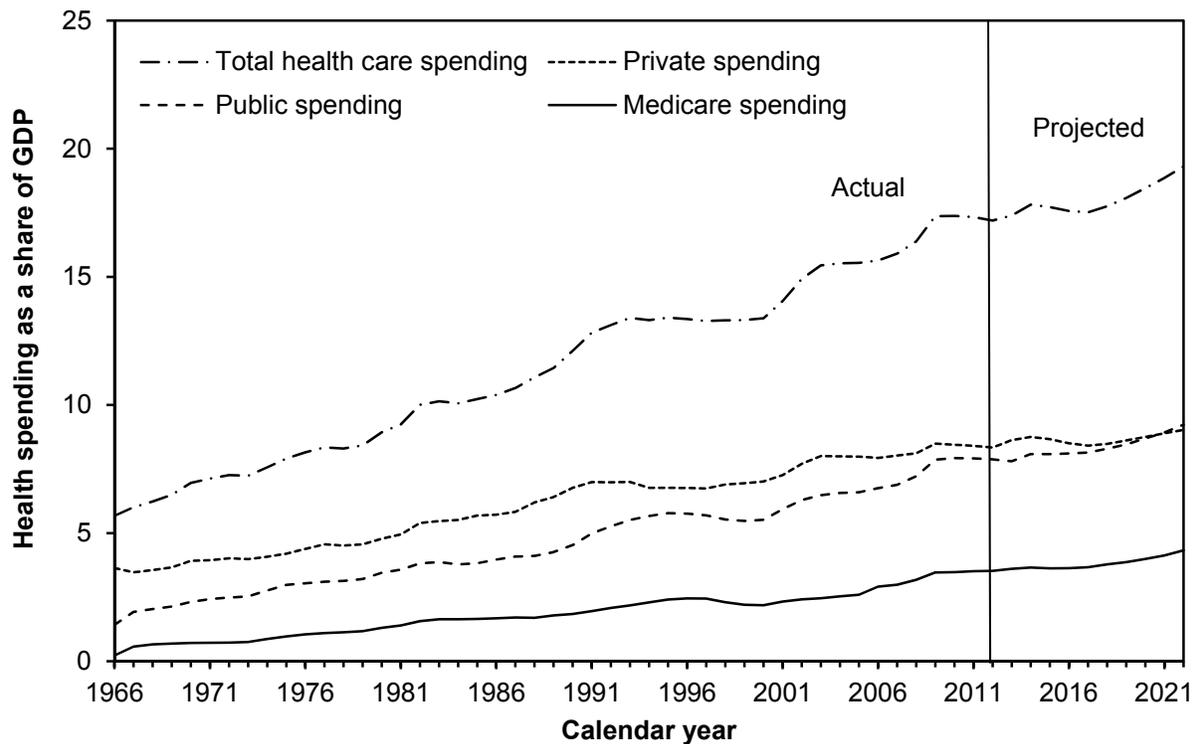


Note: SCHIP (State Children’s Health Insurance Program). “Personal health care” is a subset of national health expenditures. It includes spending for all medical goods and services that are provided for the treatment of an individual and excludes other spending, such as government administration, the net cost of health insurance, public health, and investment. “Other” includes private health insurance, out-of-pocket spending, and other private and public spending. Totals may not sum to 100 percent due to rounding.

Source: CMS Office of the Actuary, National Health Expenditure Accounts, “Table 19 National Health Expenditures by Type of Expenditure and Program: Calendar Year 2012,” released January 2014.

- While Medicare’s share of total personal health care spending was 23 percent in 2012, its share of spending by type of service varied, with a slightly higher share of spending on hospital care (27 percent) and a much higher share of spending on home health services (43 percent), partly because that category, in the chart above, includes hospice services.
- Medicare’s share of spending on nursing homes was smaller than Medicaid’s share because Medicare pays for nursing home services only for Medicare beneficiaries who require skilled nursing or rehabilitation services, whereas Medicaid pays for custodial care (assistance with activities of daily living) provided in nursing homes for people with limited income and assets.
- In 2012, Medicare accounted for 27 percent of spending on hospital care, 23 percent of physician and clinical services, 43 percent of home health services, 23 percent of nursing home care, 20 percent of durable medical equipment, and 26 percent of prescription drugs.

Chart 1-5. Health care spending has risen as a share of GDP

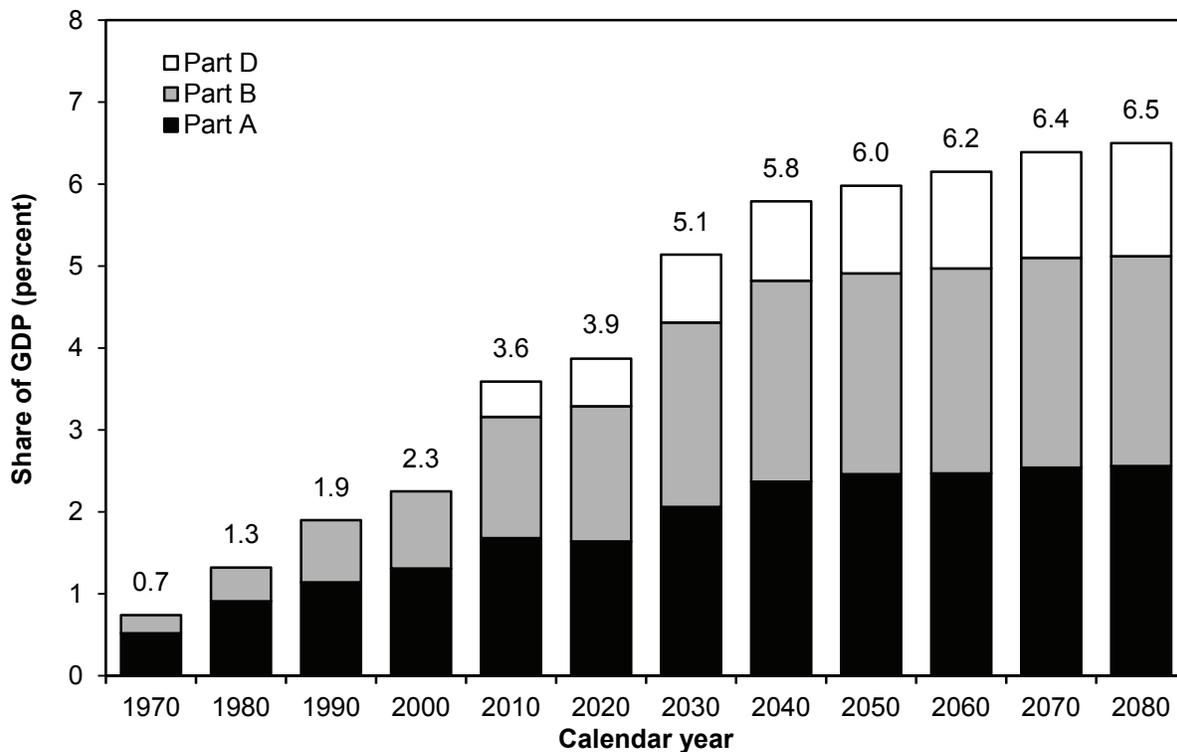


Note: GDP (gross domestic product). "Total health care spending" is the sum of all private and public spending. Medicare spending is one component of all public spending.

Source: CMS Office of the Actuary, National Health Expenditure Accounts 2014.

- Total health care spending consumes an increasing proportion of national resources, accounting for a double-digit share of GDP annually since 1982.
- As a share of GDP, total health care spending increased from about 6 percent in 1966 to about 17 percent in 2009 and has remained around this level through 2012. Projections suggest that total health care spending will make up about 19 percent of GDP by 2022.
- Medicare spending has also grown as a share of the economy, from less than 1 percent at the introduction of the program in 1966 to 3.5 percent in 2012. Projections suggest that Medicare spending will make up 4.3 percent of GDP by 2022.
- In 2012, public spending made up 49 percent of total health care spending, and private spending made up 51 percent. In 2021, public spending is projected to begin to exceed private spending as Medicare enrollment accelerates with the aging of the baby-boom population (individuals born between 1946 and 1964), enrollment in Medicaid expands, and subsidies for coverage purchased in the new health insurance exchanges are provided under provisions of the Patient Protection and Affordable Care Act of 2010.

Chart 1-6. Trustees project Medicare spending to continue to increase as a share of GDP

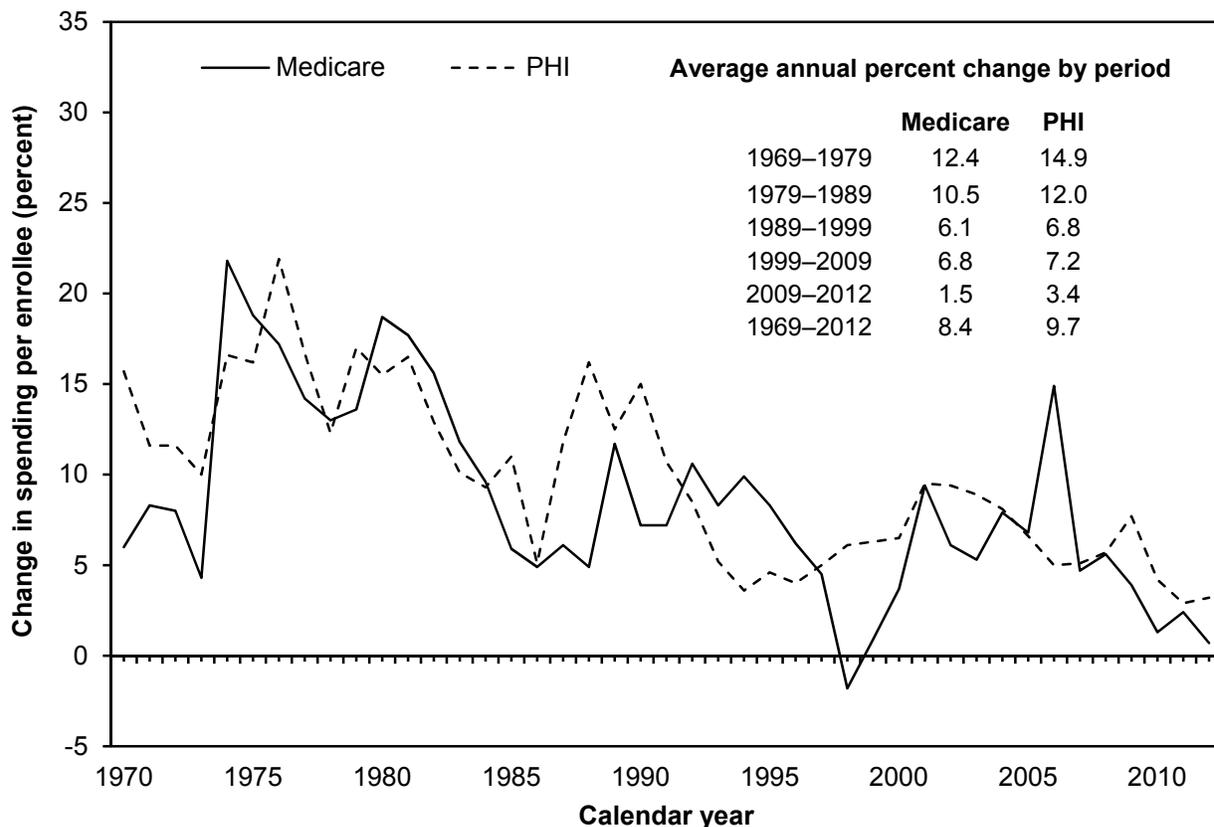


Note: GDP (gross domestic product). These projections are based on the trustees' intermediate set of assumptions.

Source: **AT THE TIME THIS DATA BOOK WAS PREPARED, THE MEDICARE TRUSTEES' REPORT (WHICH IS THE CUSTOMARY SOURCE OF DATA FOR THIS CHART) HAD NOT YET BEEN RELEASED FOR 2014. THIS CHART REFLECTS DATA FROM THE 2013 MEDICARE TRUSTEES' REPORT. THE READER IS ADVISED TO CONSULT THE 2014 TRUSTEES' REPORT DIRECTLY, WHEN AVAILABLE, FOR THE MOST CURRENT VERSION OF THESE DATA.**

- Over time, Medicare spending has accounted for an increasing share of GDP. From less than 1 percent in 1970, it is projected to reach 6.5 percent of GDP in 2080.
- The Medicare trustees project that spending will rise from 3.5 percent of GDP in 2012 to 5.1 percent of GDP by 2030, largely because of the rapid growth in the number of beneficiaries, and then to 6.5 percent of GDP in 2080, with growth in spending per beneficiary becoming the larger factor in later years of the forecast. The rapid growth in the number of beneficiaries began in 2011 and will continue through 2030 as members of the baby-boom generation reach age 65 and become eligible to receive benefits.
- Nominal Medicare spending grew on average 9.1 percent per year over the period from 1980 to 2010, considerably faster than nominal growth in the economy, which averaged 5.7 percent per year over the same time frame. Future Medicare spending is projected to continue growing faster than GDP, averaging 5.5 percent per year between 2010 and 2080, compared with an annual average growth rate of 4.6 percent for the economy as a whole. In other words, Medicare spending is projected to continue rising as a share of GDP, but at a slower pace.

Chart 1-7. Changes in spending per enrollee, Medicare and private health insurance



Note: PHI (private health insurance). Medicare expenditures include both fee-for-service and private plans.

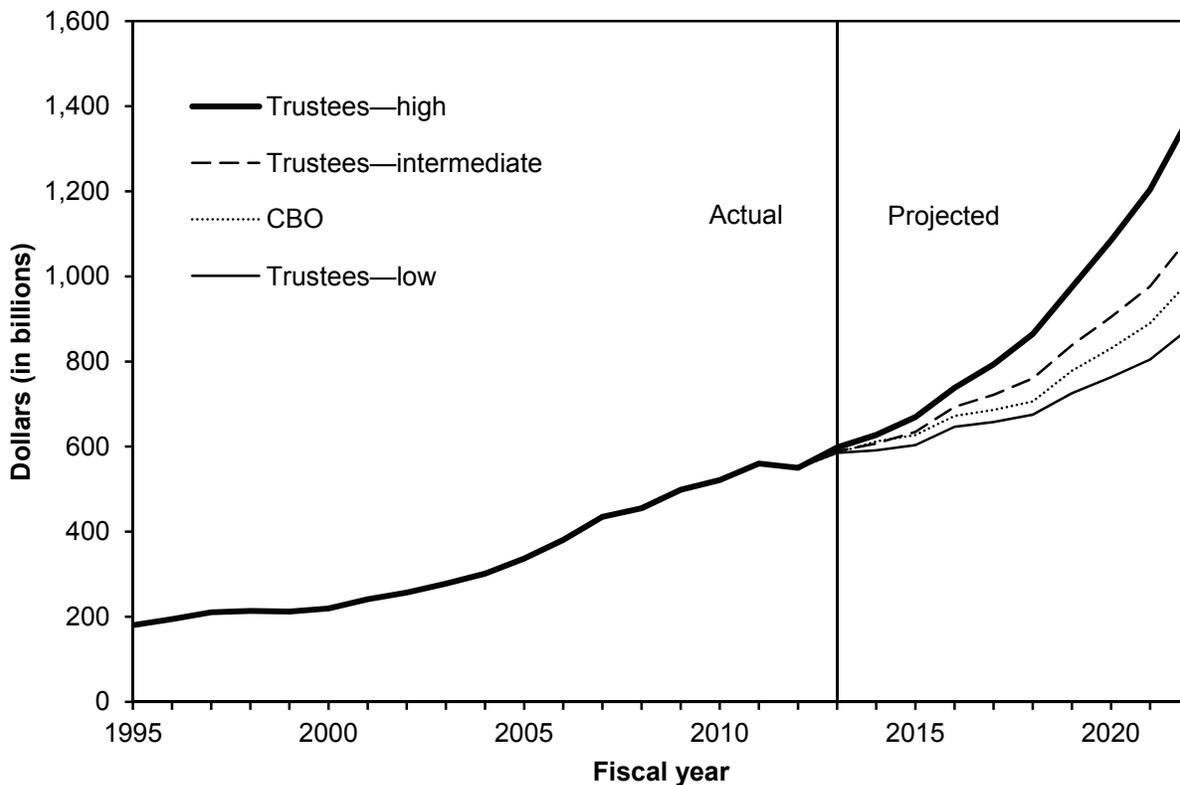
Source: CMS Office of the Actuary, National Health Expenditure Accounts 2014.

- Rates of growth in per capita spending for Medicare and private health insurance have followed a similar pattern over the last four decades. Recently, rates of growth in per capita spending have slowed for both Medicare and private health insurance.

However, differences between the rates of growth appear to be more pronounced since the mid-1980s. Some analysts believe that those differences are attributable to the introduction of the prospective payment system for hospital inpatient services that began in 1985. In their view, that payment system has allowed Medicare greater success than private payers in containing spending growth. Others maintain that the differences are due to the expansion of benefits offered by private insurers and a decline in cost-sharing requirements. More recently, cost-sharing requirements have increased, coinciding with a decline in the growth of per capita spending for private payers.

- Comparisons are problematic since private insurers and Medicare do not buy the same mix of services, and Medicare covers an older population, which tends to be more costly. In addition, spending trends are also affected by changes in the generosity of covered benefits and changes in enrollees' out-of-pocket spending.

Chart 1-8. Trustees and CBO project Medicare spending to exceed \$1 trillion by the early part of the next decade, 1995–2022

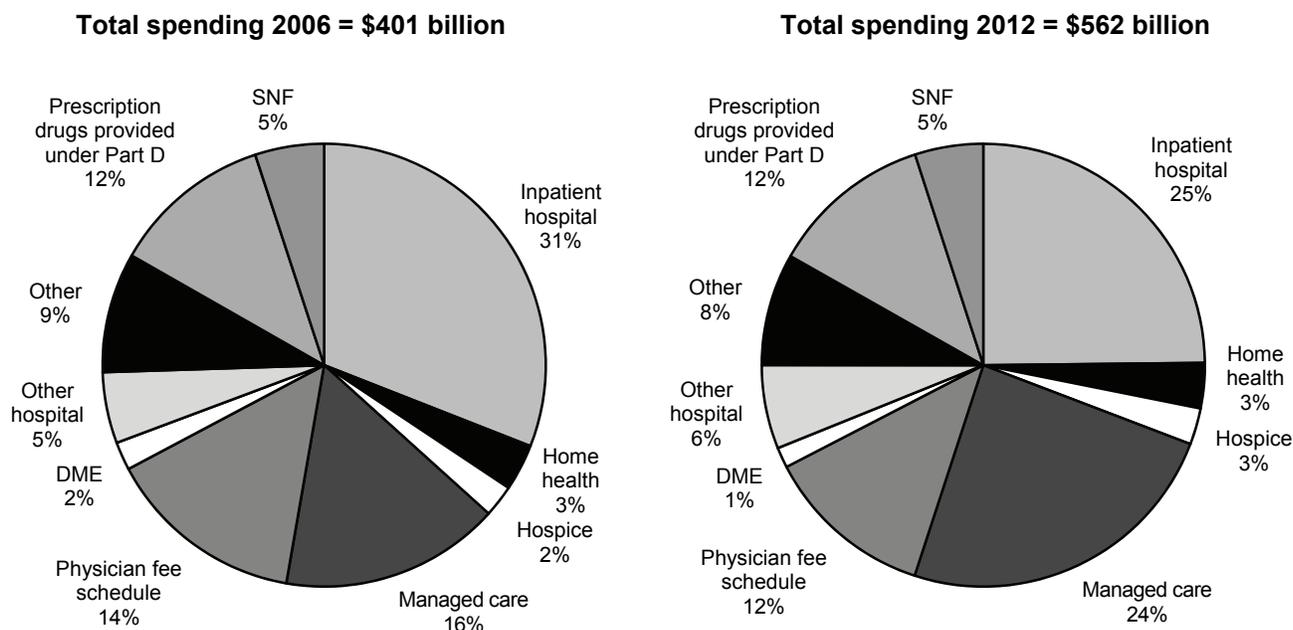


Note: CBO (Congressional Budget Office). All data are nominal, mandatory outlays (benefit payments plus mandatory administrative expenses) by fiscal year.

Source: **AT THE TIME THIS DATA BOOK WAS PREPARED, THE MEDICARE TRUSTEES' REPORT (WHICH IS THE CUSTOMARY SOURCE OF DATA FOR THIS CHART) HAD NOT YET BEEN RELEASED FOR 2014. THIS CHART REFLECTS DATA FROM THE 2013 MEDICARE TRUSTEES' REPORT. THE READER IS ADVISED TO CONSULT THE 2014 TRUSTEES' REPORT DIRECTLY, WHEN AVAILABLE, FOR THE MOST CURRENT VERSION OF THESE DATA.**

- Medicare spending has tripled since 1995, increasing from \$180 billion to \$550 billion by 2012 (these data are by fiscal year and include benefit payments and mandatory administrative expenses).
- CBO projects that spending for Medicare will grow at an average annual rate of 6.0 percent between 2013 and 2022. The Medicare trustees' intermediate projections for 2013 to 2022 assume 7.1 percent average annual growth. Forecasts of future Medicare spending are inherently uncertain, and differences can stem from different assumptions about the economy (which affect annual updates to provider payments) and about growth in the volume and intensity of services delivered to Medicare beneficiaries, among other factors.

Chart 1-9. Medicare spending is concentrated in certain services and has shifted over time

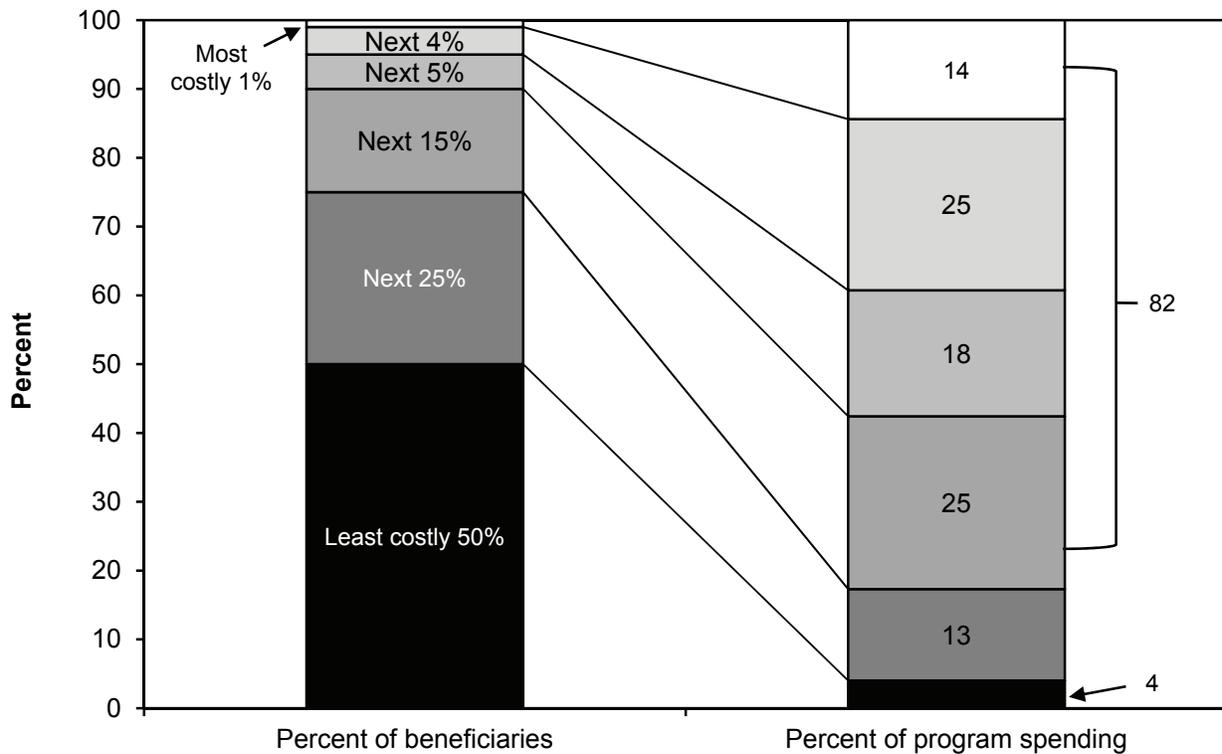


Note: SNF (skilled nursing facility), DME (durable medical equipment). All data are by calendar year. Dollar amounts are Medicare spending only and do not include beneficiary cost sharing. "Other" includes items such as laboratory services, physician-administered drugs, renal dialysis performed in freestanding dialysis facilities, services provided in freestanding ambulatory surgical center facilities, and ambulance. Totals may not sum to 100 percent due to rounding.

Source: **AT THE TIME THIS DATA BOOK WAS PREPARED, THE MEDICARE TRUSTEES' REPORT (WHICH IS THE CUSTOMARY SOURCE OF DATA FOR THIS CHART) HAD NOT YET BEEN RELEASED FOR 2014. THIS CHART REFLECTS DATA FROM THE 2013 MEDICARE TRUSTEES' REPORT. THE READER IS ADVISED TO CONSULT THE 2014 TRUSTEES' REPORT DIRECTLY WHEN AVAILABLE FOR THE MOST CURRENT VERSION OF THESE DATA.**

- The distribution of Medicare spending among services has changed over time.
- In 2012, Medicare spending totaled about \$560 billion for benefit expenses. Inpatient hospital services were the largest spending category (25 percent), followed by managed care (24 percent), services reimbursed under the physician fee schedule (12 percent), outpatient prescription drugs provided under Part D (12 percent), and services provided in other settings (8 percent).
- Although inpatient hospital services still made up the largest spending category, spending for those services was a smaller share of total Medicare spending in 2012 than it was in 2006, falling from 31 percent to 25 percent. Spending on beneficiaries enrolled in managed care plans grew from 16 percent to 24 percent over the same period. Medicare managed care enrollment increased 86 percent over the same period.

Chart 1-10. FFS program spending is highly concentrated in a small group of beneficiaries, 2010



Note: FFS (fee-for-service). All data are for calendar year 2010. Analysis excludes beneficiaries with any group health enrollment during the year. "Percent of program spending" total may not sum to 100 percent due to rounding.

Source: MedPAC analysis of 2010 Medicare Current Beneficiary Survey, Cost and Use files.

- Medicare FFS spending is concentrated among a small number of beneficiaries. In 2010, the costliest 5 percent of beneficiaries accounted for 39 percent of annual Medicare FFS spending, and the costliest 25 percent accounted for 82 percent. By contrast, the least costly 50 percent of beneficiaries accounted for only 4 percent of FFS spending.
- Costly beneficiaries tend to include those who have multiple chronic conditions, are using inpatient hospital services, are dually eligible for Medicare and Medicaid, and are in the last year of life.

Chart 1-11. Medicare HI trust fund is projected to be insolvent in 2026 under trustees' intermediate assumptions

Estimate	Year costs exceed income	Year HI trust fund assets exhausted
High	2008	2019
Intermediate	2008	2026
Low	2008	Never*

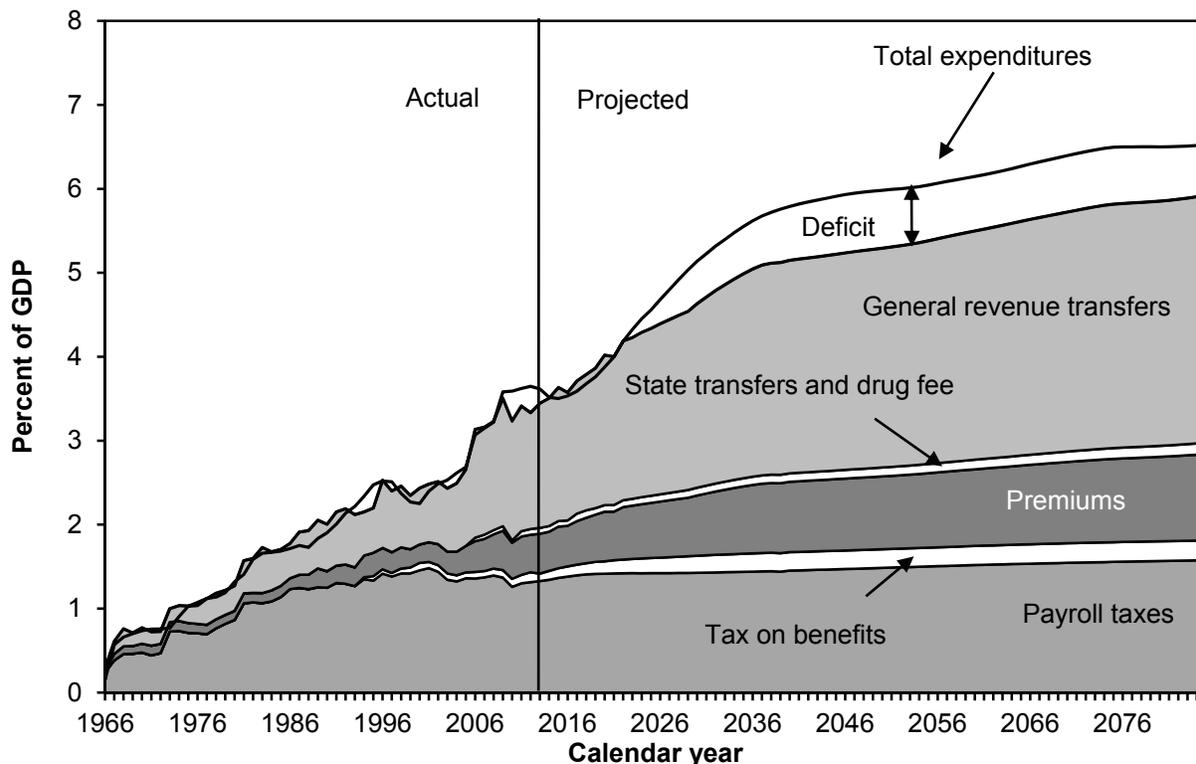
Note: HI (Hospital Insurance). All years represent calendar years. The primary source of income for HI is the payroll tax on covered earnings. Other HI income sources include a portion of the federal income taxes that Social Security recipients with incomes above certain thresholds pay on their benefits as well as interest paid on the U.S. Treasury securities held in the HI trust fund.

*Under the low-cost assumption, trust fund assets would start to increase in 2014 and continue to increase throughout the projection period.

Source: **AT THE TIME THIS DATA BOOK WAS PREPARED, THE MEDICARE TRUSTEES' REPORT (WHICH IS THE CUSTOMARY SOURCE OF DATA FOR THIS CHART) HAD NOT YET BEEN RELEASED FOR 2014. THIS CHART REFLECTS DATA FROM THE 2013 MEDICARE TRUSTEES' REPORT. THE READER IS ADVISED TO CONSULT THE 2014 TRUSTEES' REPORT DIRECTLY, WHEN AVAILABLE, FOR THE MOST CURRENT VERSION OF THESE DATA.**

- The Medicare program is financed through two trust funds: one for HI, which covers services provided by hospitals and other providers such as skilled nursing facilities, and one for Supplementary Medical Insurance (SMI) services, such as physician visits and Medicare's prescription drug benefit. Dedicated payroll taxes on current workers largely finance HI spending and are held in the HI trust fund. The HI trust fund can be exhausted if spending exceeds payroll tax revenues and fund reserves. General revenues finance roughly 75 percent of SMI services, and beneficiary premiums finance about 25 percent. (General revenues are federal tax dollars that are not dedicated to a particular use and are made up of income and other taxes on individuals and corporations.)
- The SMI trust fund is financed with general revenues and beneficiary premiums. Some analysts believe that the levels of premiums and general revenues required to finance projected spending for SMI services would impose a significant burden on Medicare beneficiaries and on growth in the U.S. economy.
- HI's expenses exceeded its income in 2008. In 2013, Medicare trustees report that, under the intermediate assumptions, the HI trust fund will be exhausted in 2026. Under high-cost assumptions, the HI trust fund could be exhausted as early as 2019. Under low-cost assumptions, it would remain able to pay full benefits indefinitely.

Chart 1-12. Medicare faces serious challenges with long-term financing

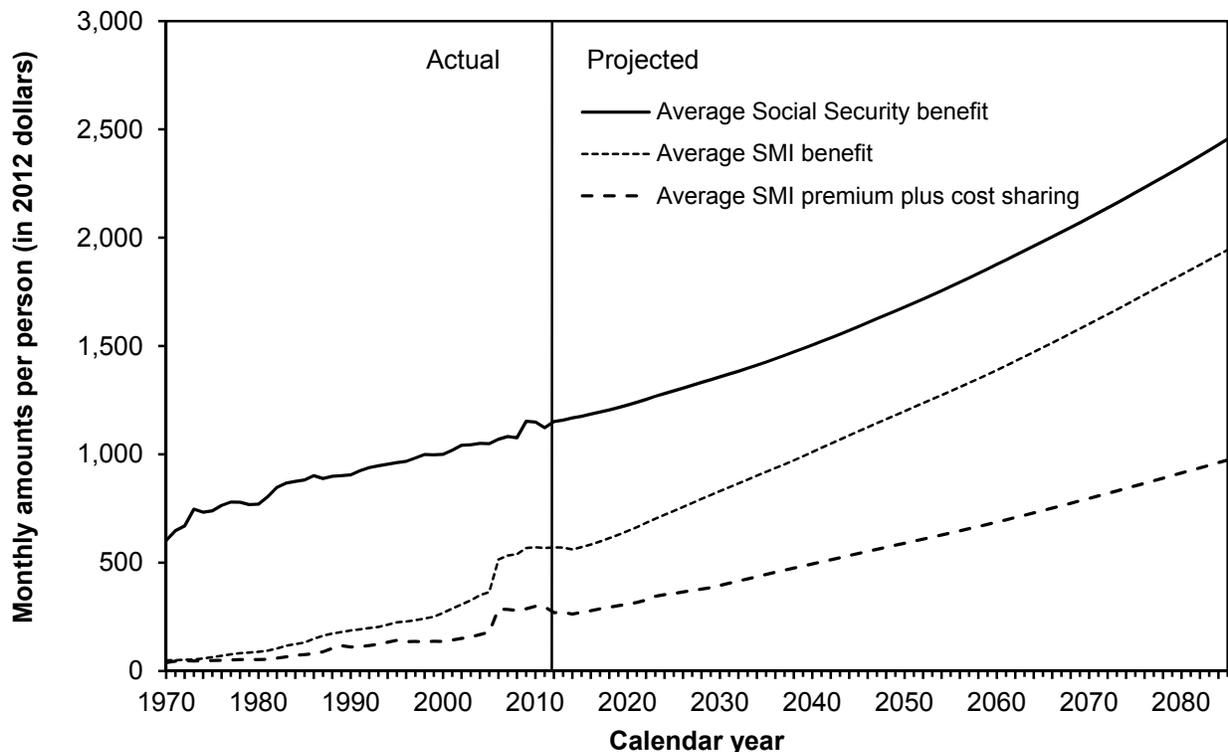


Note: GDP (gross domestic product). These projections are based on the trustees' intermediate set of assumptions. "Tax on benefits" refers to the portion of income taxes that higher income individuals pay on Social Security benefits, which is designated for Medicare. "State transfers" (often called the Part D "clawback") refer to payments called for within the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 from the states to Medicare for assuming primary responsibility for prescription drug spending. The drug fee is the fee imposed in the Patient Protection and Affordable Care Act of 2010 on manufacturers and importers of brand-name prescription drugs. These fees are deposited in the Part B account of the Supplementary Medical Insurance trust fund.

Source: **AT THE TIME THIS DATA BOOK WAS PREPARED, THE MEDICARE TRUSTEES' REPORT (WHICH IS THE CUSTOMARY SOURCE OF DATA FOR THIS CHART) HAD NOT YET BEEN RELEASED FOR 2014. THIS CHART REFLECTS DATA FROM THE 2013 MEDICARE TRUSTEES' REPORT. THE READER IS ADVISED TO CONSULT THE 2014 TRUSTEES' REPORT DIRECTLY, WHEN AVAILABLE, FOR THE MOST CURRENT VERSION OF THESE DATA.**

- In 2012, Medicare expenditures exceeded Medicare revenues because of decreased Hospital Insurance payroll tax income caused by the weak economy. The Medicare trustees project that expenditures will continue to exceed revenues in 2013 and 2014.
- From 2015 to 2022, Medicare revenues are expected to exceed Medicare expenditures in part because expenditures are reduced as a result of provisions of the Budget Control Act of 2011 that require a 2 percent sequester of Medicare payments during this period.
- After 2022, the Medicare trustees project that Medicare expenditures will exceed Medicare revenues, and general revenues will grow as a share of total Medicare financing, adding significantly to federal budget pressures.

Chart 1-13. Average monthly SMI premiums and cost sharing are projected to grow faster than the average monthly Social Security benefit



Note: SMI (Supplementary Medical Insurance). "Average SMI benefit" and "average SMI premium plus cost sharing" values are for a beneficiary enrolled in Part B and (after 2006) Part D. Beneficiary spending on outpatient prescription drugs before 2006 is not included.

Source: **AT THE TIME THIS DATA BOOK WAS PREPARED, THE MEDICARE TRUSTEES' REPORT (WHICH IS THE CUSTOMARY SOURCE OF DATA FOR THIS CHART) HAD NOT YET BEEN RELEASED FOR 2014. THIS CHART REFLECTS DATA FROM THE 2013 MEDICARE TRUSTEES' REPORT. THE READER IS ADVISED TO CONSULT THE 2014 TRUSTEES' REPORT DIRECTLY, WHEN AVAILABLE, FOR THE MOST CURRENT VERSION OF THESE DATA.**

- Most Medicare beneficiaries pay their Part B premium by having it withheld from their monthly Social Security benefits. Over time, growth in Medicare premiums and cost sharing has outpaced growth in Social Security benefits.
- Between 1970 and 2010, the average monthly Social Security benefit (adjusted for inflation) increased by an annual average rate of 1.6 percent. Over the same period, average SMI premiums plus cost sharing grew by an annual average of 5.2 percent, and the value of the total SMI benefit grew by an annual average of 6.3 percent.
- The Medicare trustees project that growth in Medicare premiums and cost sharing will continue to outpace growth in Social Security income. Between 2010 and 2040, the average Social Security benefit is projected to grow by 1.0 percent annually (after adjusting for inflation) compared with about 1.7 percent annual growth in average SMI premiums plus cost sharing.

Chart 1-14. Medicare HI and SMI benefits and cost sharing per FFS beneficiary in 2012

	Average benefit (in dollars)	Average cost sharing (in dollars)
HI	\$5,162	\$422
SMI	5,188	1,278

Note: HI (Hospital Insurance), SMI (Supplementary Medical Insurance), FFS (fee-for-service). Dollar amounts are for calendar year 2012 for FFS Medicare only and do not include Part D. "Average benefit" represents amounts paid for covered services per FFS beneficiary and excludes administrative expenses. "Average cost sharing" represents the sum of deductibles, coinsurance, and balance billing paid for covered services per FFS beneficiary.

Source: CMS Office of the Actuary, the 2013 annual report of the Boards of Trustees of the Medicare Trust Funds, and the Medicare and Medicaid Statistical Supplement 2013, CMS Office of Information Services.

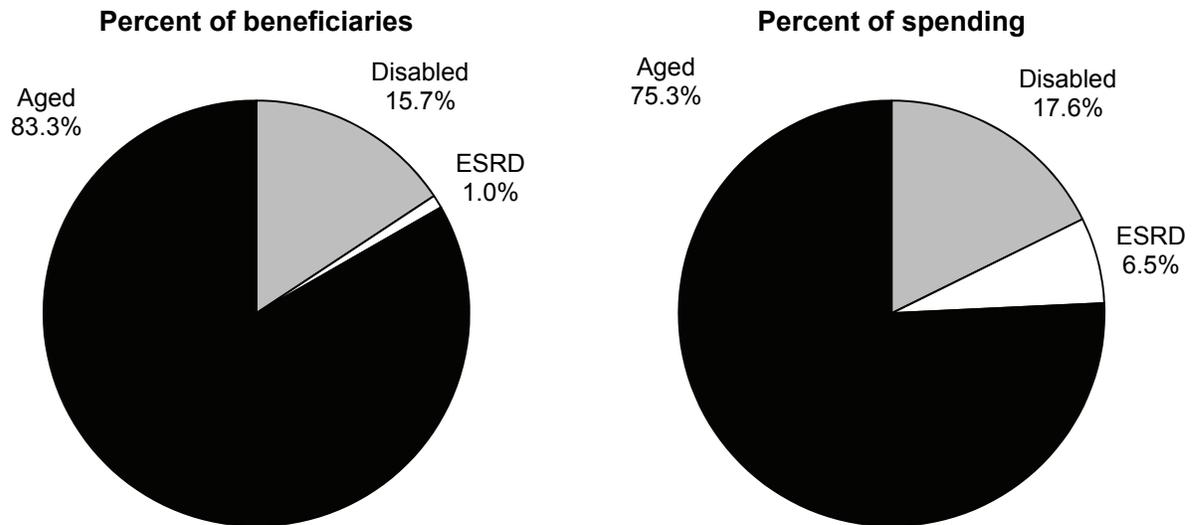
- In calendar year 2012, the Medicare program made \$5,162 in HI benefit payments and \$5,188 in SMI benefit payments on average per beneficiary.
- In the same year, beneficiaries owed an average of \$422 in cost sharing for HI, \$1,278 in cost sharing for SMI, and a total of \$1,550 in cost sharing for both.
- Most Medicare beneficiaries have supplemental coverage through former employers, medigap policies, Medicaid, or other sources that fill in much of Medicare's cost-sharing requirements.

SECTION

2

**Medicare beneficiary
demographics**

Chart 2-1. Aged beneficiaries account for the greatest share of the Medicare population and program spending, 2010

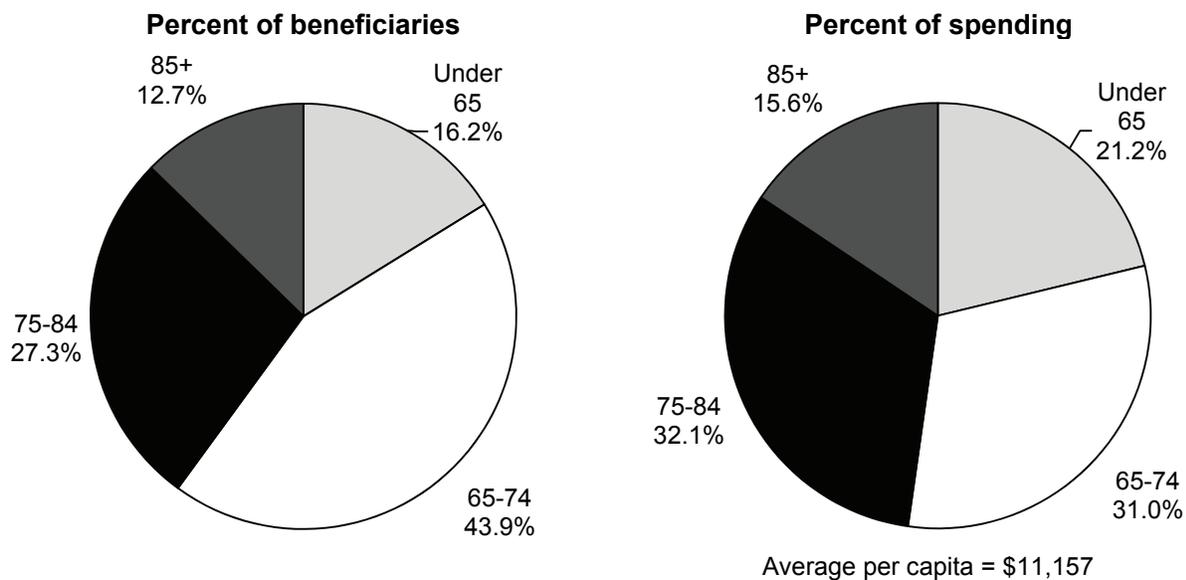


Note: ESRD (end-stage renal disease). The aged category refers to beneficiaries age 65 or older without ESRD. The disabled category refers to beneficiaries under age 65 without ESRD. The ESRD category refers to beneficiaries with ESRD, regardless of age. Results include fee-for-service, Medicare Advantage, community-dwelling, and institutionalized beneficiaries. Totals may not sum to 100 percent due to rounding and exclusion of an “other” category.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost and Use file 2010.

- In 2010, beneficiaries age 65 or older without ESRD composed 83.3 percent of the beneficiary population and accounted for 75 percent of Medicare spending. Beneficiaries under 65 with a disability and beneficiaries with ESRD accounted for the remaining population and spending.
- In 2010, average Medicare spending per beneficiary was \$11,157.
- A disproportionate share of Medicare expenditures is devoted to Medicare beneficiaries with ESRD. On average, these beneficiaries incur spending that is more than six times greater than spending for aged beneficiaries (65 years or older without ESRD) or for beneficiaries under age 65 with disability (non-ESRD). In 2010, \$75,475 was spent per ESRD beneficiary versus \$10,093 per aged beneficiary and \$12,530 per beneficiary under age 65 enrolled due to disability.

Chart 2-2. Medicare enrollment and spending by age group, 2010

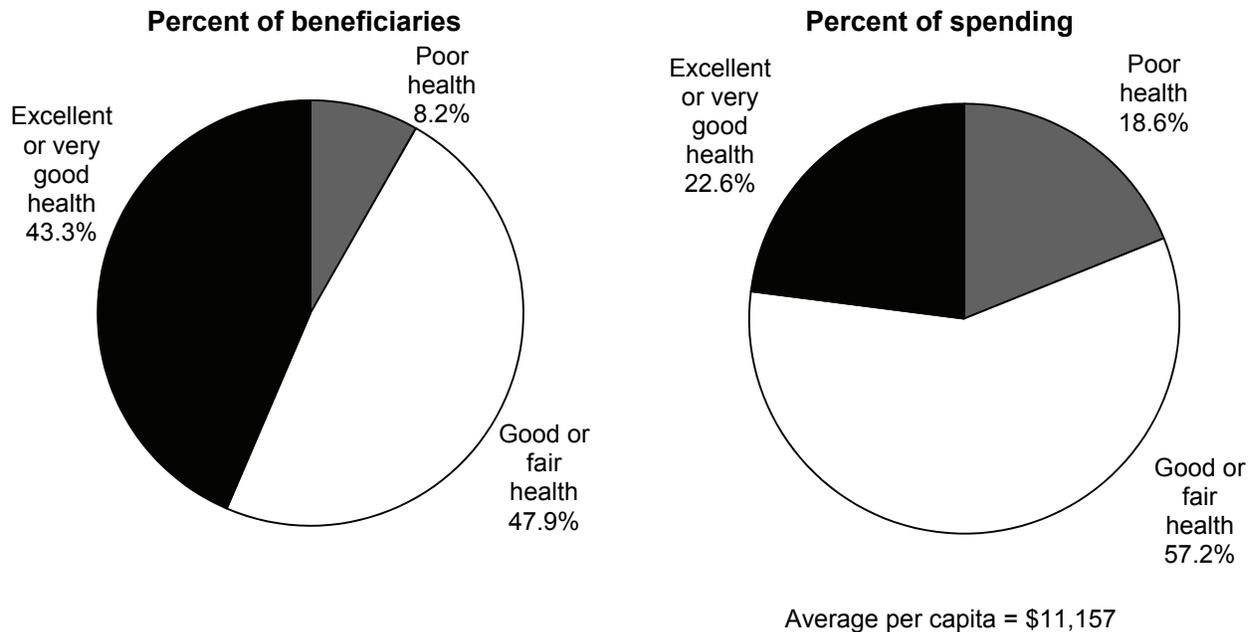


Note: Results include fee-for-service, Medicare Advantage, community-dwelling, and institutionalized beneficiaries. Totals may not sum to 100 percent due to rounding.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost and Use file 2010.

- For the aged population (65 or older), per capita expenditures increase with age. In 2010, per capita expenditures were \$7,883 for beneficiaries 65 to 74 years old, \$13,121 for those 75 to 84 years old, and \$13,785 for those 85 or older.
- In 2010, per capita expenditures for Medicare beneficiaries under age 65 enrolled due to end-stage renal disease or disability were \$14,663.

Chart 2-3. Beneficiaries who report being in poor health account for a disproportionate share of Medicare spending, 2010

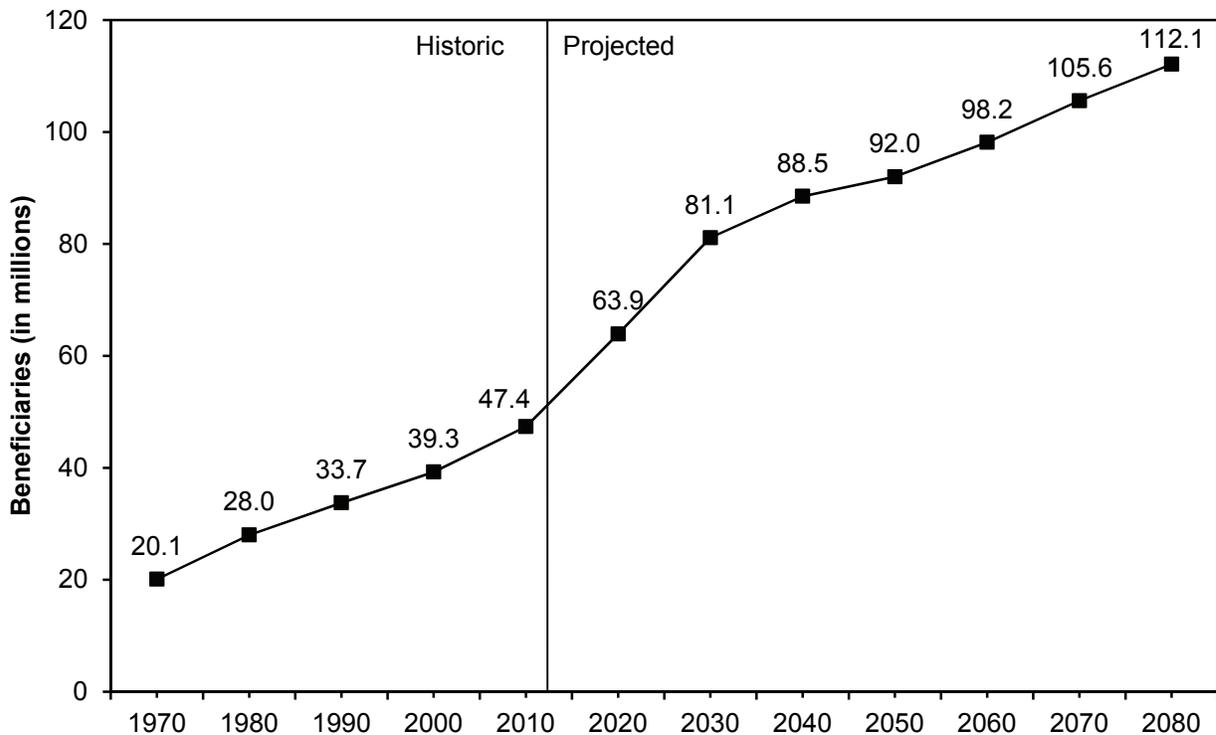


Note: Results include fee-for-service, Medicare Advantage, community-dwelling, and institutionalized beneficiaries. Totals may not sum to 100 percent due to rounding and exclusion of an “other” category.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost and Use file 2010.

- In 2010, most beneficiaries reported fair to excellent health. Fewer than 10 percent reported poor health.
- Medicare spending is strongly associated with self-reported health status. In 2010, per capita expenditures were \$5,825 for those who reported excellent or very good health, \$13,335 for those who reported good or fair health, and \$25,314 for those who reported poor health.

Chart 2-4. Enrollment in the Medicare program is projected to grow rapidly in the next 20 years



Note: Enrollment numbers are based on Part A enrollment only. Beneficiaries enrolled only in Part B are not included.

Source: **AT THE TIME THIS DATA BOOK WAS PREPARED, THE MEDICARE TRUSTEES' REPORT (WHICH IS THE CUSTOMARY SOURCE OF DATA FOR THIS CHART) HAD NOT YET BEEN RELEASED FOR 2014. THIS CHART REFLECTS DATA FROM THE 2013 MEDICARE TRUSTEES' REPORT. THE READER IS ADVISED TO CONSULT THE 2014 TRUSTEES' REPORT DIRECTLY, WHEN AVAILABLE, FOR THE MOST CURRENT VERSION OF THESE DATA.**

- The total number of people enrolled in the Medicare program will increase from about 50 million in 2012 to about 81 million in 2030.
- The rate of increase in Medicare enrollment will accelerate until 2030 as more members of the baby-boom generation become eligible, at which point it will continue to increase, but more slowly, after the entire baby-boom generation has become eligible.

Chart 2-5. Characteristics of the Medicare population, 2010

Characteristic	Percent of the Medicare population	Characteristic	Percent of the Medicare population
Total (48,420,576)	100%	Living arrangement	
Sex		Institution	5%
Male	45	Alone	29
Female	55	Spouse	49
Race/ethnicity		Other	18
White, non-Hispanic	77	Education	
African American, non-Hispanic	10	No high school diploma	23
Hispanic	9	High school diploma only	29
Other	5	Some college or more	47
Age		Income status	
<65	16	Below poverty	14
65–74	44	100–125% of poverty	9
75–84	27	125–200% of poverty	19
85+	13	200–400% of poverty	31
Health status		Over 400% of poverty	27
Excellent or very good	43	Supplemental insurance status	
Good or fair	48	Medicare only	10
Poor	8	Managed care	24
Residence		Employer-sponsored insurance	29
Urban	77	Medigap	18
Rural	23	Medigap with employer-sponsored insurance	4
		Medicaid	14
		Other	1

Note: "Urban" indicates beneficiaries living in metropolitan statistical areas (MSAs). "Rural" indicates beneficiaries living outside MSAs. In 2010, poverty was defined as income of \$10,458 for people living alone and \$13,194 for married couples. Totals may not sum to 100 percent due to rounding and exclusion of an "other" category. Poverty thresholds are calculated by the U.S. Census Bureau (<https://www.census.gov/hhes/www/poverty/data/threshld/>). Some beneficiaries may have more than one type of supplemental insurance.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost and Use file 2010.

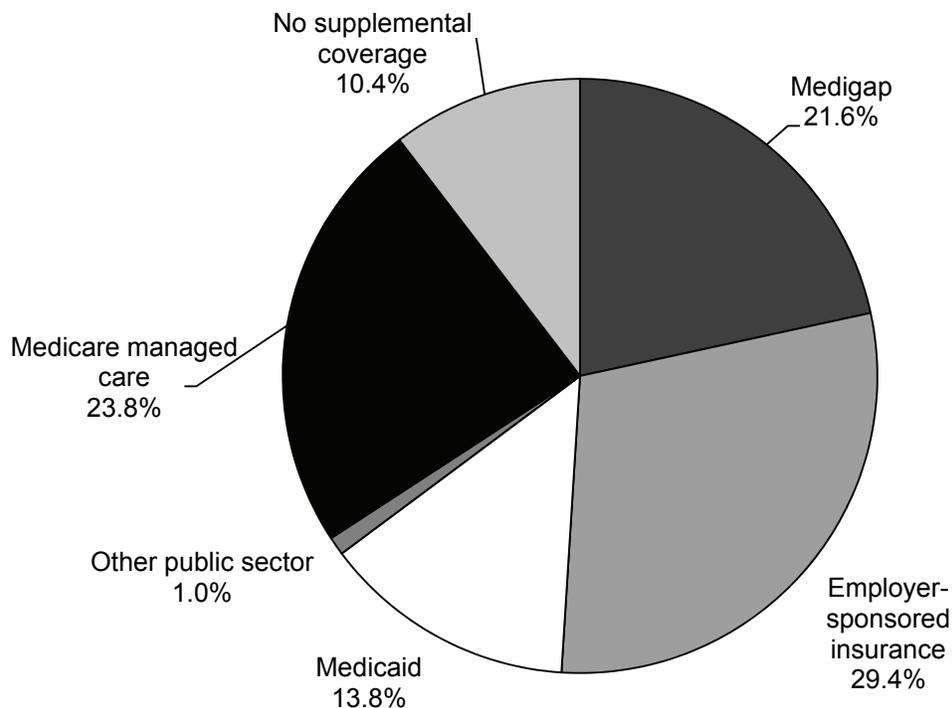
- Most Medicare beneficiaries are female and White.
- Close to one-quarter of beneficiaries live in rural areas.
- Twenty-nine percent of the Medicare population lives alone.
- Close to one-quarter of beneficiaries have no high school diploma.
- Most Medicare beneficiaries have some source of supplemental insurance. Employer-sponsored plans are the most common source of supplemental coverage.

SECTION

3

**Medicare beneficiary and
other payer financial liability**

Chart 3-1. Sources of supplemental coverage among noninstitutionalized Medicare beneficiaries, 2010



Note: Beneficiaries are assigned to the supplemental coverage category they were in for the most time in 2010. They could have had coverage in other categories during 2010. "Other public sector" includes federal and state programs not included in other categories. Analysis includes only beneficiaries not living in institutions, such as nursing homes. It excludes beneficiaries who were not in both Part A and Part B throughout their enrollment in 2010 or who had Medicare as a secondary payer.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use file 2010.

- Most beneficiaries living in the community (noninstitutionalized) have coverage that supplements or replaces the Medicare benefit package. In 2010, about 90 percent of beneficiaries had supplemental coverage or participated in Medicare managed care.
- About 51 percent of beneficiaries had private-sector supplemental coverage such as medigap (about 22 percent) or employer-sponsored retiree coverage (about 29 percent).
- Slightly less than 15 percent of beneficiaries had public-sector supplemental coverage, primarily Medicaid.
- Twenty-four percent of beneficiaries participated in Medicare managed care. This care includes Medicare Advantage, cost, and health care prepayment plans. These types of arrangements generally replace Medicare's fee-for-service coverage and often add to it.

Chart 3-2. Sources of supplemental coverage among noninstitutionalized Medicare beneficiaries, by beneficiaries' characteristics, 2010

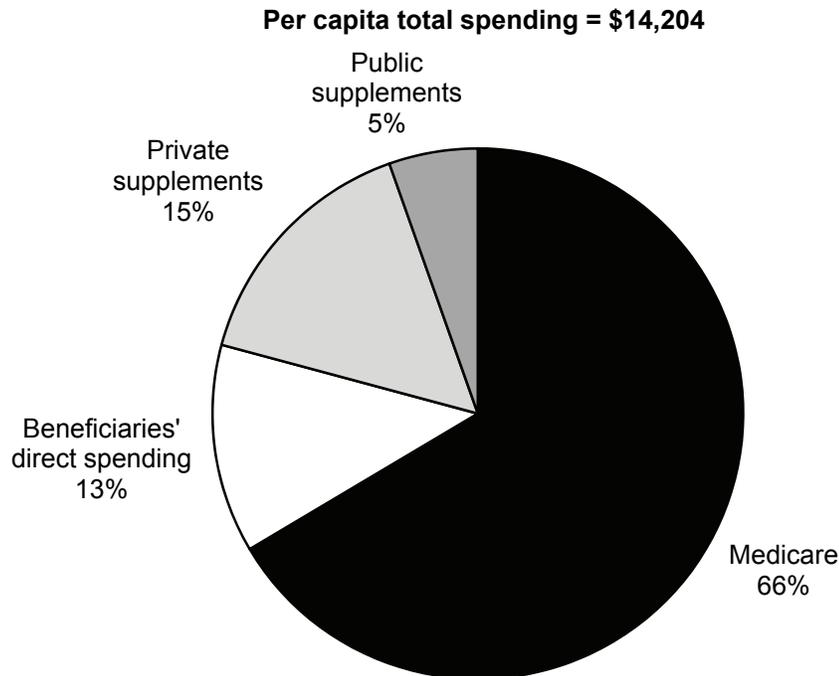
	Number of beneficiaries (thousands)	Employer-sponsored insurance	Medigap insurance	Medicaid	Medicare managed care	Other public sector	Medicare only
All beneficiaries	41,047	29%	22%	14%	24%	1%	10%
Age							
<65	6,359	13	5	44	18	1	19
65–69	9,542	33	21	8	25	0	12
70–74	8,196	31	25	8	26	2	8
75–79	6,827	32	26	9	26	1	7
80–84	5,284	33	26	8	25	1	7
85+	4,840	33	29	9	20	1	8
Income category							
< \$10,000	5,125	8	8	57	18	0	8
\$10,000–\$19,999	11,702	17	19	21	25	2	15
\$20,000–\$29,999	8,959	33	24	3	28	1	12
\$30,000–\$39,999	4,601	39	24	1	28	0	8
\$40,000–\$59,999	5,297	43	28	0	21	0	7
\$60,000–\$79,999	2,257	47	28	0	20	1	6
≥ \$80,000	3,107	49	27	0	18	0	6
Eligibility status							
Aged	34,468	32	25	8	25	1	9
Disabled	6,148	13	5	43	18	1	19
ESRD	403	22	18	43	12	0	5
Residence							
Urban	31,271	30	20	13	27	1	10
Rural	9,777	29	28	18	12	1	12
Sex							
Male	18,282	31	19	13	25	1	12
Female	22,765	28	24	15	23	1	9
Health status							
Excellent/very good	18,265	34	24	7	25	1	10
Good/fair	19,587	27	20	18	24	1	10
Poor	2,976	18	16	31	18	2	15

Note: ESRD (end-stage renal disease). Beneficiaries are assigned to the supplemental coverage category they were in for the most time in 2010. They could have had coverage in other categories during 2010. Medicare managed care includes Medicare Advantage, cost, and health care prepayment plans. "Other public sector" includes federal and state programs not included in other categories. Married people have joint income reported on the data file. We divided their income by 1.26 to create an equal measure with unmarried people. "Urban" indicates beneficiaries living in metropolitan statistical areas (MSAs). "Rural" indicates beneficiaries living outside MSAs. Analysis includes beneficiaries living in the community. It excludes beneficiaries who were not in both Part A and Part B throughout their enrollment in 2010 or who had Medicare as a secondary payer. The number of beneficiaries differs among boldface categories because we excluded beneficiaries with missing values. Numbers in rows may not sum to 100 due to rounding.

Source: MedPAC analysis of 2010 Medicare Current Beneficiary Survey, Cost and Use file.

- Beneficiaries most likely to have employer-sponsored supplemental coverage are those who are above age 64, have income over \$20,000, are eligible due to age, and report better than poor health.
- Medigap is most common among those who are age 70 or older, have income over \$20,000, are eligible due to age or ESRD, are rural dwelling, are female, and report excellent or very good health.
- Medicaid coverage is most common among those who are under age 65, have income below \$20,000, are eligible due to disability or ESRD, are rural dwelling, and report poor health.
- Lack of supplemental coverage (Medicare coverage only) is most common among beneficiaries who are under age 65, have income of \$10,000 to \$30,000, are eligible due to disability, are male, and report poor health.

Chart 3-3. Total spending on health care services for noninstitutionalized FFS Medicare beneficiaries, by source of payment, 2010

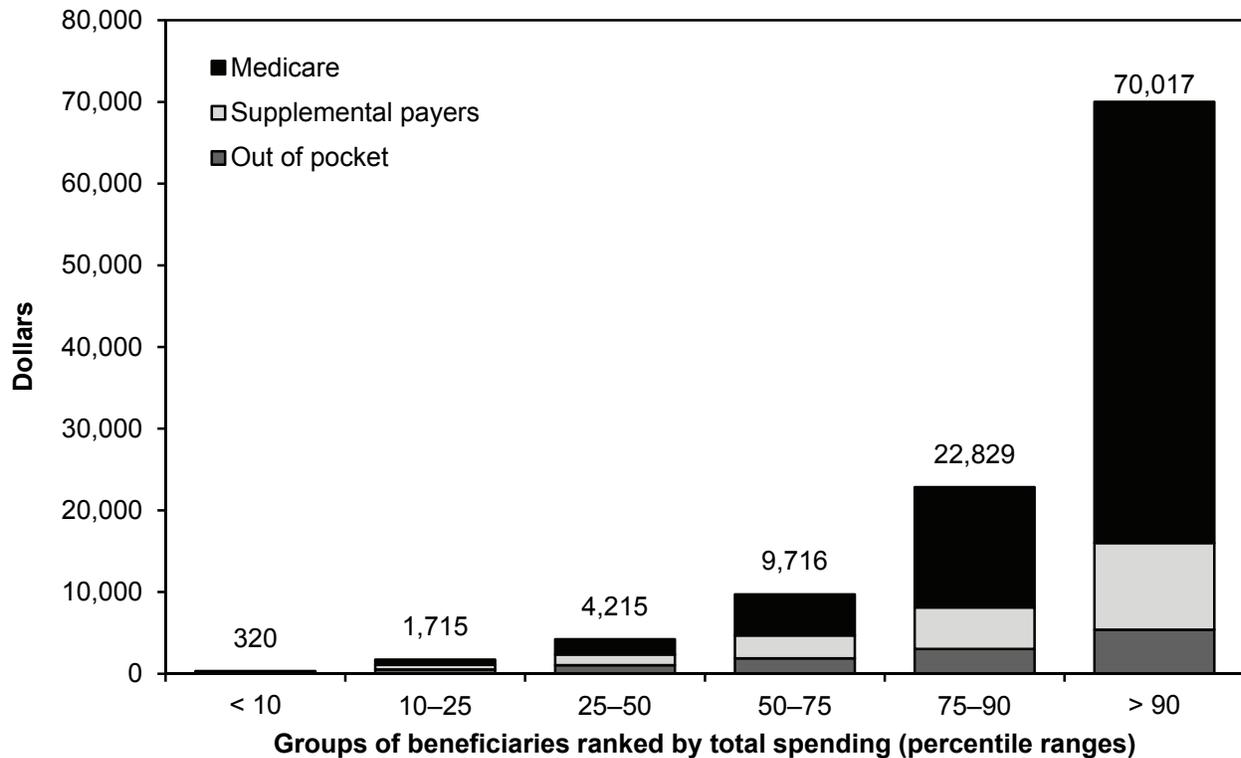


Note: FFS (fee-for-service). "Private supplements" includes employer-sponsored plans and individually purchased coverage. "Public supplements" includes Medicaid, Department of Veterans Affairs, and other public coverage. Direct spending is on Medicare cost sharing and noncovered services but not supplemental premiums. Analysis includes only FFS beneficiaries not living in institutions such as nursing homes.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use file 2010.

- Among FFS beneficiaries living in the community, the total cost of health care services (defined as beneficiaries' direct spending as well as expenditures by Medicare, other public-sector sources, and all private-sector sources on all health care goods and services) averaged about \$14,200 in 2010. Medicare is the largest source of payment: It pays 66 percent of the health care costs for FFS beneficiaries living in the community, an average of \$9,436 per beneficiary. The level of Medicare spending in this chart differs from the level in Chart 2-1 because this chart excludes beneficiaries in Medicare Advantage and those living in institutions, while Chart 2-1 represents all Medicare beneficiaries.
- Private sources of supplemental coverage—primarily employer-sponsored retiree coverage and medigap—paid 15 percent of beneficiaries' costs, an average of \$2,189 per beneficiary.
- Beneficiaries paid 13 percent of their health care costs out of pocket, an average of \$1,811 per beneficiary.
- Public sources of supplemental coverage—primarily Medicaid—paid 5 percent of beneficiaries' health care costs, an average of \$768 per beneficiary.

Chart 3-4. Per capita total spending on health care services among noninstitutionalized FFS beneficiaries, by source of payment, 2010

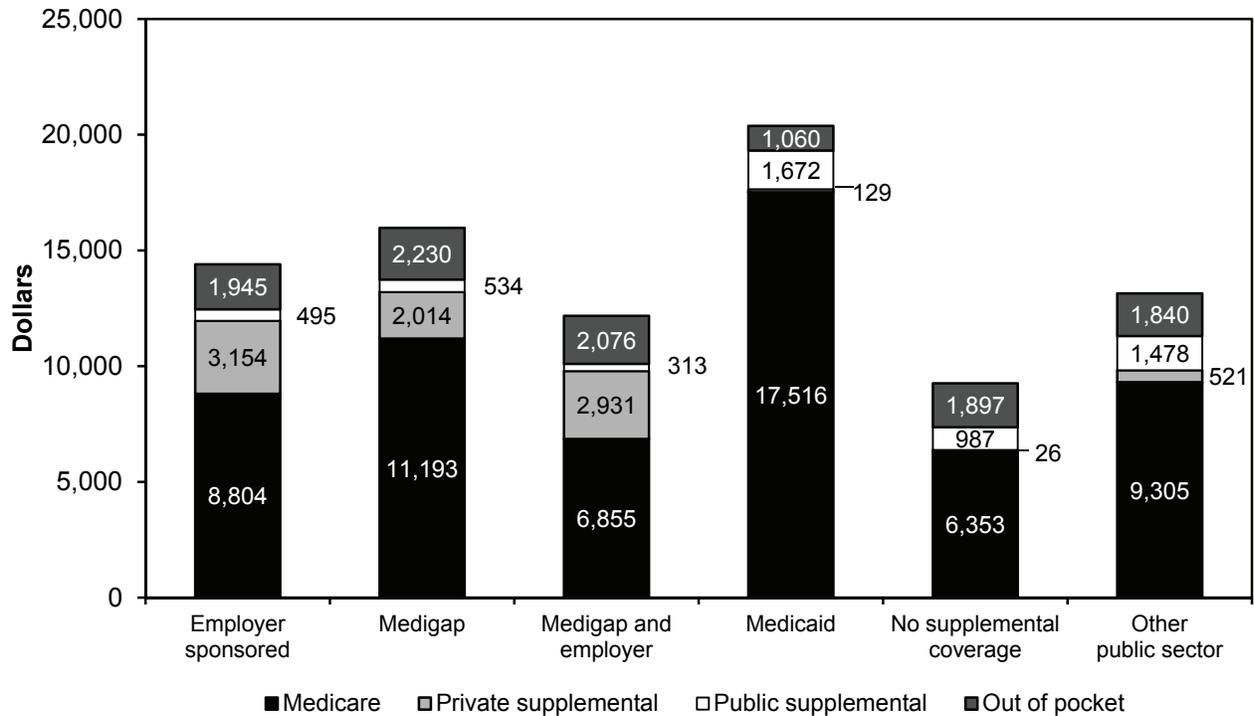


Note: FFS (fee-for-service). Analysis excludes those who are not in FFS Medicare and those living in institutions such as nursing homes. Out-of-pocket spending includes Medicare cost sharing and noncovered services.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use file 2010.

- Total spending on health care services varies dramatically among FFS beneficiaries living in the community. Per capita spending for the 10 percent of beneficiaries with the highest total spending averaged \$70,017 in 2010. Per capita spending for the 10 percent of beneficiaries with the lowest total spending averaged \$320.
- Among FFS beneficiaries living in the community, Medicare pays a larger percentage as total spending increases, and beneficiaries' out-of-pocket spending is a smaller percentage as total spending increases. For example, Medicare pays 66 percent of total spending for all beneficiaries, but pays 77 percent of total spending for the 10 percent of beneficiaries with the highest total spending. Beneficiaries' out-of-pocket spending covers 13 percent of total spending for all beneficiaries, but only 8 percent of total spending for the 8 percent of beneficiaries with the highest total spending.

Chart 3-5. Variation in and composition of total spending among noninstitutionalized FFS beneficiaries, by type of supplemental coverage, 2010

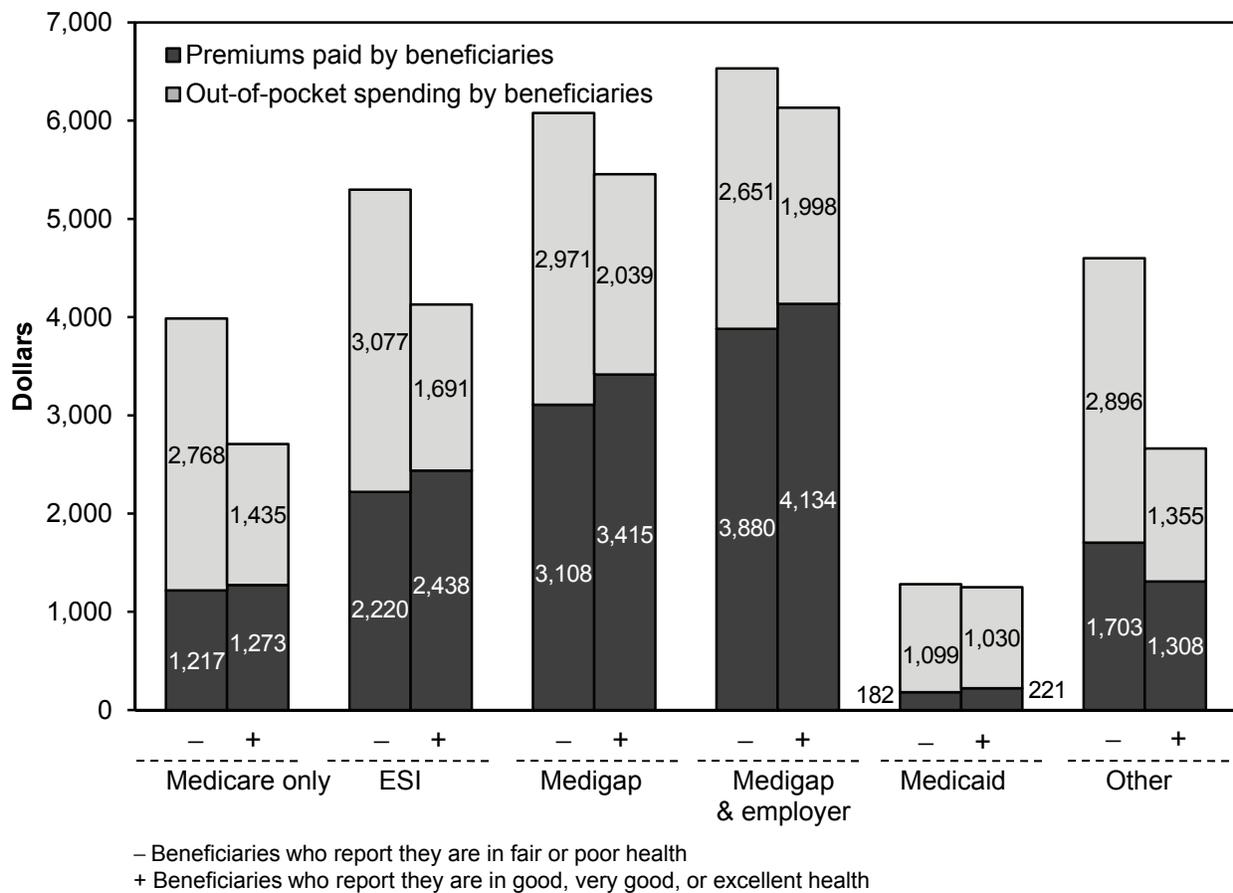


Note: FFS (fee-for-service). Beneficiaries are assigned to the supplemental coverage category they were in for the most time in 2010. They could have had coverage in other categories during 2010. "Other public sector" includes federal and state programs not included in the other categories. "Private supplemental" includes employer-sponsored plans and individually purchased coverage. "Public supplemental" includes Medicaid, Department of Veterans Affairs, and other public coverage. Analysis excludes beneficiaries who are not in FFS Medicare or live in institutions such as nursing homes. It excludes beneficiaries who were not in both Part A and Part B throughout their enrollment in 2010 or had Medicare as a second payer. Out-of-pocket spending includes Medicare cost sharing and noncovered services, but not supplemental premiums.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use file 2010.

- The level of total spending (defined as beneficiaries' out-of-pocket spending as well as expenditures by Medicare, other public-sector sources, and all private-sector sources on all health care goods and services) among FFS beneficiaries living in the community varies by the type of supplemental coverage they have. Total spending is much lower for those beneficiaries with no supplemental coverage than for those beneficiaries who have supplemental coverage. Beneficiaries with Medicaid coverage have the highest level of total spending—120 percent higher than those with no supplemental coverage in 2010.
- Medicare is the largest source of payment for beneficiaries in each supplemental insurance category, but the second largest source of payment differs. Among those with supplemental coverage, combined public and private supplemental coverage is the second largest source of payment. Among those who are covered only by Medicare, beneficiaries' out-of-pocket spending is the second largest source of payment.

Chart 3-6. Out-of-pocket spending for premiums and health services per beneficiary, by insurance and health status, 2010



Note: ESI (employer-sponsored supplemental insurance).

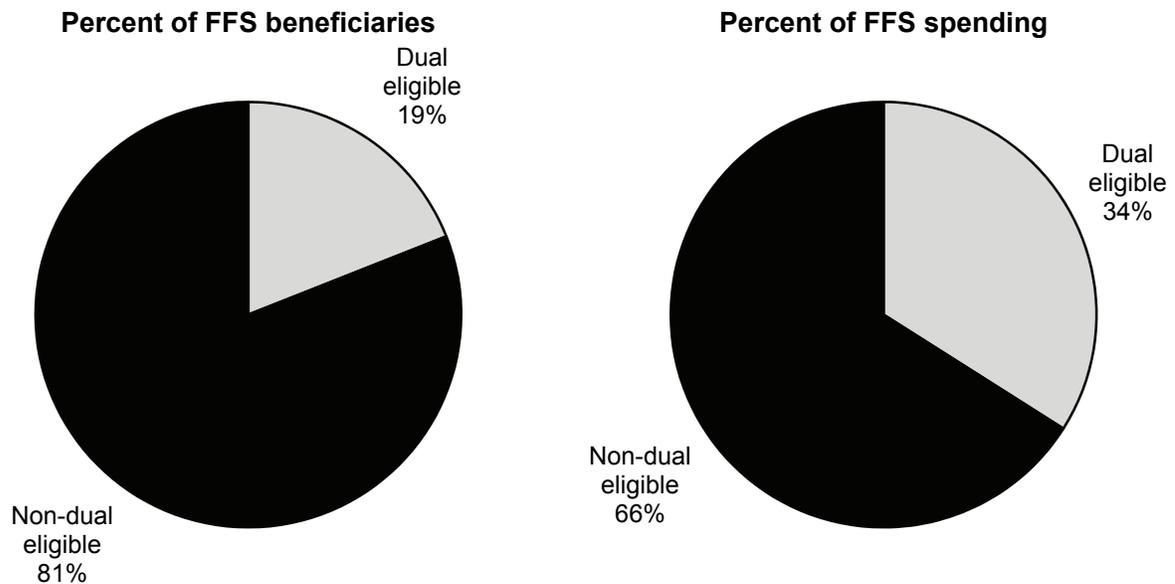
Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use file 2010.

- This diagram illustrates out-of-pocket spending on services and premiums by beneficiaries' supplemental insurance and health status. For example, beneficiaries who have only traditional Medicare coverage ("Medicare only") and report fair or poor health averaged \$1,217 in out-of-pocket spending on premiums and \$2,768 on services in 2010. Those who have Medicare-only coverage and report good, very good, or excellent health averaged \$1,273 in out-of-pocket spending on premiums and \$1,435 on services.
- Insurance that supplements Medicare does not shield beneficiaries from all out-of-pocket costs. Beneficiaries who report being in fair or poor health spend more out of pocket for health services than those reporting good, very good, or excellent health, regardless of the type of coverage they have to supplement Medicare.
- Despite having supplemental coverage, beneficiaries who have ESI or medigap have out-of-pocket spending that is comparable to or more than those who have only coverage under traditional Medicare (Medicare only). This result likely reflects the fact that beneficiaries who have ESI or medigap have higher incomes and are likely to have stronger preferences for health care.
- What beneficiaries actually pay out of pocket varies by type of supplemental coverage. For those with medigap, out-of-pocket spending generally reflects the premiums and costs of services not covered by Medicare. Beneficiaries with ESI usually pay less out of pocket for Medicare noncovered services than those with medigap, but may pay more in Medicare deductibles and cost sharing.

SECTION **4**

**Dual-eligible
beneficiaries**

Chart 4-1. Dual-eligible beneficiaries account for a disproportionate share of Medicare spending, 2010

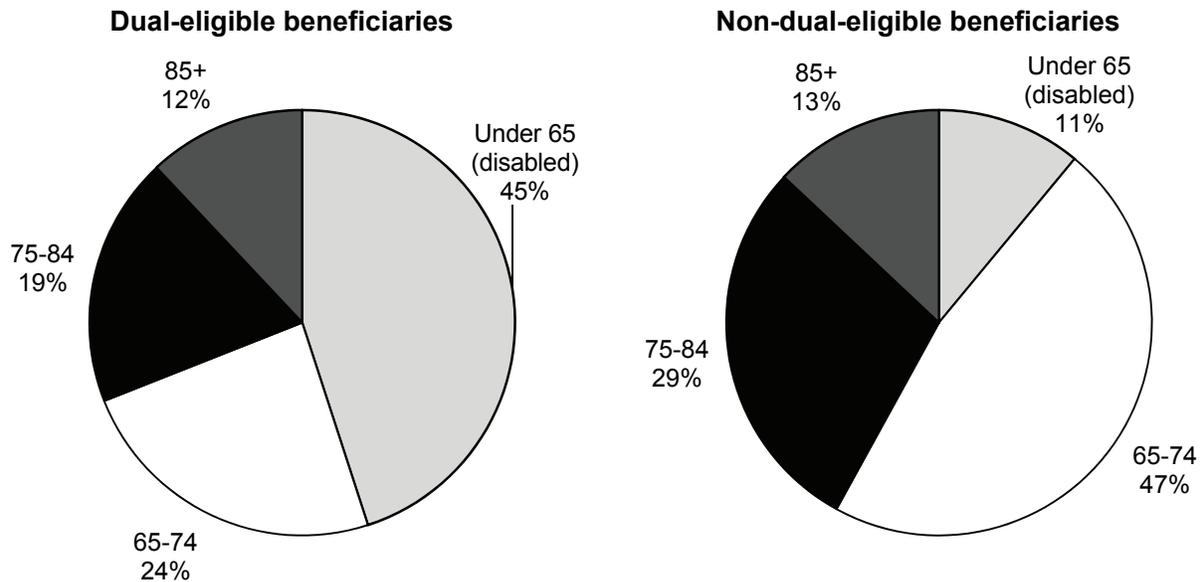


Note: FFS (fee for service). Dual-eligible beneficiaries are designated as such if the months they were enrolled in Medicaid exceed the months they were enrolled in supplemental insurance. Spending data reflect 2010 Medicare Current Beneficiary Survey Cost and Use file from CMS.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost and Use file 2010.

- Dual-eligible beneficiaries are those who qualify for both Medicare and Medicaid. Medicaid is a joint federal and state program designed to help people with low incomes obtain needed health care.
- Dual-eligible beneficiaries account for a disproportionate share of Medicare FFS expenditures. As 19 percent of the Medicare FFS population, they represented 34 percent of aggregate Medicare FFS spending in 2010.
- On average, Medicare FFS per capita spending is more than twice as high for dual-eligible beneficiaries compared to non-dual-eligible beneficiaries: In 2010, \$19,418 was spent per dual-eligible beneficiary, and \$8,789 was spent per non-dual-eligible beneficiary.
- In 2010, average total spending—which includes Medicare, Medicaid, supplemental insurance, and out-of-pocket spending across all payers—for dual-eligible beneficiaries was about \$31,600 per beneficiary, more than twice the amount for other Medicare beneficiaries.

Chart 4-2. Dual-eligible beneficiaries are more likely than non-dual-eligible beneficiaries to be under age 65 and disabled, 2010

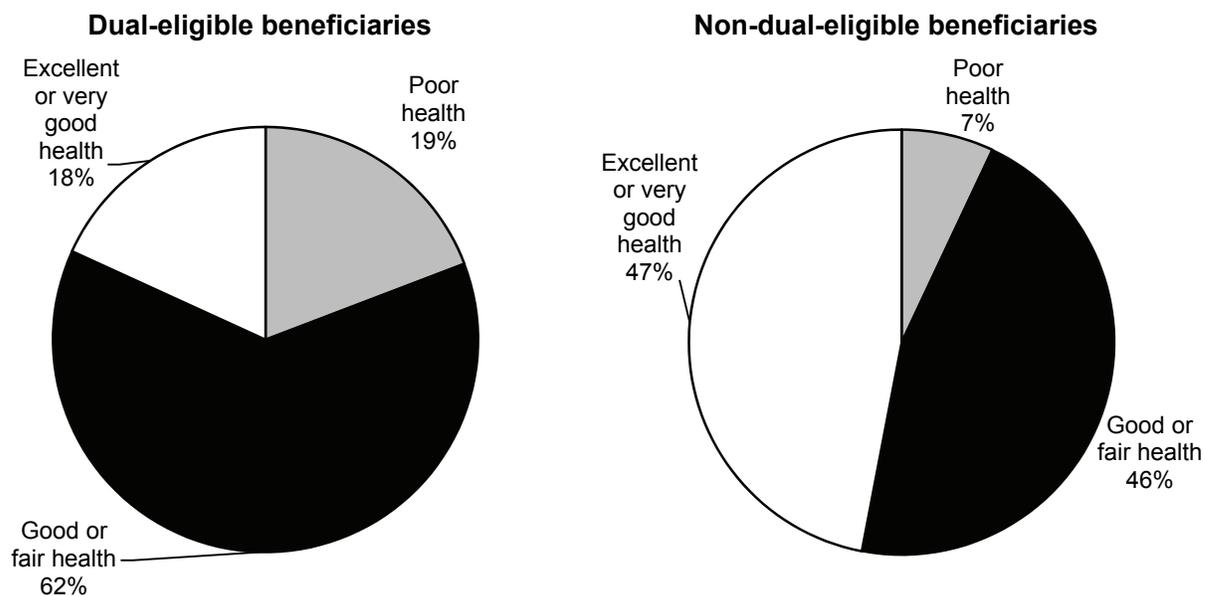


Note: Beneficiaries who are under age 65 qualify for Medicare because they are disabled. Once disabled beneficiaries reach age 65, they are counted as aged. Dual-eligible beneficiaries are designated as such if the months they were enrolled in Medicaid exceed the months they were enrolled in supplemental insurance.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use file 2010.

- Disability is a pathway for individuals to become eligible for both Medicare and Medicaid benefits.
- Dual-eligible beneficiaries are more likely than non-dual-eligible beneficiaries to be under age 65 and disabled. In 2010, 45 percent of dual-eligible beneficiaries were under age 65 and disabled, compared with 11 percent of the non-dual-eligible population.

Chart 4-3. Dual-eligible beneficiaries are more likely than non-dual-eligible beneficiaries to report poorer health status, 2010



Note: Dual-eligible beneficiaries are designated as such if the months they were enrolled in Medicaid exceeded the months they were enrolled in supplemental insurance. Totals may not sum to 100 percent due to rounding.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost and Use file 2010.

- Dual-eligible beneficiaries are more likely than non-dual-eligible beneficiaries to report poorer health status. In 2010, 19 percent of dual-eligible beneficiaries reported being in poor health, compared to 7 percent of non-dual eligible beneficiaries.
- Almost half of non-dual-eligible beneficiaries (47 percent) report being in excellent or very good health in 2010. In comparison, less than one-fifth (18 percent) of dual-eligible beneficiaries reported being in excellent or very good health.

Chart 4-4. Demographic differences between dual-eligible beneficiaries and non-dual-eligible beneficiaries, 2010

Characteristic	Percent of dual-eligible beneficiaries	Percent of non-dual-eligible beneficiaries
Sex		
Male	43%	46%
Female	57	54
Race/ethnicity		
White, non-Hispanic	57	80
African American, non-Hispanic	20	8
Hispanic	13	8
Other	10	4
Limitations in ADLs		
No ADLs	45	70
1–2 ADLs	26	20
3–6 ADLs	29	10
Residence		
Urban	70	78
Rural	30	22
Living arrangement		
Institution	19	3
Alone	29	28
Spouse	15	54
Children, nonrelatives, others	36	16
Education		
No high school diploma	50	19
High school diploma only	25	29
Some college or more	22	51
Income status		
Below poverty	54	8
100–125% of poverty	21	7
125–200% of poverty	18	20
200–400% of poverty	5	35
Over 400% of poverty	1	31
Supplemental insurance status		
Medicare or Medicare/Medicaid only	92	10
Medicare managed care	3	33
Employer-sponsored insurance	0	35
Medigap	1	17
Medigap/employer	0	3
Other*	3	1

Note: ADL (activity of daily living). Dual-eligible beneficiaries are designated as such if the months they were enrolled in Medicaid exceed the months they were enrolled in other supplemental insurance. "Urban" indicates beneficiaries living in metropolitan statistical areas (MSAs). "Rural" indicates beneficiaries living outside MSAs. In 2010, poverty was defined as income of \$10,458 for people living alone and \$13,194 for married couples. Totals may not sum to 100 percent due to rounding and exclusion of an "other" category. Poverty thresholds are calculated by the U.S. Census Bureau (<https://www.census.gov/hhes/www/poverty/data/threshld/>).
*Includes public programs such as the Department of Veterans Affairs and state-sponsored drug plans.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use file 2010.

- Dual-eligible beneficiaries qualify for Medicaid due in part to low incomes. In 2010, 54 percent lived below the federal poverty level, and 93 percent lived below 200 percent of the poverty level. Compared with non-dual-eligible beneficiaries, dual-eligible beneficiaries are more likely to be female, to be African American or Hispanic, to lack a high school diploma, to have greater limitations in activities of daily living, to reside in a rural area, and to live in an institution. They are less likely to have sources of supplemental coverage other than Medicaid.

Chart 4-5. Differences in Medicare spending and service use between dual-eligible beneficiaries and non-dual-eligible beneficiaries, 2010

Service	Dual-eligible beneficiaries	Non-dual-eligible beneficiaries
Average FFS Medicare payment for all beneficiaries		
Total Medicare FFS payments	\$19,418	\$8,789
Inpatient hospital	6,122	2,803
Physician ^a	3,209	2,598
Outpatient hospital	2,311	1,133
Home health	806	460
Skilled nursing facility ^b	1,466	572
Hospice	676	211
Prescribed medication ^c	4,805	1,002
Percent of FFS beneficiaries using service		
Percent using any type of service	95.7%	84.7%
Inpatient hospital	25.8	16.6
Physician ^a	89.7	82.9
Outpatient hospital	74.8	59.9
Home health	13.5	8.5
Skilled nursing facility ^b	8.4	4.5
Hospice	4.0	2.1
Prescribed medication ^c	75.0	37.6

Note: FFS (fee-for-service). Data in this analysis are restricted to beneficiaries in FFS. Dual-eligible beneficiaries are designated as such if the months they were enrolled in Medicaid exceed the months they were enrolled in supplemental insurance. Spending totals derived from the Medicare Current Beneficiary Survey (MCBS) do not necessarily match official estimates from CMS, Office of the Actuary. Total payments may not equal the sum of line items.

^a Includes a variety of medical services, equipment, and supplies.

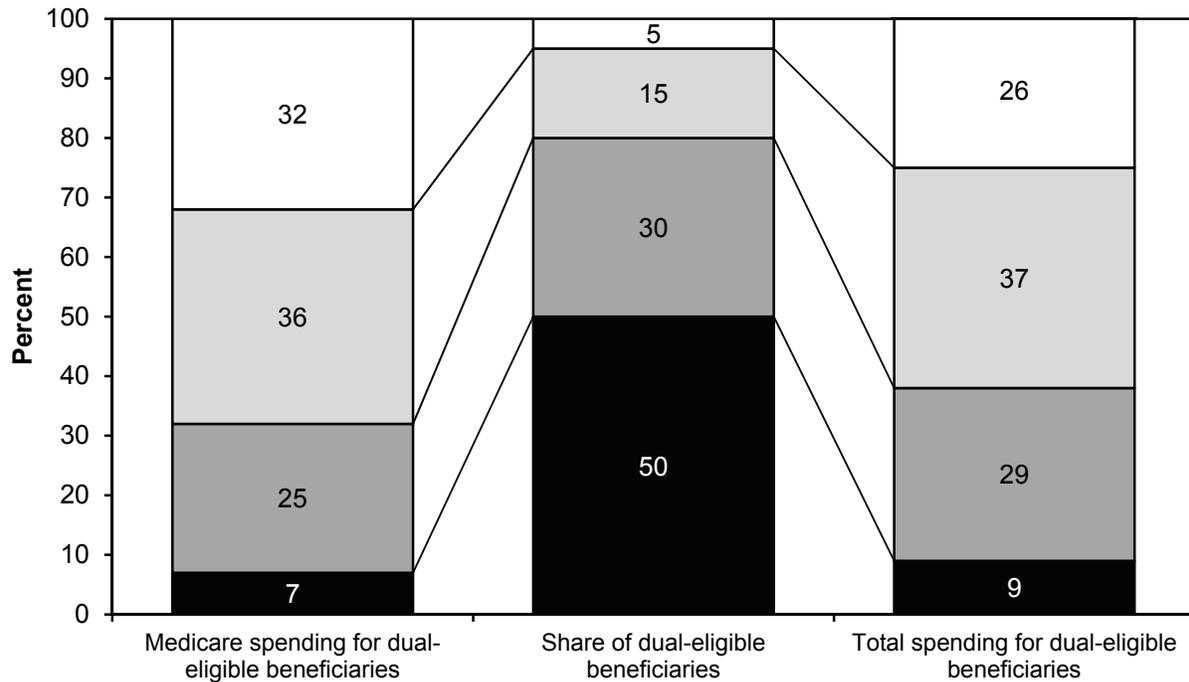
^b Individual short-term facility (usually skilled nursing facility) stays for the MCBS population.

^c Data from Medicare Advantage–Prescription Drug plans and stand-alone prescription drug plans.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost and Use file 2010.

- Average per capita Medicare FFS spending for dual-eligible beneficiaries was more than twice that for non-dual-eligible beneficiaries—\$19,418 compared with \$8,789.
- For each type of service, average Medicare FFS per capita spending is higher for dual-eligible beneficiaries than for non-dual-eligible beneficiaries.
- Higher average per capita FFS spending for dual-eligible beneficiaries is a function of a higher use of these services by dual-eligible beneficiaries compared with their non-dual-eligible counterparts. Dual-eligible beneficiaries are more likely than non-dual-eligible beneficiaries to use each type of Medicare-covered service.

Chart 4-6. Both Medicare and total spending are concentrated among dual-eligible beneficiaries, 2010



Note: "Total spending" includes Medicare, Medicaid, supplemental insurance, and out-of-pocket spending. Dual-eligible beneficiaries are designated as such if the months they were enrolled in Medicaid exceed the months they were enrolled in supplemental insurance. Totals may not sum to 100 percent due to rounding.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost and Use files 2010.

- Annual Medicare FFS spending on dual-eligible beneficiaries is concentrated among a small number. The costliest 20 percent of dual-eligible beneficiaries accounted for 68 percent of Medicare spending and 63 percent of total spending on dual-eligible beneficiaries in 2010. In contrast, the least costly 50 percent of dual-eligible beneficiaries accounted for only 7 percent of Medicare spending and 9 percent of total spending on dual-eligible beneficiaries.
- On average, total spending (including Medicaid, medigap, etc.) for dual-eligible beneficiaries in 2010 was more than twice that for non-dual-eligible beneficiaries—about \$31,600, compared with about \$15,300.

SECTION

5

**Quality of care in the
Medicare program**

Chart 5-1. In-hospital and 30-day postdischarge mortality rates improved from 2009 to 2012

Condition or procedure	Risk-adjusted rate per 100 eligible discharges, 2009	Risk-adjusted rate per 100 eligible discharges, 2012	Directional change in rate, 2009–2012
In-hospital mortality			
Acute myocardial infarction	7.97	6.23	Better
Congestive heart failure	3.93	3.05	Better
Stroke	10.82	8.69	Better
Hip fracture	3.22	2.73	Better
Pneumonia	4.19	3.20	Better
30-day postdischarge mortality			
Acute myocardial infarction	12.12	11.68	No difference
Congestive heart failure	10.26	9.34	Better
Stroke	23.79	22.54	Better
Hip fracture	8.25	8.38	No difference
Pneumonia	9.74	8.63	Better

Note: Rates are calculated based on the discharges eligible to be counted in each measure. Rates do not include deaths in non-inpatient prospective payment system hospitals or Medicare Advantage plans. “Better” indicates that the risk-adjusted rate decreased by a statistically significant amount from 2009 to 2012 using a $p \leq 0.01$ criterion. “No difference” indicates that the change in the rate was not statistically significant from 2009 to 2012 using a $p \leq 0.01$ criterion.

Source: MedPAC analysis of CMS Medicare Provider Analysis and Review data using Agency for Healthcare Research and Quality Inpatient Quality Indicators version 4.1b (with modifications for 30-day mortality rate calculations).

- Our most recent analysis of several inpatient quality indicators shows generally positive trends. We analyzed five of the Inpatient Quality Indicators developed by the Agency for Healthcare Research and Quality to measure in-hospital and 30-day postdischarge mortality rates. Trends in risk-adjusted in-hospital mortality rates are used to assess changes in the quality of care provided to Medicare beneficiaries during inpatient stays for certain medical conditions. Thirty-day postdischarge mortality rates reflect the quality of care during a patient’s transition from an inpatient stay to post-acute care or home and in the critical 30-day period following their discharge from the hospital.
- Rates of deaths during a hospital stay declined from 2009 to 2012 for all five of the conditions we analyzed: acute myocardial infarction (AMI), congestive heart failure, stroke, hip fracture, and pneumonia.
- Rates of deaths within 30 days after a beneficiary’s discharge from a hospital stay improved from 2009 to 2012 for congestive heart failure, stroke, and pneumonia, but remained stable for patients discharged with a diagnosis of AMI or hip fracture.

Chart 5-2. Most hospital inpatient patient safety indicators improved or were stable from 2009 to 2012

Patient safety indicator	Risk-adjusted rate per 100 eligible discharges, 2009	Risk-adjusted rate per 100 eligible discharges, 2012	Directional change in rate, 2009–2012
Death among surgical inpatients with treatable serious complications	9.79	11.77	Worse
Iatrogenic pneumothorax	0.05	0.03	Better
Postoperative respiratory failure	1.73	0.88	Better
Postoperative PE or DVT	0.49	0.39	Better
Postoperative wound dehiscence	0.28	0.18	Better
Accidental puncture or laceration	0.19	0.14	Better

Note: PE (pulmonary embolism), DVT (deep vein thrombosis). “Better” indicates that the risk-adjusted rate decreased by a statistically significant amount from 2009 to 2012 using a $p \leq 0.01$ criterion.

Source: MedPAC analysis of CMS Medicare Provider Analysis and Review data using Agency for Healthcare Research and Quality Patient Safety Indicators, version 4.1b.

- We analyzed six of the Agency for Healthcare Research and Quality (AHRQ) Patient Safety Indicators (PSIs), which measure the frequency of potentially preventable adverse events that can occur during an inpatient stay, such as the development of postoperative PE or DVT (a blood clot that can suddenly obstruct an artery or vein), or a patient’s death from serious but treatable complications following surgery. The rates are calculated using software from AHRQ and Medicare inpatient hospital discharge data.
- Rates improved from 2009 to 2012 for five of the six PSIs we analyzed:
 - iatrogenic pneumothorax (introduction of air into the pleural cavity during a medical procedure, which often causes the lung to collapse)
 - postoperative respiratory failure
 - postoperative PE or DVT
 - postoperative wound dehiscence (parting of the sutures of a surgical wound)
 - accidental puncture or laceration during treatment

The indicator that worsened from 2009 to 2012 was the rate of deaths among surgical inpatients with treatable serious complications.

- Caution should be used in interpreting all the reported PSI rates. PSIs measure rates of very rare events, and it is difficult, even when measuring across all inpatient prospective payment system hospitals, to detect statistically significant changes. The reliability of some of the PSIs also can be affected by variations in providers’ coding practices. The Commission monitors trends in the selected PSIs as indicators—not definitive evidence—of changes in rates of treatment-related harm to patients that can be avoided with adherence to known clinical safety practices.

Chart 5-3. SNFs improved on risk-adjusted rates of community discharge and potentially avoidable rehospitalizations, but there was little change in patient functional status

Measure	2011	2012
Discharged to the community	28.8%	30.6%
Potentially avoidable rehospitalizations during SNF stay	12.5	11.7
Potentially avoidable rehospitalizations during 30 days after discharge from SNF	5.9	5.8
Combined during and after SNF stay rehospitalization rate	15.6	14.9
Rate of improvement in one or more mobility ADLs	27.1	27.4
Rate of no decline in mobility	88.7	88.9

Note: SNF (skilled nursing facility), ADL (activity of daily living). High rates of discharge to community indicate better quality. High rehospitalization rates indicate worse quality. The rate of mobility improvement is the average of the rates of improvement in bed mobility, transfer, and ambulation, weighted by the number of stays included in each measure. Stays with improvement in one, two, or three ADLs are counted in the improvement measures. The rate of no decline in mobility is the share of stays with no decline in any of the three ADLs. Rates are the average of facility rates and calculated for all facilities with 25 or more stays. Measures exclude hospital-based swing-bed units.

Source: Kramer, A., M. Lin, R. Fish, et al. 2014. *Development of potentially avoidable readmission and functional outcome SNF quality measures*. Report prepared by staff from Providigm, LLC for the Medicare Payment Advisory Commission. Washington, DC: MedPAC.

- Rates of risk-adjusted community discharge and potentially avoidable rehospitalization among SNF patients improved between 2011 and 2012. The decline in potentially avoidable rehospitalizations was the result of improvements in readmissions during the SNF stay; rates for the 30 days after discharge from the SNF were essentially unchanged.
- The rehospitalization rates count only stays readmitted to a hospital with the principal diagnosis of a potentially avoidable condition. The 13 potentially avoidable conditions include congestive heart failure, electrolyte imbalance/dehydration, respiratory infection, sepsis, urinary tract or kidney infection, hypoglycemia or diabetic complications, anticoagulant complications, fractures and musculoskeletal injuries, acute delirium, adverse drug reactions, cellulitis/wound infections, pressure ulcers, and blood pressure management.
- The two risk-adjusted measures of changes in functional status were essentially unchanged between 2011 and 2012. The mobility measures are composites of the patients' abilities regarding bed mobility, transfer, and ambulation, and they consider the likelihood that a patient will change, given her functional ability at admission. A facility admitting patients with worse prognoses will have a lower expected rate of achieving these outcomes, and this difference will be reflected in the risk-adjusted rates. The rate of improvement in mobility shows the share of stays with improvement in one, two, or three ADLs: bed mobility, transfer, and ambulation. The rate of no decline in mobility is the share of stays with no decline in any of the three ADLs.
- There was considerable variation in most of the measures. For example, the worst performing quarter of SNFs had readmission rates at or above 14.7 percent, whereas the best performing quarter had rates at or below 8.4 percent.

Chart 5-4. Risk-adjusted home health quality measures held steady or improved slightly from 2008 to 2013

Functional measure	2008	2011	2012	2013
Improvements in:				
Transferring	51%	51%	52%	52%
Bathing	62	62	63	63
Walking	N/A	53	55	57
Medication management	N/A	43	45	46
Pain management	N/A	65	65	65

Note: N/A (not applicable). The measures for walking, medication management, and pain management changed in 2011, and therefore the 2008 results shown are not comparable with data from later years.

Source: MedPAC analysis of Outcome and Assessment Information Set, home health standard analytic file, and CMS Home Health Compare data.

- Medicare publishes risk-adjusted home health quality measures that track changes in the functional abilities for patients who receive home health care. These measures do not include home health episodes that end with a hospitalization.
- Since 2008, the rates of functional improvement have generally held steady or slightly improved each year.

Chart 5-5. Dialysis quality of care: Some measures show progress, others need improvement, 2007–2011

Outcome measure	2007	2009	2011
Percent of in-center hemodialysis patients:			
Receiving adequate dialysis (higher is better)	94%	95%	97%
Anemia measures			
Mean hemoglobin 10 to < 12 g/dL	49	62	74
Mean hemoglobin ≥ 12 g/dL*	45	32	12
Mean hemoglobin < 10 g/dL	6	6	14
Dialyzed with an AV fistula	47	53	59
Percent of peritoneal dialysis patients:			
Receiving adequate dialysis (higher is better)	89	89	91
Anemia measures			
Mean hemoglobin 10 to < 12 g/dL	48	57	61
Mean hemoglobin ≥ 12 g/dL*	45	33	21
Mean hemoglobin < 10 g/dL	7	10	18
Percent of all dialysis patients wait-listed for a kidney			
	17	17	17
Renal transplant rate per 100 dialysis patient years			
	4.4	4.1	3.8
Annual mortality rate per 100 patient years*			
	20.8	19.5	18.4
Total admissions per patient year*			
	1.9	1.9	1.8
Hospital days per patient year			
	12.9	12.1	11.7

Note: g/dL (grams per deciliter [of blood]), AV (arteriovenous). Data on dialysis adequacy, use of fistulas, and anemia management represent share of patients meeting CMS's clinical performance measures. United States Renal Data System adjusts data by age, gender, race, and primary diagnosis of end-stage renal disease.
*Lower values suggest higher quality.

Source: Compiled by MedPAC from the Elab Project Report, Fistula First, and the United States Renal Data System.

- Quality of dialysis care is mixed. Performance has improved on some measures, but performance on others remains unchanged.
- All hemodialysis patients require vascular access—the site on the patient's body where blood is removed and returned during dialysis. Between 2007 and 2011, use of arteriovenous fistulas, considered the best type of vascular access, increased from 47 percent to 59 percent of hemodialysis patients. Between 2007 and 2011, overall adjusted mortality rates decreased but remained high among dialysis patients.
- Between 2007 and 2011, the proportion of hemodialysis patients receiving adequate dialysis remained high. Overall rates of hospitalization remained steady at about two admissions per dialysis patient per year.
- Other measures suggest that improvements in dialysis quality are still needed. We looked at access to kidney transplantation because it is widely believed to be the best treatment option for individuals with end-stage renal disease. Between 2007 and 2011, the proportion of dialysis patients accepted on the kidney transplant waiting list remains low, and the renal transplant rate per 100 dialysis patient years has declined.

Chart 5-6. Medicare Advantage quality measures show improvement between 2011 and 2013

Measures	HMO averages (cost plans and PSOs included)			Local PPO averages		
	2011	2012	2013	2011	2012	2013
HEDIS® administrative measures						
Breast cancer screening	68.5	68.9	70.5 ^a	66.1	65.9 ^b	67.7 ^b
Glaucoma testing	63.8	65.8 ^a	68.6 ^a	65.5	66.8	69.4 ^a
Osteoporosis management	20.7	22.5	24.8	18.7	19.3 ^b	19.4 ^b
Rheumatoid arthritis management	72.8	72.6	75.4 ^a	78.3	77.7 ^b	79.3 ^b
HEDIS® hybrid measures						
BMI documented	50.3	68.1 ^a	81.7 ^a	36.7	63.2 ^{ab}	77.1 ^{ab}
Colorectal cancer screening	57.6	60.0 ^a	63.1 ^a	41.3	55.5 ^{ab}	59.1 ^{ab}
Cholesterol screening for patients with heart disease	88.5	88.9	89.5	87.1	88.4 ^a	87.7 ^b
Controlling blood pressure	61.9	64.0 ^a	63.9	55.8	61.3 ^{ab}	60.0 ^b
Cholesterol screening for patients with diabetes	87.9	88.3	88.7	86.3	86.7 ^b	86.7 ^b
Eye exam to check for damage from diabetes	64.6	66.0	67.6	62.7	64.3	65.5
Kidney function testing for members with diabetes	89.2	89.8 ^a	90.5 ^a	87.3	88.1 ^{ab}	88.5 ^b
Diabetics with cholesterol is under control	52.2	52.5	52.8	45.9	51.1 ^a	49.6 ^b
Diabetics not controlling blood sugar (lower rate better)	25.9	26.5	25.4	34.3	28.4 ^a	28.6 ^b
Measures from HOS^c						
Advising physical activity	47.9	48.6	50.0 ^a	47.6	47.7	49.1 ^a
Improving bladder control	36.0	34.9 ^a	34.6	36.6	35.8	35.9 ^b
Reducing the risk of falling	60.5	60.5	61.8 ^a	55.1	54.3 ^b	56.6 ^{ab}
Other measures based on HOS						
Improving or maintaining physical health	66.4	65.5 ^a	66.5 ^a	66.1	65.6	67.1 ^a
Improving or maintaining mental health	77.5	76.5 ^a	77.5 ^a	78.5	77.8	78.0
Measures from CAHPS®						
Annual flu vaccine	67.9	68.0	70.7 ^a	68.6	68.8	72.0 ^a
Ease of getting needed care and seeing specialists	84.7	84.4	84.9	85.9	85.9	86.1 ^b
Getting appointments and care quickly	75.1	75.5	75.7	76.7	76.5	76.2
Overall rating of health care quality	85.5	85.8	85.9	86.1	86.5 ^a	86.3
Overall rating of plan	85.7	86.2	86.2	84.2	85.1 ^a	85.0 ^b

Note: HMO (health maintenance organization), PPO (preferred provider organization), PSO (provider sponsored organization), HEDIS® (Healthcare Effectiveness Data and Information Set, a registered trademark of the National Committee for Quality Assurance), BMI (body mass index), HOS (Health Outcomes Survey), CAHPS® (Consumer Assessment of Healthcare Providers and Systems, a registered trademark of the Agency for Healthcare Research and Quality). Medicare Advantage plan types not included in the data are regional PPOs, private fee-for-service plans, continuing care retirement community plans, and employer direct-contract plans. Cost-reimbursed HMO plans are included. HEDIS administrative measures are calculated using administrative data; hybrid measures involve sampling medical records to determine a rate. Averages are for all reporting plans in each year; results may therefore differ from those shown in other MedPAC reporting of scores for plans that report measures for both years of a two-year time period.

^a Statistically significant difference in performance from previous year ($p < 0.05$).

^b Statistically significant difference in performance in 2013 between HMO and PPO results ($p < 0.05$).

^c Results shown for HEDIS measures taken from HOS (the three measures listed) include scores for plans not reporting other HEDIS data. Results may therefore differ from those shown in other MedPAC reporting of these scores.

Source: MedPAC analysis of CMS HEDIS public use files for HEDIS measures and star ratings data for measures based on HOS and for CAHPS measures.

(Chart continued next page)

Chart 5-6. Medicare Advantage quality measures show improvement between 2011 and 2013 (continued)

- The chart displays the simple averages across all plans in each category (HMOs and local PPOs) for each year.
- The measures listed are included in the measures that CMS uses to develop plan star ratings, which are the basis of quality bonus payments for plans (see Chart 9-12). For star rating purposes, measures have different weights. Process measures, such as each of the HEDIS administrative measures in the table, have a weight of 1. Patient experience measures, including the last four items in the table, have a weight of 1.5. Outcome measures have a weight of 3. The table includes the following outcome measures used in the star ratings: controlling blood pressure (for all patients with hypertension), diabetics with their cholesterol under control, and diabetics not controlling their blood glucose (sugar).
- Between 2012 and 2013, HMOs had statistically significant improvement for 11 of the 23 measures shown in the chart. Of the 11 improved measures, 4 are screening or testing measures. HMOs also improved on two of three measures collected through HOS and on the two measures based on beneficiaries' reporting of improved mental or physical health.

Seven measures showed statistically significant improvement among local PPOs, including two testing or screening measures. PPOs also improved in the same two HOS measures as HMOs, as well as the measure of beneficiaries' reporting improved physical health. PPOs and HMOs both showed improved rates of influenza vaccination.

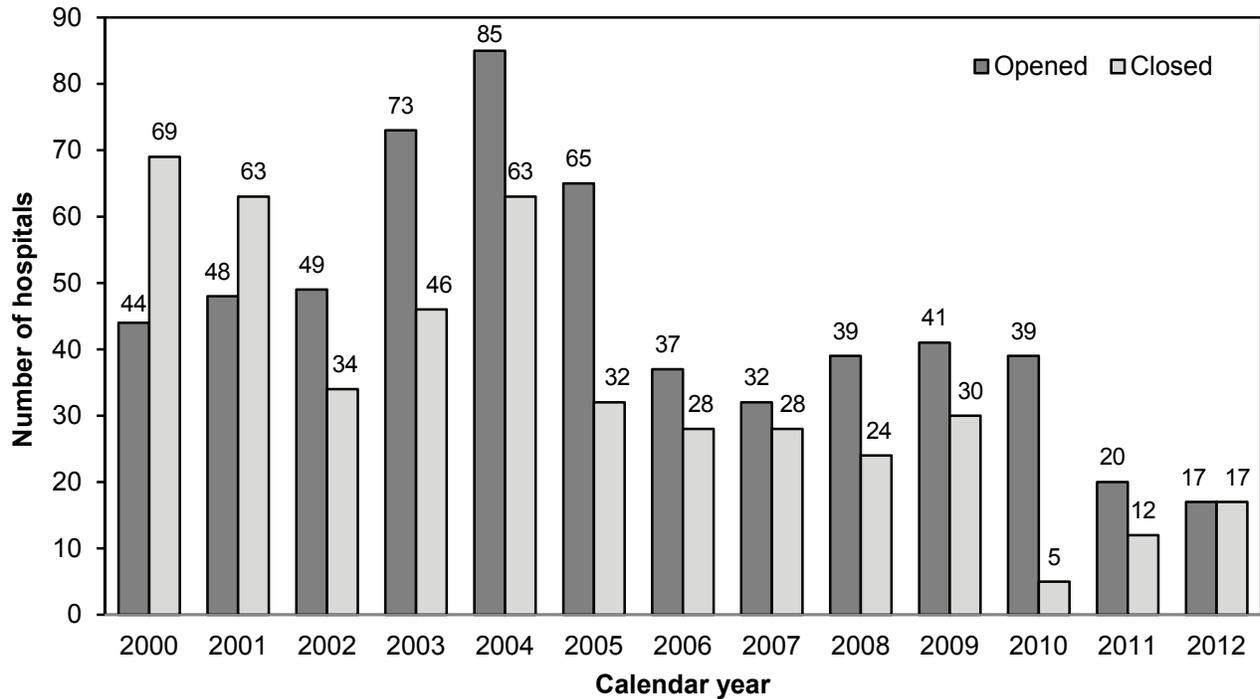
- The performance of HMOs and PPOs differs across quality measures. For eight of the nine HEDIS hybrid measures—which are measures that involve documentation from a review of a sample of medical records—HMOs continued to perform better than local PPOs, though among PPOs, two such measures improved (recording of body mass index and colorectal cancer screening rates). HMOs also performed better than local PPOs on four other measures, including three HEDIS measures: breast cancer screening, osteoporosis management in women who have had a fracture, and reducing the risk of falling among members with a problem falling, walking, or maintaining balance. Local PPOs performed better on a measure of rheumatoid arthritis management and a measure of improving bladder control. In patient experience measures, PPOs performed better than HMOs in members' perception of their ease of getting care, but HMO plans had higher overall plan ratings.

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, 2000–2012



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 acute care facilities 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 openings was the same as the number of closures in 2012, with 17 acute care hospitals starting participation in the Medicare program and 17 terminating their participation.
- In 2012, more than 4,600 acute care hospitals (including critical access hospitals) participated in the Medicare program.

Chart 6-2. Percent change in hospital employment, by occupation, 2008–2012

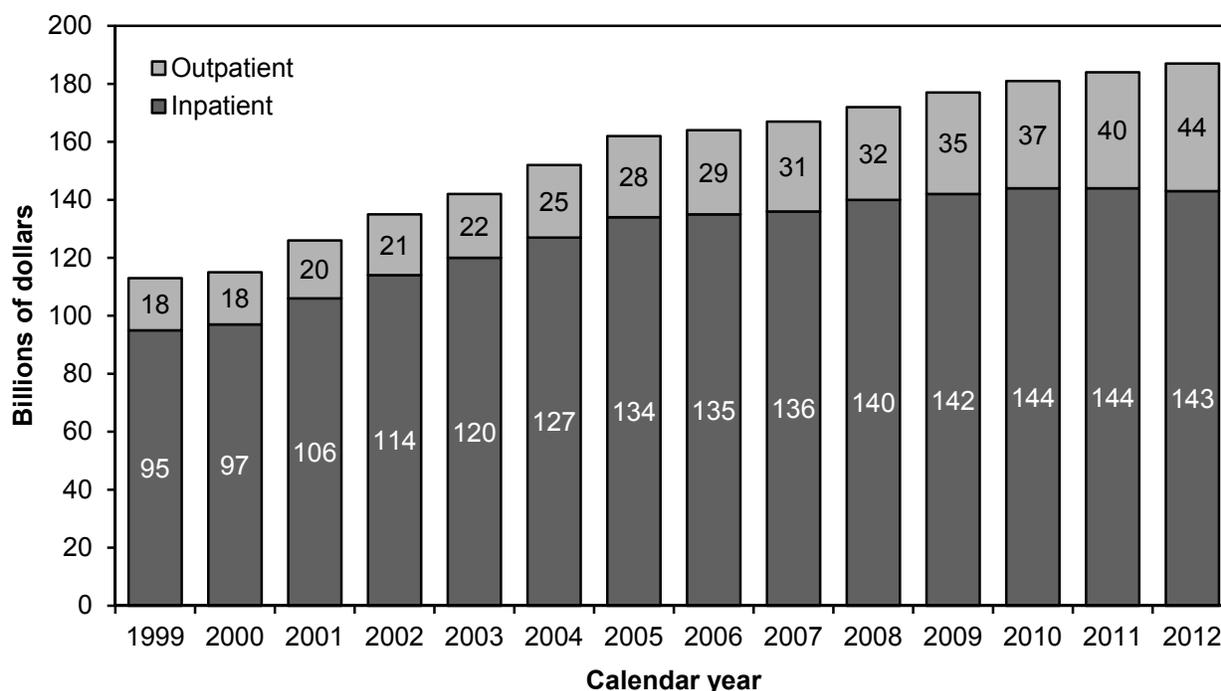
	Total U.S. employment (May 2008)	Total U.S. employment (May 2012)	Percent change in total employment (2008–2012)
All hospital occupations	5,096,190	5,236,960	2.8%
Surgeons (direct employment only)	5,730	7,250	26.5
Computer and math science	52,180	63,010	20.8
Internists (direct employment only)	8,100	9,690	19.6
Diagnostic sonographers	28,930	34,290	18.5
Life, physical, and social science	25,550	29,080	13.8
Business and finance	92,160	105,420	14.4
Pharmacists	55,530	61,460	10.7
Management	175,390	192,918	10.0
Physician assistants	16,820	18,380	9.3
Registered nurses	1,458,520	1,545,370	6.8
Radiation technologists	125,640	132,950	5.8
HC clinicians and technical	2,712,350	2,863,320	5.6
Community and social services (social work)	103,380	98,990	-4.3
LPNs/LVNs	163,360	124,400	-23.9

Note: HC (health care), LPN (licensed practical nurse), LVN (licensed vocational nurse).

Source: MedPAC analysis of Bureau of Labor Statistics, Occupational Employment Statistics data set as of September 2013.

- From May 2008 to May 2012, hospital employment increased 2.8 percent. By the end of this period, the hospital sector employed over 5.2 million individuals.
- Six occupations with notable growth in the hospital sector from 2008 to 2012 include surgeons employed directly by hospitals (26.5 percent); computer and math science positions (20.8 percent); internists directly employed by hospitals (19.6 percent); diagnostic sonographers (18.5 percent); business and finance positions (14.4 percent); and life, physical, and social science positions (13.8 percent). Growth in the two physician groups suggests that hospitals have been more active in recent years in hiring physicians directly. Growth in computer and math science positions, in particular, may reflect hospitals' efforts to implement electronic health record systems.
- LPNs and LVNs, as well as community and social service positions (social workers), were among the few occupations to experience a decline in the number of individuals employed by hospitals from 2008 to 2012, declining by 23.9 percent and 4.3 percent, respectively. During the same time period, the number of registered nurses employed by hospitals increased 6.8 percent (86,850 registered nurses), suggesting a continued shift toward employing nurses with a higher level of training.

Chart 6-3. Growth in Medicare’s FFS payments for hospital inpatient and outpatient services, 1999–2012



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. The growth in spending was slowed in 2006 by increases in the number of Medicare Advantage enrollees, who are not included in these aggregate totals.

Source: CMS, Office of the Actuary.

- Aggregate Medicare FFS inpatient spending was \$143 billion and outpatient spending was \$44 billion in 2012. From 2011 to 2012, inpatient spending decreased about 1 percent, while outpatient spending increased about 9 percent.
- A freeze in inpatient payment rates in the Balanced Budget Act of 1997 reduced growth in inpatient spending from 1999 to 2000. Spending increased substantially between 2001 and 2005, but remained relatively unchanged from 2005 to 2007, in part because traditional FFS Medicare enrollment declined in each of these three years due to a large number of beneficiaries switching to the Medicare Advantage program. Payment growth began to increase in 2008 for inpatient and particularly outpatient services.
- Outpatient spending has increased as a share of total Medicare hospital-based spending in the past 13 years. In 1999, outpatient spending accounted for almost 16 percent of all hospital spending; in 2012, outpatient spending grew to approximately 24 percent of total Medicare hospital spending.
- Outpatient spending per FFS beneficiary was about \$1,397 in 2012, up from approximately \$590 in 1999, an increase of 137 percent.

Chart 6-4. Proportion of Medicare acute care hospital inpatient discharges by hospital group, 2012

Hospital group	Hospitals		Medicare discharges	
	Number	Share of total	Number (thousands)	Share of total
All PPS hospitals and CAHs	4,630	100.0%	10,319	100.0%
CAHs	1,325	28.6	361	3.5
PPS hospitals	3,305	71.4	9,958	96.5
Urban (PPS hospitals)	2,388	72.3	8,651	86.9
Large urban	1,305	39.5	4,725	47.5
Other urban	1,083	32.8	3,926	39.4
Rural (PPS hospitals)	917	27.7	1,307	13.1
Rural referral	123	3.7	365	3.7
Sole community	383	11.6	542	5.4
Medicare dependent	192	5.8	179	1.8
Other rural < 50 beds	92	2.8	44	0.4
Other rural ≥ 50 beds	127	3.8	177	1.8
Tax status (PPS hospitals)				
Voluntary	1,931	58.4	7,097	71.3
Proprietary	811	24.5	1,583	15.9
Government	563	17.0	1,278	12.8
Teaching status (PPS hospitals)				
Major teaching	265	8.0	1,560	15.7
Other teaching	741	22.4	3,628	36.4
Nonteaching	2,299	69.6	4,770	47.9

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 2012 cost reports in the CMS database. See Chart 6-28 for more information about CAHs. Hospitals in urban, rural, tax status, and teaching status categories are all PPS hospitals. Numbers may not sum to totals due to rounding.

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

- In 2012, 3,305 hospitals provided 10 million discharges under Medicare's acute inpatient PPS, and 1,325 CAHs provided about 360,000 discharges. The number of PPS discharges continued to decline from 2011 to 2012, in part because of a shift in services from the inpatient to the outpatient setting.
- Approximately 21 percent of PPS hospitals are covered by three special payment provisions (rural referral centers (RRCs), sole community hospitals (SCHs), and small rural Medicare-dependent hospitals (MDHs)) intended to help rural facilities that are not CAHs; these facilities account for about 11 percent of all discharges.
- About 90 percent of rural hospitals were CAHs, SCHs, MDHs, or RRCs in 2012. Collectively, these four types of hospitals provide 87 percent of all rural Medicare discharges (not shown in chart).

Chart 6-5. Major diagnostic categories with highest volume, fiscal year 2012

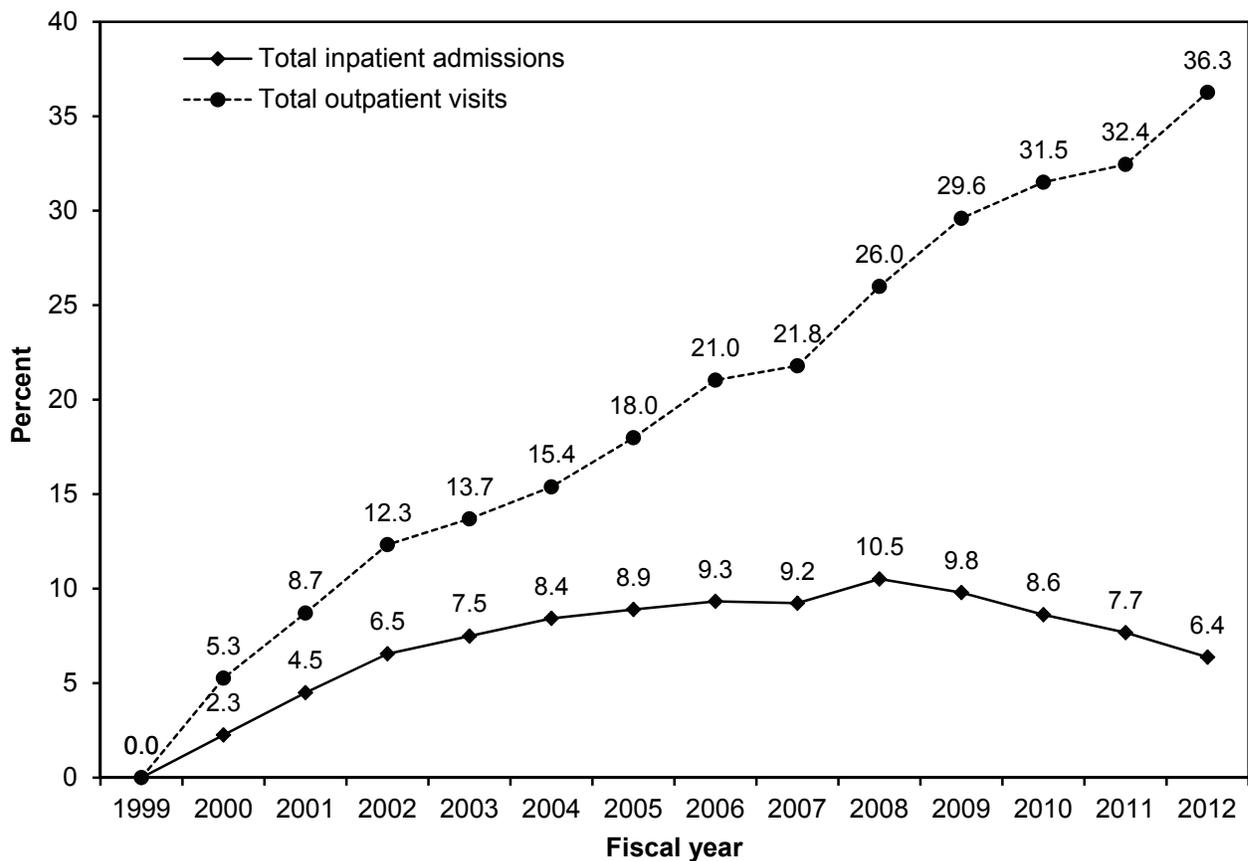
MDC number	MDC name	Share of all discharges	Share of medical discharges	Share of surgical discharges
5	Circulatory system	22%	21%	24%
4	Respiratory system	15	19	3
8	Musculoskeletal system and connective tissue	13	4	38
6	Digestive system	11	11	10
1	Nervous system	8	9	5
11	Kidney and urinary tract	8	9	4
18	Infectious and parasitic diseases	6	7	3
10	Endocrine, nutritional, and metabolic diseases and disorders	4	4	2
7	Hepatobiliary system and pancreas	3	3	4
9	Skin, subcutaneous tissue, and breast	3	3	2
	Total	93	90	95

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 fiscal year 2012, 10 major diagnostic categories accounted for 93 percent of all discharges from hospitals paid under the acute inpatient prospective payment system.
- Circulatory system cases accounted for about one-quarter of surgical cases.
- Respiratory system cases accounted for 19 percent of medical discharges.
- Musculoskeletal system cases accounted for 38 percent of surgical discharges.

Chart 6-6. Cumulative change in total all-payer inpatient admissions and total outpatient visits, 1999–2012

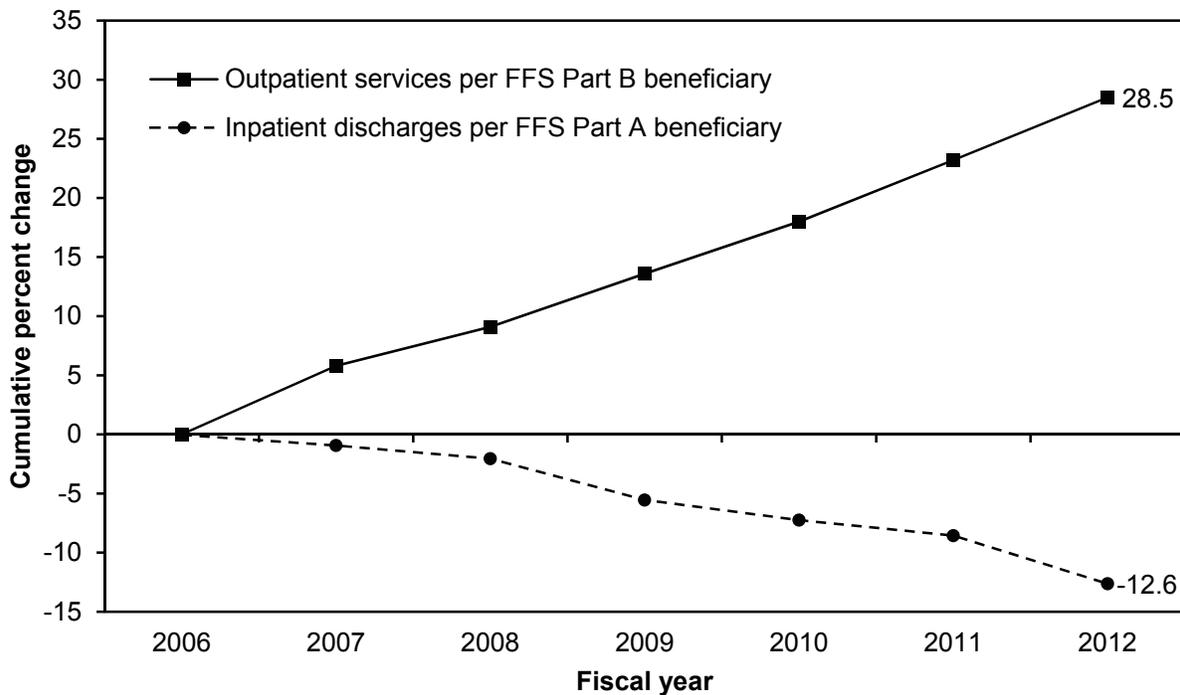


Note: Cumulative change is the total percent increase from 1999 through 2012. Data are admissions (all payers) to and outpatient visits at about 5,000 community hospitals.

Source: American Hospital Association, AHA Hospital Statistics.

- In 2012, community hospitals provided nearly 675 million outpatient visits and slightly fewer than 34 million inpatient admissions (data not shown in chart).
- Hospital outpatient service use grew much more rapidly from 1999 to 2012 than inpatient service use. Total hospital outpatient visits increased about 36 percent from 1999 to 2012.
- Outpatient visits increased nearly 4 percentage points from 2011 to 2012, or nearly 19 million visits.
- Total inpatient admissions grew by over 10 percent between 1999 and 2008, but have since declined. Inpatient admissions decreased by 1.3 percentage points from 2011 to 2012, or over 400,000 admissions.

Chart 6-7. Cumulative change in Medicare outpatient services and inpatient discharges per FFS beneficiary, 2006–2012

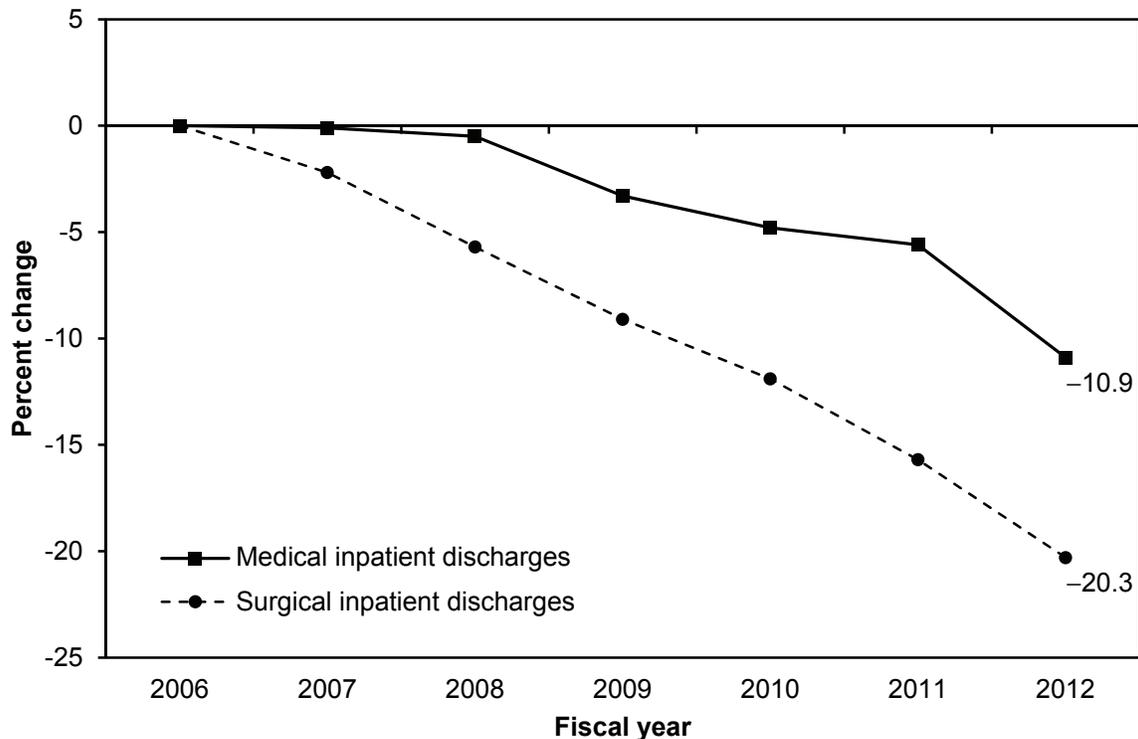


Note: FFS (fee-for-service). Data are for short-term general and surgical hospitals, including critical access and children's hospitals.

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

- From 2006 to 2012, the number of Medicare inpatient discharges per FFS beneficiary declined by 12.6 percent. From 2006 to 2007, inpatient volume per beneficiary was relatively flat, but, beginning in 2008, the volume of discharges began to decline more rapidly.
- From 2006 to 2012, the number of outpatient services per FFS beneficiary increased 28.5 percent.
- Together, these two trends suggest a shift in services from the inpatient to the outpatient setting, as well as other separate trends in increasing outpatient utilization and decreasing inpatient utilization.
- From 2011 to 2012, the number of Medicare inpatient discharges per FFS beneficiary declined approximately 4 percentage points, or more than double the average annual decline from 2006 to 2011.
- From 2011 to 2012, the number of Medicare outpatient services per FFS beneficiary increased approximately 5 percentage points, or at about the same rate as the average annual increase from 2006 to 2011.

Chart 6-8. Cumulative change in Medicare inpatient medical and surgical discharges per FFS beneficiary, 2006–2012

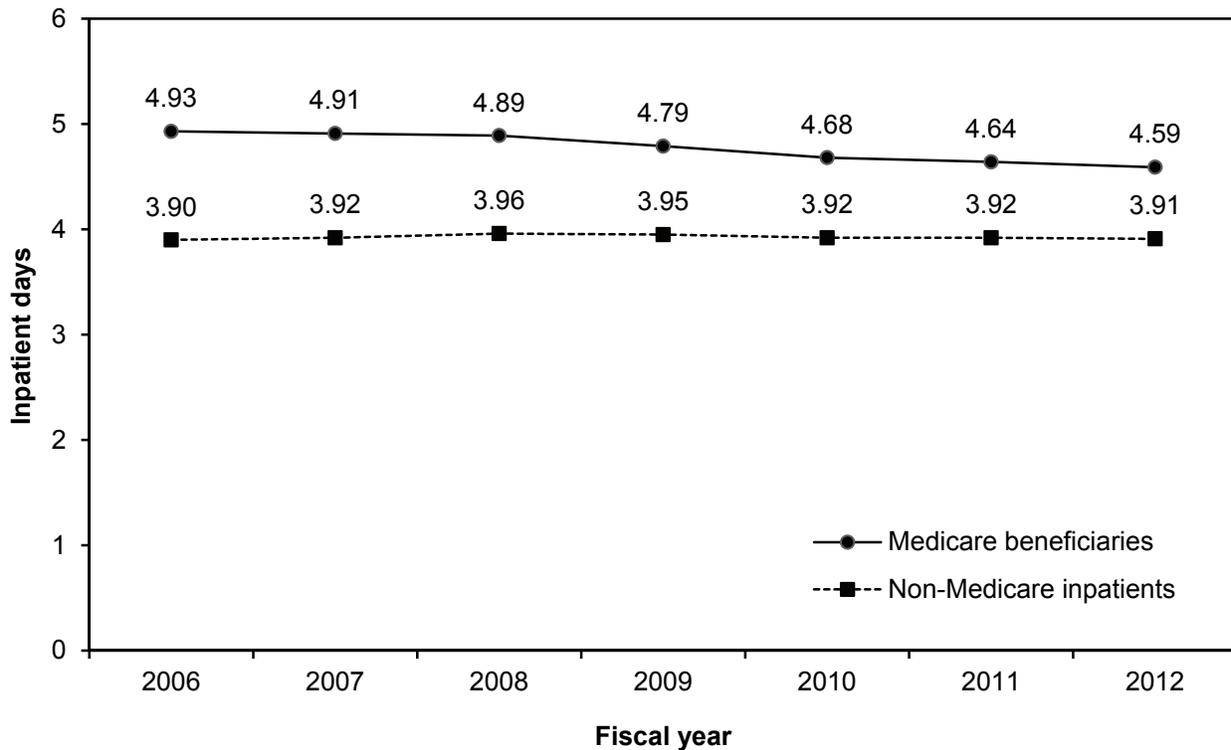


Note: FFS (fee-for-service). Data are for short-term general and surgical hospitals, including critical access and children's hospitals.

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

- From 2006 to 2012, inpatient surgical discharges per beneficiary declined approximately 20 percent, or an average of slightly more than 3 percent per year. Over the same period, inpatient medical discharges per beneficiary declined approximately 11 percent, or an average of slightly less than 2 percent per year.
- In the most recent year for which data are available, inpatient surgical discharges and inpatient medical discharges shifted away from the inpatient setting at equal rates. From 2011 to 2012, both inpatient surgical and medical discharges per beneficiary declined approximately 5.5 percent.

Chart 6-9. Trends in Medicare inpatient and non-Medicare inpatient length of stay, 2006–2012

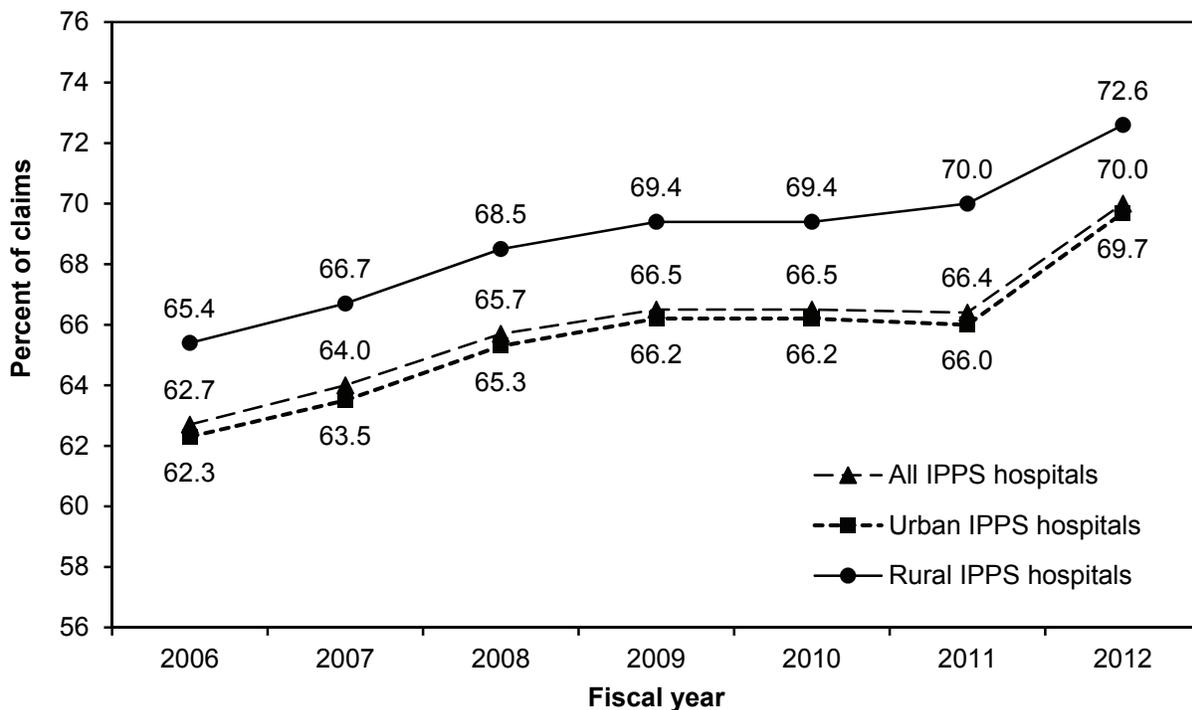


Note: Length of stay was calculated for more than 3,000 hospitals covered by the acute inpatient prospective payment system. Chart excludes critical access hospitals.

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

- Average length of inpatient stay for Medicare beneficiaries was nearly one day longer than for non-Medicare inpatients in 2012.
- Average length of inpatient stay for Medicare beneficiaries fell nearly 7 percent, from 4.93 days in 2006 to 4.59 days in 2012. Medicare length of stay declined at an average annual rate of approximately 1.2 percent during this period.
- Average length of stay for all non-Medicare inpatients remained nearly unchanged at 3.9 days between 2006 and 2012.

Chart 6-10. Share of inpatient admissions preceded by emergency department visit by location, 2006–2012

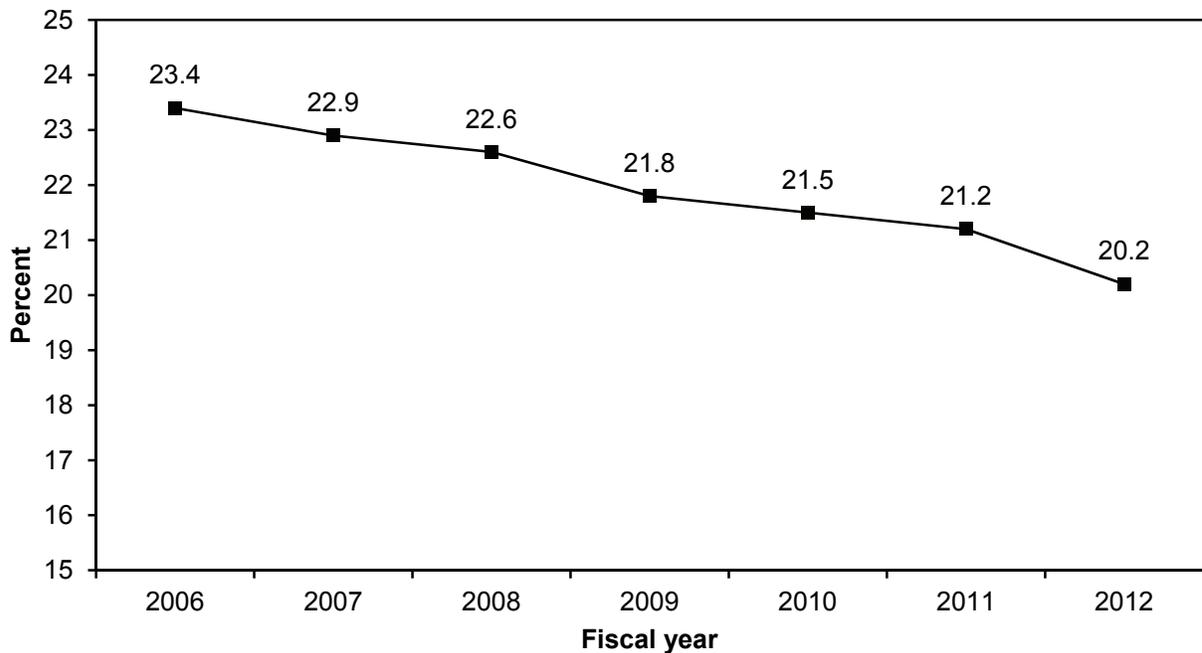


Note: IPPS (inpatient prospective payment system).

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

- Across all IPPS hospitals, the share of inpatient admissions preceded by an emergency department visit increased from 62.7 percent to 70.0 percent from 2006 to 2012, an increase of 7.3 percentage points. The 3.6 percentage point increase in the share of inpatient admissions preceded by an emergency department visit between 2011 and 2012 was the result of a decrease of 225,000 inpatient admissions preceded by an emergency department visit and a decrease of 438,000 inpatient admissions overall.
- The share of inpatient admissions preceded by an emergency department visit is consistently higher for rural hospitals than for urban hospitals. In 2012, approximately 73 percent of inpatient admissions provided at rural hospitals were preceded by an emergency department visit. By contrast, approximately 70 percent of inpatient admissions provided at urban hospitals were preceded by an emergency department visit.

Chart 6-11. Share of Medicare Part A fee-for-service beneficiaries with at least one hospitalization, 2006–2012

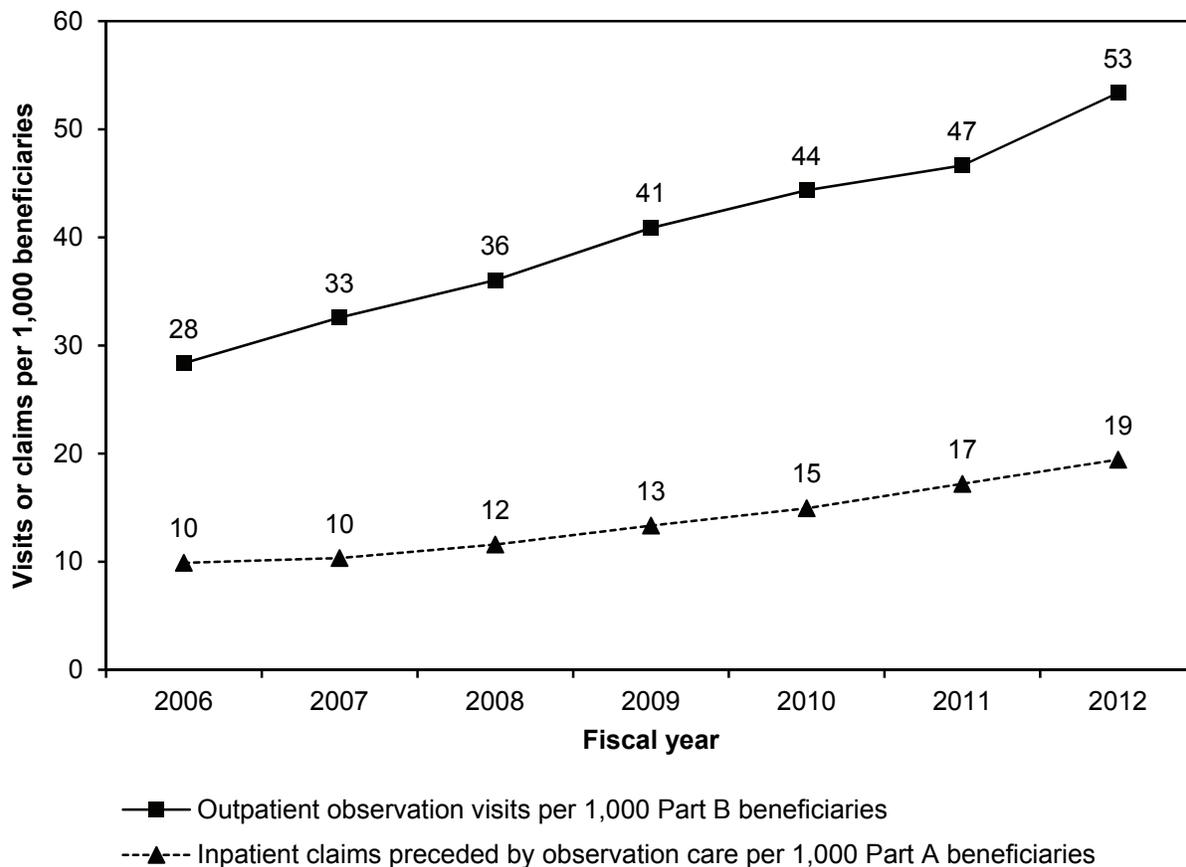


Note: Analysis excludes Medicare Advantage claims and claims for non-inpatient prospective payment system hospitals, such as critical access hospitals and hospitals located in Maryland.

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

- The share of Medicare fee-for-service beneficiaries with Part A coverage who had at least one inpatient hospitalization in a given year declined by over 3 percentage points from 2006 to 2012. In 2012, 20.2 percent of Medicare beneficiaries had at least one inpatient stay covered under Part A.
- A portion of the decline in beneficiaries' use of inpatient services could reflect the increase in the number of cases in which beneficiaries are served in outpatient observation status. In addition, this decline could also represent, in part, a general long-term trend in reduced inpatient use.

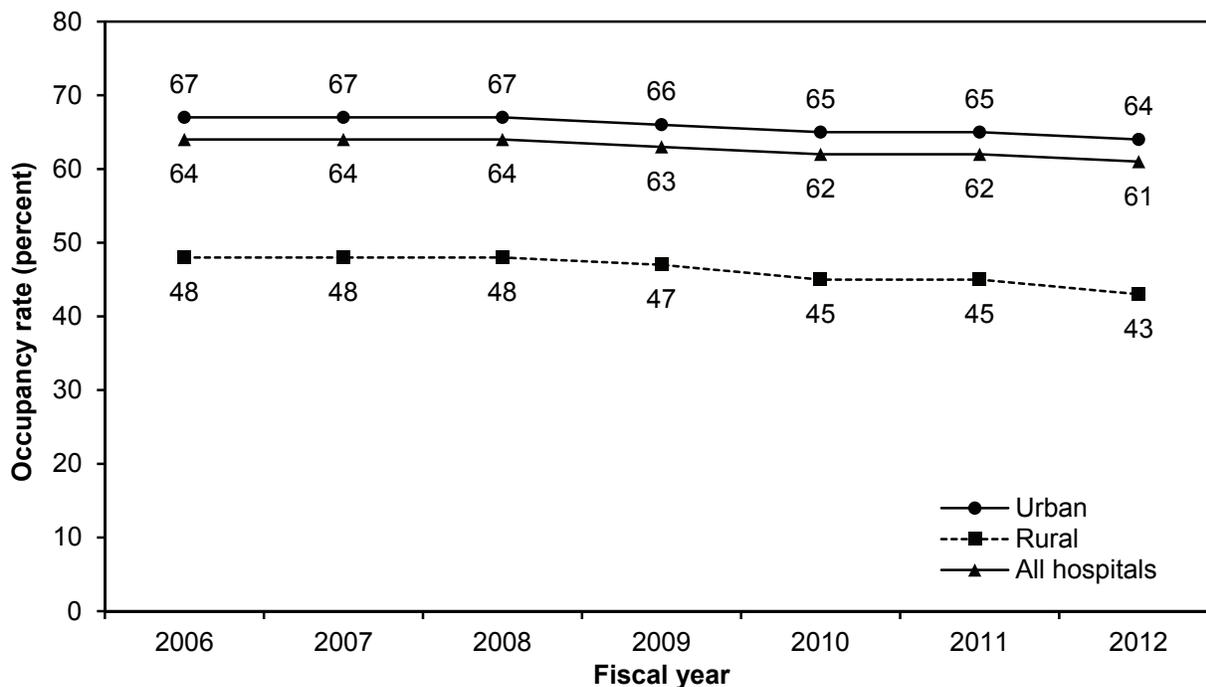
Chart 6-12. Number of Medicare outpatient observation visits and inpatient claims preceded by observation care per 1,000 beneficiaries increased from 2006 to 2012



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

- Hospitals use observation care to determine whether a patient should be hospitalized for inpatient care, transferred to an alternative treatment setting, or sent home.
- The number of Medicare outpatient observation visits increased approximately 88 percent from 2006 to 2012. During this period, the rate of outpatient observation visits per Part B beneficiary increased from approximately 28 visits per 1,000 beneficiaries to 53 visits per 1,000 beneficiaries.
- The number of Medicare inpatient admissions preceded by observation care increased approximately 97 percent from 2006 to 2012, jumping from 10 inpatient admissions preceded by observation per 1,000 Part A beneficiaries to 19 per 1,000 beneficiaries.

Chart 6-13. Hospital occupancy rates, 2006–2012



Note: Hospital occupancy rates were calculated as total bed days used (including swing bed days used) 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 but have edged down slightly in more recent years as total inpatient admissions have fallen. In 2012, occupancy rates were 61 percent across all hospitals, their lowest level in the past seven years.
- Occupancy rates are generally higher for urban than for rural hospitals. In 2012, the aggregate occupancy rate for urban hospitals was 64 percent, whereas the aggregate occupancy rate for rural hospitals was 43 percent.
- Occupancy rates vary across markets and within markets. For example, the average occupancy rate for hospitals in Boston, MA, was 68 percent in 2012, compared with an average occupancy rate of 49 percent for hospitals in Dallas, TX. In addition, individual hospital occupancy rates within geographic areas vary from 30 percent to over 90 percent in Atlanta, GA, and from 30 percent to 90 percent in Denver, CO.

Chart 6-14. Medicare inpatient payments, by source and hospital group, 2012

Hospital group	Percent of total payments					Total payments (millions)
	Base	IME	DSH	Outlier	Additional rural hospital*	
All hospitals	79.6%	5.0%	9.6%	4.0%	1.9%	\$110,423
Urban	79.4	5.5	10.1	4.3	0.8	99,484
Rural	82.0	0.8	4.8	1.2	11.8	10,938
Large urban	77.9	6.7	10.6	4.6	0.2	57,326
Other urban	81.4	3.8	9.4	3.8	1.7	42,156
Rural referral	87.7	1.1	7.4	2.2	1.5	3,126
SCH (federal rate)	84.0	3.3	7.9	1.7	3.2	1,253
SCH (HSP rate)	73.5	0.1	0.0	0.3	26.2	3,757
Medicare dependent	80.3	0.0	7.2	1.0	11.6	1,292
Other rural < 50 beds	82.6	0.2	6.3	1.1	10.4	303
Other rural ≥ 50 beds	88.2	0.5	6.9	1.4	3.0	1,210
Voluntary	80.3	5.3	8.8	4.0	1.8	78,721
Proprietary	82.6	1.9	11.1	3.3	1.2	17,395
Government	72.6	7.3	12.1	4.8	3.3	14,307
Major teaching	65.7	15.9	12.3	5.9	0.2	25,949
Other teaching	81.7	3.6	9.7	3.7	1.4	39,440
Nonteaching	85.9	0.0	7.9	3.1	3.3	45,033

Note: IME (indirect medical education), DSH (disproportionate share hospital), SCH (sole community hospital), HSP (hospital-specific payment [rate]). Chart includes all hospitals covered by Medicare's acute inpatient prospective payment system and excludes direct graduate medical education payments. Simulated payments reflect 2012 payment rules applied to actual number of cases in 2012. Chart excludes critical access hospitals. The Medicare-dependent hospital category includes facilities paid at either the HSP or the federal rate. Rows may not sum due to rounding.

*Additional rural hospital payments are the total payments made to hospitals beyond the federal base rate. This category includes rural add-on payments such as the SCH add-on, the Medicare-dependent hospital add-on, the expanded low-volume add-on, and the low-spending county add-on mandated by the Patient Protection and Affordable Care Act of 2010. For SCHs paid the HSP, this category also includes the payments hospitals receive that are 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 2012 to hospitals covered by the acute inpatient prospective payment system (IPPS) exceeded \$110 billion. About \$99.5 billion (90 percent) went to urban hospitals and \$10.9 billion went to rural hospitals. This figure does not reflect \$2.8 billion in payments to critical access hospitals (CAHs) for inpatient care. Cost-based reimbursement for CAHs results in payments that are significantly above what CAHs would have been paid under the IPPS.
- Special payments—which include IME, DSH, and outlier payments, as well as additional payments to rural hospitals through the SCH and Medicare-dependent hospital programs—account for 20.5 percent of all inpatient payments.
- Additional rural hospital payments increased in 2011 and 2012 because of two temporary provisions in the Patient Protection and Affordable Care Act of 2010. These provisions expanded the existing low-volume hospital add-on policy and created a new add-on policy for hospitals in counties with low levels of Medicare spending. In 2012, the expanded low-volume add-on amounted to approximately \$300 million in additional payments to hospitals.
- Outlier payments accounted for 4.0 percent of total inpatient payments in 2012. The legislatively specified calculation (outlier payments as a ratio of outlier payments to base payments plus outlier payments) produced an outlier share of 4.9 percent of IPPS payments in fiscal year 2012, slightly lower than the CMS goal of 5.1 percent.

Chart 6-15. Discharge destination of Medicare fee-for-service beneficiaries, 2006–2012

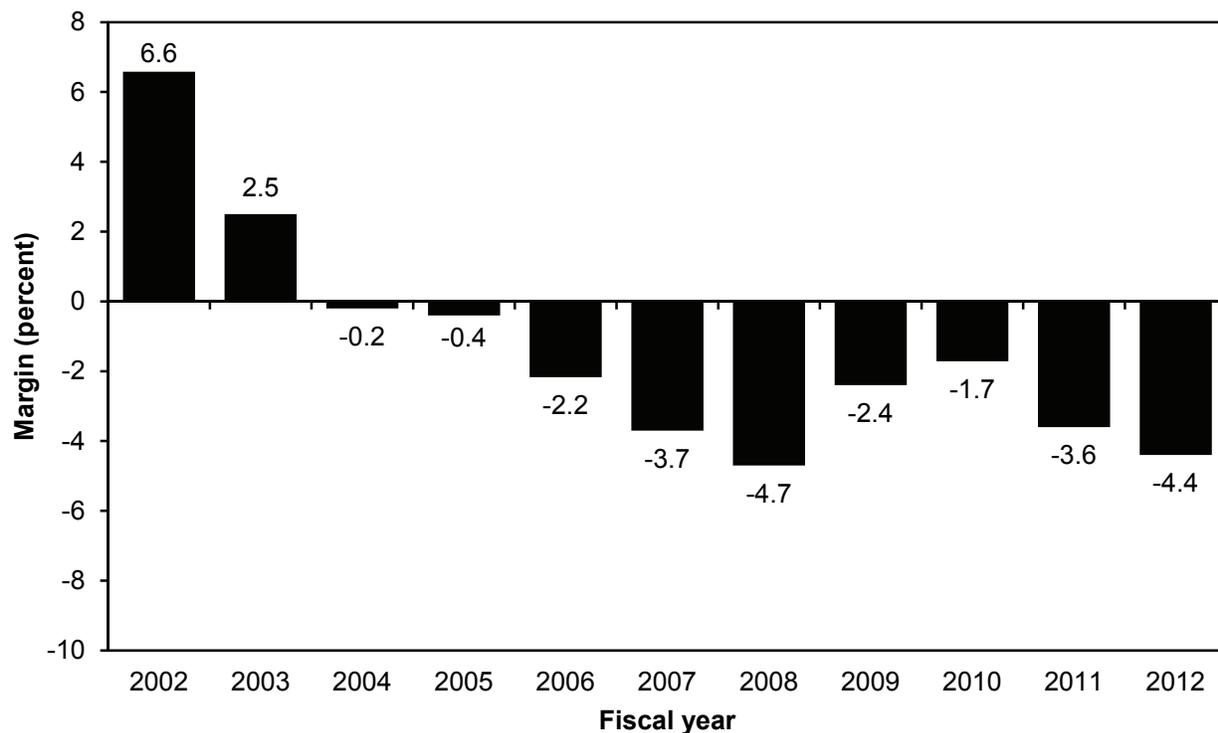
Destination	2006	2009	2012	Percent change 2006 to 2012
Home–self care	52.3%	50.1%	48.0%	–4.3%
Skilled nursing or swing bed	18.8	19.8	20.3	1.5
Home with organized home health care	13.8	15.2	15.9	2.1
Inpatient rehabilitation facility	3.4	3.3	3.5	0.1
Long-term care hospital	0.9	1.1	1.2	0.3
Inpatient psychiatric facility	0.4	0.5	0.5	0.1
Hospice	1.6	2.1	2.7	1.0
Other setting (e.g., ICF, nursing facility)	2.0	1.6	1.7	–0.3
Transferred to other acute care hospital	2.5	2.2	2.2	–0.3
Left against medical advice	0.6	0.7	0.8	0.1
Died in hospital	3.8	3.5	3.3	–0.5

Note: ICF (Intermediate care facility).

Source: Medicare inpatient claims data.

- In 2012, slightly less than half 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 different post-acute care providers, particularly home health care, skilled nursing care, and hospice.
- About one in five beneficiaries are discharged to skilled nursing care, either in a SNF or hospital swing bed. The share of beneficiaries discharged to SNF-level care increased 1.5 percentage points between 2006 and 2012.
- An increasing share of beneficiaries are also being discharged home with organized home health care, going from 13.8 percent of discharges in 2006 to 15.9 percent in 2012.
- About 5 percent of beneficiaries are discharged to hospital-level post-acute care in an inpatient rehabilitation facility (3.5 percent), long-term care hospital (1.2 percent), or inpatient psychiatric facility (0.5 percent).
- Discharges to hospice care have shown substantial growth, rising from 1.6 percent of discharges in 2006 to 2.7 percent of discharges in 2012. A little more than half of these hospice discharges are to medical facility–level care rather than to home care.
- The share of patients dying in the hospital or being transferred to another acute care hospital has been declining.

Chart 6-16. Medicare acute inpatient PPS margin, 2002–2012

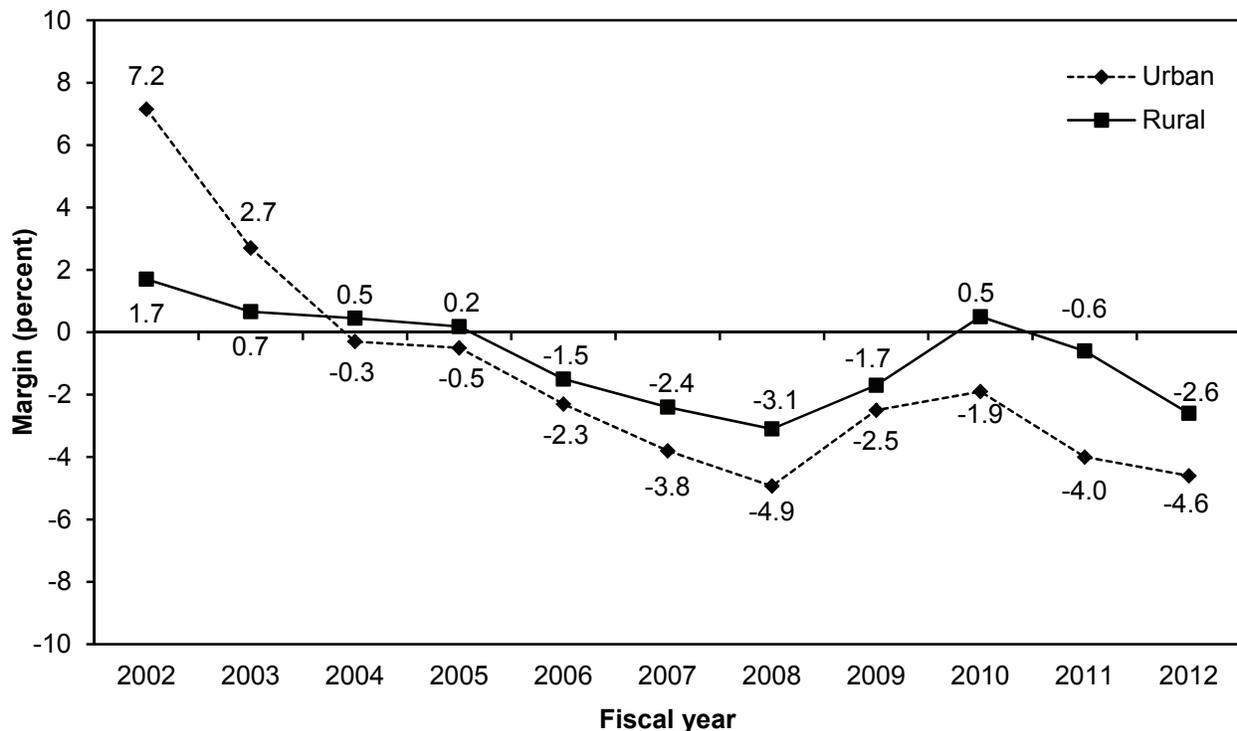


Note: PPS (prospective payment system). A margin is calculated as revenue minus costs, divided by revenue. Data are based on Medicare-allowable costs and exclude critical access hospitals. “Medicare acute inpatient margin” includes services covered by the acute care inpatient PPS. Maryland hospitals are excluded from this analysis.

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

- Medicare’s acute inpatient margin reflects payments and costs for services covered by Medicare’s inpatient hospital PPS. The inpatient margin may be influenced by how hospitals allocate overhead costs across service lines. Only by combining data for all major services can we estimate Medicare costs without the potential influence of how overhead costs are allocated (see Chart 6-18).
- Following implementation of the Balanced Budget Act of 1997, inpatient margins declined over the next 10 years as costs rose faster than the 3 percent average annual increase in Medicare payments. In 2012, the margin was –4.4 percent, down from –3.6 percent in 2011.
- Medicare inpatient margins vary widely. In 2012, one-quarter of hospitals had Medicare inpatient margins that were 6.4 percent or higher, and another one-quarter had inpatient margins that were –19.0 percent or lower. Thirty-eight percent of hospitals had positive inpatient Medicare margins in 2012.

Chart 6-17. Medicare acute inpatient PPS margin, by urban and rural location, 2002–2012

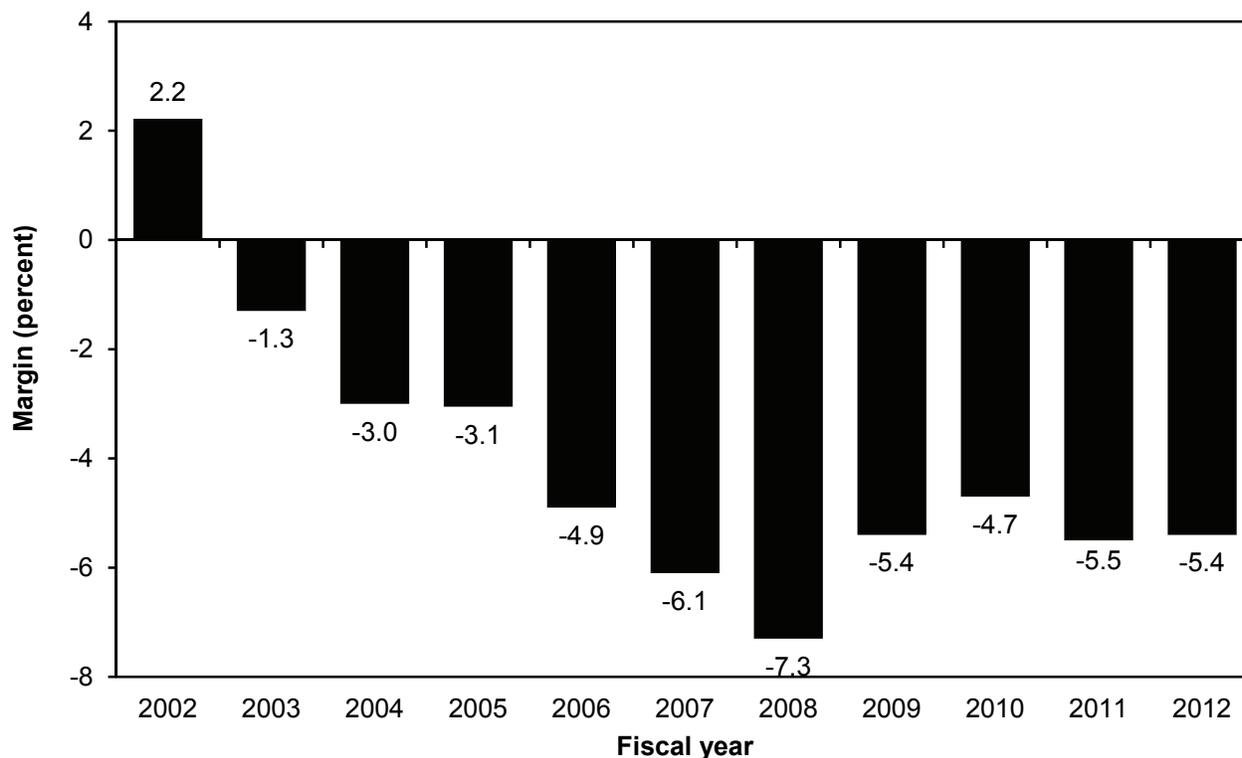


Note: PPS (prospective payment system). A margin is calculated as revenue minus costs, divided by revenue. Data are based on Medicare-allowable costs and exclude critical access hospitals. “Medicare acute inpatient PPS margin” includes services covered by the acute care inpatient PPS. Maryland hospitals are excluded from this analysis.

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

- Urban hospitals historically had higher Medicare inpatient margins than rural hospitals (not shown in chart), but the gap narrowed in 2002 and 2003. One factor in this gap was that urban hospitals had greater success in controlling cost growth, at least partly in response to pressures from managed care. From 2004 to 2012, rural hospitals’ inpatient margins were slightly higher than those for urban hospitals.
- In 2012, the margins of rural and urban hospitals were –2.6 percent and –4.6 percent, respectively. The narrowing and subsequent reversal between these two groups of hospitals since 2002 was the result of payment policies targeted at raising rural hospital payments, as well as growth in the number of critical access hospitals, which removed many rural hospitals with low margins from the PPS.

Chart 6-18. Overall Medicare margin, 2002–2012

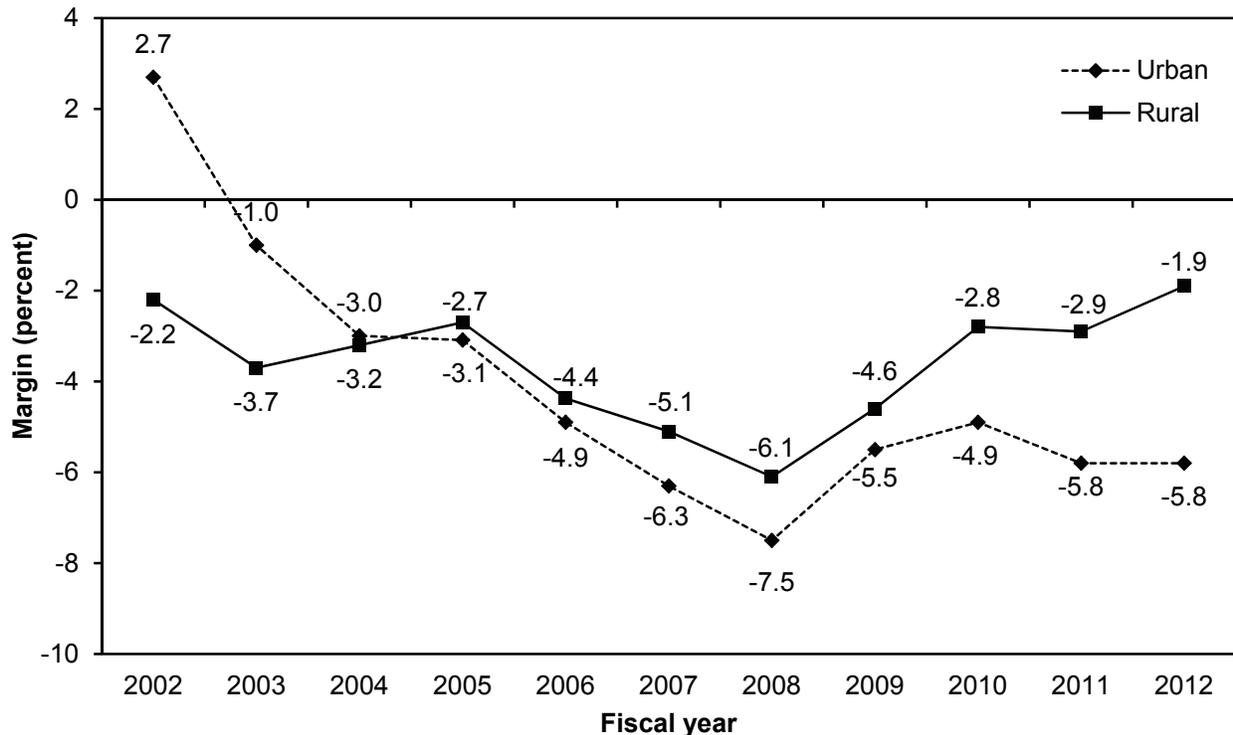


Note: A margin is calculated as revenue minus costs, divided by revenue. Data are based on Medicare-allowable costs and exclude critical access hospitals. "Overall Medicare margin" covers the costs and payments of acute inpatient, outpatient, inpatient psychiatric and rehabilitation unit, skilled nursing facility, and home health services, as well as graduate medical education and bad debts. 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 and bad debts. The overall margin follows a trend similar to that for the Medicare inpatient margin.
- The overall Medicare margin in 2002 was 2.2 percent. In fiscal year 2012, it was –5.4 percent.
- In 2012, one-quarter of hospitals had overall Medicare margins of 3.4 percent or higher, and another one-quarter had margins of –18.3 percent or lower. About one-third of hospitals had positive overall Medicare margins in 2012.

Chart 6-19. Overall Medicare margin, by urban and rural location, 2002–2012

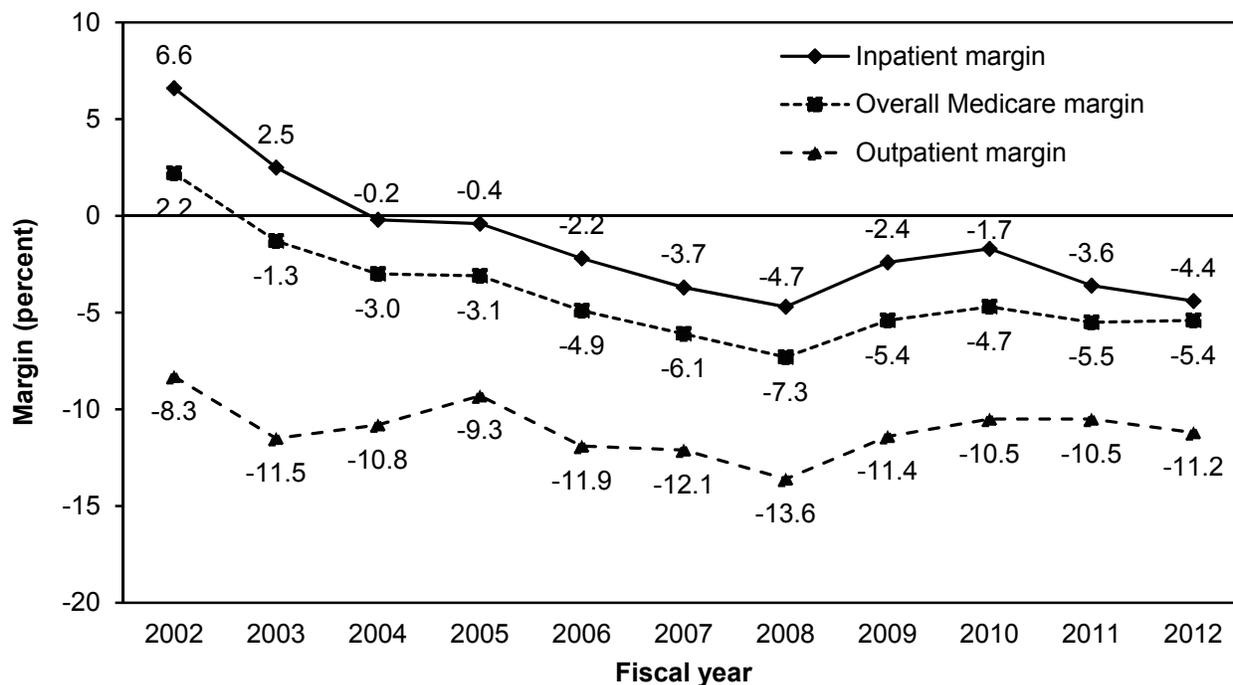


Note: A margin is calculated as revenue minus costs, divided by revenue. Data are based on Medicare-allowable costs and exclude critical access hospitals. “Overall Medicare margin” covers the costs and payments of acute hospital inpatient, outpatient, inpatient psychiatric and rehabilitation unit, skilled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

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

- As with inpatient margins, overall Medicare margins historically were higher for urban hospitals than for rural hospitals, but since 2005, overall Medicare margins for rural hospitals have exceeded those for urban hospitals.
- 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 –2.2 percent for rural hospitals. In 2004, the overall Medicare margin for urban hospitals was –3.0 percent, compared with –3.2 percent for rural hospitals. However, since then, the overall Medicare margin for rural hospitals has been higher than for urban hospitals. Most recently, in 2012, the overall Medicare margin for urban hospitals was –5.8 percent, compared with –1.9 percent for rural hospitals. 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.

Chart 6-20. Medicare hospital outpatient, inpatient, and overall Medicare margins, 2002–2012

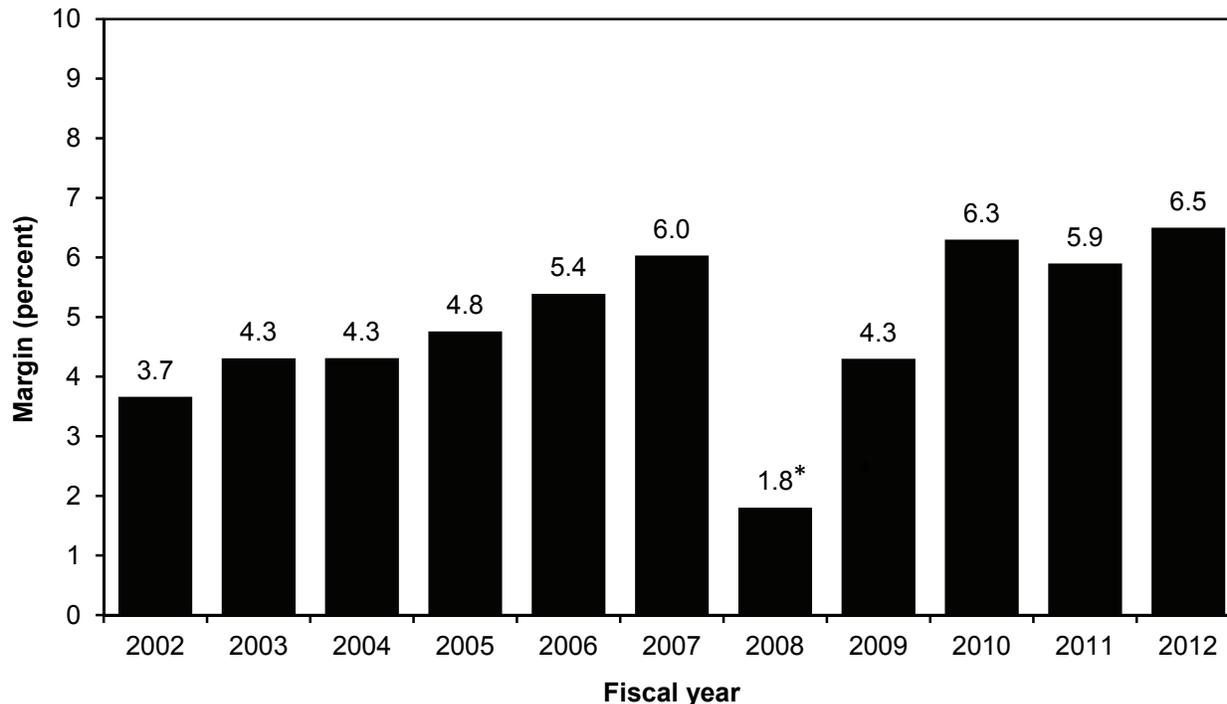


Note: A margin is calculated as revenue minus costs, divided by revenue. Data are based on Medicare-allowable costs. Analysis excludes critical access hospitals. “Overall Medicare margin” covers the costs and payments of hospital inpatient, outpatient, psychiatric, and rehabilitation services (not paid under the prospective payment system); hospital-based skilled nursing facilities and home health services; and graduate medical education. Maryland hospitals are excluded from this analysis.

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

- In 2012, while the aggregate outpatient margin was –11.2 percent, 25 percent of hospitals had margins of –21.0 percent or lower, and 25 percent had margins of 4.2 percent or higher. Outpatient margins also differed widely across hospital categories.
- Hospitals’ overhead costs are allocated across different types of services (e.g., inpatient and outpatient). Therefore, margins for hospital inpatient and outpatient services must be considered in the context of Medicare payments and hospital costs for the full range of services provided to Medicare beneficiaries, or what we refer to as the “overall Medicare margin.”
- Inpatient margins are higher than outpatient margins due to indirect medical education and disproportionate share add-on payments, which increased inpatient payments by roughly 17 percent in 2012.

Chart 6-21. Hospital total all-payer margin, 2002–2012



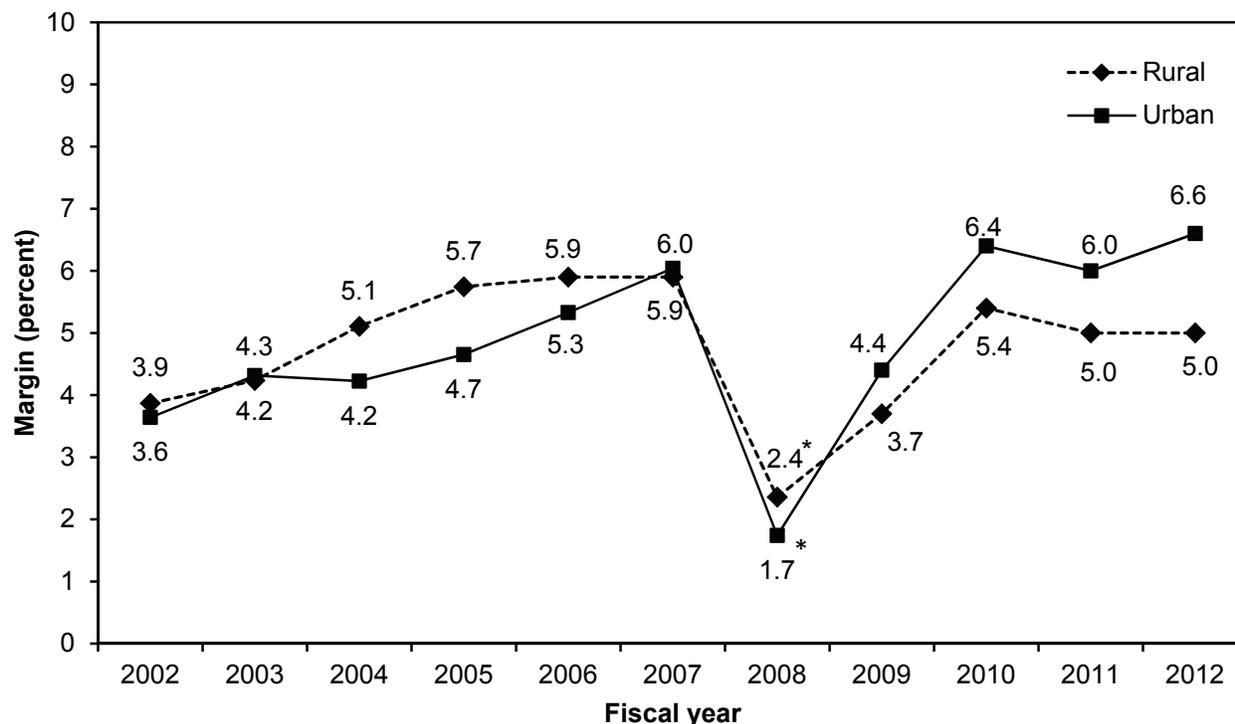
Note: A margin is calculated as revenue minus costs, divided by revenue. "Total all-payer margin" includes all patient care services funded by all payers, plus nonpatient revenue. Analysis excludes critical access hospitals. Maryland hospitals are also excluded from this analysis.

*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 revenue. Other types of margins we track—Medicare inpatient margin and overall Medicare margin—are operating margins that do not include investment revenue.
- From 2002 to 2007, total margins increased to the highest level in a decade. In 2008, the total margin declined to 1.8 percent. 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. In 2012, total margins increased slightly to 6.5 percent from 5.9 percent in 2011, reaching their highest levels since we started tracking total all-payer margins.
- In 2012, 75 percent of hospitals had positive total margins. The total margin varied much less than the Medicare inpatient or overall Medicare margin. In 2012, one-quarter of prospective payment system hospitals had total margins that were 9.9 percent or higher, while another one-quarter had margins that were zero or lower, a spread of 10 percentage points compared with a 25 percentage point interquartile spread for Medicare inpatient margins and a 22 percentage point interquartile spread for overall Medicare margins.

Chart 6-22. Hospital total all-payer margin, by urban and rural location, 2002–2012

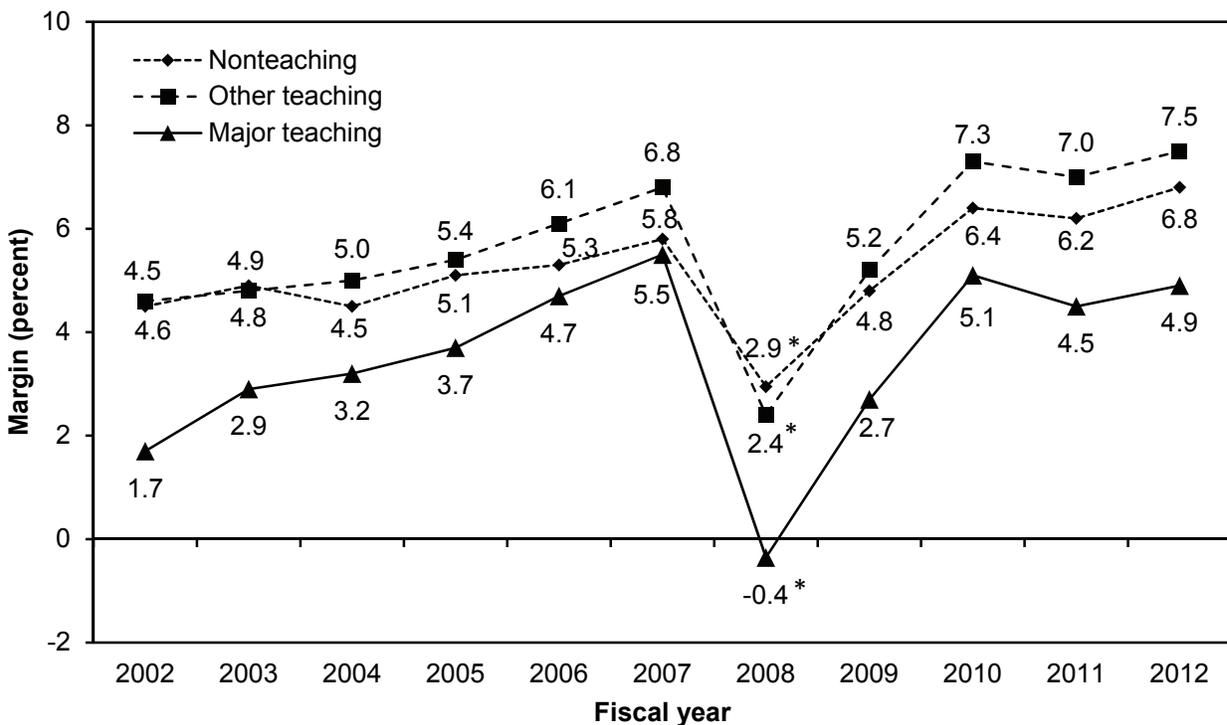


Note: A margin is calculated as revenue minus costs, divided by revenue. “Total all-payer margin” includes all patient care services funded by all payers, plus nonpatient revenue such as investment revenues. Analysis excludes critical access hospitals. Maryland hospitals are also excluded from this analysis.
 * 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 2012, total margins were 6.6 percent for urban hospitals and 5.0 percent for rural hospitals. From 2009 to 2012, the growth in urban and rural total all-payer margins reflects low cost growth and increasing private payer reimbursement rates.
- In 2008, both rural and urban hospitals experienced their lowest level of total (all-payer) margins in the past 15 years. Hospitals’ total margins include all patient care services funded by all payers, plus nonpatient revenue, such as investment revenue. The 2008 decline of the U.S. stock market resulted in significant investment losses for hospitals, which resulted in a corresponding decline in total margins. Other types of margins we track—Medicare inpatient margin and overall Medicare margin—are operating margins that do not include investment revenue.

Chart 6-23. Hospital total all-payer margin, by teaching status, 2002–2012



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. Maryland hospitals are also excluded from this analysis.
*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 2012, the total margin for major teaching hospitals stood at 4.9 percent, compared with other teaching hospitals and nonteaching hospitals at 7.5 percent and 6.8 percent, respectively.
- Beginning in 2002, major teaching hospitals' total (all-payer) margins steadily increased, reaching 5.5 percent in 2007. However, in 2008, this trend was interrupted by a steep decline in their investment revenues, resulting in a negative total margin. Since then, total margins have recovered and remain above their historic average.

Chart 6-24. Medicare margins by teaching and disproportionate share status, 2011

Hospital group	Share of hospitals	Share of Medicare inpatient payments	Medicare inpatient margin	Overall Medicare margin
All hospitals	100%	100%	-4.4%	-5.4%
Major teaching	10	27	3.9	-2.6
Other teaching	21	32	-5.1	-5.2
Nonteaching	69	40	-9.4	-7.3
Both IME and DSH	27	55	0.2	-3.2
IME only	4	5	-14.4	-13.3
DSH only	54	33	-6.7	-5.5
Neither IME nor DSH	14	7	-21.3	-14.9

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

Source: MedPAC analysis of 2011 Medicare cost report data from CMS.

- By contrast with all-payer total margins, major teaching hospitals had the highest Medicare inpatient and overall Medicare margins in 2012. 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 2012, the Medicare inpatient margin of these hospitals was about -21 percent, well below the margins of major teaching hospitals (3.9%) and the all-hospital average (-4.4%).
- The pattern of Medicare inpatient and overall Medicare margins by teaching status—major teaching hospitals have higher Medicare margins than other hospitals—is the opposite of the pattern for total margins by teaching status—major teaching hospitals have lower total (all-payer) margins than other hospitals (see Chart 6-22).

Chart 6-25. Financial pressure leads to lower costs

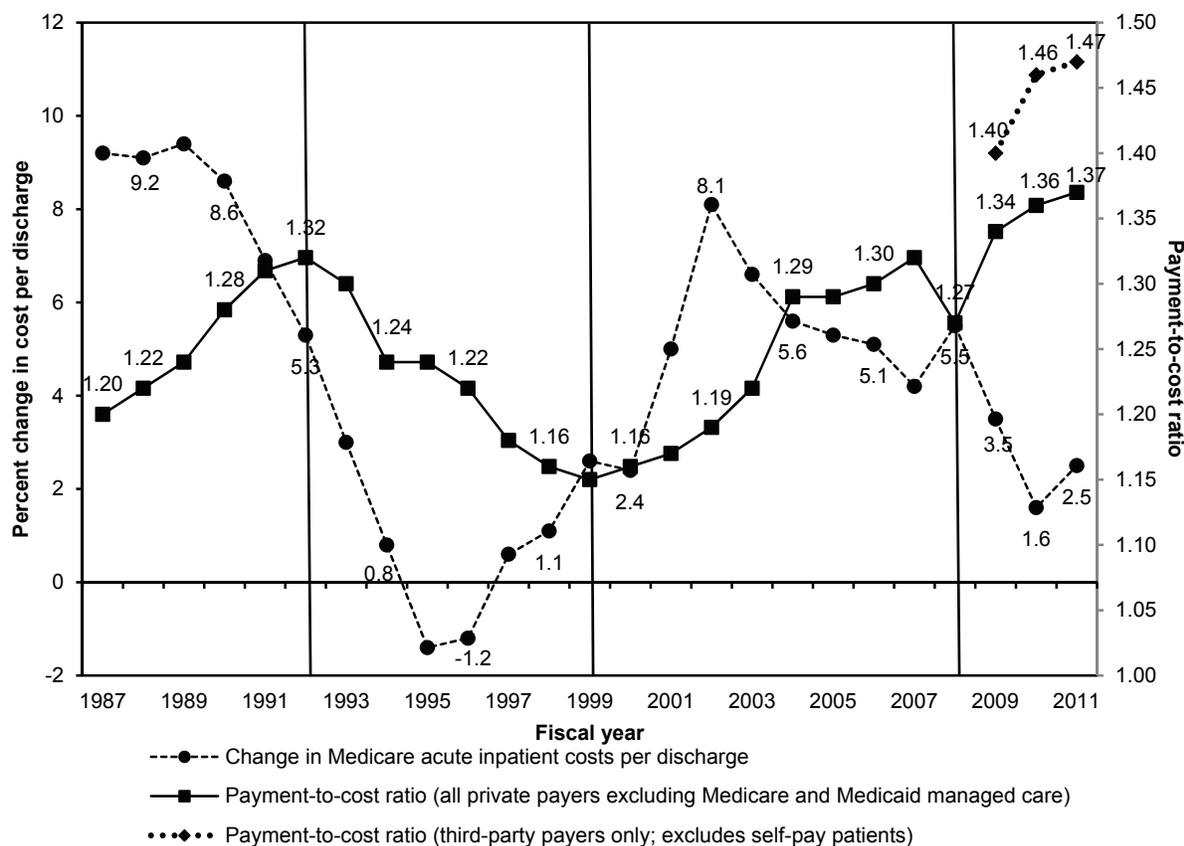
	Level of financial pressure, 2007–2011		
	High pressure (non-Medicare margin ≤ 1%)	Medium pressure	Low pressure (non-Medicare margin > 5%)
Number of hospitals	723	444	1,655
Financial characteristics, 2012 (medians)			
Non-Medicare margin (private, Medicaid, uninsured)	-1.6%	4.2%	13.0%
Standardized cost per discharge (as a share of the national median)			
For-profit and nonprofit hospitals	91	98	104
Nonprofit hospital	91	99	105
For-profit hospital	91	95	100
Annual growth in cost per discharge, 2009–2012	3%	3%	2%
Overall 2012 Medicare margin (medians)	2%	-3%	-10%
Patient characteristics (medians)			
Total hospital discharges in 2012	4,499	7,164	7,421
Medicare share of inpatient days	43%	40%	41%
Medicaid share of inpatient days	12	10	9
Medicare case-mix index	1.33	1.45	1.52

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 2013. “High-pressure hospitals” are defined as those with a median non-Medicare profit margin of 1 percent or less from 2007 to 2011 and a net worth that grew by less than 1 percent per year from 2007 to 2011 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 2007 to 2011 and a net worth that grew by more than 1 percent per year from 2007 to 2011 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.

Chart 6-26. Change in Medicare hospital inpatient costs per discharge and private payer payment-to-cost ratio, 1987–2011

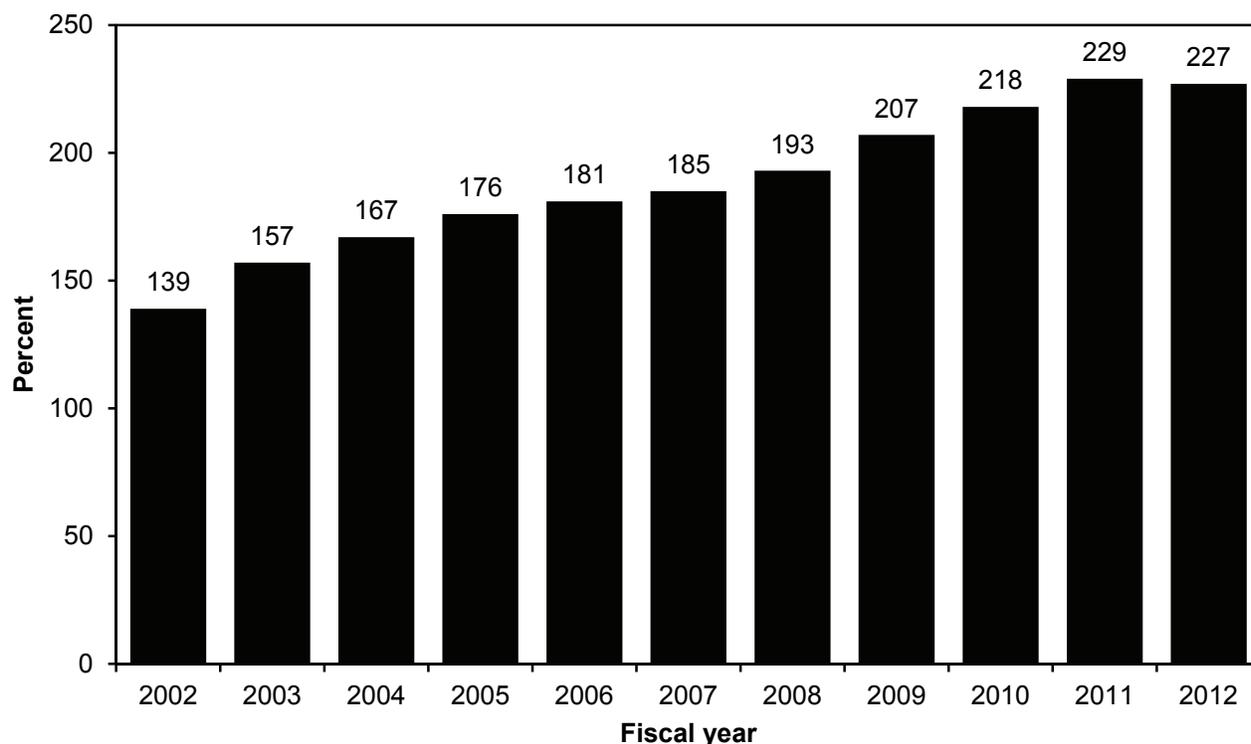


Note: Data are for community hospitals (including critical access hospitals and Maryland hospitals) and cover all hospital services. Imputed values were used for missing data (about one-third of observations). Data for 2006–2010 exclude Medicare and Medicaid managed care patients from the private payment-to-cost ratio. The private payment-to-cost ratio includes self-pay patients.

Source: MedPAC analysis of Medicare Cost Report files from CMS and CMS's rules for the acute inpatient prospective payment system and American Hospital Association Annual Survey of Hospitals.

- Changes in Medicare costs per discharge suggest that hospitals have responded to the incentives posed by the rise and fall of financial pressure from private payers over four distinct periods between 1987 and 2011.
- During the first period, 1987–1992, private payers' payments rose much faster than the cost of treating patients (seen in the chart as a steep increase in the payment-to-cost ratio). This result suggests minimal pressure from private payers. Medicare costs per discharge rose 8.3 percent per year during these years, more than 3 percentage points a year above the increase in Medicare's market basket index.
- As health maintenance organizations and other private insurers exerted more pressure during the second period, 1993–1999, the private payer payment-to-cost ratio dropped substantially. The rate of cost growth plummeted to an average of only 0.8 percent per year, which was more than 2 percentage points below the average increase in the market basket.
- As pressure from private payers waned after 1999, the private payer payment-to-cost ratio rose sharply, and hospital cost growth exceeded growth in the market basket by 2 percentage points a year. Between 2005 and 2008, the growth in the private payer payment-to-cost ratio (profit margins) slowed, and in 2008, cost growth more closely matched the market basket.
- Since 2008, cost growth has slowed. This decline is partially due to the general slowing of the economy, which has reduced input price inflation. In addition, uncertainty about economic growth in future years and enactment of laws restraining Medicare and Medicaid prices may be inducing hospitals to restrain their cost growth down to the level of input price inflation. The combination of lower annual cost growth and continued increases in private insurers' prices has resulted in increases in the profit margins on privately insured patients.

Chart 6-27. Markup of hospital charges above costs for Medicare services, 2002–2012

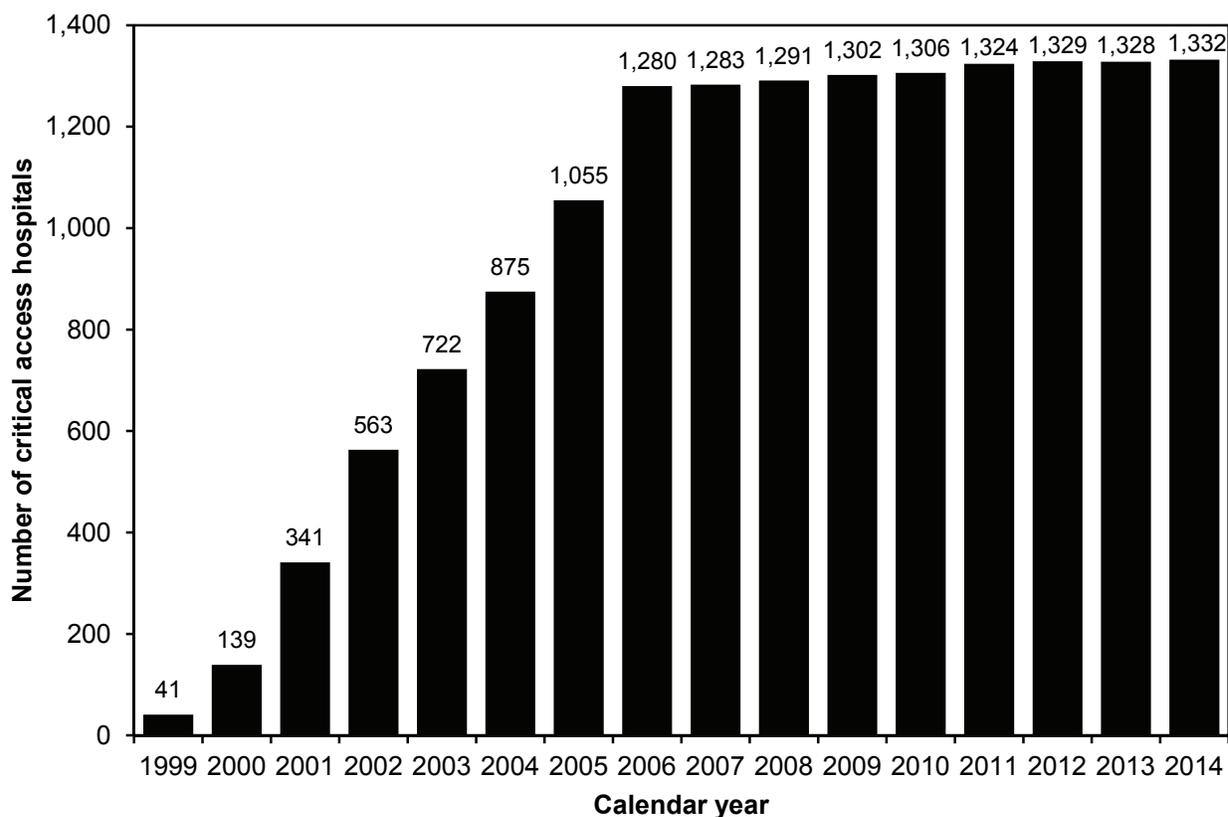


Note: Analysis includes all community hospitals (including critical access hospitals and hospitals in Maryland). Markups are calculated as the amount of charges over the amount of costs, minus the amount that charges equal costs (charges/costs – 1).

Source: American Hospital Association Annual Survey of Hospitals.

- The average markup of hospitals' charges above costs rose from about 139 percent in 2002 to 227 percent in 2012. Hospital charges (\$604 billion) are now more than three times costs (\$185 billion).
- 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 unusually large increases in charges in 2003 and 2004 may have resulted from some hospitals manipulating Medicare outlier payments. Toward the end of fiscal year 2003, Medicare revised its outlier policy in an attempt to curb hospitals' opportunity to increase their outlier payments through excessive increases in charges.
- The markup of charges over costs is generally higher for urban hospitals (237 percent in 2012) than for rural hospitals (164 percent in 2012).
- Among urban hospitals in 2012, the markup of charges over costs was higher for for-profit hospitals (462 percent) than for nonprofit hospitals (234 percent). Rural for-profit hospitals have a higher markup of charges over costs (374 percent) than non-profit hospitals (175 percent).

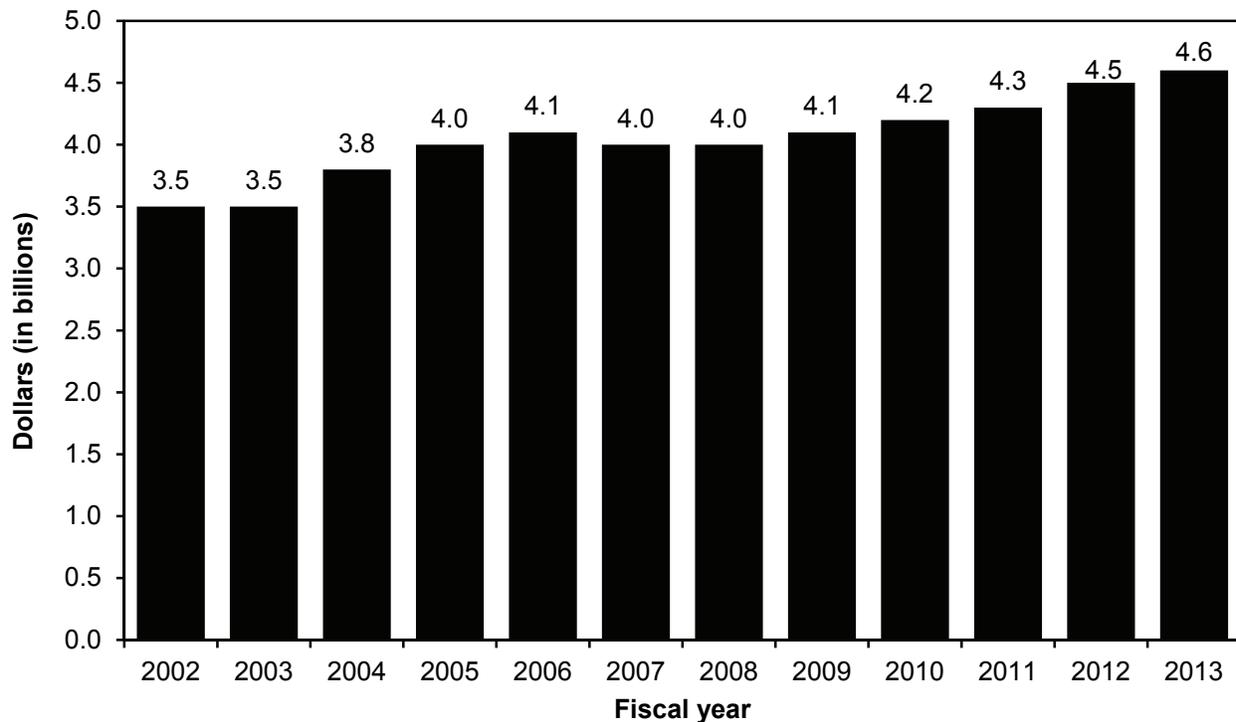
Chart 6-28. Number of critical access hospitals, 1999–2014



Source: The Medicare Rural Hospital Flexibility Program and CMS.

- The number of critical access hospitals (CAHs) grew rapidly from 1999 to 2006 but has since leveled off at approximately 1,300 facilities.
- The increase in CAHs between 1999 and 2006 is partly due to a series of legislative changes that made conversion to CAH status easier and expanded the services that qualify for cost-based reimbursement. Currently, CAHs are paid their Medicare costs plus 1 percent for inpatient services, outpatient services (including laboratory and therapy services), and post-acute services in swing beds.
- Before 2006, a hospital could convert to CAH status if (1) it was 35 miles by primary road or 15 miles by secondary road from the nearest hospital, or (2) the state waived the distance requirement by declaring the hospital a “necessary provider.” Starting in 2006, states could no longer waive the distance requirement. While most existing CAHs fail the distance test, they are grandfathered into the program. Among small rural hospitals that have not converted, most would not meet the distance requirement. Therefore, we expect the number of CAHs to remain fairly constant going forward, absent any additional statutory changes.

Chart 6-29. Medicare payments to inpatient psychiatric facilities, 2002–2013



Source: CMS, Office of the Actuary.

- The inpatient psychiatric facility prospective payment system started January 1, 2005. The new payment system was phased in over a three-year period.
- Medicare program spending for beneficiaries' care in inpatient psychiatric facilities grew an average of 2.7 percent per year between 2002 and 2013.
- Inpatient psychiatric care furnished in scatter beds in acute care hospitals and paid under the acute care inpatient prospective payment system is not included in this chart.

Chart 6-30. Number of inpatient psychiatric facility cases increased in 2011

	2006	2007	2008	2009	2010	2011	Average annual change	
							2006–2009	2009–2011
Cases	474,417	456,045	442,759	431,276	447,897	450,655	–3.1%	2.2%
Cases per 1,000 FFS beneficiaries	13.1	12.8	12.5	12.1	12.4	12.4	–2.5	1.1
Spending per FFS beneficiary	\$104.9	\$106.2	\$109.1	\$110.3	\$115.6	\$118.1	1.7	3.5
Payment per case	\$7,989	\$8,315	\$8,742	\$9,080	\$9,288	\$9,515	4.4	2.4
Payment per day	\$677	\$698	\$728	\$763	\$782	\$803	4.1	2.6
Length of stay (in days)	13.0	13.0	13.1	13.1	13.0	12.7	0.3	–1.5

Note: FFS (fee-for-service). Numbers of cases and patients reflect Medicare FFS use of services furnished in inpatient psychiatric facilities (IPFs). Scatter bed cases and spending are excluded, as are cases and spending for beneficiaries enrolled in Medicare Advantage plans.

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

- Between 2006 and 2009, the number of IPF cases per FFS beneficiary fell, on average, 2.5 percent per year. Between 2009 and 2011, however, the number of cases per FFS beneficiary increased 1.1 percent.

Chart 6-31. Inpatient psychiatric facilities, 2004–2011

Type of IPF	TEFRA		PPS						Average annual change 2004–2011
	2004	2005	2006	2007	2008	2009	2010	2011	
All	1,657	1,645	1,647	1,652	1,632	1,609	1,591	1,517	–1.3%
Urban	1,301	1,295	1,284	1,277	1,261	1,242	1,223	1,165	–1.6
Rural	356	350	363	375	371	361	368	352	–0.2
Freestanding	352	366	396	412	419	432	447	418	2.5
Hospital-based units	1,305	1,279	1,251	1,240	1,213	1,177	1,144	1,099	–2.4
Nonprofit	949	917	903	879	864	835	804	752	–3.3
For profit	327	347	348	365	357	375	386	401	3.0
Government	381	381	396	408	411	399	401	364	–0.6

Note: IPF (inpatient psychiatric facility), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system). CMS began a three-year phase-in of the IPF PPS on January 1, 2005. Numbers are for facilities that submitted valid Medicare cost reports in the given fiscal year.

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

- In 2011, 418 freestanding IPFs and 1,099 hospital-based psychiatric units provided inpatient-level care to Medicare beneficiaries. Since 2004, the number of psychiatric units filing Medicare cost reports has declined, on average, more than 2 percent per year. At the same time, the number of freestanding IPFs has grown, on average, 2.5 percent per year.
- A growing share of Medicare IPF users receives care in for-profit facilities. Since 2004, the number of nonprofit IPFs has fallen 3.3 percent per year, on average, compared with a 3.0 percent increase in for-profit IPFs.

Chart 6-32. One diagnosis accounted for almost three-quarters of IPF cases in 2011

MS-DRG	Diagnoses	Percentage
885	Psychosis	72.8%
057	Degenerative nervous system disorders without MCC	7.6
884	Organic disturbances and mental retardation	6.0
897	Alcohol/drug abuse or dependency, no rehabilitation, without MCC	4.3
881	Depressive neurosis	3.4
882	Neurosis except depressive	1.2
895	Alcohol/drug abuse or dependency with rehabilitation, without MCC	1.0
880	Acute adjustment reaction and psychosocial dysfunction	0.7
056	Degenerative nervous system disorders with MCC	0.6
886	Behavioral and developmental disorders	0.5
883	Disorders of personality and impulse control	0.4
894	Alcohol/drug use—left AMA	0.2
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	0.9
	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).

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

- Medicare patients in IPFs are generally assigned to 1 of 17 psychiatric MS-DRGs.
- The most frequently occurring IPF diagnosis—accounting for about 73 percent of IPF discharges in 2011—was psychosis. In 2011, the next most common discharge diagnosis, accounting for almost 8 percent of IPF cases, was degenerative nervous system disorder.

Chart 6-33. Characteristics of IPF users, 2011

Characteristic	Share of total IPF users	Share of users with more than one IPF stay
Current eligibility status*		
Aged	41.1%	28.7%
Disabled	58.8	71.2
ESRD only	0.1	0.1
Age (years)		
<45	23.9	31.2
45–64	34.5	39.6
65–79	24.1	19.2
80+	17.5	10.1
Race		
White	78.8	76.0
African American	15.8	18.4
Hispanic	2.6	3.0
Other	2.9	2.6
All	100.0	27.9

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.

- About 59 percent of Medicare beneficiaries who had at least one IPF stay in 2011 qualified for Medicare because of a disability. These beneficiaries tend to be younger and poorer than the typical fee-for-service beneficiary.
- About 28 percent of Medicare beneficiaries who used an IPF in 2011 had more than one IPF stay during the year. Beneficiaries who qualified for Medicare because of a disability were far more likely to have multiple IPF stays than other beneficiaries
- A majority of beneficiaries admitted to IPFs are dually eligible for Medicare and Medicaid. In 2011, 57 percent of Medicare beneficiaries with at least one IPF stay were dually eligible for at least one month of the year (data not shown).

SECTION

7

Ambulatory care

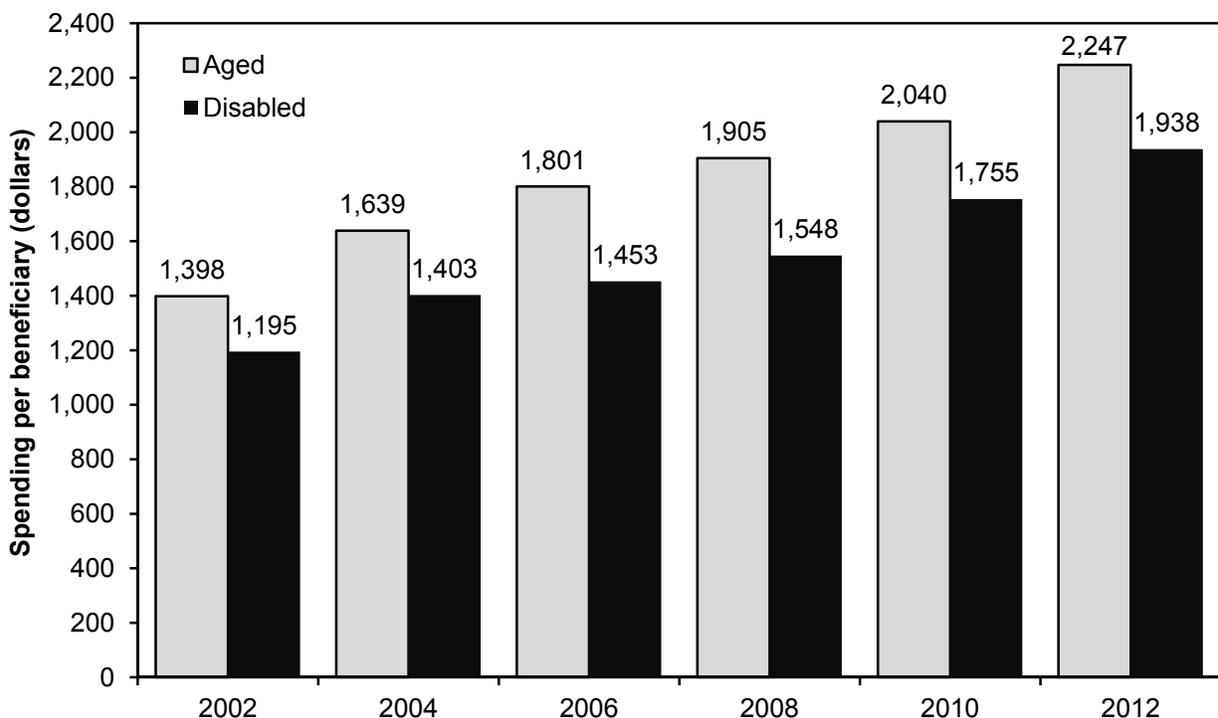
**Physicians and other
health professionals**

Hospital outpatient services

Ambulatory surgical centers

Imaging services

Chart 7-1. Medicare spending per FFS beneficiary on physician fee-schedule services, 2002–2012

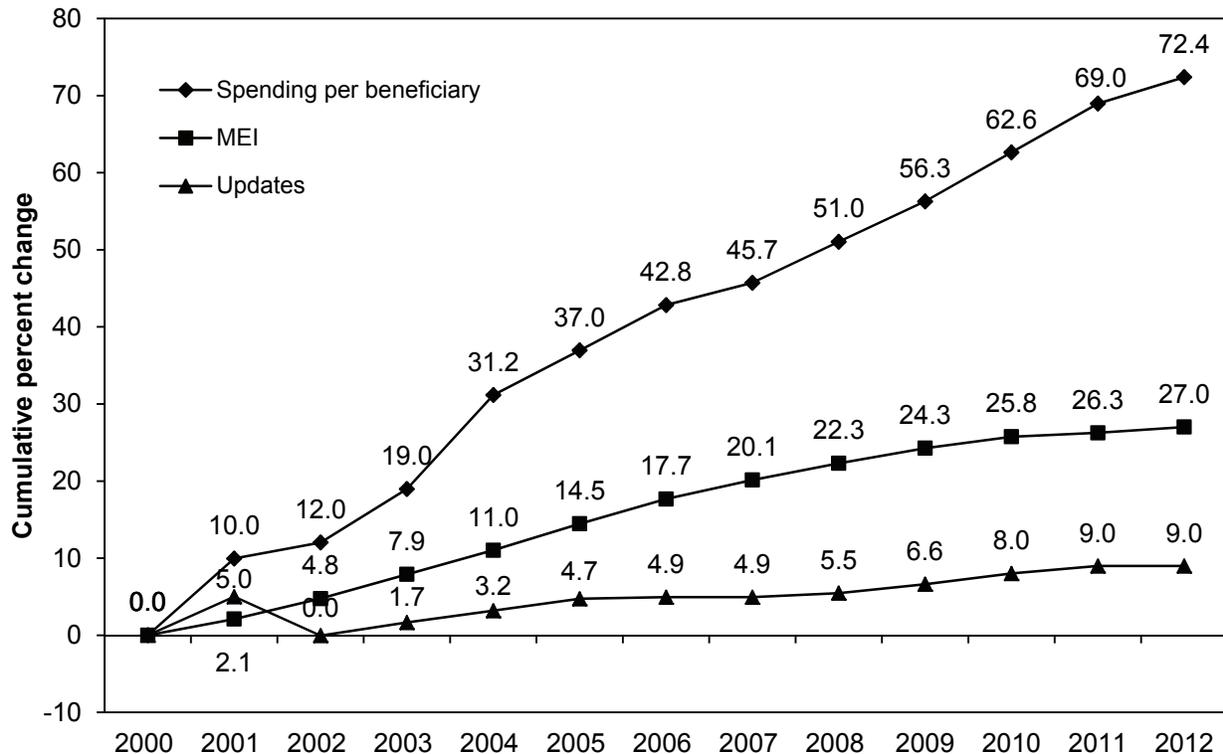


Note: FFS (fee-for-service). Dollar amounts are Medicare spending only and do not include beneficiary coinsurance. The category “disabled” excludes beneficiaries who qualify for Medicare because they have end-stage renal disease. All beneficiaries age 65 or over are included in the aged category.

Source: **AT THE TIME THIS DATA BOOK WAS PREPARED, THE MEDICARE TRUSTEES' REPORT (WHICH IS THE CUSTOMARY SOURCE OF DATA FOR THIS CHART) HAD NOT YET BEEN RELEASED FOR 2014. THIS CHART REFLECTS DATA FROM THE 2013 MEDICARE TRUSTEES' REPORT. THE READER IS ADVISED TO CONSULT THE 2014 TRUSTEES' REPORT DIRECTLY, WHEN AVAILABLE, FOR THE MOST CURRENT VERSION OF THESE DATA.**

- Physicians and other health professionals perform a broad range of services in the Medicare physician fee schedule, including office visits, surgical procedures, and a variety of diagnostic and therapeutic services furnished in all health care settings. In addition to physicians, these services may be provided by other health professionals (e.g., nurse practitioners, chiropractors, and physical therapists).
- FFS spending per beneficiary for physician fee-schedule services has increased annually. From 2002 to 2012, Medicare spending per FFS beneficiary on these services grew 60 percent.
- Growth in spending on physician fee-schedule services is one of several contributions to Part B premium increases over this time period.
- Per capita spending for disabled beneficiaries (under age 65) is lower than per capita spending for aged beneficiaries. In 2012, for example, per capita spending for disabled beneficiaries was \$1,938, compared with \$2,247 for aged beneficiaries.

Chart 7-2. Volume growth has raised physician spending more than input prices and payment updates, 2000–2012

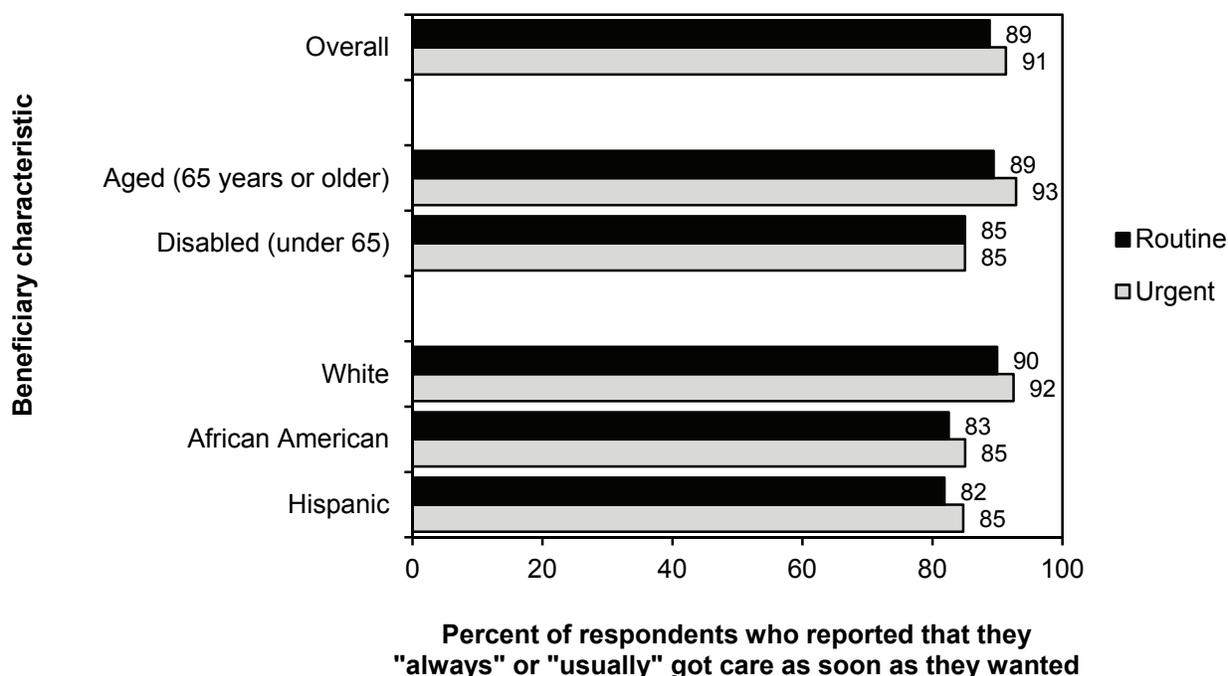


Note: MEI (Medicare Economic Index).

Source: AT THE TIME THIS DATA BOOK WAS PREPARED, THE MEDICARE TRUSTEES' REPORT (WHICH IS THE CUSTOMARY SOURCE OF DATA FOR THIS CHART) HAD NOT YET BEEN RELEASED FOR 2014. THIS CHART REFLECTS DATA FROM THE 2013 MEDICARE TRUSTEES' REPORT. THE READER IS ADVISED TO CONSULT THE 2014 TRUSTEES' REPORT DIRECTLY, WHEN AVAILABLE, FOR THE MOST CURRENT VERSION OF THESE DATA.

- From 2000 to 2012, Medicare spending per beneficiary for physician services increased by 72 percent.
- This spending grew much more rapidly over the period than both the payment rate updates and the MEI. Physician fee-schedule payment updates totaled 9 percent, and the MEI increased 27 percent.
- Growth in the volume of services contributed much more to the rapid increase in Medicare spending than payment rate updates. Both factors—updates and volume growth—combined to increase physician revenues.

Chart 7-3. Most beneficiaries report that they can always or usually get timely care, 2012



Note: In the survey, "routine care" refers to appointments in doctors' offices or clinics that are not for care needed "right away." "Urgent care" refers to care needed right away for an illness, injury, or condition. Nonapplicable respondents (e.g., those who did not seek routine or urgent care in the past six months) were excluded.

Source: MedPAC analysis of Consumer Assessment of Healthcare Providers and Systems® for fee-for-service, Medicare 2012 (unweighted).

- Overall, in 2012, 89 percent of Medicare beneficiaries who reported making an appointment for routine care at a doctor's office or clinic said that they always or usually got care as soon as they wanted. For beneficiaries who reported needing urgent care in a clinic, emergency room, or doctor's office, 91 percent reported that they always or usually got care as soon as they wanted.
- Compared with beneficiaries age 65 or older, those under age 65 and eligible for Medicare on the basis of disability were less likely to report that they always or usually got routine or urgent care as soon as they wanted.
- Smaller percentages of African American and Hispanic beneficiaries reported that they always or usually got care as soon as they wanted, compared with White beneficiaries.

Chart 7-4. Medicare beneficiaries report better ability to get timely appointments with physicians, compared with privately insured individuals, 2010–2013

Survey question	Medicare (age 65 or older)				Private insurance (age 50–64)			
	2010	2011	2012	2013	2010	2011	2012	2013
Unwanted delay in getting an appointment: Among those who needed an appointment, “How often did you have to wait longer than you wanted to get a doctor’s appointment?”								
For routine care								
Never	75% ^{ab}	74% ^a	77% ^{ab}	73% ^a	72% ^{ab}	71% ^a	72% ^{ab}	69% ^a
Sometimes	17 ^{ab}	18 ^a	17 ^{ab}	20 ^a	21 ^{ab}	21 ^a	21 ^{ab}	23 ^a
Usually	3 ^a	3	3	3 ^a	4 ^a	4	3 ^b	4 ^a
Always	2	2 ^a	2 ^{ab}	3	3	3 ^a	3 ^a	3
For illness or injury								
Never	83 ^a	82	84 ^a	82 ^a	80 ^{ab}	79	80 ^a	77 ^a
Sometimes	13 ^a	14 ^a	12 ^a	14 ^a	15 ^a	17 ^a	16 ^{ab}	17 ^a
Usually	2	2	2	2 ^a	2	2	2	3 ^a
Always	1 ^a	1	1 ^a	1	2 ^a	1	2 ^a	2

Note: Numbers may not sum to 100 percent due to rounding. Missing responses (“Don’t Know” or “Refused”) are not presented. Overall sample sizes for each group (Medicare and privately insured) were 4,000 in years 2010–2013. Sample sizes for individual questions varied.

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

^b Statistically significant difference (at a 95 percent confidence level) from 2013 within the same insurance coverage category.

Source: MedPAC-sponsored telephone surveys conducted in 2010, 2011, 2012, and 2013.

- Most Medicare beneficiaries have one or more doctor appointments in a given year. Their ability to schedule timely appointments is one indicator of access we examine.
- Medicare beneficiaries report better access to physicians for appointments than privately insured individuals age 50 to 64. For example, in 2013, 73 percent of Medicare beneficiaries and 69 percent of privately insured individuals reported “never” having to wait longer than they wanted to get an appointment for routine care.
- Medicare beneficiaries also report more timely appointments for injury and illness than their privately insured counterparts.
- Appointment scheduling for illness and injury is better than for routine care appointments for both Medicare beneficiaries and privately insured individuals.

Chart 7-5. Medicare and privately insured patients who are looking for a new physician report more difficulty finding one in primary care, 2010–2013

Survey question	Medicare (age 65 or older)				Private insurance (age 50–64)			
	2010	2011	2012	2013	2010	2011	2012	2013
Looking for a new physician: “In the past 12 months, have you tried to get a new ...?” (Percent answering “Yes”)								
Primary care physician	7	6 ^b	7	7	7	7	7	8
Specialist	13 ^{ab}	14 ^a	13 ^a	14	15 ^a	16 ^a	18 ^a	16
Getting a new physician: Among those who tried to get an appointment with a new physician, “How much of a problem was it finding a primary care doctor/specialist who would treat you? Was it ...”								
Primary care physician								
No problem	79 ^a	65	72	70	69 ^a	68	75	67
Small problem	8	12	14	11	12	16	9	15
Big problem	12	23 ^a	14	17	19	14 ^a	15	18
Specialist								
No problem	87 ^a	84	87	86	82 ^{ab}	86	86	87
Small problem	6 ^a	8	6	8	11 ^{ab}	8	7	6
Big problem	5	7	7	5	6	6	7	7

Note: Numbers may not sum to 100 percent due to rounding. Missing responses (“Don’t Know” or “Refused”) are not presented. Overall sample sizes for each group (Medicare and privately insured) were 4,000 in 2010–2013. Sample sizes for individual questions varied.

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

^b Statistically significant difference (at a 95 percent confidence level) from 2013 within the same insurance coverage category.

Source: MedPAC-sponsored telephone surveys, conducted in 2010, 2011, 2012 and 2013.

- In 2013, only 7 percent of Medicare beneficiaries and 8 percent of privately insured individuals reported looking for a new primary care physician. This finding suggests that most people were either satisfied with their current physician or did not need to look for one.
- Of the 7 percent of Medicare beneficiaries who looked for a new primary care physician in 2013, 28 percent reported problems finding one—17 percent reported their problem as “big,” and 11 percent reported their problem as “small.” Although this number indicates that only about 2 percent of the total Medicare population reported problems finding a primary care physician, the Commission is concerned about the continuing trend of greater access problems for primary care.

Of the 8 percent of privately insured individuals who looked for a new primary care physician in 2013, 33 percent reported problems finding one—18 percent reported their problem as “big,” and 15 percent reported their problem as “small.”

- For 2013, Medicare beneficiaries and privately insured individuals were more likely to report problems accessing a new primary care physician than a new specialist.

Chart 7-6. Access to physician care is better for Medicare beneficiaries than privately insured individuals, but minorities in both groups report problems slightly more frequently, 2013

Survey question	Medicare (age 65 or older)			Private insurance (age 50–64)		
	All	White	Minority	All	White	Minority
Unwanted delay in getting an appointment: Among those who needed an appointment, “How often did you have to wait longer than you wanted to get a doctor’s appointment?”						
For routine care						
Never	73% ^a	74% ^a	71% ^a	69% ^a	70% ^{ab}	65% ^{ab}
Sometimes	20 ^a	20 ^a	19 ^a	23 ^a	23 ^a	25 ^a
Usually	3 ^a	3 ^a	4	4 ^a	5 ^a	4
Always	3	2 ^b	4 ^b	3	3 ^b	5 ^b
For illness or injury						
Never	82 ^a	83 ^{ab}	77 ^b	77 ^a	77 ^a	76
Sometimes	14 ^a	13 ^a	16	17 ^a	18 ^a	17
Usually	2 ^a	2 ^{ab}	3 ^b	3 ^a	3 ^a	2
Always	1	1 ^b	3 ^b	2	1	2

Note: Numbers may not sum to 100 percent due to rounding. Missing responses (“Don’t Know” or “Refused”) are not presented. Overall sample size for each group (Medicare and privately insured) was 4,000 in 2013. Sample size for individual questions varied.

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

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

Source: MedPAC-sponsored telephone surveys conducted in 2013.

- In 2013, Medicare beneficiaries reported better access to physicians for appointments than privately insured individuals age 50 to 64.
- Access varied by race, with minorities more likely than Whites to report access problems in both insurance categories. For example, in 2013, 83 percent of White Medicare beneficiaries reported “never” having to wait longer than they wanted to get an appointment for an illness or injury, compared with 77 percent of minority beneficiaries.
- Although minorities experienced slightly more access problems, minorities with Medicare were less likely to experience problems than minorities with private insurance.

Chart 7-7. Differences in access to new physicians are most apparent among minority Medicare and privately insured patients who are looking for a new specialist, 2013

Survey question	Medicare (age 65 or older)			Private insurance (age 50–64)		
	All	White	Minority	All	White	Minority
Looking for a new physician: “In the past 12 months, have you tried to get a new ...?”						
Primary care physician	7%	7%	7%	8%	8%	7%
Specialist	14	15 ^b	12 ^b	16	17 ^b	12 ^b
Getting a new physician: Among those who tried to get an appointment with a new physician, “How much of a problem was it finding a primary care doctor/specialist who would treat you? Was it ...”						
Primary care physician						
No problem	70	72	65	67	67	66
Small problem	11	9 ^a	19 ^a	15	15	16
Big problem	17	18	14	18	19	16
Specialist						
No problem	86	87	80	87	88	86
Small problem	8	7	12 ^a	6	6	4 ^a
Big problem	5	5	7	7	6	9

Note: Numbers may not sum to 100 percent due to rounding. Missing responses (“Don’t Know” or “Refused”) are not presented. Overall sample size for each group (Medicare and privately insured) was 4,000 in 2013. Sample size for individual questions varied.

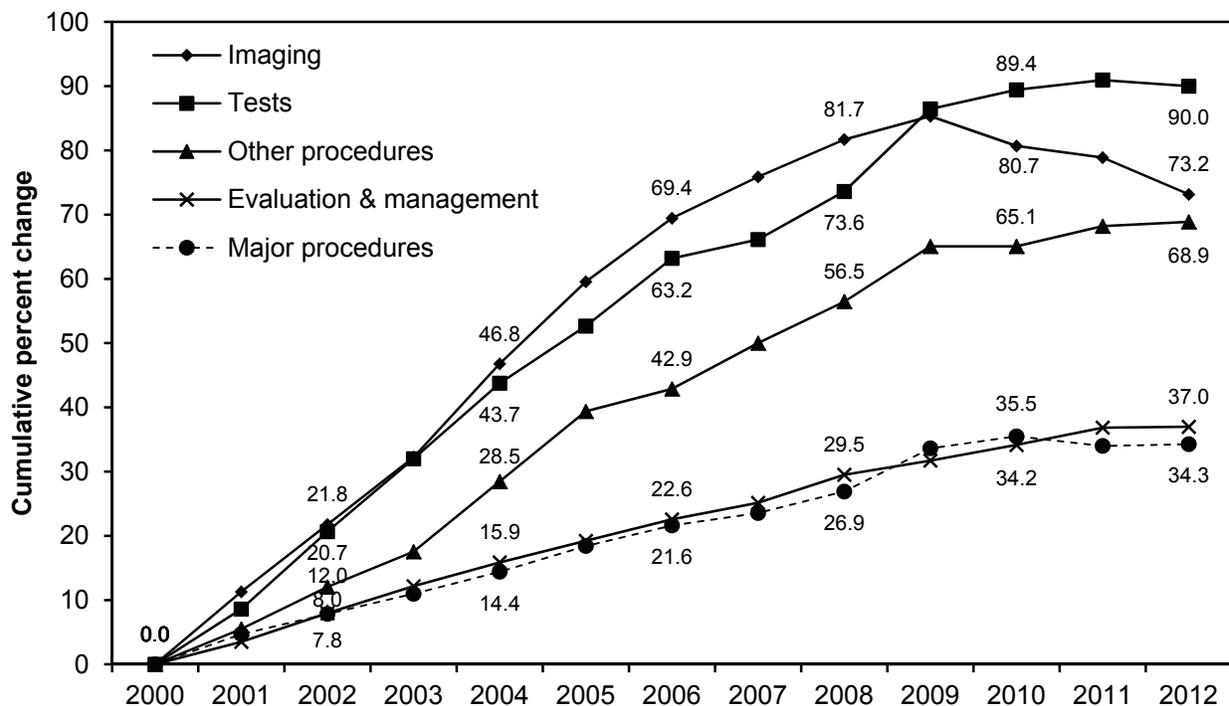
^a Statistically significant difference (at a 95 percent confidence level) between the Medicare and privately insured populations in the given race category.

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

Source: MedPAC-sponsored telephone surveys conducted in 2013.

- Among the small percentage of Medicare beneficiaries and privately insured individuals looking for a new specialist, minorities were more likely than Whites to report problems finding one. For example, in 2013, 87 percent of White Medicare beneficiaries reported “no problem” finding a new specialist, compared with 80 percent of minority beneficiaries.
- Although minorities experienced more access problems, minorities with Medicare were generally less likely to experience problems than minorities with private insurance.

Chart 7-8. Growth in volume per beneficiary of physician and other qualified health professional services, 2000–2012

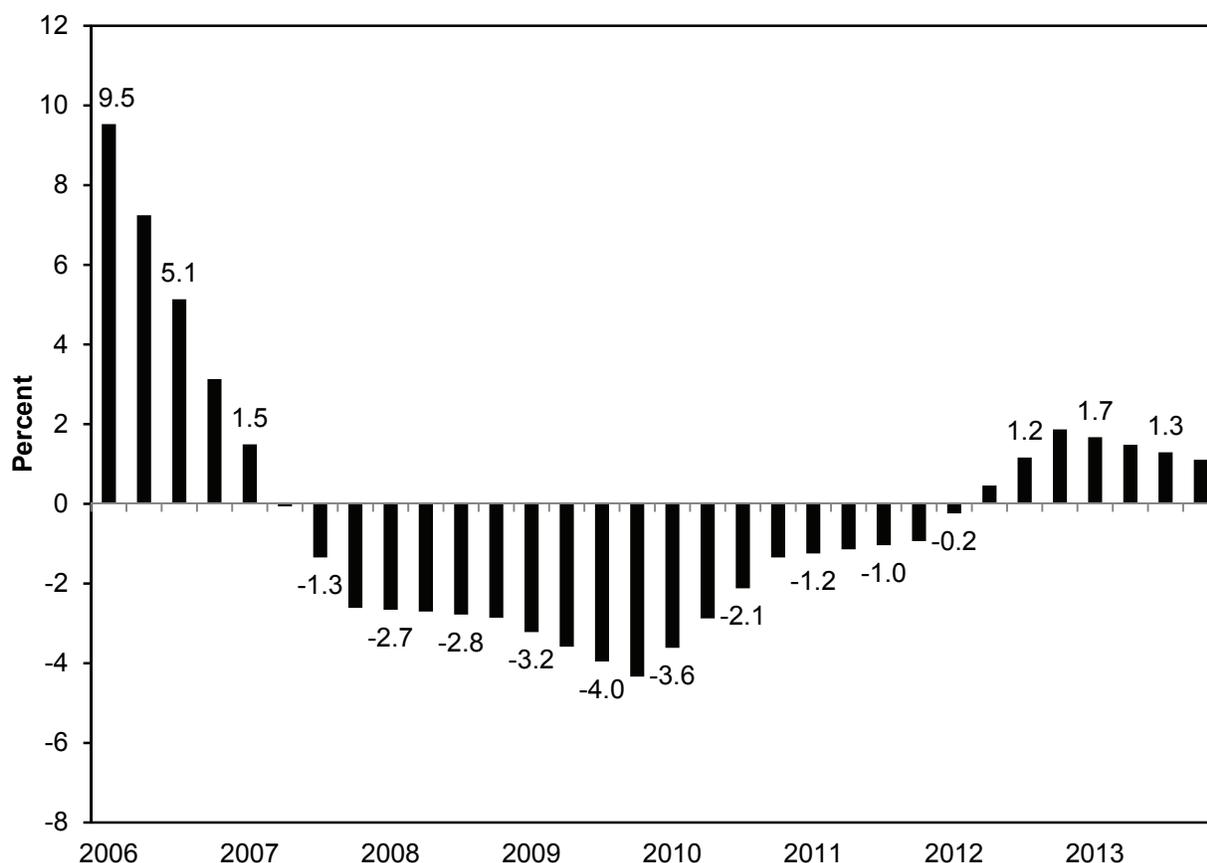


Note: "Volume" is units of service multiplied by relative value units from the fee schedule for services furnished by physicians and other qualified health professionals. Volume for all years is measured on a common scale, with relative value units for 2012. Volume growth for evaluation and management (E&M) from 2009 to 2010 is not directly observable because of a change in payment policy for consultations. To compute cumulative volume growth for E&M through 2011, we used a growth rate for 2009 to 2010 of 1.85 percent, which is the average of the 2008 to 2009 growth rate of 1.7 percent and the 2010 to 2011 growth rate of 2.0 percent.

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

- From 2000 to 2012, the volume of some services furnished by physicians and other qualified health professionals grew much more than others.
- The volume of tests grew by 90 percent, the volume of imaging grew by 73 percent, and the volume of "other procedures" (procedures other than major procedures) grew by 69 percent. The comparable growth rates for major procedures and E&M services were only 37 percent and 34 percent, respectively.
- Volume growth increases Medicare spending, limiting funds available for other priorities in the federal budget and requiring taxpayers and beneficiaries to contribute more to the Medicare program. Overall volume increases translate directly to growth in both Part B spending and premiums. They are also largely responsible for the negative updates required by the sustainable growth rate formula. Rapid volume growth may be a sign that some services in the physician fee schedule are mispriced.

Chart 7-9. Changes in physicians' professional liability insurance premiums, 2006–2013

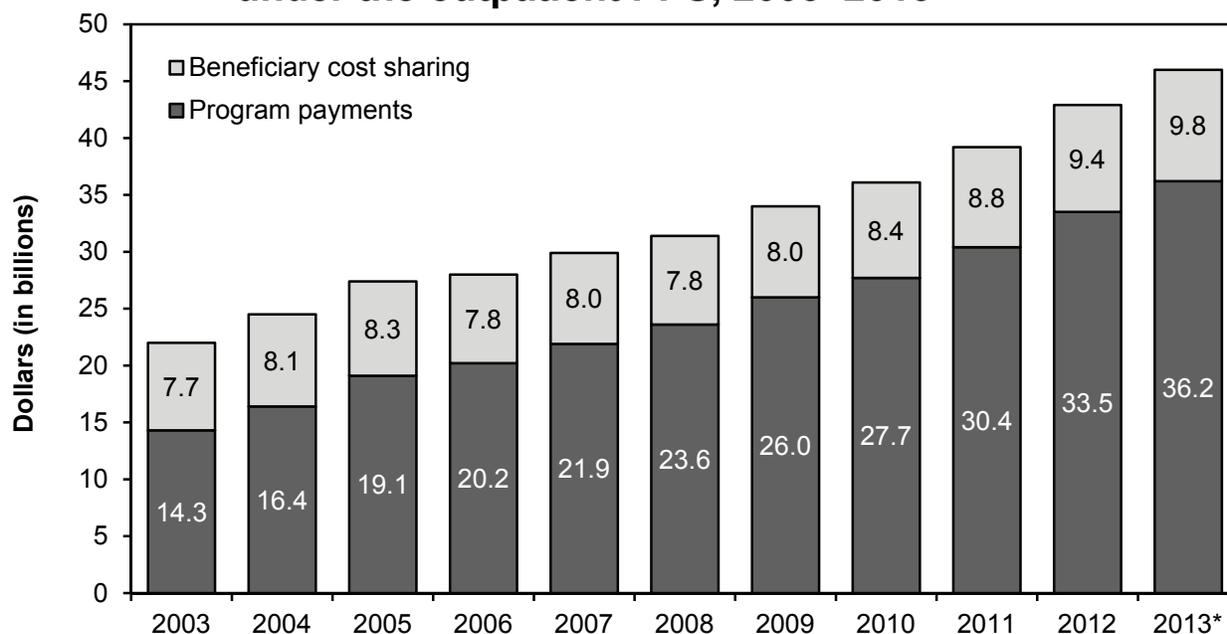


Note: Bars represent a four-quarter moving average percent change.

Source: CMS, Office of the Actuary. Data are from CMS's Professional Liability Physician Premium Survey.

- Professional liability insurance (PLI) accounts for 4.3 percent of total payments under the physician fee schedule. PLI premiums generally follow a cyclical pattern, alternating between periods of low premiums—characterized by high investment returns for insurers and vigorous competition—and high premiums—characterized by declining investment returns and market exit.
- After rapid increases in PLI premiums between 2002 and 2004 (data not shown), premium growth slowed in 2005 and 2006, becoming negative in 2007 and remaining negative through the first quarter of 2012. Premiums began to rise slowly in the second quarter of 2012.

Chart 7-10. Spending on hospital outpatient services covered under the outpatient PPS, 2003–2013



Note: PPS (prospective payment system). Spending amounts are for services covered by the Medicare outpatient PPS. They do not include services paid on separate fee schedules (e.g., ambulance services and durable medical equipment) or those paid on a cost basis (e.g., corneal tissue acquisition and flu vaccines) or payments for clinical laboratory services.
*Estimate.

Source: CMS, Office of the Actuary.

- Overall spending by Medicare and beneficiaries on hospital outpatient services covered under the outpatient PPS from calendar year 2003 to 2013 increased by 110 percent, reaching \$46.0 billion. The Office of the Actuary projects continued growth in total spending, averaging 11.1 percent per year from 2013 to 2015.
- In 2001, the first full year of the outpatient PPS, spending under the PPS was \$20.1 billion, including \$12.1 billion by the program and \$8.0 billion in beneficiary cost sharing. Spending under the outpatient PPS is expected to rise to \$46.0 billion in 2013 (\$36.2 billion program spending; \$9.8 billion beneficiary copayments). The outpatient PPS accounted for about 6 percent of total Medicare spending by the program in 2013.
- Beneficiary cost sharing under the outpatient PPS is generally higher than for other sectors, about 22 percent in 2012. Chart 7-14 provides more detail on coinsurance.

Chart 7-11. Most hospitals provide outpatient services

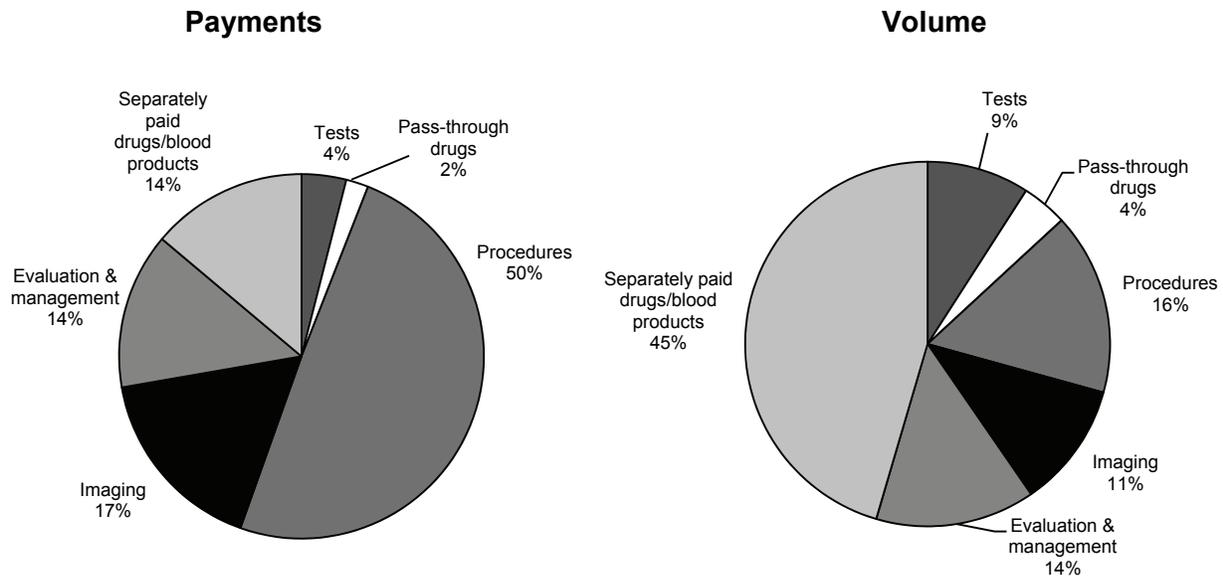
Year	Hospitals	Percent offering		
		Outpatient services	Outpatient surgery	Emergency services
2002	4,210	94%	84%	N/A
2004	3,882	94	86	N/A
2006	3,651	94	86	N/A
2008	3,607	94	87	N/A
2010	3,518	95	90	N/A
2012	3,483	95	91	93%
2013	3,456	96	92	93

Note: N/A (not applicable). We list emergency services from 2002 through 2010 as N/A because the data source we used in this chart changed the variable for identifying hospitals' provision of emergency services. We believe this change in variable definition makes it appear that the percentage of hospitals providing emergency services increased sharply from 2010 to 2012, but we question whether such a large increase actually occurred. This chart includes services provided or arranged by short-term hospitals and excludes long-term, Christian Science, psychiatric, rehabilitation, children's, critical access, and alcohol/drug hospitals.

Source: Medicare Provider of Services files from CMS.

- The number of hospitals that furnish services under Medicare's outpatient prospective payment system (PPS) sharply declined from 2002 through 2006, largely because of growth in the number of hospitals converting to critical access hospital status, which allows payment on a cost basis. Since 2006, the decline in the number of outpatient PPS hospitals has slowed.
- The percent of hospitals providing outpatient services remained stable, and the percent offering outpatient surgery steadily increased from 2002 through 2013. We also believe the percent offering emergency services has remained fairly stable, but we are not certain. In 2011, CMS changed the variable in the Provider of Services file we use to calculate the share of hospitals offering emergency services, so the 2012 and 2013 numbers are not precisely comparable with prior years.

Chart 7-12. Payments and volume of services under the Medicare hospital outpatient PPS, by type of service, 2012



Note: PPS (prospective payment system). Payments include both program spending and beneficiary cost sharing but do not include hold-harmless payments to rural hospitals. Services are grouped into evaluation and management, procedures, imaging, and tests, according to the Berenson–Eggers Type of Service classification developed by CMS. Pass-through drugs and separately paid drugs and blood products are classified by their payment status indicator. The percentage of volume attributable to separately paid drugs and blood products increased substantially over 2011 largely because of the payment status of very low-cost drugs changing from “packaged” in 2011 to “paid separately” in 2012. Percentages may not sum to 100 percent due to rounding.

Source: MedPAC analysis of the 5 percent standard analytic file of outpatient claims for 2012.

- Hospitals provide many types of services in their outpatient departments, including emergency and clinic visits, imaging and other diagnostic services, laboratory tests, and ambulatory surgery.
- The payments for services are distributed differently than volume. For example, in 2012, procedures accounted for 50 percent of payments but only 16 percent of volume.
- Procedures (e.g., endoscopies, surgeries, and skin and musculoskeletal procedures) account for the greatest share of payments for services (50 percent) in 2012, followed by imaging services (17 percent), separately paid drugs and blood products (14 percent), and evaluation and management services (14 percent).

Chart 7-13. Hospital outpatient services with the highest Medicare expenditures, 2012

APC title	Share of payments	Volume (thousands)	Payment rate
Total	44%		
All emergency visits	6	12,665	\$188
All clinic visits	5	24,209	76
Diagnostic cardiac catheterization	3	480	2,720
Cataract procedures with IOL insert	2	519	1,672
Level II extended assessment & management composite	2	1,815	721
Insertion of cardioverter–defibrillator pulse generator	2	31	23,915
Level I plain film except teeth	2	16,136	45
Insertion/replacement/repair of cardioverter–defibrillator leads	2	23	29,835
Lower gastrointestinal endoscopy	2	1,101	656
Coronary angioplasty, valvuloplasty, and level I endovascular revascularization of the lower extremity	2	158	4,611
Transcatheter placement of intracoronary drug-eluting stents	1	89	7,398
Combined abdomen and pelvis CT with contrast*	1	1,052	581
Level II endovascular revascularization of the lower extremity**	1	82	8,087
IMRT treatment delivery	1	1,300	458
Level II echocardiogram without contrast	1	1,556	393
Level II cardiac imaging	1	836	672
Level II drug administration*	1	15,911	35
Computed tomography without contrast	1	2,715	192
Level II laparoscopy	1	143	3,357
CT and CTA with contrast composite	1	648	722
Level III nerve injections	1	856	522
Level III cystourethroscopy and other genitourinary procedures	1	272	1,841
MRI and magnetic resonance angiography without contrast material	1	1,185	339
Insertion/replacement/conversion of permanent dual chamber pacemaker or pacing electrode	1	42	9,638
Level I upper gastrointestinal procedures	1	791	592
Average APC		459	128

Note: APC (ambulatory payment classification), IOL (intraocular lens), CT (computed tomography), IMRT (intensity-modulated radiation therapy), CTA (computed tomography angiography), MRI (magnetic resonance imaging). The payment rate for “All emergency visits” is a weighted average of payment rates from 10 APCs, and the payment rate for “All clinic visits” is a weighted average of payment rates from 5 APCs.

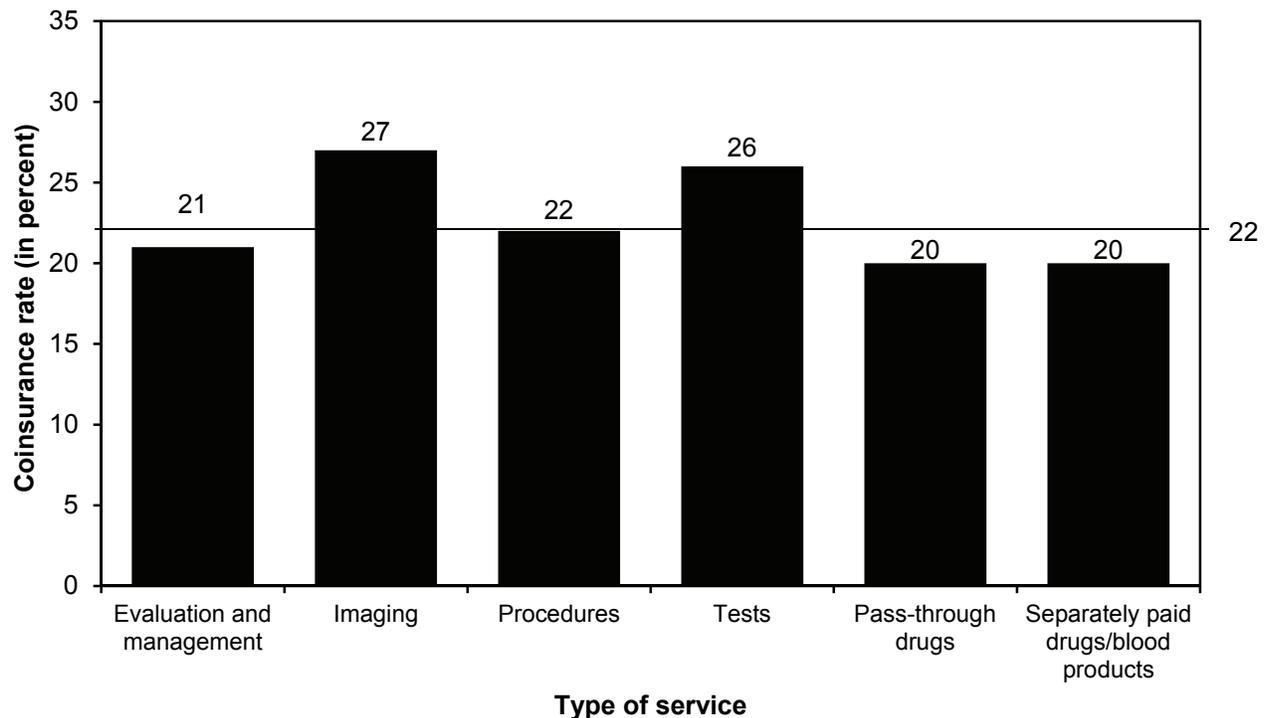
*Did not appear on the list for 2011.

**APC has been renamed since 2011.

Source: MedPAC analysis of 5 percent analytic files of outpatient claims for calendar year 2012.

- Although the outpatient prospective payment system covers thousands of services, expenditures are concentrated in a handful of categories that have high volume, high payment rates, or both.

Chart 7-14. Medicare coinsurance rates, by type of hospital outpatient service, 2012



Note: Services were grouped into categories of evaluation and management, imaging, procedures, and tests according to the Berenson–Eggers Type of Service classification developed by CMS. Pass-through drugs and separately paid drugs and blood products are classified by their payment status indicators.

Source: MedPAC analysis of the 5 percent standard analytic files of outpatient claims for 2012.

- Before CMS began using the outpatient prospective payment system (PPS), beneficiary coinsurance payments for hospital outpatient services were based on hospital charges, while Medicare payments were based on hospital costs. As hospital charges grew faster than costs, coinsurance represented an increasingly large share of total payments over time.
- In adopting the outpatient PPS, the Congress froze the dollar amounts for coinsurance. Consequently, beneficiaries' share of total payments has declined over time.
- The coinsurance rate differs for each service. Some services, such as imaging, have relatively high rates of coinsurance—27 percent in 2012. Other services, such as evaluation and management services, have coinsurance rates of 21 percent.
- In 2012, the average coinsurance rate was about 22 percent.

Chart 7-15. Effects of hold-harmless and SCH transfer payments on hospitals' outpatient revenue, 2010–2012

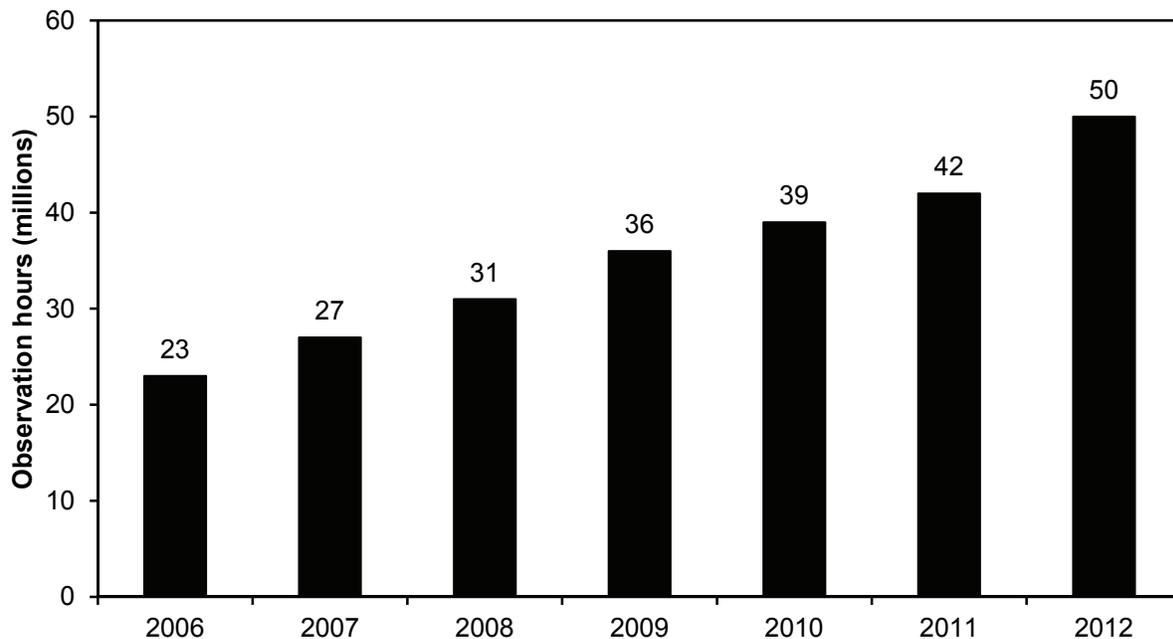
Hospital group	2010		2011		2012	
	Number of hospitals	Share of payments from hold harmless and SCH transfer	Number of hospitals	Share of payments from hold harmless and SCH transfer	Number of hospitals	Share of payments from hold harmless and SCH transfer
All hospitals	3,127	0.4%	3,070	0.4%	2,998	0.4%
Urban	2,231	-0.3	2,184	-0.3	2,148	-0.3
Rural SCHs	366	7.8	377	8.0	368	8.1
Rural ≤100 beds	388	3.2	371	3.3	351	4.4
Other rural	141	-0.3	137	-0.4	131	-0.4
Major teaching	269	-0.3	257	-0.3	257	-0.4
Other teaching	719	-0.1	723	0.0	707	-0.1
Nonteaching	2,138	1.0	2,089	1.1	2,034	1.2

Note: SCH (sole community hospital). Number of hospitals in groups in 2010 and 2011 do not sum to total because we could not classify one hospital in both years.

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

- Medicare implemented the hospital outpatient prospective payment system (PPS) in 2000. Previously, Medicare paid for hospital outpatient services on the basis of hospital costs. Recognizing that some hospitals might receive lower payments under the outpatient PPS than under the earlier system, the Congress established transitional corridor payments. The corridors were designed to make up part of the difference between payments that hospitals would have received under the old payment system and those under the new outpatient PPS.
- Transitional corridor payments expired for most hospitals at the end of 2003. However, some rural hospitals continued to receive a special category of transitional corridor payments called “hold harmless” (HH) through 2012. Qualifying hospitals receive the greater of the payments they would have received from the previous system or the actual outpatient PPS payments.
- Hospitals that qualified for HH payments in 2004 and 2005 included rural SCHs and other small rural hospitals (100 or fewer beds). After 2005, small rural hospitals continued to be eligible for HH payments, but SCHs no longer qualified. In 2006, CMS implemented a policy (the “SCH transfer”) that increased outpatient payments to rural SCHs by 7.1 percent above the standard rates. This policy is made budget neutral by reducing payments to all other hospitals. Finally, the Congress reestablished HH payments for SCHs that had 100 or fewer beds in 2009 and extended HH payments to all SCHs in 2010 and 2011. HH payments for SCHs that had more than 100 beds expired on March 1, 2012, and expired for SCHs and rural hospitals that had 100 or fewer beds on January 1, 2013.
- HH payments and the SCH transfer represented 0.4 percent of total outpatient PPS payments for all hospitals in 2010. However, the percentage of total outpatient payments from these policies was 7.8 percent for rural SCHs and 3.2 percent for small rural hospitals. Data from 2011 and 2012 indicate transfer and HH payments to rural SCHs were 8.0 percent of their outpatient revenue in 2011 and 8.1 percent in 2012. Small rural hospitals continued to benefit from HH payments in 2011 and 2012. These payments were 3.3 percent of their total outpatient payments in 2011 and 4.4 percent in 2012.

Chart 7-16. Number of observation hours has increased, 2006–2012



Source: MedPAC analysis of Limited Data Set claims for the outpatient prospective payment system 2006–2012.

- Hospitals use observation care to determine whether a patient should be hospitalized for inpatient care, transferred to an alternative treatment setting, or sent home.
- Medicare began providing separate payments to hospitals for some observation services on April 1, 2002. Previously, the observation services were packaged into the payments for the emergency room or clinic visits that occurred with observation care.
- The number of observation hours (both packaged and separately paid) has increased substantially, from about 23 million in 2006 to 50 million in 2012. Before 2006, it was difficult to count the total number of observation hours because hospitals were not required to report packaged observation hours on Medicare claims.

Chart 7-17. Number of Medicare-certified ASCs increased by 19 percent, 2006–2013

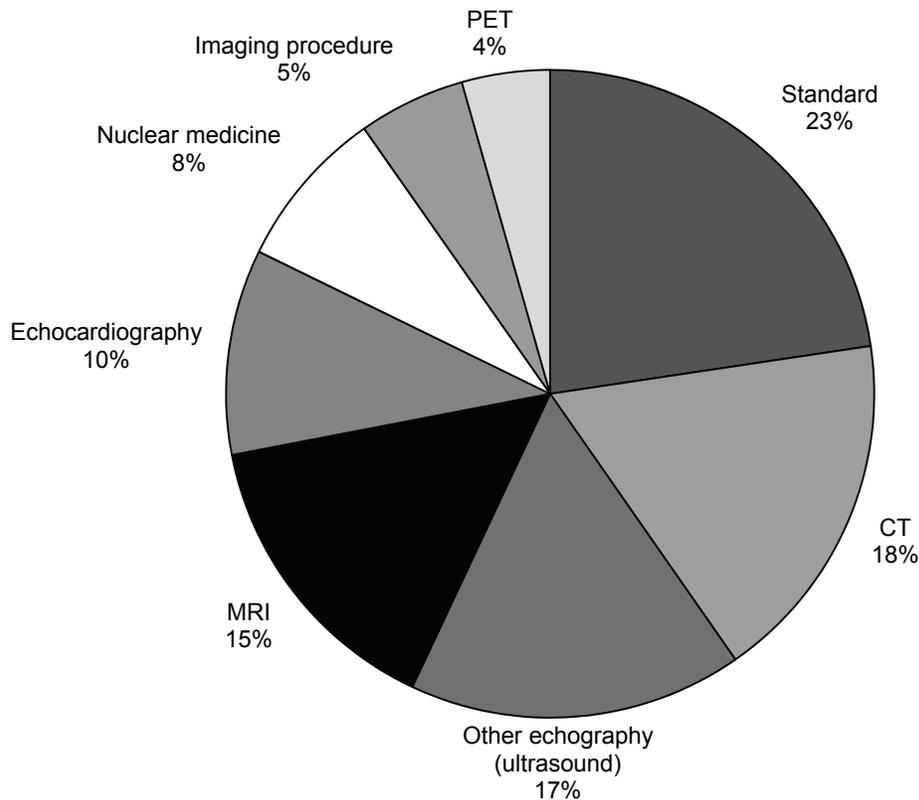
	2006	2007	2008	2009	2010	2011	2012	2013
Medicare payments (billions of dollars)	\$2.8	\$2.9	\$3.1	\$3.2	\$3.3	\$3.4	\$3.6	\$3.7
Number of centers	4,490	4,756	4,955	5,064	5,152	5,228	5,307	5,364
New centers	320	345	280	220	193	190	165	108
Exiting centers	92	79	81	111	105	114	86	51
Net percent growth in number of centers from previous year	4.5%	5.9%	4.2%	2.2%	1.7%	1.5%	1.5%	1.1%
Percent of all centers that are:								
For profit	96	96	96	96	97	97	97	96
Nonprofit	4	4	4	3	3	3	3	3
Urban	91	91	91	91	91	91	91	91
Rural	9	9	9	9	9	9	9	9

Note: ASC (ambulatory surgical center). Medicare payments include program spending and beneficiary cost sharing for ASC facility services. Payments for 2013 are preliminary and subject to change. Totals may not sum to 100 percent due to rounding.

Source: MedPAC analysis of Provider of Services file from CMS 2013. Payment data are from CMS, Office of the Actuary.

- ASCs are entities that furnish only outpatient surgical services not requiring an overnight stay. To receive payments from Medicare, ASCs must meet Medicare's conditions of coverage, which specify minimum facility standards.
- Total Medicare payments for ASC services increased by 3.8 percent per year, on average, from 2006 through 2013. Payments per fee-for-service beneficiary also grew by 3.8 percent per year during this period. Between 2012 and 2013, total payments rose by 1.4 percent and payments per beneficiary grew by 0.4 percent.
- The number of Medicare-certified ASCs grew at an average annual rate of 2.6 percent from 2006 through 2013. Each year from 2006 through 2013, an average of 228 new facilities entered the market, while an average of 90 closed or merged with other facilities.
- The slower growth in the number of ASCs in 2010 through 2013 may reflect the substantially higher rates that Medicare pays for ambulatory surgical services in hospital outpatient departments than in ASCs, the general slowdown in health care spending, the significant growth in hospital employment of physicians, and the major revision of the ASC payment system in 2008.

Chart 7-18. Medicare spending for imaging services under the fee schedule for physicians and other health professionals, by type of service, 2012

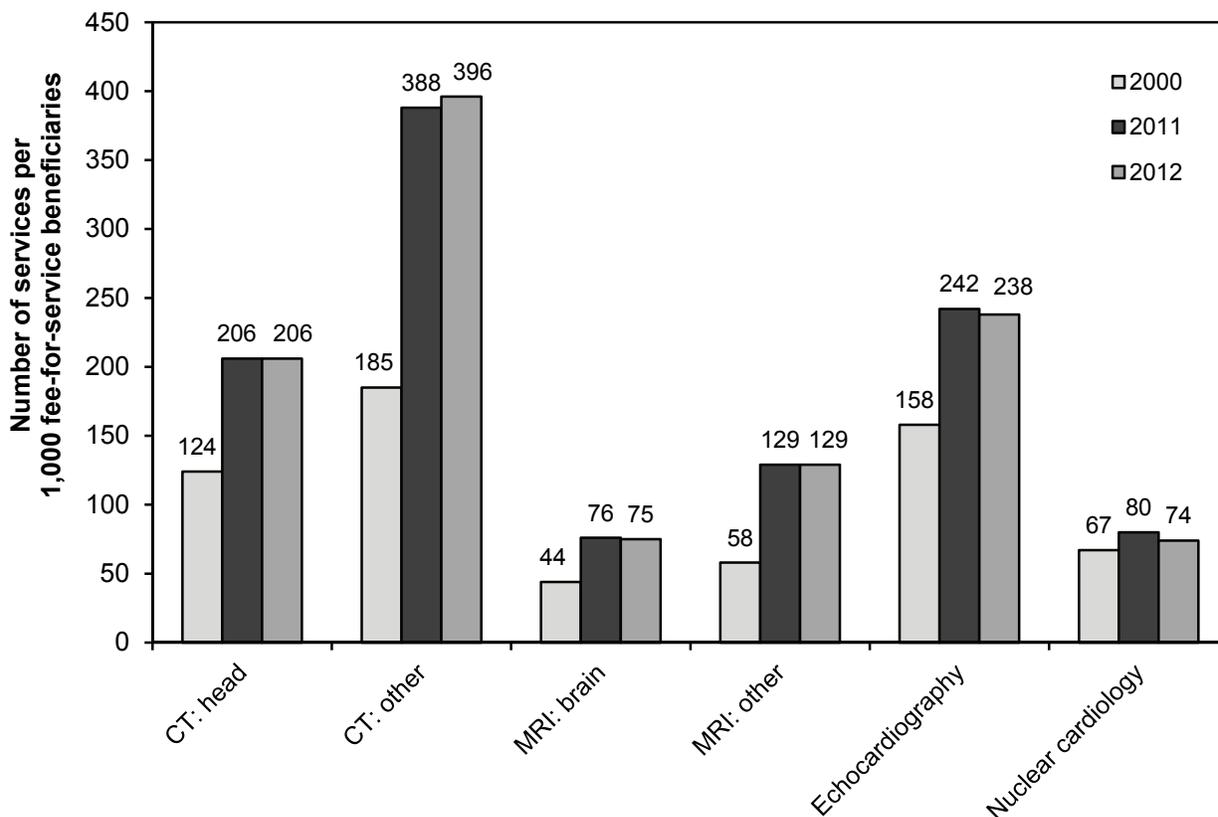


Note: PET (positron emission tomography), CT (computed tomography), MRI (magnetic resonance imaging). Standard imaging includes chest, musculoskeletal, and breast X-rays. Imaging procedures include stereoscopic X-ray guidance for delivery of radiation therapy, fluoroguide for spinal injection, and other interventional radiology procedures. Medicare payments include program spending and beneficiary cost sharing for physician fee-schedule imaging services provided in all settings. Payments include carrier-priced codes but exclude radiopharmaceuticals.

Source: MedPAC analysis of 100 percent physician/supplier procedure summary file from CMS 2012.

- One-third of Medicare spending for imaging under the physician fee schedule in 2012 was for CT and MRI studies. About one-quarter was for various types of ultrasound (echocardiography and other echography).
- Medicare and beneficiaries spent a total of \$10.0 billion for imaging services under the physician fee schedule in 2012. Spending declined from \$10.6 billion in 2011 (–5.1 percent). The decline in spending was largely due to a 3.2 percent drop in the number and complexity of imaging services per beneficiary in 2012, CMS’s adoption of more current practice expense data from a new survey of practitioners, and CMS’s implementation of a multiple procedure payment reduction for the professional component of advanced imaging services.

Chart 7-19. Growth in the number of CT, MRI, and cardiac imaging services per 1,000 beneficiaries, 2000–2012



Note: CT (computed tomography), MRI (magnetic resonance imaging). Data include physician fee schedule imaging services provided in all settings but exclude technical component-only services. The number of echocardiography and nuclear cardiology services exclude add-on services. The number of services classified in 2011 as “CT: other” was adjusted to account for comprehensive (bundled) codes for CT angiography that were instituted in 2012. The number of services classified in 2000 as “CT: other” was adjusted to account for comprehensive codes for CT of the abdomen and pelvis that were instituted in 2011.

Source: MedPAC analysis of 100 percent physician/supplier procedure summary files from CMS, 2000, 2011, and 2012.

- The number of CT and MRI scans per 1,000 fee-for-service beneficiaries grew rapidly from 2000 to 2011. There was minimal change from 2011 to 2012.
- For example, the number of CT scans of parts of the body other than the head more than doubled from 2000 to 2012 (from 185 per 1,000 beneficiaries to 396).
- The number of echocardiography and nuclear cardiology studies also increased from 2000 to 2011, although not as rapidly as CT and MRI scans.
- Echocardiography services per 1,000 beneficiaries grew by 54 percent from 2000 to 2011 and declined by 2 percent in 2012. Nuclear cardiology studies increased by 19 percent from 2000 to 2011 and fell by 7 percent in 2012.

SECTION

8

Post-acute care
Skilled nursing facilities
Home health services
Inpatient rehabilitation facilities
Long-term care hospitals

Chart 8-1. Number of post-acute care providers increased or remained stable in 2013

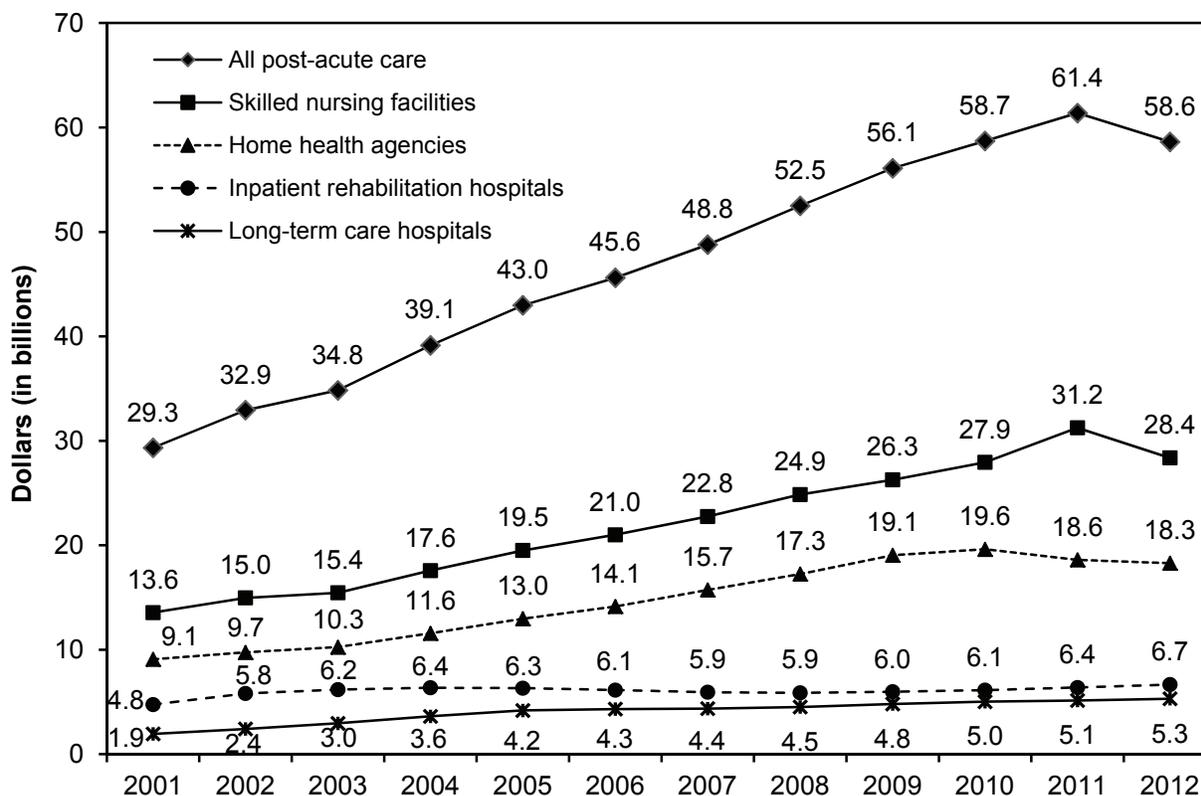
	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average annual percent change 2005–2012	Percent change 2012–2013
Home health agencies	8,314	8,955	9,404	10,040	10,961	11,654	12,026	12,225	12,613	5.4%	3.2
Inpatient rehabilitation facilities	1,235	1,225	1,202	1,202	1,196	1,179	1,165	1,166	1,161	–0.8	–0.4
Long-term care hospitals	388	392	396	402	427	438	437	437	432	1.4	–1.1
Skilled nursing facilities	15,026	15,017	15,047	15,024	15,062	15,076	15,120	15,139	15,163	0.1	0.2

Note: The skilled nursing facility count does not include swing beds.

Source: MedPAC analysis of data from the Provider of Services files from CMS.

- The number of home health agencies has increased substantially since 2005. The number of agencies increased by 388 in 2013. The growth in new agencies is concentrated in a few areas of the country.
- In spite of a moratorium on new long-term care hospitals (LTCHs) beginning in October 2007, the number of these facilities continued to grow through 2010. The number of LTCHs dropped from 437 in 2012 to 432 in 2013.
- The total number of skilled nursing facilities has increased slightly since 2005, and the mix of facilities shifted from hospital-based to freestanding facilities. In 2013, hospital-based facilities made up 5 percent of all facilities, down from 8 percent in 2005.

Chart 8-2. Home health care and skilled nursing facilities have fueled growth in Medicare’s post-acute care expenditures



Note: These numbers are program spending only and do not include beneficiary copayments.

Source: AT THE TIME THIS DATA BOOK WAS PREPARED, THE MEDICARE TRUSTEES' REPORT (WHICH IS THE CUSTOMARY SOURCE OF DATA FOR THIS CHART) HAD NOT YET BEEN RELEASED FOR 2014. THIS CHART REFLECTS DATA FROM THE 2013 MEDICARE TRUSTEES' REPORT. THE READER IS ADVISED TO CONSULT THE 2014 TRUSTEES' REPORT DIRECTLY, WHEN AVAILABLE, FOR THE MOST CURRENT VERSION OF THESE DATA.

- Increases in fee-for-service (FFS) spending on post-acute care have slowed in part because of expanded enrollment in managed care under Medicare Advantage; Medicare Advantage spending is not included in this chart.
- FFS spending on inpatient rehabilitation hospitals declined from 2005 through 2008, reflecting policies intended to ensure that patients who do not need this intensity of services are treated in less-intensive settings. However, spending on inpatient rehabilitation hospitals has increased since 2009.
- FFS spending on skilled nursing facilities increased sharply in 2011, reflecting CMS’s adjustment for the implementation of the new case-mix groups (resource utilization groups, version IV) beginning October 2010. Once CMS established that the adjustment it made was too large, it lowered the adjustment, and spending dropped in 2012.

Chart 8-3. A growing share of fee-for-service Medicare stays and payments go to freestanding SNFs and for-profit SNFs

Type of SNF	Facilities		Medicare-covered stays		Medicare payments (billions)	
	2006	2012	2006	2012	2006	2012
Totals	15,178	14,938	2,454,263	2,396,548	\$19.5	\$26.2
Freestanding	92%	95%	89%	94%	94%	97%
Hospital based	8	5	11	6	6	3
Urban	67	70	79	82	81	84
Rural	33	30	21	18	19	16
For profit	68	70	67	71	73	75
Nonprofit	26	25	29	25	24	21
Government	5	5	4	3	3	3

Note: SNF (skilled nursing facility). Totals may not sum to 100 due to rounding and missing values.

Source: MedPAC analysis of the Provider of Services, Medicare Provider Analysis and Review files 2006 and 2012.

- The mix of where beneficiaries receive SNF services has shifted towards freestanding, urban, and for-profit facilities.
- In 2012, freestanding facilities accounted for 94 percent of stays and an even larger share of Medicare's payments.
- In 2012, urban facilities accounted for 70 percent of facilities, 82 percent of stays, and 84 percent of Medicare payments.
- In 2012, for-profit facilities accounted for 70 percent of facilities, but higher shares of stays and Medicare payments (71 percent and 75 percent, respectively).

Chart 8-4. SNF service use declined between 2011 and 2012

Volume measure	2006	2008	2010	2011	2012	Percent change 2011–2012
Covered admissions per 1,000 FFS beneficiaries	72	73	71.5	71.2	68	–4.5%
Covered days (in thousands)	1,892	1,977	1,938	1,935	1,861	–3.8
Covered days per admission	26.3	27.0	27.1	27.2	27.4	0.7

Note: SNF (skilled nursing facility), FFS (fee-for-service). Data include 50 states and the District of Columbia.

Source: Calendar year data from CMS, Office of Information Products and Data Analytics 2012.

- In 2012, 4.5 percent of beneficiaries used SNF services, down slightly from 2011 (not shown).
- Admissions per 1,000 FFS beneficiaries decreased 4.5 percent, paralleling the declines in inpatient hospital use. An acute hospital stay of three or more days is a prerequisite for Medicare coverage of SNF care.
- Covered days declined at a slower pace (3.8 percent), resulting in a slight increase in covered days per admission.

Chart 8-5. Freestanding SNF Medicare margins remain high despite reductions in payments

	2002	2004	2006	2008	2010	2011	2012
All	17.5%	13.8%	12.8%	16.7%	19.4%	21.2%	13.8%
Rural	20.3	16.1	13.5	17.9	19.4	20.4	12.9
Urban	16.9	13.3	12.7	16.4	19.4	21.4	14.0
Nonprofit	9.1	3.7	3.1	7.1	10.7	13.6	5.4
For profit	19.5	16.2	15.2	19.0	21.6	23.2	16.1

Note: SNF (skilled nursing facility).

Source: MedPAC analysis of freestanding SNF cost reports 2006–2012.

- In 2011, the average Medicare margin for freestanding SNFs was 21.2 percent, reflecting the large increase in payments with the implementation of the new case-mix groups and an incorrect adjustment factor. In 2012, CMS corrected the adjustment, and margins were lower. Margins have declined since 2010 because current law has required market basket increases to be offset by a productivity adjustment since 2011.
- Though lower than in recent years, the 2012 Medicare margin is the 13th year of Medicare margins above 10 percent.
- In 2012, on average, urban facilities had slightly higher Medicare margins than rural facilities, and for-profit SNFs had higher Medicare margins than nonprofit SNFs. Rural facilities have higher base rates than urban facilities.
- In 2012, total margins (the margin across all payers and all lines of business) for freestanding facilities remained positive (1.8 percent, not shown).

Chart 8-6. Cost and payment differences explain variation in Medicare margins for freestanding SNFs in 2012

Characteristic	Highest margin quartile (n = 3,136)	Lowest margin quartile (n = 3,137)	Ratio of highest quartile to lowest quartile
Cost measures			
Standardized cost per day	\$247	\$355	0.7
Standardized cost per discharge	\$11,389	\$13,268	0.9
Average daily census (patients)	89	70	1.3
Average length of stay (days)	47	36	1.3
Revenue measures			
Medicare payment per day	\$467	\$421	1.1
Medicare payment per discharge	\$22,562	\$15,633	1.4
Share of days in intensive therapy	79%	70%	1.1
Share of medically complex days	4	6	0.7
Medicare share of facility revenue	26	16	1.6
Patient characteristics			
Case-mix index	1.37	1.28	1.1
Dual-eligible share of beneficiaries	40%	26%	1.5
Percent minority beneficiaries	12	4	3.0
Percent very old beneficiaries	30	36	0.8
Medicaid share of days	65	59	1.1
Facility mix			
Percent for-profit	89%	59%	N/A
Percent urban	77	68	N/A

Note: SNF (skilled nursing facility), N/A (not applicable). Values shown are medians for the quartile. Highest margin quartile SNFs were in the top 25 percent of the distribution of Medicare margins. Lowest margin quartile SNFs were in the bottom 25 percent of the distribution of Medicare margins. Standardized costs per day are Medicare costs adjusted for differences in area wages and the case mix (using the nursing component's relative weights) of Medicare beneficiaries. Intensive therapy days are days classified into ultra-high and very-high rehabilitation case-mix groups.

Source: MedPAC analysis of freestanding 2012 SNF cost reports.

- Medicare margins varied widely across freestanding SNFs. One-quarter of SNFs had Medicare margins at or below 4.8 percent, and one-quarter of facilities had Medicare margins at or above 23 percent (data not shown).
- High-margin SNFs had lower costs per day (30 percent lower costs than low-margin SNFs), after adjusting for wage and case-mix differences, and higher revenues per day (1.1 times the revenues per day of low-margin SNFs).
- Facilities with the highest Medicare margins had higher case-mix indexes, higher shares of beneficiaries who were dually eligible for Medicare and Medicaid, and higher shares of minority beneficiaries.

Chart 8-7. Financial performance of relatively efficient SNFs reflects a combination of lower cost per day and higher payments per day

	Relatively efficient SNFs (11%)	Other SNFs (89%)
Performance in 2011		
Relative* community discharge rate	1.18	0.97
Relative* rehospitalization rate	0.88	1.02
Relative* cost per day	0.96	1.01
Medicare margin	25.0%	22.7%
Performance in 2012		
Relative* community discharge rate	1.16	0.97
Relative* rehospitalization rate	0.89	1.02
Cost per day	\$280	\$292
Medicare margin	17.3%	15.0%
Facility case-mix index	1.36	1.35
Medicare payment per day	\$463	\$453
Medicare average length of stay	33 days	39 days
Share intensive therapy days	76%	77%
Total margin	3.5	2.3
Medicaid share of facility days	58%	62%
Trends in cost and revenue growth 2005–2010		
Share of facilities with low growth in cost per day	17%	83%
Share of facilities with high growth in revenue per day	12%	88%

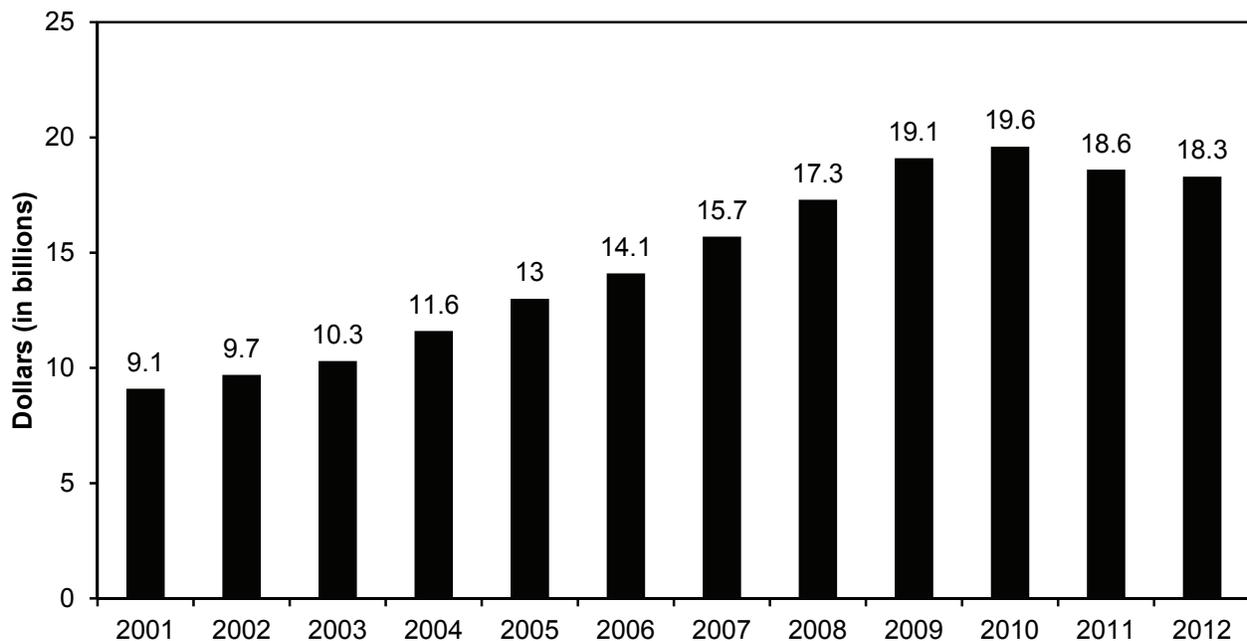
Note: SNF (skilled nursing facility). There were 7,814 freestanding facilities included in the analysis. Efficient SNFs were defined by their cost per day (2008–2010) and two quality measures (community discharge and rehospitalization rates) for 2008 through September 2010. Efficient SNFs were those in the lowest third of the distribution of one measure and not in the bottom third on any measure in each of three years. Costs per day were standardized for differences in case mix (using the nursing component relative weights) and wages. Quality measures were rates of risk-adjusted community discharge and rehospitalization for patients with potentially avoidable conditions within 100 days of hospital discharge. Quality measures were calculated for all facilities with at least 25 stays. Intensive therapy days include days classified into the ultra-high and very-high case-mix groups.

* Measures are relative to the national average.

Source: MedPAC analysis of quality measures for 2008–2012 and Medicare cost report data for 2005–2012.

- Relatively efficient SNFs were defined as consistently providing relatively low-cost and high-quality care compared with other SNFs.
- Compared with national averages, relatively efficient SNFs furnished considerably higher quality (higher discharge to community rates and lower readmission rates) and had costs per day that were 4 percent lower.

Chart 8-8. Spending on home health care, 2001–2012



Source: AT THE TIME THIS DATA BOOK WAS PREPARED, THE MEDICARE TRUSTEES' REPORT (WHICH IS THE CUSTOMARY SOURCE OF DATA FOR THIS CHART) HAD NOT YET BEEN RELEASED FOR 2014. THIS CHART REFLECTS DATA FROM THE 2013 MEDICARE TRUSTEES' REPORT. THE READER IS ADVISED TO CONSULT THE 2014 TRUSTEES' REPORT DIRECTLY, WHEN AVAILABLE, FOR THE MOST CURRENT VERSION OF THESE DATA.

- In October 2000, the prospective payment system (PPS) replaced the previous Medicare payment system. At the same time, eligibility for the benefit broadened slightly.
- Home health care has risen rapidly under the PPS. Spending rose by about 10 percent a year between 2001 and 2009, but growth slowed beginning in 2010 and has remained relatively flat since 2011.
- Spending dropped by an estimated \$400 million in 2012. This decline was attributable to two factors: The base rate for home health care declined, and the number of episodes declined slightly. Despite these declines, spending in 2012 was more than double the spending for 2001.

Chart 8-9. Trends in the provision of home health care

	2002	2011	2012	Average annual percent change		Cumulative change
				2002–2011	2011–2012	2002–2012
Number of users (in millions)	2.5	3.4	3.4	3.5%	–0.2%	36.6%
Percent of beneficiaries who used home health care	7.2%	9.6%	9.0%	3.2	–1.5	31.0
Episodes (in millions)	4.1	6.8	6.7	5.9	–1.5	64.5
Episodes per home health patient	1.6	2.0	2.0	2.2	–1.3	20.4
Visits per home health episode	18.4	17.2	16.9	–0.7	–1.8	–8.2
Visits per home health patient	31	34	33	1.0	–3.4	7.4
Average payment per episode	\$2,335	\$2,691	\$2,677	1.6	–0.5	14.6

Source: MedPAC analysis of the home health Standard Analytic File.

- Under the prospective payment system, in effect since 2000, the number of users and the number of episodes have risen significantly. In 2012, 3.4 million beneficiaries used the home health benefit.
- The number of home health episodes increased rapidly from 2002 to 2012, though growth has slowed in recent years. The number of beneficiaries using home health care has also increased since 2002, but at a lower rate than the growth in episodes.
- The number of visits per episode decreased from 2002 to 2012. However, this decline was offset by an increase in the average number of episodes per patient, which increased from 1.6 in 2002 to 2.0 in 2012 (not shown). Beneficiaries received fewer visits in an episode but had more 60-day episodes of care. As a result, the average number of visits increased from 31 visits per home health user in 2002 to 33 visits per home health user in 2011.

Chart 8-10. Home health episodes not preceded by a hospitalization account for the majority of services in 2011

	Number of episodes (in millions)		Cumulative growth	Share of episodes	
	2001	2011		2001	2011
Episodes not preceded by a hospitalization or PAC stay:					
First	0.8	1.3	67%	20%	19%
Subsequent	<u>1.3</u>	<u>3.2</u>	148	<u>32</u>	<u>46</u>
Subtotal	2.1	4.5	117	53	66
Episodes preceded by a hospitalization or PAC stay:					
First	1.6	1.8	17	40	27
Subsequent	<u>0.3</u>	<u>0.5</u>	66	<u>8</u>	<u>7</u>
Subtotal	1.9	2.3	25	47	34
Total	3.9	6.8	73	100%	100%

Note: PAC (post-acute care). "First" indicates no home health episode in the 60 days preceding the episode. "Subsequent" indicates the episode started within 60 days of the end of a preceding episode. "Episodes not preceded by a hospitalization or PAC stay" indicates that there was no hospitalization or PAC stay in the 15 days before the start of the episode. "Episodes preceded by a hospitalization or PAC stay" indicates the episode occurred less than 15 days after a stay in a hospital (including a long-term care hospital), skilled nursing facility, or inpatient rehabilitation facility. Numbers may not sum due to rounding.

Source: CMS Datalink file 2012.

- The rise in the average number of episodes per beneficiary coincides with a relative shift away from using home health care as a PAC service.
- During the 2001 through 2011 period, the number of episodes not preceded by a hospitalization or PAC stay increased by 117 percent, compared with a 25 percent increase in episodes that were preceded by a hospitalization or PAC stay. During that period, the share of all episodes preceded by a hospitalization or PAC stay rose from about 53 percent to 66 percent.
- Beneficiaries for whom the majority of home health episodes in 2010 were preceded by a hospitalization or other post-acute stay had different characteristics than community-admitted beneficiaries. Community-admitted home health users were more likely to be dually eligible for Medicare and Medicaid, had more home health episodes, and had more episodes with a high share of home health aide services compared with post-acute users of home health (not shown in table). Community-admitted users generally had fewer chronic conditions, tended to be older, and had a higher rate of dementia and Alzheimer's disease.

Chart 8-11. Medicare margins for freestanding home health agencies

	2011	2012	Percent of agencies 2012
All	15.0%	14.4%	100%
Geography			
Mostly urban	14.8	14.8	83
Mostly rural	15.5	12.8	17
Type of control			
For profit	15.8	15.2	88
Nonprofit	12.0	12.0	12
Volume quintile			
First	6.8	6.8	20
Second	8.3	8.0	20
Third	10.1	10.2	20
Fourth	13.5	13.2	20
Fifth	17.4	16.7	20

Note: Agencies are characterized as urban or rural based on the residence of the majority of their patients. Agencies with outlier payments that exceeded 10 percent of Medicare revenues are excluded from the reported statistics.

Source: MedPAC analysis of 2011–2012 Cost Report files.

- In 2012, freestanding home health agencies (HHAs) (about 85 percent of all HHAs) had an aggregate margin of 14.4 percent. HHAs that served mostly urban patients in 2012 had an aggregate margin of 14.8 percent; HHAs that served mostly rural patients had an aggregate margin of 12.8 percent. The 2012 margin is consistent with the historically high margins the home health industry has experienced under the prospective payment system. The margin from 2001 to 2012 averaged 17.5 percent, indicating that most agencies have been paid well in excess of their costs under the prospective payment system.
- For-profit agencies in 2012 had an average margin of 15.2 percent, and nonprofit agencies had an average margin of 12.0 percent.
- Agencies that serve more patients have higher margins. The agencies in the lowest volume quintile in 2012 have an aggregate margin of 6.8 percent, while those in the highest quintile have an aggregate margin of 16.7 percent.

Chart 8-12. Most common types of inpatient rehabilitation facility cases, 2013

Type of case	Share of cases
Stroke	19.4%
Fracture of the lower extremity	12.6
Neurological disorders	12.5
Debility	10.3
Major joint replacement	8.8
Brain injury	8.1
Other orthopedic	7.6
Cardiac conditions	5.4
Spinal cord injury	4.5
Other	10.7

Note: "Other" includes conditions such as amputations, major multiple trauma, and pain syndrome. Numbers may not sum to 100 percent due to rounding.

Source: MedPAC analysis of Inpatient Rehabilitation Facility–Patient Assessment Instrument data from CMS (January through June of 2013).

- In 2013, the most frequent diagnosis for Medicare patients in inpatient rehabilitation facilities (IRFs) was stroke, representing close to 20 percent of cases.
- Major joint replacement cases represented 8.8 percent of IRF admissions in 2013, down from 24 percent in 2004, when major joint replacement was the most common IRF Medicare case type.
- The share of cases represented by patients with neurological disorders has been steadily increasing since 2004, while the share of major joint replacement cases has been steadily decreasing. In 2012, the share of neurological disorders exceeded the share of major joint replacement for the first time.

Chart 8-13. Number of IRF FFS patients increased in 2012

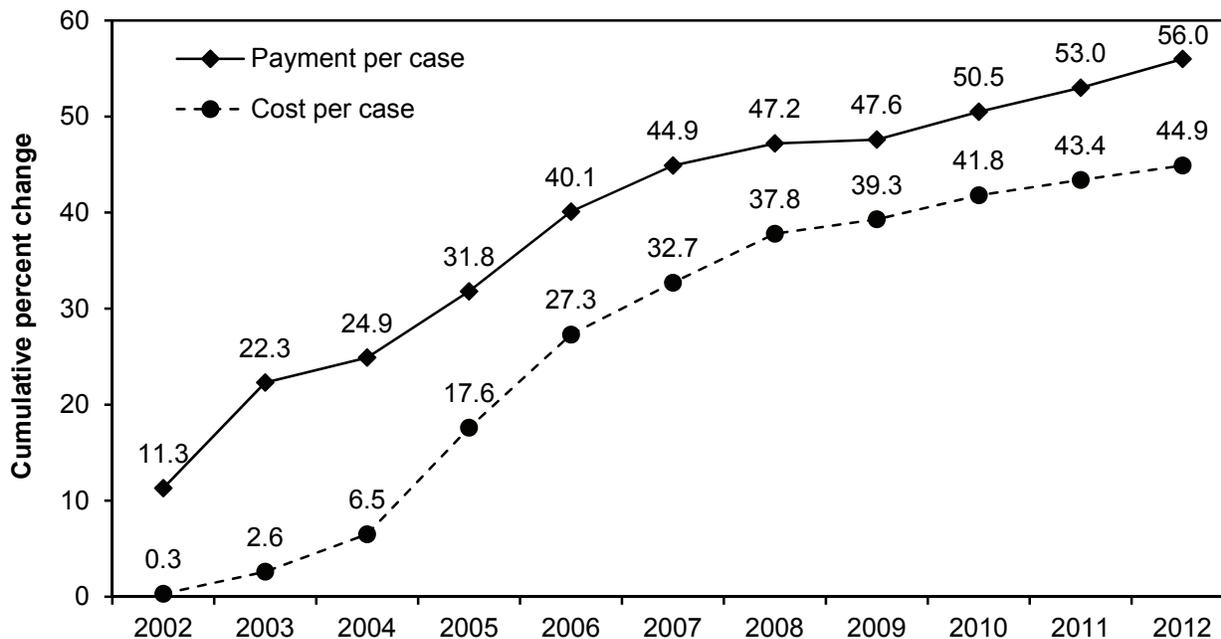
	2004	2010	2011	2012	Average annual percent change 2004–2011	Percent change 2011–2012
Number of IRF cases	495,000	359,000	371,000	373,000	–4.0%	0.5%
Unique patients per 10,000 FFS beneficiaries	124.4	91.2	93.1	92.4	–4.0	–0.8
Payment per case	\$13,290	\$17,085	\$17,398	\$17,995	4.0	3.4
Average length of stay (in days)	12.7	13.1	13.0	12.9	0.4	–0.8

Note: IRF (inpatient rehabilitation facility), FFS (fee-for-service). Numbers of cases reflect Medicare FFS utilization only.

Source: MedPAC analysis of MedPAR data from CMS.

- IRF volume is measured by the number of IRF cases and the number of unique patients per 10,000 beneficiaries, which controls for changes in FFS enrollment.
- IRF volume declined from 2004 through 2008, when enforcement of the compliance threshold was renewed. After 2008, the volume decline began to level off after the compliance threshold was permanently lowered to 60 percent.
- Between 2011 and 2012, the number of cases grew by 0.5 percent. This growth continues an upward trend in the number of IRF cases since 2010.
- While Medicare FFS spending on IRFs declined from 2004 through 2008, total Medicare spending rose 4.0 percent from 2011 to 2012.

Chart 8-14. Overall IRF payments per case have risen faster than costs since implementation of the PPS in 2002



Note: IRF (inpatient rehabilitation facility), PPS (prospective payment system). Costs are not adjusted for changes in case mix.

Source: MedPAC analysis of cost report data from CMS.

- Since implementation of the PPS in 2002, overall Medicare payments per case have cumulatively increased more than costs per case. In most years from 2004 through 2009, costs per case grew more than payments, although payments per case have grown more than costs each year since 2010.
- Between 2011 and 2012, payments per case increased more than costs per case.
- These trends in Medicare per case payments and costs are reflected in IRFs' Medicare margins, shown in Chart 8-15.

Chart 8-15. Inpatient rehabilitation facilities' Medicare margin by type, 2002–2012

	2002	2004	2006	2008	2010	2011	2012
All IRFs	10.8%	16.7%	12.4%	9.3%	8.7%	9.8%	11.1%
Hospital based	6.1	12.2	9.6	3.8	−0.4	−0.1	0.8
Freestanding	18.5	24.7	17.5	18.1	21.3	22.9	23.8
Urban	11.3	17.0	12.6	9.5	9.0	10.2	11.4
Rural	5.9	13.9	10.6	7.2	5.6	6.1	7.3
Nonprofit	6.5	12.8	10.7	5.3	2.1	2.0	2.1
For profit	18.5	24.4	16.3	16.8	19.6	21.0	22.9

Note: IRF (inpatient rehabilitation facility).

Source: MedPAC analysis of cost report data from CMS.

- Freestanding and for-profit IRFs had substantially higher aggregate Medicare margins than hospital-based and nonprofit IRFs, continuing a trend that began with implementation of the IRF prospective payment system (PPS) in 2002.
- Medicare margins increased rapidly during the first two years (2002–2004) of the IRF PPS across all provider types. Aggregate margins rose from just under 2 percent in 2001 to almost 17 percent in 2004.
- Margins declined each year from 2004 (16.7 percent) to 2009 (8.4 percent). This decline was largely due to reductions in patient volume through 2008, resulting in fewer patients across whom to distribute fixed costs. Since 2010, aggregate margins have increased each year.
- Between 2011 and 2012, Medicare margins increased from 9.8 percent to 11.1 percent (an increase of 13 percent).

Chart 8-16. The top 25 MS–LTC–DRGs made up nearly two-thirds of LTCH discharges in 2012

MS–LTC –DRG	Description	Discharges	Percentage
207	Respiratory system diagnosis with ventilator support 96+ hours	15,842	11.3%
189	Pulmonary edema and respiratory failure	14,036	10.0
871	Septicemia without MV 96+ hours with MCC	8,954	6.4
177	Respiratory infections and inflammations with MCC	4,546	3.2
592	Skin ulcers with MCC	4,004	2.8
208	Respiratory system diagnosis with ventilator support < 96 hours	3,060	2.2
949	Aftercare with CC/MCC	3,060	2.2
539	Osteomyelitis with MCC	2,605	1.9
190	Chronic obstructive pulmonary disease with MCC	2,466	1.8
193	Simple pneumonia and pleurisy with MCC	2,259	1.6
919	Complications of treatment with MCC	2,200	1.6
559	Aftercare, musculoskeletal system and connective tissue with MCC	2,190	1.6
682	Renal failure with MCC	2,142	1.5
314	Other circulatory system diagnoses with MCC	2,061	1.5
862	Postoperative and post-traumatic infections with MCC	2,053	1.5
570	Skin debridement with MCC	1,965	1.4
870	Septicemia with MV 96+ hours	1,928	1.4
166	Other respiratory system OR procedures with MCC	1,899	1.4
4	Tracheostomy with MV 96+ hours or primary diagnosis except face, mouth & neck without major OR	1,840	1.3
291	Heart failure and shock with MCC	1,749	1.2
853	Infectious and parasitic diseases with OR procedure with MCC	1,561	1.1
602	Cellulitis with MCC	1,523	1.1
603	Cellulitis without MCC	1,487	1.1
981	Extensive OR procedure unrelated to principal diagnosis with MCC	1,455	1.0
371	Major gastrointestinal disorders & peritoneal infections with MCC	1,424	1.0
	Top 25 MS–LTC–DRGs	88,309	62.9
	Total	140,496	100.0

Note: MS–LTC–DRG (Medicare severity long-term care diagnosis related group), LTCH (long-term care hospital), MV (mechanical ventilation), MCC (major complication or comorbidity), CC (complication or comorbidity), OR (operating room). MS–LTC–DRGs are the case-mix system for LTCHs. Columns may not sum to totals due to rounding.

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

- Cases in LTCHs are concentrated in a relatively small number of MS–LTC–DRGs. In 2012, the top 25 MS–LTC–DRGs accounted for more than 60 percent of all cases.
- The most frequent diagnosis in LTCHs in 2012 was respiratory system diagnosis with ventilator support for more than 96 hours. Nine of the top 25 diagnoses, representing 42 percent of all cases, were respiratory conditions or involved prolonged mechanical ventilation.

Chart 8-17. The number of Medicare LTCH cases and users holding steady

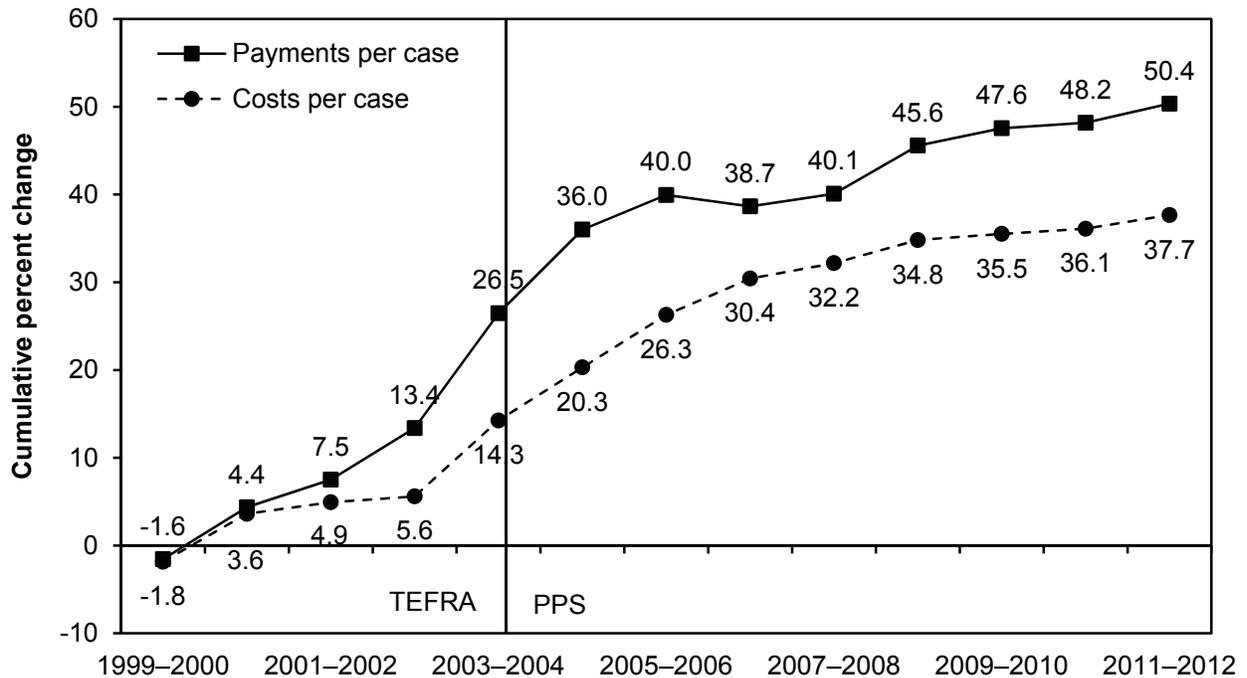
	2004	2005	2007	2011	2012	Average annual change			
						2004–2005	2005–2007	2007–2011	2011–2012
Cases	121,955	134,003	129,202	139,715	140,463	9.9%	–1.8%	2.0%	0.5%
Cases per 10,000 FFS beneficiaries	33.4	36.4	36.2	38.3	37.9	9.0	–0.3	1.4	–1.0
Spending per FFS beneficiary	\$ 101.3	\$ 122.2	\$ 126.0	\$ 148.0	\$149.6	20.7	1.5	4.1	1.1
Payment per case	30,059	33,658	34,769	38,664	39,493	12.0	1.6	2.7	2.1
Length of stay (in days)	28.5	28.2	26.9	26.3	26.2	–1.1	–2.3	–0.5	–0.4
Users	108,814	119,282	114,299	122,838	123,652	9.6	–2.1	1.8	0.7

Note: LTCH (long-term care hospitals), FFS (fee-for-service).

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

- Between 2011 and 2012, the number of beneficiaries who had LTCH stays (users) increased by 0.7 percent.
- Controlling for the number of FFS beneficiaries, the number of LTCH cases declined 1.0 percent between 2011 and 2012. The decline is due at least in part to a congressional moratorium that limited growth in the number of LTCHs.

Chart 8-18. LTCHs' per case payments continue to increase more than costs



Note: LTCH (long-term care hospital), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system). Percent changes are calculated based on consistent two-year cohorts of LTCHs.

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

- In the first years of the PPS, costs per case increased rapidly, following a surge in payments per case.
- Between 2005 and 2007, growth in cost per case slowed considerably, as regulatory changes to Medicare's payment policies for LTCHs slowed growth in payment per case.
- Since 2007, LTCHs have held cost growth below the rate of market basket increases. Between 2009 and 2011, the average cost per case increased less than 1.0 percent per year. Between 2011 and 2012, the average cost per case increased 1.6 percent.

Chart 8-19. The aggregate LTCH Medicare margin rose in 2012

Type of LTCH	Share of discharges	2004	2006	2008	2010	2011	2012
All	100%	9.0%	9.7%	3.6%	6.7%	6.7%	7.1%
Urban	95	9.2	9.9	3.9	7.0	6.8	7.2
Rural	4	2.6	4.7	-3.2	-0.1	3.0	3.4
Nonprofit	14	6.9	6.5	-2.5	-0.2	0.9	-1.4
For profit	84	10.0	10.9	5.3	8.2	8.2	8.9
Government	2	N/A	N/A	N/A	N/A	N/A	N/A

Note: LTCH (long-term care hospital), N/A (not available). "Share of discharges" column groupings may not sum to 100 percent due to rounding or missing data. Margins for government-owned providers are not shown. They operate in a different context from other providers, so their margins are not necessarily comparable.

Source: MedPAC analysis of cost report data from CMS.

- After implementation of the prospective payment system, LTCHs' Medicare margins increased rapidly for all LTCH provider types, climbing to 11.9 percent in 2005 (data not shown). Margins then fell as growth in payments per case leveled off.
- In 2009, LTCH margins began to climb again as providers consistently held cost growth below that of payments. In 2012, the aggregate margin was 7.1 percent.
- Financial performance in 2012 varied across LTCHs. The aggregate Medicare margin for for-profit LTCHs (which accounted for 84 percent of all Medicare discharges from LTCHs) was 8.9 percent. Rural LTCHs' aggregate margin was 3.4 percent, compared with 7.2 percent for their urban counterparts. Rural providers account for about 4 percent of LTCH discharges and care for a smaller volume of patients on average, which may result in fewer economies of scale.

SECTION

9

Medicare Advantage

Chart 9-1. MA plans available to virtually all Medicare beneficiaries

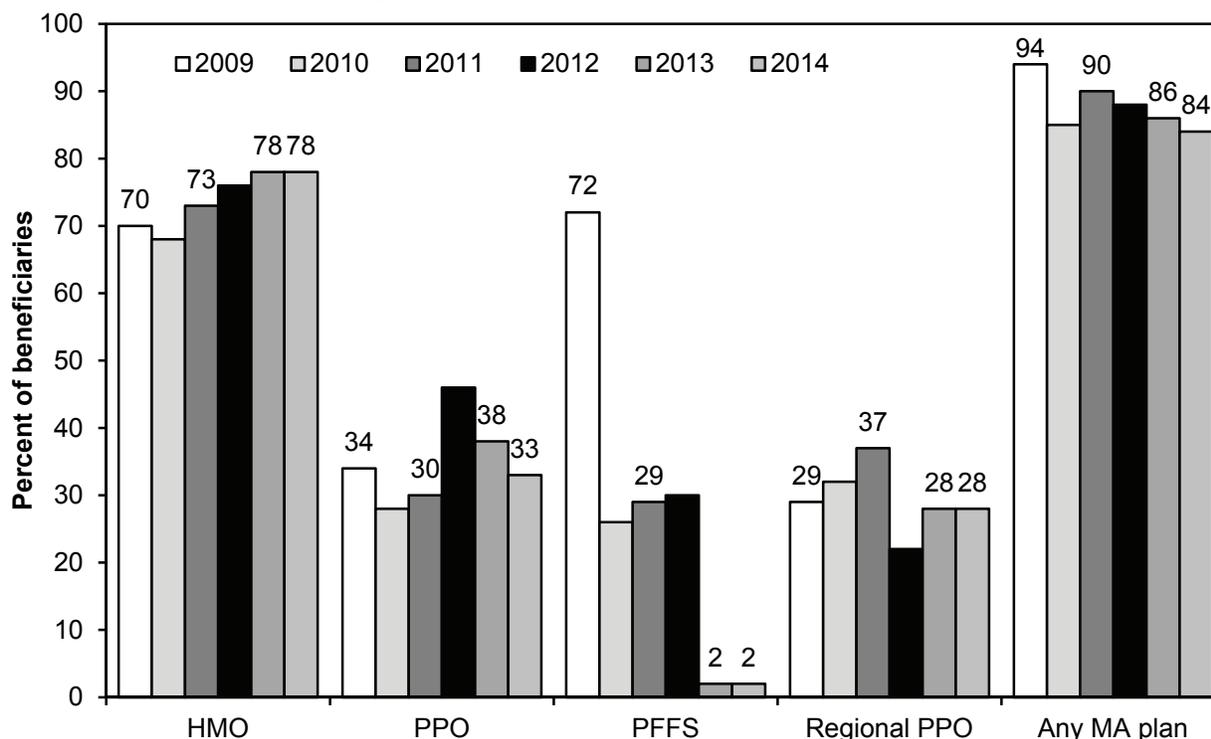
	CCPs			PFFS	Any MA plan	Average plan offerings per county
	HMO or local PPO	Regional PPO	Any CCP			
2009	88%	91%	99%	100%	100%	34
2010	91	86	99	100	100	21
2011	92	86	99	63	100	12
2012	93	76	99	60	100	12
2013	95	71	99	59	100	12
2014	95	71	99	53	100	10

Note: MA (Medicare Advantage), CCP (coordinated care plan), HMO (health maintenance organization), PPO (preferred provider organization), PFFS (private fee-for-service). These data do not include plans that have restricted enrollment or are not paid based on the MA plan bidding process (special needs plans, cost plans, employer-only plans, and certain demonstration plans).

Source: MedPAC analysis of plan bid data from CMS.

- There are four types of plans, three of which are CCPs. Local CCPs include local PPOs and HMOs, which have comprehensive provider networks and limit or discourage use of out-of-network providers. Local CCPs may choose which individual counties to serve. Regional PPOs cover entire state-based regions and have networks that may be looser than those required of local PPOs. Since 2011, PFFS plans (not CCPs) are required to have networks in areas with two or more CCPs. In areas where there are not two or more CCPs, PFFS plans are not required to have networks and enrollees are free to use any Medicare provider.
- Local CCPs are available to 95 percent of Medicare beneficiaries in 2014 and regional PPOs are available to 71 percent of beneficiaries; the availability of both plan types is unchanged from 2013. However, the availability of MA PFFS plans has declined from 59 percent of beneficiaries in 2013 to 53 percent of beneficiaries in 2014. The decline is due to recent provider network requirements in most of the country. For the past nine years, virtually 100 percent of Medicare beneficiaries have had MA plans available, up from 84 percent in 2005.
- The number of plans from which beneficiaries may choose in 2014 is down from last year. In 2014, beneficiaries can choose from an average of 10 plans operating in their counties (this is the simple average of available plans per county; if counties were enrollee weighted, the average would be substantially higher). This number has decreased after peaking in 2008 and 2009, reflecting CMS's 2010 effort to reduce the number of duplicative plans and plans with small enrollment, as well as network requirements for PFFS plans. The decrease in plan choices from 2010 to 2014 was due to the reduction in the number of PFFS and regional PPO plans.

Chart 9-2. Access to zero-premium plans with MA drug coverage, 2009–2014

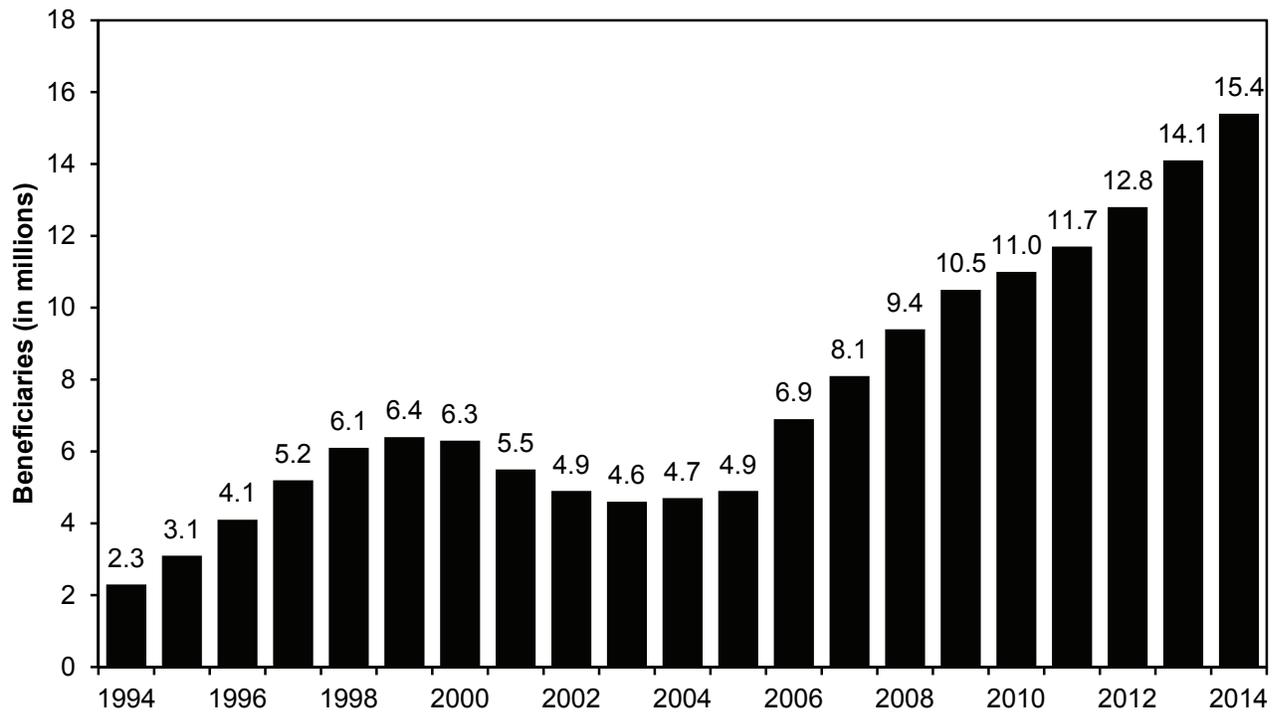


Note: MA (Medicare Advantage), HMO (health maintenance organization), PPO (preferred provider organization), PFFS (private fee-for-service).

Source: MedPAC analysis of bid and plan finder data from CMS.

- Across all plan types, the availability of zero-premium plans—plans with no beneficiary premium other than the Medicare Part B premium—has ranged from 84 percent to 94 percent since 2009. Most beneficiaries can obtain a Medicare Advantage–Prescription Drug (MA–PD) plan, an MA plan that includes Part D drug coverage, for which the enrollee pays no premium. In 2014, 84 percent of Medicare beneficiaries have access to at least one MA–PD plan with no premium (beyond the Medicare Part B premium) for the combined coverage (and no premium for any non-Medicare-covered benefits included in the benefit package), compared with 86 percent in 2013.
- Seventy-eight percent of beneficiaries have zero-premium MA–PD HMOs available. MA–PD PPOs without premiums are less widely available but are available to 33 percent of beneficiaries in 2014, while zero-premium regional PPOs are available to 28 percent of Medicare beneficiaries. PFFS plans offering zero premiums and Part D drug coverage are available to only 2 percent of beneficiaries in 2014, down from 30 percent of beneficiaries in 2012.
- In most cases, MA plan enrollees continue paying their Medicare Part B premium, but some MA–PD plans use rebate dollars to reduce or eliminate their enrollees’ Part B premium obligation.

Chart 9-3. Enrollment in MA plans, 1994–2014



Note: MA (Medicare Advantage).

Source: Medicare managed care contract reports and monthly summary reports, CMS.

- Medicare enrollment in MA plans that are paid on an at-risk capitated basis is at an all-time high, at 15.4 million enrollees (29 percent of all Medicare beneficiaries). Enrollment rose rapidly throughout the 1990s, peaking at 6.4 million enrollees in 1999, but then declined to a low of 4.6 million enrollees in 2003. MA enrollment has increased steadily since 2003.

Chart 9-4. Changes in enrollment vary among major plan types

Plan type	Total enrollees (in thousands)					Percent change 2013–2014
	February 2010	February 2011	February 2012	February 2013	February 2014	
Local CCPs	8,534	9,993	11,382	12,580	13,809	10%
Regional PPOs	760	1,132	930	1,060	1,221	16
PFFS	1,657	588	518	417	309	–26

Note: CCP (coordinated care plan), PPO (preferred provider organization), PFFS (private fee-for-service). Local CCPs include health maintenance organizations and local PPOs.

Source: CMS health plan monthly summary reports.

- Enrollment in local CCPs grew by 10 percent over the past year. Enrollment in regional PPOs grew by 16 percent, while enrollment in PFFS plans continued to decline. Combined enrollment in the three types of plans grew by 9 percent from February 2013 to February 2014.

Chart 9-5. MA and cost plan enrollment by state and type of plan, 2014

State	Medicare eligibles (in thousands)	Distribution (in percent) of enrollees by plan type					Total
		HMO	Local PPO	Regional PPO	PFFS	Cost	
U.S. total	52,635	19%	7%	2%	1%	1%	30%
Alabama	933	15	7	2	0	0	24
Alaska	76	0	0	0	0	0	0
Arizona	1,060	35	3	1	0	0	38
Arkansas	579	7	3	5	4	0	19
California	5,363	37	1	0	0	0	38
Colorado	735	29	3	0	1	4	36
Connecticut	614	21	3	1	0	0	24
Delaware	170	5	2	0	0	0	8
Florida	3,785	27	3	9	0	0	38
Georgia	1,437	8	13	7	1	0	28
Hawaii	233	18	16	12	0	0	46
Idaho	264	11	20	0	0	0	32
Illinois	2,005	7	8	1	0	0	16
Indiana	1,108	3	14	5	1	0	23
Iowa	554	5	7	0	0	2	14
Kansas	471	5	6	0	1	0	13
Kentucky	836	4	13	6	1	0	25
Louisiana	760	24	1	2	0	0	28
Maine	295	13	7	0	0	0	20
Maryland	889	3	1	0	0	4	9
Massachusetts	1,171	15	3	1	0	0	19
Michigan	1,830	12	16	2	0	0	30
Minnesota	873	16	5	0	0	31	52
Mississippi	542	7	3	3	1	0	13
Missouri	1,097	17	5	3	1	0	27
Montana	191	0	14	0	3	0	17
Nebraska	302	5	4	0	2	1	12
Nevada	419	29	3	0	0	0	33
New Hampshire	251	2	2	0	2	0	7
New Jersey	1,447	13	2	0	0	0	15
New Mexico	353	18	12	0	0	0	31
New York	3,242	26	7	2	1	0	36
North Carolina	1,684	14	11	2	1	0	29
North Dakota	115	0	2	0	0	12	14
Ohio	2,077	17	17	3	0	1	39
Oklahoma	657	11	4	0	1	0	17
Oregon	707	24	20	0	0	0	44
Pennsylvania	2,459	23	15	0	1	0	40
Puerto Rico	733	67	6	0	0	0	73
Rhode Island	197	33	1	1	0	0	36
South Carolina	887	5	6	9	1	0	22
South Dakota	149	0	6	0	1	9	16
Tennessee	1,183	23	8	1	0	0	32
Texas	3,440	17	7	3	1	1	29
Utah	325	25	9	0	0	0	34
Vermont	126	0	2	3	3	0	7
Virgin Islands	18	0	0	0	0	0	0
Virginia	1,289	5	4	2	3	2	16
Washington	1,116	24	5	0	0	0	30
Washington D.C.	85	2	2	0	0	7	11
West Virginia	407	1	10	11	2	2	27
Wisconsin	1,006	18	11	2	1	4	35
Wyoming	90	0	1	0	2	1	4

Note: MA (Medicare Advantage), HMO (health maintenance organization), PPO (preferred provider organization), PFFS (private fee-for-service). Cost plans are not MA plans; they submit cost reports rather than bids to CMS. Totals may not sum due to rounding.

Source: CMS enrollment and population data 2014.

Chart 9-6. MA plan benchmarks, bids, and Medicare program payments relative to FFS spending, 2014

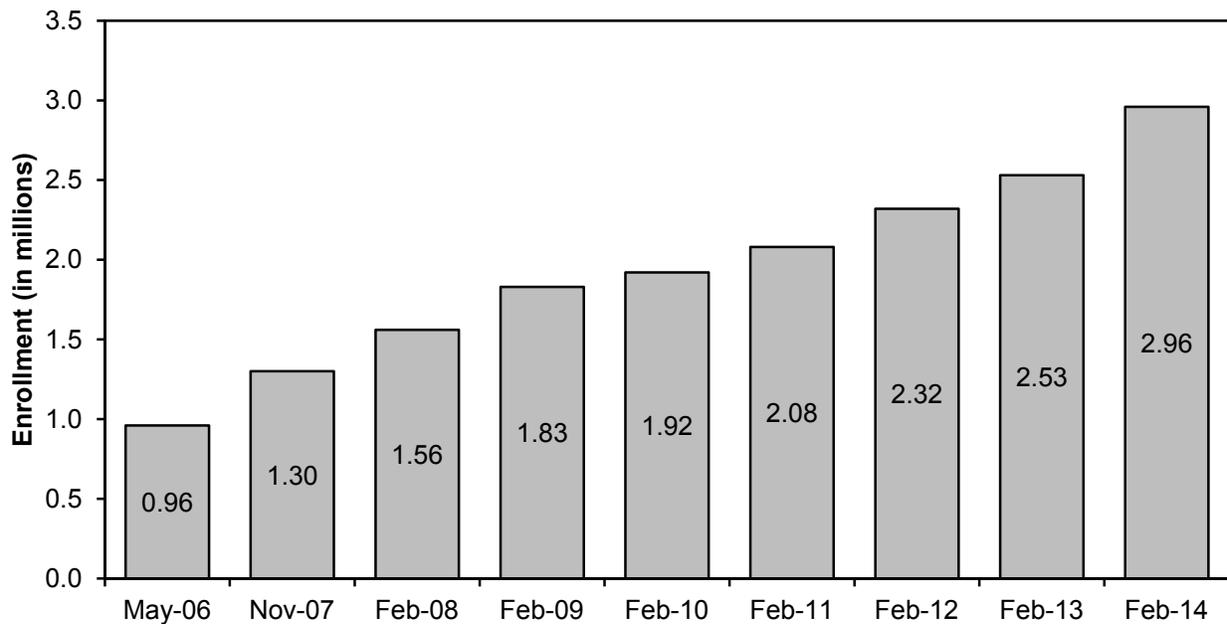
	All plans	HMOs	Local PPOs	Regional PPOs	PFFS
Benchmarks/FFS	112%	112%	113%	109%	114%
Bids/FFS	98	95	108	102	110
Payments/FFS	106	105	110	106	111

Note: MA (Medicare Advantage), FFS (fee-for-service), HMO (health maintenance organization), PPO (preferred provider organization), PFFS (private fee-for-service).

Source: MedPAC analysis of plan bid data from CMS October 2013.

- Since 2006, plan bids have partially determined the Medicare payments they receive. Plans bid to offer Part A and Part B coverage to Medicare beneficiaries (Part D coverage is bid separately). The bid includes plan administrative cost and profit. CMS bases the Medicare payment for a private plan on the relationship between its bid and its applicable benchmark.
- The benchmark is an administratively determined bidding target. Legislation established the formula, being phased in by 2017, for calculating benchmarks in each county, based on percentages (ranging from 95% to 115%) of each county's per capita Medicare spending.
- If a plan's bid is above the benchmark, then the plan receives the benchmark as payment from Medicare, and enrollees have to pay an additional premium that equals the difference. If a plan's bid is below the benchmark, the plan receives its bid plus a "rebate," defined by law as a percentage of the difference between the plan's bid and its benchmark. The percentage is based on the plan's quality rating and ranges from 50 percent to 70 percent. The plan must then return the rebate to its enrollees in the form of supplemental benefits, lower cost sharing, or lower premiums.
- We estimate that MA benchmarks average 112 percent of FFS spending when weighted by MA enrollment. The ratio varies by plan type because different types of plans tend to draw enrollment from different types of areas.
- Plans' enrollment-weighted bids average 98 percent of FFS spending. We estimate that HMOs bid an average of 95 percent of FFS spending, while bids from other plan types average at least 102 percent of FFS spending. These numbers suggest that HMOs can provide the same services for less than FFS in the areas where they bid, while most other plan types tend to charge more.
- We project that 2014 MA payments will be 106 percent of FFS spending. It is likely this number will decline over the next few years as benchmarks are gradually reduced relative to FFS levels to meet requirements under the Patient Protection and Affordable Care Act of 2010.
- The ratio of payments relative to FFS spending varies by the type of MA plan. HMOs and regional PPO payments are estimated to be 105 percent and 106 percent of FFS, respectively, while payments to PFFS and local PPOs will average 111 percent and 110 percent of FFS, respectively.

Chart 9-7. Enrollment in employer group MA plans, 2006–2014

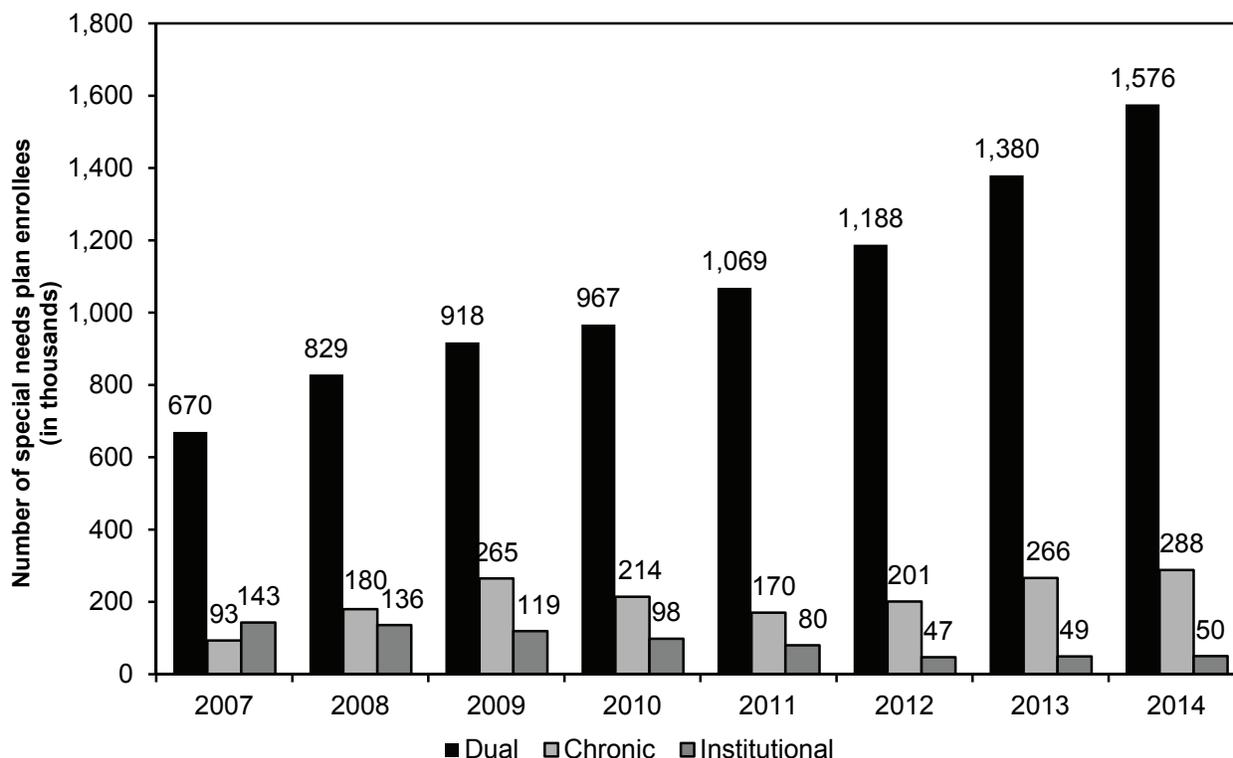


Note: MA (Medicare Advantage)

Source: CMS enrollment data.

- While most MA plans are available to any Medicare beneficiary residing in a given area, some MA plans are available only to retirees whose Medicare coverage is supplemented by their former employer or union. These plans are called employer group plans. Such plans are usually offered through insurers and are marketed to groups formed by employers or unions rather than to individual beneficiaries.
- As of February 2014, about 3 million enrollees were in employer group plans, or about 19 percent of all MA enrollees.
- Our analysis of MA bid data shows that employer group plans on average have bids that are higher relative to FFS spending than individual plans, meaning that group plans appear to be less efficient than individual market MA plans. Employer group plans bid an average of 107 percent of FFS, compared with 97 percent of FFS for individual plans (not shown in Chart 9-7).

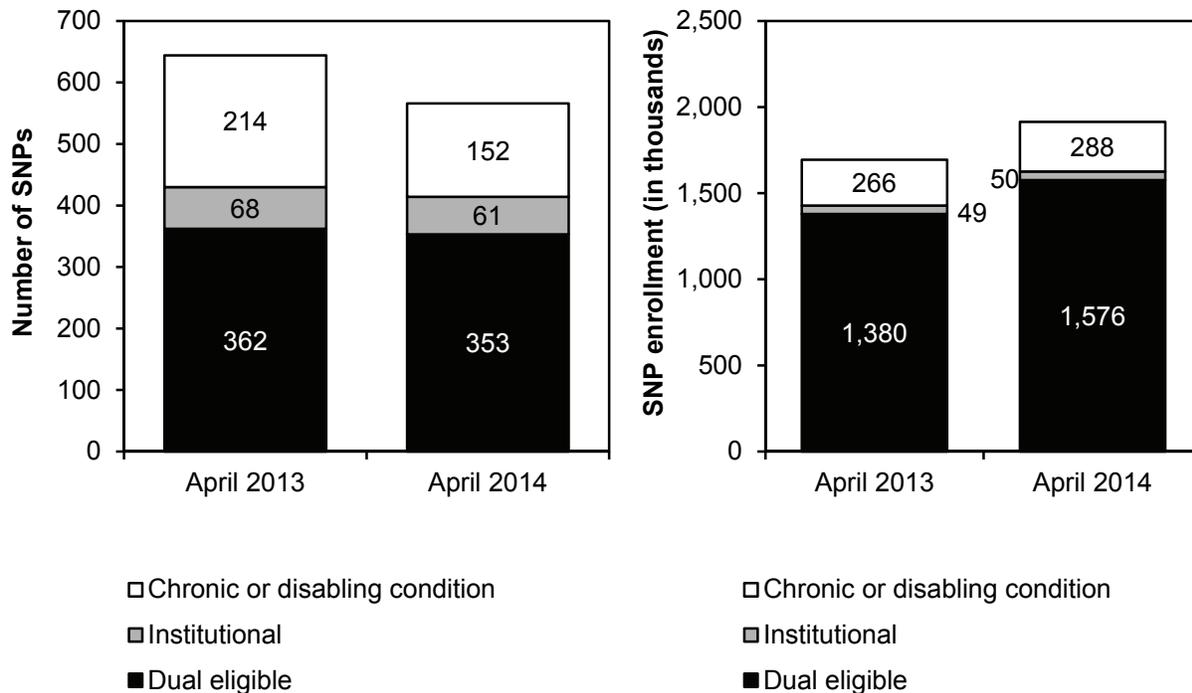
Chart 9-8. Number of special needs plan enrollees, 2007–2014



Source: CMS special needs plans comprehensive reports, May 2007, April 2008–2014.

- The Congress created special needs plans (SNPs) as a new Medicare Advantage (MA) plan type in the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 to provide a common framework for the existing plans serving special needs beneficiaries and to expand beneficiaries' access to and choice among MA plans.
- SNPs were originally authorized for five years. SNP authority was extended several times, often subject to new requirements, most recently in the Protecting Access to Medicare Act of 2014. Absent further congressional action, SNP authority will expire at the end of 2016.
- CMS approves three types of SNPs: dual-eligible SNPs enroll only beneficiaries dually entitled to Medicare and Medicaid, chronic condition SNPs enroll only beneficiaries who have certain chronic or disabling conditions, and institutional SNPs enroll only beneficiaries who reside in institutions or are nursing home certified.
- Enrollment in dual-eligible SNPs has grown continuously and is about 1.6 million in 2014.
- Enrollment in chronic-condition SNPs has fluctuated as plan requirements have changed.
- Enrollment in institutional SNPs had declined steadily through 2012, although enrollment has grown slightly over the last couple of years.

Chart 9-9. Number of SNPs declined and SNP enrollment rose from 2013 to 2014



Note: SNP (special needs plan).

Source: CMS special needs plans comprehensive reports, April 2013 and 2014.

- The number of SNPs decreased by 12 percent from April 2013 to April 2014, and the number of SNP enrollees increased by 13 percent.
- In 2014, most SNPs (62 percent) are for dual-eligible beneficiaries, while 27 percent are for beneficiaries with chronic conditions, and 11 percent are for beneficiaries who reside in institutions (or reside in the community but have a similar level of need).
- Enrollment in SNPs has grown from 0.9 million in May 2007 (not shown) to 1.9 million in April 2014.
- The availability of SNPs varies by type of special needs population served. In 2014, 82 percent of beneficiaries reside in areas where SNPs serve dual-eligible beneficiaries (unchanged from 2013), 47 percent live where SNPs serve institutionalized beneficiaries (up from 46 percent), and 51 percent live where SNPs serve beneficiaries with chronic conditions (down from 55 percent).

Chart 9-10. Twenty most common condition categories among MA beneficiaries, defined in the CMS–HCC model, 2012

Conditions (defined by HCC)	Percent of beneficiaries with listed condition	Percent of beneficiaries with listed condition and no others
Diabetes without complications	14.3%	5.3%
Vascular disease	13.9	1.5
Renal failure	13.2	1.5
COPD	13.1	2.0
CHF	10.7	0.5
Specified heart arrhythmias	10.7	1.4
Polyneuropathy	9.2	0.6
Angina pectoris/old myocardial infarction	7.1	0.7
Major depressive, bipolar, and paranoid disorders	6.8	1.4
Breast, prostate, colorectal, and other cancers and tumors	6.6	1.9
Diabetes with renal or peripheral circulatory manifestation	6.4	0.3
Rheumatoid arthritis and inflammatory connective tissue disease	4.8	1.0
Diabetes with neurologic or other specified manifestation	4.1	0.5
Cardio-respiratory failure and shock	3.2	0.1
Ischemic or unspecified stroke	2.7	0.2
Major complications of medical care and trauma	2.3	0.2
Seizure disorders and convulsions	2.2	0.3
Unstable angina and other acute ischemic heart disease	1.7	0.1
Diabetes with ophthalmologic or unspecified manifestation	1.7	0.5
Vascular disease with complications	1.6	0.1

Note: MA (Medicare Advantage), HCC (hierarchical condition category), COPD (chronic obstructive pulmonary disease), CHF (congestive heart failure). The method used in this table differs from the analogous table from our 2013 data book. This year, we determined the number of beneficiaries in individual HCCs, whereas in 2013 we determined number of beneficiaries in the most common HCC combinations.

Source: MedPAC analysis of Medicare data files from Acumen LLC.

- CMS uses the CMS–HCC model to risk adjust capitated payments to MA plans, so that payments better reflect the clinical needs of MA enrollees given the number and severity of their clinical conditions. The CMS–HCC model uses beneficiaries’ conditions, which are collected into HCCs, to adjust the capitated payments.
- CMS is transitioning to a version of the CMS–HCC model that has 79 HCCs, but the year of this analysis is 2012, when the CMS–HCC model included 70 HCCs. The 2012 version had 5 diabetes HCCs, and 4 are among the 20 most common HCCs, including the most common one. Two categories for vascular disease are also among the 20 most common HCCs.

Chart 9-11. Medicare private plan enrollment patterns by age and Medicare–Medicaid dual-eligible status, December 2012

	As percent of Medicare population	Percent of category in FFS	Percent of category in plans
All beneficiaries	100%	74%	26%
Aged (65 or older)	83	72	28
Under 65	17	80	20
Non–dual eligible	82	73	27
Aged (65 or older)	73	72	28
Under 65	9	78	22
Dual eligible	18	77	23
Aged (65 or older)	11	73	27
Under 65	8	83	17
Dual-eligible beneficiaries by category (all ages)			
Full dual eligibility	13	81	19
Beneficiaries with partial dual eligibility			
QMB only	2	72	28
SLMB only	2	63	37
QI	1	59	41

Note: FFS (fee-for-service), QMB (qualified Medicare beneficiary), SLMB (specified low-income beneficiary), QI (qualified individual). “Dual eligible beneficiaries” are eligible for Medicare and Medicaid. See accompanying text for an explanation of the categories of dual-eligible beneficiaries. Data exclude Puerto Rico because of the inability to determine specific dual-eligible categories. As of December 2012, dual-eligible special needs plans in Puerto Rico enrolled 242,000 beneficiaries. Plans include Medicare Advantage plans as well as cost-reimbursed plans. Percentages may not sum to 100 percent due to rounding.

Source: MedPAC analysis of 2012 denominator file.

- Dual-eligible beneficiaries are more likely to receive their Medicare coverage through the traditional FFS program—77 percent of dual-eligible and 73 percent of non-dual-eligible beneficiaries are in FFS. However, recent levels of Medicare plan enrollment among the dually eligible represent a significant increase over earlier years. In 2004, only 1 percent of dual-eligible beneficiaries were enrolled in plans, compared with 16 percent of non-dual-eligible beneficiaries.
- A substantial share of dual-eligible beneficiaries (42 percent (not shown in table)) are under the age of 65 and entitled to Medicare on the basis of disability or end-stage renal disease. Such beneficiaries are less likely than aged beneficiaries to enroll in Medicare plans (20 percent vs. 28 percent). Comparing dual-eligible beneficiaries under age 65 with non-dual-eligible beneficiaries under age 65 shows that the latter are more likely to be plan enrollees—17 percent and 22 percent, respectively.
- Dual-eligible beneficiaries who have full dual eligibility—that is, those who have coverage for their Medicare out-of-pocket costs (premiums and cost sharing) as well as coverage for services such as long-term care services and supports—are less likely to enroll in Medicare plans than beneficiaries with “partial” dual eligibility. Full dual-eligibility categories consist of beneficiaries with coverage through state Medicaid programs that include drug coverage as well as certain QMBs and SLMBs who also have Medicaid coverage for services. The latter two categories are referred to as QMB Plus and SLMB Plus beneficiaries. Beneficiaries with partial dual eligibility have coverage for Medicare premiums (through the QI or SLMB program) or premiums and Medicare cost sharing, in the case of the QMB program. SLMB-only and QI beneficiaries have higher rates of plan enrollment (37 percent and 41 percent, respectively) than any other category shown in Chart 9-11, and it is higher than the average rate (26 percent) across all Medicare beneficiaries.

Chart 9-12. Distribution of MA plans and enrollment by CMS overall star ratings, February 2014

Plans and enrollment	Year 2014 star ratings: Number of stars							Any star rating
	5	4.5	4	3.5	3	2.5	2	
All plan types								
Number of plans	11	64	87	143	108	16	1	430
As share of rated plans	9%	15%	13%	38%	20%	5%	0%	100%
HMOs								
Number of plans	11	44	58	85	71	13	1	283
As share of HMO enrollees	14%	21%	24%	27%	14%	1%	< 1%	100%
Local PPOs								
Number of plans	0	19	27	51	27	1	0	125
As share of local PPO enrollees	N/A	33%	18%	37%	12%	< 1%	N/A	100%
Regional PPOs								
Number of plans	0	1	0	3	6	1	0	11
As share of regional PPO enrollees	N/A	2%	N/A	49%	45%	4%	N/A	100%
PFFS								
Number of plans	0	0	2	4	4	1	0	11
As share of PFFS enrollees	N/A	N/A	58%	30%	11%	2%	N/A	100%

Note: MA (Medicare Advantage), HMO (health maintenance organization), PPO (preferred provider organization), N/A (not applicable), PFFS (private fee-for-service). For purposes of this table, a plan is an MA contract, which can consist of several options with different benefit packages that are also referred to as "plans." Cost-reimbursed HMO plans are included in the data. Numbers may not sum to 100 percent due to rounding; enrollment totals are rounded results of the sum of unrounded numbers.

Source: MedPAC analysis of CMS star ratings and enrollment data 2014.

- The star rating system is a composite measure of clinical processes and outcomes, patient experience measures, and measures of a plan's administrative performance. The overall star rating measures performance on Part C measures and Part D measures.
- The average overall star rating across all plans is 3.62, or 3.87 on an enrollment-weighted basis. There are 144 plans with enrollment in 2014 that do not have a star rating because they are too new to be rated or there is insufficient information on which to base a rating.

(Chart continued next page)

Chart 9-12. Distribution of MA plans and enrollment by CMS overall star ratings, February 2014 (continued)

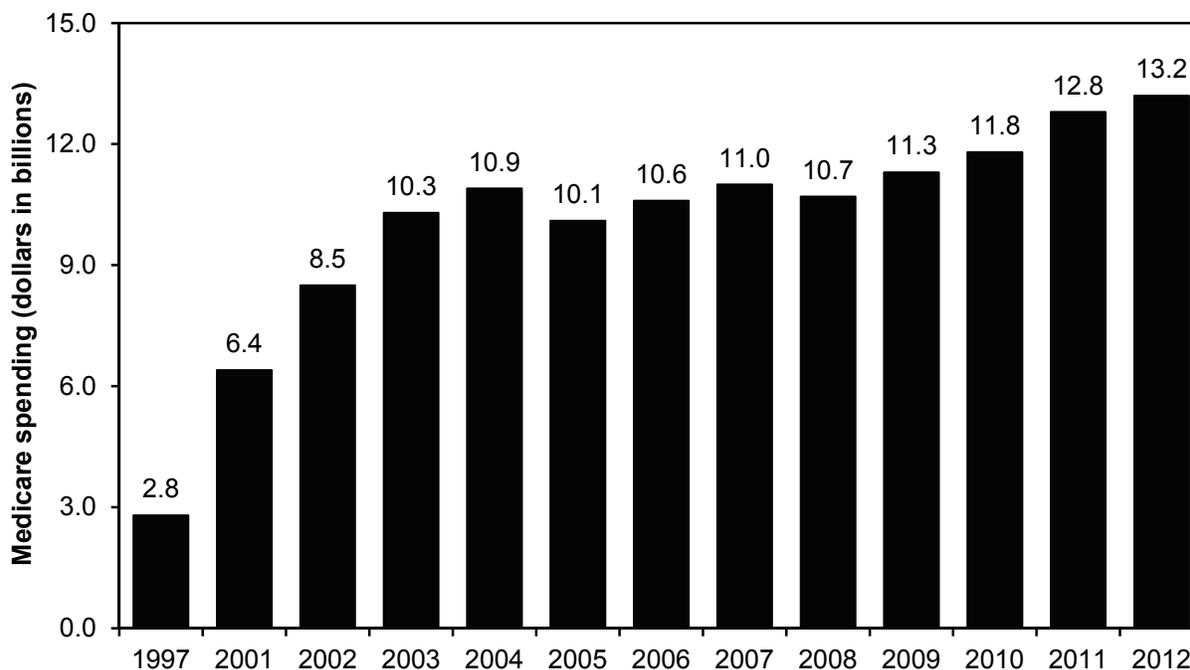
- Under the statutory provisions that introduced quality bonus payments beginning in 2012, plans with ratings of 4 stars or more receive bonus payments in the form of an increase in their benchmarks. Plan star ratings also determine the level of rebate dollars, with higher rated plans able to use a higher proportion of the difference between the plan bid and benchmark amounts to provide extra benefits to enrollees.
- Under a demonstration during the period 2012 to 2014, plans with star ratings of 3 or 3.5 stars also receive bonuses. Under the statutory bonus provisions, no PFFS plans would have received a bonus payment, and only 2 percent of regional plan enrollment would be in bonus plans if 2013 stars were used to determine bonuses. For HMOs, 42 percent of enrollees would be in bonus plans and 36 percent of local PPO enrollment would be in such plans. (The quality bonuses for 2014 are based on 2013 star ratings. The 2014 star ratings were the ratings displayed during the October–December 2013 enrollment period.)
- Plans with a 5-star rating are able to enroll beneficiaries outside of the annual election period, on a year-round basis. HMOs are the only plan type for which there are 5-star plans. Ten MA HMO plans and one cost-reimbursed HMO plan have 5-star ratings. The highest star rating attained by any local PPO is 4.5, whereas the highest rating for a PFFS plan is 4 (for two plans). One regional PPO plan has a 4.5-star rating, but most regional plan enrollees (49 percent) are in plans with a 3.5-star rating.
- The criteria for determining plan star ratings change from year to year. Therefore, plan ratings across years are not entirely comparable. Between 2011 and 2013, star rating criteria were changed, and a weighting approach was used as of 2012. In 2013 and 2014, two-thirds of the total weight of measures reflect Part C and Part D clinical quality measures, compared with just less than one-half of total weight in 2011.

SECTION

10

Prescription drugs

Chart 10-1. Medicare spending for Part B drugs furnished in physicians' offices or by suppliers



Note: Data include Part B–covered drugs administered in physicians' offices or furnished by suppliers (e.g., certain oral drugs and drugs used with durable medical equipment). Data do not include Part B–covered drugs furnished in hospital outpatient departments or dialysis facilities. Medicare spending includes program payments and beneficiary cost sharing.

Source: MedPAC analysis of Medicare claims data.

- Medicare spending for Part B drugs furnished in physicians' offices or by suppliers totaled about \$13.2 billion in 2012, an increase of about 3 percent from the 2011 level.
- Medicare spending on Part B drugs furnished in physician offices or by suppliers increased at an average rate of 25 percent per year from 1997 to 2003. In 2005, the Medicare payment rate changed from one based on the average wholesale price to 106 percent of the average sales price. With the move to the new payment system, spending declined 8 percent in 2005. Since 2005, spending has increased at an average annual rate of just under 4 percent.
- Reduced use of darbepoetin alfa and epoetin alfa (annual spending has declined nearly \$1.3 billion since 2005) has also contributed to slower growth in physician and supplier Part B drug spending.
- Total spending displayed in the chart does not include drugs provided through hospital outpatient departments (HOPDs). Separately paid HOPD drugs have grown rapidly in recent years—from about \$3.5 billion in 2009 to about \$6.0 billion in 2012.

Chart 10-2. Top 10 Part B drugs furnished in physicians' offices, by suppliers, and in hospital outpatient departments (in millions), 2011 and 2012

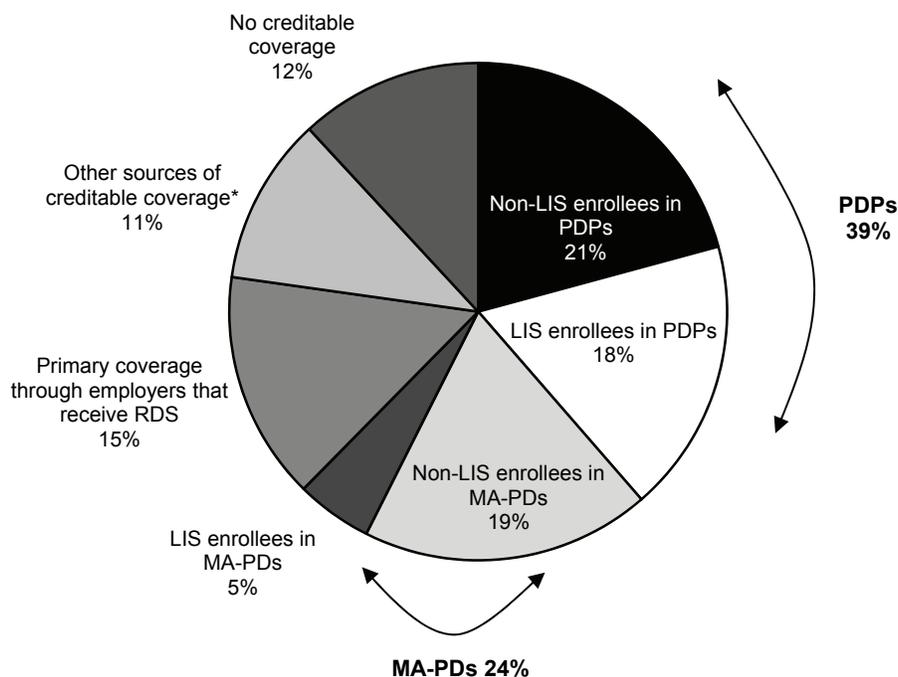
Part B drug	Total Part B drug spending		Physician and supplier Part B drug spending		Hospital outpatient Part B drug spending	
	2011	2012	2011	2012	2011	2012
Rituximab	\$1,377	\$1,429	\$885	\$876	\$491	\$553
Ranibizumab	1,433	1,278	1,366	1,220	67	57
Pegfilgrastim	997	1,063	624	643	373	420
Bevacizumab	970	1,022	667	625	303	397
Infliximab	927	1,002	669	704	259	297
Immune globulin	736	880	326	407	411	473
Oxaliplatin	477	527	310	309	167	218
Pemetrexed	469	517	281	292	188	225
Denosumab	N/A	493	N/A	347	N/A	146
Trastuzumab	397	468	251	273	146	196
Total spending, top 10 Part B drugs	7,783	8,678	5,378	5,696	2,405	2,983
Total spending, all Part B drugs	17,944	19,204	12,821	13,191	5,125	6,013

Note: N/A (not available). The 10 Part B drugs with the highest total Medicare expenditures in 2012 are displayed in the table. Data for hospital outpatient departments only include separately paid drugs. Data do not include Part B drugs furnished in dialysis facilities. Medicare spending includes Medicare program payments and beneficiary cost sharing. Spending for denosumab is only reported for 2012, the first year the product had its own billing code. Data may not sum to total due to rounding.

Source: MedPAC analysis of Medicare claims data from CMS.

- Medicare covers roughly 600 outpatient drugs under Part B, but spending is very concentrated. Medicare spending (including cost sharing) on the five highest expenditure products, all of which are biologics, totaled about \$5.7 billion in 2012, about 30 percent of all Medicare Part B spending on drugs that year. The top 10 products accounted for about 45 percent of all Part B spending on drugs.
- Total spending on Part B drugs increased by about 7 percent from 2011 to 2012, predominantly because of spending growth in hospital outpatient departments. Overall, Medicare spending on Part B drugs grew by 17 percent in hospital outpatient departments compared to 3 percent for Part B drugs furnished by physicians or suppliers during this period.
- Many of the top 10 drugs are used to treat cancer or its side effects (rituximab, pegfilgrastim, bevacizumab, oxaliplatin, pemetrexed, denosumab, trastuzumab). Drugs used to treat age-related macular degeneration (ranibizumab and bevacizumab), rheumatoid arthritis (rituximab and infliximab), and immune disorders (immune globulin) are also included in the top 10.

Chart 10-3. In 2011, almost 90 percent of Medicare beneficiaries were enrolled in Part D plans or had other sources of creditable drug coverage



Note: LIS (low-income subsidy), PDP (prescription drug plan), MA-PD (Medicare Advantage–Prescription Drug [plan]), RDS (retiree drug subsidy). Percentages may not add to 100 due to rounding.
 *"Creditable coverage" means the value of drug benefits is equal to or greater than that of the basic Part D benefit.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Access to Care file 2011.

- Over three-quarters of Medicare beneficiaries were either signed up for Part D plans or had prescription drug coverage through employer-sponsored plans under Medicare's RDS in 2011. (If an employer agrees to provide primary drug coverage to its retirees with a benefit value that is equal to or greater than that of Part D (called "creditable coverage"), Medicare provides the employer with a tax-free subsidy for 28 percent of each eligible individual's drug costs that fall within a specified range of spending.)
- About 23 percent of Medicare beneficiaries received Part D's LIS in 2011. Among all LIS beneficiaries, four out of five (18 percent of all Medicare beneficiaries) were enrolled in stand-alone PDPs and the remainder (5 percent of all Medicare beneficiaries) were in MA-PD plans.
- Other enrollees in stand-alone PDPs accounted for 21 percent of all Medicare beneficiaries. Another 19 percent were in MA-PD plans or other private Medicare health plans. Individuals whose employers received Medicare's RDS accounted for nearly 15 percent.

(Chart continued next page)

Chart 10-3. In 2011, almost 90 percent of Medicare beneficiaries were enrolled in Part D plans or had other sources of creditable drug coverage (continued)

- Other Medicare beneficiaries had creditable drug coverage, but that coverage did not affect Medicare program spending. Examples of other sources of creditable coverage include the Federal Employees Health Benefits program, TRICARE, Department of Veterans Affairs, and employers not receiving the RDS.
- About 12 percent of Medicare beneficiaries had no drug coverage or coverage that is less generous than Part D's defined standard benefit.

Chart 10-4. Changes in parameters of the Part D defined standard benefit over time

	2006	2012	2013	2014	Cumulative change 2006–2014
Deductible	\$250.00	\$320.00	\$325.00	\$310.00	24%
Initial coverage limit	2,250.00	2,930.00	2,970.00	2,850.00	27%
Annual out-of-pocket threshold	3,600.00	4,700.00	4,750.00	4,550.00	26%
Total covered drug spending at annual out-of-pocket threshold	5,100.00	6,730.39	6,954.52	6,690.77	31%
Minimum cost sharing above the annual out-of-pocket threshold					
Copay for generic/preferred multisource drugs	2.00	2.60	2.65	2.55	28%
Copay for other prescription drugs	5.00	6.50	6.60	6.35	27%

Note: Under Part D's defined standard benefit, the enrollee pays the deductible and then 25 percent of covered drug spending (75 percent paid by the plan) until total covered drug spending reaches the initial coverage limit (ICL). Before 2011, enrollees exceeding the ICL were responsible for 100 percent of covered drug spending up to the annual out-of-pocket threshold. Beginning in 2011, enrollees face reduced cost sharing in the coverage gap. For 2011 and later years, the amount of total covered drug spending at the annual out-of-pocket threshold depends on the mix of brand and generic drugs filled during the coverage gap. The amounts shown are for individuals not receiving Part D's low-income subsidy who have no other source of supplemental coverage. Cost sharing paid by most sources of supplemental coverage does not count toward this threshold. The enrollee pays nominal cost sharing above the limit.

Source: CMS, Office of the Actuary.

- The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 specified a defined standard benefit structure. In 2014, it has a \$310 deductible, 25 percent coinsurance on covered drugs until the enrollee reaches \$2,850 in total covered drug spending, and then a coverage gap until out-of-pocket spending reaches the annual threshold. Before 2011, enrollees were responsible for paying the full discounted price of covered drugs filled during the coverage gap. Because of changes made by the Patient Protection and Affordable Care Act of 2010, enrollees face reduced cost sharing for drugs filled in the coverage gap. In 2014, the cost sharing for drugs filled during the gap phase is 47.5 percent for brand-name drugs and 72 percent for generic drugs. Enrollees with drug spending that exceeds the annual threshold pay the greater of \$2.55 to \$6.35 per prescription or 5 percent coinsurance.
- The parameters of this defined standard benefit structure have changed over time at the same rate as the annual change in average total drug expenses of Medicare beneficiaries. The benefit parameters have generally increased over time, with the exception of 2014. The reduction in 2014 reflects a decrease in average drug expenses CMS estimated for the August 2012 through July 2013 period. The parameters have grown cumulatively by between 24 percent and 31 percent since the program began in 2006. (Although the benefit parameters are all indexed to the same factor—the annual change in average total drug expenses—the actual changes differ across the parameters because of different rounding rules that are applied. In the case of total covered drug spending at the annual out-of-pocket threshold, the growth rate is also affected by the mix of brand and generic drugs filled during the coverage gap that is used for the calculation.)

(Chart continued next page)

Chart 10-4. Changes in parameters of the Part D defined standard benefit over time (continued)

- Within certain limits, sponsoring organizations may offer Part D plans that have the same actuarial value as the defined standard benefit but a different benefit structure, and most do offer such plans. For example, a plan may use tiered copayments rather than 25 percent coinsurance or have no deductible but use cost-sharing requirements that are equivalent to a rate higher than 25 percent. Both defined standard benefit plans and plans that are actuarially equivalent to the defined standard benefit are known as “basic benefits.”
- Once a sponsoring organization offers one plan with basic benefits within a prescription drug plan region, it may also offer a plan with enhanced benefits—basic and supplemental coverage combined.

Chart 10-5. Characteristics of Medicare PDPs

	2013				2014			
	Plans		Enrollees as of February 2013		Plans		Enrollees as of February 2014	
	Number	Percent	Number (in millions)	Percent	Number	Percent	Number (in millions)	Percent
Total	1,031	100%	18.0	100%	1,169	100%	18.6	100%
Type of organization								
National ^a	858	83	16.0	89	725	62	16.0	86
Other	173	17	2.1	11	444	38	2.5	14
Type of benefit								
Defined standard	36	3	0.5	3	36	3	0.4	2
Actuarially equivalent ^b	483	47	10.5	58	549	47	10.2	55
Enhanced	512	50	7.1	39	584	50	7.9	43
Type of deductible								
Zero	466	45	8.1	45	553	47	8.0	43
Reduced	98	9	0.6	3	42	4	0.7	4
Defined standard ^c	467	45	9.4	52	574	49	9.8	53
Drugs covered in the gap								
Some generics but no brand-name drugs	173	17	0.5	3	61	5	0.4	2
Some generics and some brand-name drugs ^d	174	17	0.7	4	183	16	1.8	10
None	684	66	16.8	93	925	79	16.4	88

Note: PDP (prescription drug plan). The PDPs and enrollment described here exclude employer-only plans and plans offered in U.S. territories. Sums may not add to totals due to rounding.

^a Reflects total number of plans for organizations with at least 1 PDP in each of the 34 PDP regions.

^b Includes "actuarially equivalent standard" and "basic alternative" benefits.

^c \$325 in 2013 and \$310 in 2014.

^d Includes plans offering gap coverage for some brand-name drugs but no generics.

Source: MedPAC analysis of CMS landscape, premium, and enrollment data.

- Between 2013 and 2014, the number of stand-alone PDPs increased by about 13 percent. Plan sponsors are offering 1,169 PDPs in 2014 compared with 1,031 in 2013.
- In 2014, 62 percent of all PDPs are offered by sponsoring organizations that have at least 1 PDP in each of the 34 PDP regions. Plans offered by those national sponsors account for 86 percent of all PDP enrollment.
- For 2014, sponsors are offering more PDPs with enhanced benefits (basic plus supplemental coverage) and with actuarially equivalent benefits (having the same average value as the defined standard benefit but with alternative benefit designs) than they did in 2013. Although actuarially equivalent plans continue to attract the largest share of PDP enrollees (55 percent), the share of enrollees choosing to enroll in enhanced benefit plans increased from 39 percent to 43 percent between 2013 and 2014.
- Fewer PDPs include gap coverage for generic drugs in 2014 than in 2013, and the majority of PDP enrollees (88 percent) continue to enroll in plans that offer no additional benefits in the coverage gap. However, because of the changes made by the Patient Protection and Affordable Care Act of 2010, the Part D benefit now includes some coverage for medications filled during the gap phase. In addition, many PDP enrollees receive Part D's low-income subsidy, which effectively eliminates the coverage gap.

Chart 10-6. Characteristics of MA–PDs

	2013				2014			
	Plans		Enrollees as of February 2013		Plans		Enrollees as of February 2014	
	Number	Percent	Number (in millions)	Percent	Number	Percent	Number (in millions)	Percent
Totals	1,627	100%	9.3	100%	1,615	100%	9.9	100%
Type of organization								
Local HMO	1,011	62	6.5	70	1,066	66	7.0	71
Local PPO	472	29	1.7	18	436	27	1.8	18
PFFS	112	7	0.3	3	83	5	0.2	2
Regional PPO	32	2	0.8	8	30	2	0.9	9
Type of benefit								
Defined standard	31	2	0.1	1	40	2	0.1	1
Actuarially equivalent ^a	120	7	0.7	7	153	9	1.0	10
Enhanced	1,476	91	8.6	92	1,422	88	8.8	89
Type of deductible								
Zero	1,407	86	8.2	89	1,326	82	8.5	86
Reduced	136	8	0.8	9	188	12	1.1	11
Defined standard ^b	84	5	0.2	2	101	5	0.3	3
Drugs covered in the gap								
Some generics but no brand-name drugs	364	22	2.0	22	398	24	2.3	23
Some generics and some brand-name drugs ^c	445	27	2.6	28	411	26	2.8	28
None	818	50	4.6	50	806	50	4.8	49

Note: MA–PD (Medicare Advantage–Prescription Drug [plan]), HMO (health maintenance organization), PPO (preferred provider organization), PFFS (private fee-for-service). The MA–PD plans and enrollment described here exclude employer-only plans, plans offered in U.S. territories, 1876 cost plans, special needs plans, demonstrations, and Part B–only plans. Numbers may not add to totals due to rounding.

^a Includes “actuarially equivalent standard” and “basic alternative” benefits.

^b \$325 in 2013 and \$310 in 2014.

^c Includes plans offering gap coverage for some brand-name drugs but no generics.

Source: MedPAC analysis of CMS landscape, premium, and enrollment data.

- There are slightly fewer MA–PD plans in 2014 than in 2013. Sponsors are offering 1,615 MA–PD plans compared with 1,627 the year before. HMOs remain the dominant kind of MA–PD plan, making up 66 percent of all (unweighted) offerings in 2014. The number of PFFS plans continues to decline, from 112 in 2013 to 83 in 2014. The number of drug plans offered by local PPOs decreased by about 8 percent (36 plans), while the number of drug plans offered by regional PPOs remained about the same between 2013 and 2014.
- A larger share of MA–PD plans than stand-alone prescription drug plans (PDPs) offer enhanced benefits (compare Chart 10-6 with Chart 10-5). In 2014, 50 percent of all PDPs have enhanced benefits compared with 88 percent of MA–PD plans. In 2014, enhanced MA–PD plans attracted 89 percent of total MA–PD enrollment.
- Eighty-two percent of MA–PD plans have no deductible in 2014. These plans attracted 86 percent of total MA–PD enrollees in 2014.
- MA–PD plans are more likely than PDPs to provide some additional benefits in the coverage gap. In 2014, about 50 percent of MA–PD plans include some gap coverage—23 percent with some generics but no brand-name drug coverage and 28 percent with some generics and some brand-name drug coverage (some brand-name drugs but no generics). Those plans account for about 50 percent of MA–PD enrollment.

Chart 10-7. Average Part D premiums

	2013 enrollment (in millions)	Average monthly 2013 premium weighted by 2013 enrollment	2014 enrollment (in millions)	Average monthly 2014 premium weighted by 2014 enrollment	Dollar change	Percentage change in weighted average premium
PDPs						
Basic coverage	11.0	\$32	10.6	\$30	-\$2.6	-8 %
Enhanced coverage	7.1	49	7.9	49	0	0
Any coverage	18.0	39	18.6	38	0.9	-2
MA-PDs, including SNPs*						
Basic coverage	1.6	29	2.2	25	-3.9	-14
Enhanced coverage	9.0	13	9.2	13	0.9	7
Any coverage	10.6	15	11.4	16	0.7	5
All plans						
Basic coverage	12.5	32	12.8	29	-2.9	-9
Enhanced coverage	16.0	28	17.1	30	1.3	5
Any coverage	28.6	30	30.0	29	-0.5	-2

Note: PDP (prescription drug plan), MA-PD (Medicare Advantage-Prescription Drug [plan]), SNPs (special needs plans). The PDPs and enrollment described here exclude employer-only plans and plans offered in U.S. territories. The MA-PD plans and enrollment described here exclude employer-only plans, plans offered in U.S. territories, 1876 cost plans, demonstrations, and Part B-only plans.

*Reflects the portion of Medicare Advantage plans' total monthly premium attributable to Part D benefits for plans that offer Part D coverage. MA-PD premiums reflect rebate dollars that were used to offset Part D premium costs. Lower average premiums for enhanced MA-PD plans could reflect a different mix of sponsoring organizations and counties of operation than MA-PD plans with basic coverage and/or health status differences between beneficiaries enrolled in plans that offer enhanced coverage compared with plans that offer only basic coverage.

Source: MedPAC analysis of CMS landscape, plan report, and enrollment data.

- The average premium paid by Part D enrollees decreased slightly from \$30 per month in 2013 to \$29 per month in 2014.
- The average premiums for beneficiaries enrolled in PDPs decreased slightly, to \$38 from \$39 per month in 2013.
- MA-PD plans can lower the part of their monthly premium attributable to Part D using rebate dollars—a portion of the difference between the plan's payment benchmark and its bid for providing Part A and Part B services. MA-PD plans may also enhance their Part D benefit with rebate dollars. Many MA-PD plans use rebate dollars in these ways, resulting in more enhanced offerings and lower average premiums compared with PDPs.
- The portion of Medicare Advantage premiums attributable to prescription drug benefits increased by about \$1 in 2014, with the average MA-PD enrollee paying \$16 per month.

Chart 10-8. Change in average Part D premiums, 2010–2014

	Average monthly premium weighted by enrollment					Cumulative change in weighted average premium, 2010–2014
	2010	2011	2012	2013	2014	
PDPs						
Basic coverage	\$34	\$33	\$33	\$32	\$30	–13 %
Enhanced coverage	50	63	58	49	49	–2
Any coverage	37	38	38	39	38	1
MA–PDs, including SNPs*						
Basic coverage	26	27	27	29	25	–3
Enhanced coverage	13	12	12	13	13	6
Any coverage	14	14	14	15	16	9
All plans						
Basic coverage	33	33	33	32	29	–13
Enhanced coverage	25	26	26	28	30	17
Any coverage	30	30	30	30	29	–2
Base beneficiary premium	31.94	32.34	31.08	31.17	32.42	2

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), SNPs (special needs plans). The PDPs and enrollment described here exclude employer-only plans and plans offered in U.S. territories. The MA–PD plans and enrollment described here exclude employer-only plans, plans offered in U.S. territories, 1876 cost plans, demonstrations, and Part B–only plans.

*Reflects the portion of Medicare Advantage plans' total monthly premium attributable to Part D benefits for plans that offer Part D coverage. MA–PD premiums reflect rebate dollars that were used to offset Part D premium costs. Lower average premiums for enhanced MA–PD plans could reflect a different mix of sponsoring organizations and counties of operation than MA–PD plans with basic coverage and/or health status differences between beneficiaries enrolled in plans that offer enhanced coverage compared with plans that offer only basic coverage.

Source: MedPAC analysis of CMS landscape, plan report, and enrollment data.

- The average premium paid by Part D enrollees has fluctuated over time. The change in premium experienced by an enrollee varies by the type of plan (PDP vs. MA–PD) and by the type of benefit offered by the plan (basic vs. enhanced coverage) and generally does not correspond to the changes observed for the base beneficiary premium.
- Between 2010 and 2014, the average premium paid by beneficiaries enrolled in PDPs offering basic coverage ranged from \$30 to \$34, a cumulative decrease of 13 percent over this period, while the average premium paid by beneficiaries enrolled in MA–PD plans ranged from \$25 to \$29, a cumulative decrease of 3 percent.
- The average premium paid by beneficiaries enrolled in MA–PD plans offering enhanced coverage has remained stable during the 2010 to 2014 period, while beneficiaries enrolled in PDPs offering enhanced coverage have experienced large year-to-year fluctuations.

Chart 10-9. More premium-free (for LIS enrollees) PDPs in 2014, but some unavailable to new enrollees

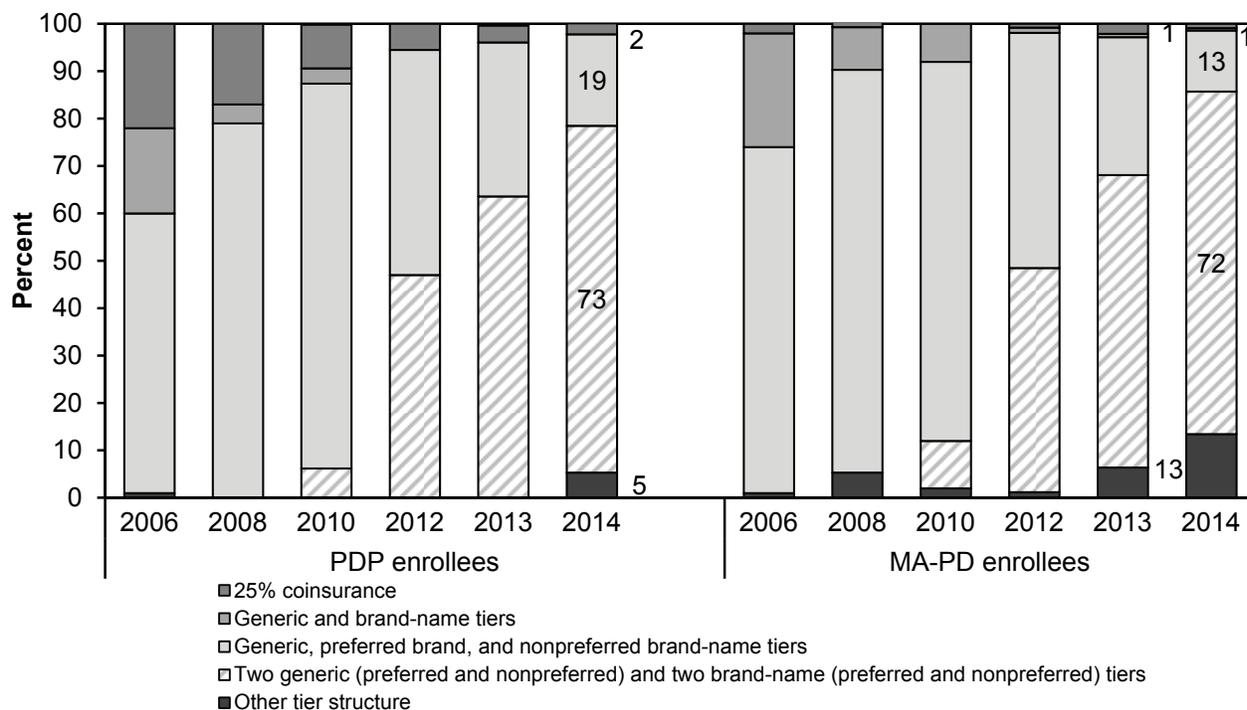
PDP region	State(s)	Number of PDPs			Number of PDPs that have zero premium for LIS enrollees		
		2013	2014*	Difference	2013	2014*	Difference
1	ME, NH	28	32	4	10	7	-3
2	CT, MA, RI, VT	30	33	3	6	8	2
3	NY	28	31	3	12	8	-4
4	NJ	29	34	5	10	12	2
5	DC, DE, MD	29	36	7	13	13	0
6	PA, WV	38	39	1	14	13	-1
7	VA	31	35	4	10	13	3
8	NC	30	34	4	8	10	2
9	SC	31	35	4	14	8	-6
10	GA	30	34	4	13	9	-4
11	FL	34	35	1	2	5	3
12	AL, TN	33	35	2	13	11	-2
13	MI	33	36	3	10	13	3
14	OH	33	37	4	8	12	4
15	IN, KY	31	35	4	11	15	4
16	WI	30	33	3	10	12	2
17	IL	32	38	6	10	14	4
18	MO	31	35	4	8	8	0
19	AR	30	34	4	15	12	-3
20	MS	29	33	4	13	13	0
21	LA	30	33	3	14	14	0
22	TX	32	36	4	12	11	-1
23	OK	30	36	6	11	12	1
24	KS	30	33	3	10	13	3
25	IA, MN, MT, ND, NE, SD, WY	32	34	2	8	10	2
26	NM	30	36	6	7	7	0
27	CO	29	34	5	4	5	1
28	AZ	29	34	5	10	11	1
29	NV	29	34	5	2	4	2
30	OR, WA	30	35	5	10	12	2
31	ID, UT	32	37	5	10	13	3
32	CA	32	36	4	6	9	3
33	HI	23	29	6	10	4	-6
34	AK	23	28	5	7	11	4
	Total	1,031	1,169	138	331	352	21

Note: LIS (low-income subsidy), PDP (prescription drug plan).
*Includes 27 SmartD Rx plans that are not accepting new enrollees as of April 2014 because of CMS sanctions.

Source: MedPAC based on 2013 and 2014 PDP landscape file provided by CMS.

- The total number of stand-alone PDPs increased by about 13 percent, from 1,031 in 2013 to 1,169 in 2014. The median number of plans offered in PDP regions increased to 35 plans from 30 in 2013 (not shown in chart). AK had the fewest stand-alone PDPs, with 28; the PA–WV region had the most, with 39.
- In 2014, 352 PDPs qualified to be premium free to LIS enrollees, with at least 4 PDPs available in any given region. However, 27 plans were not accepting new enrollees because of CMS sanctions, reducing the actual premium-free options available to 325 plans. This figure is slightly lower than the premium-free options that were available in 2013 (331 PDPs).

Chart 10-10. In 2014, more Part D enrollees are in plans that use a five-tier formulary structure

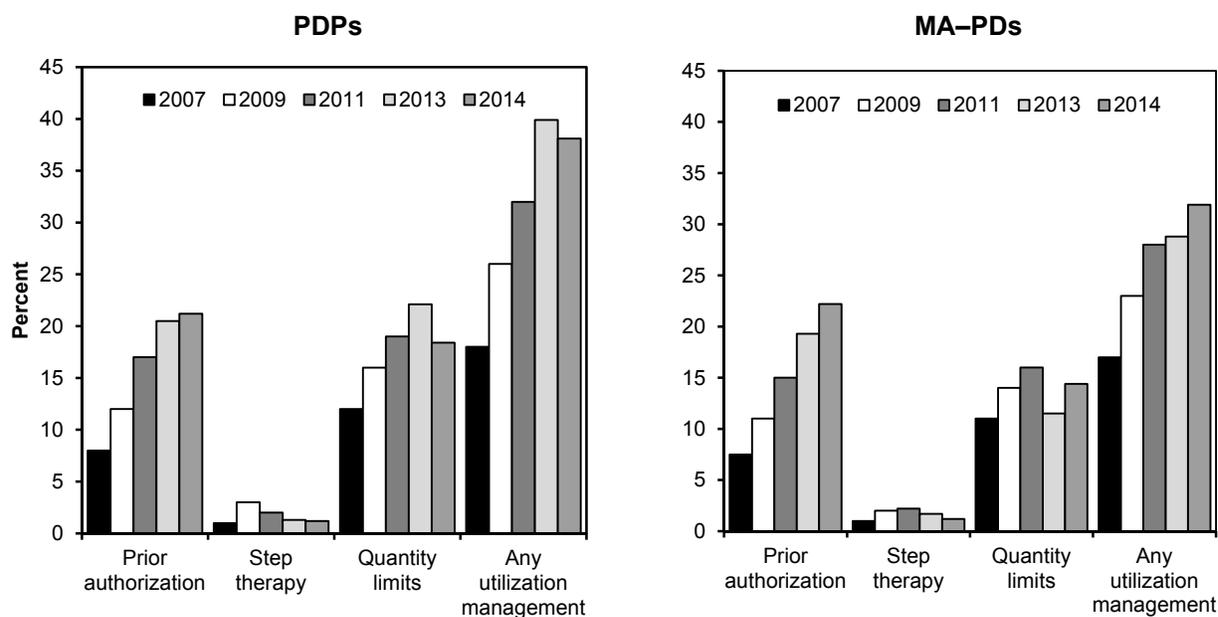


Note: PDP (prescription drug plan), MA-PD (Medicare Advantage-Prescription Drug [plan]). Calculations are weighted by enrollment. All calculations exclude employer-only groups and plans offered in U.S. territories. In addition, MA-PD plans exclude demonstration programs, special needs plans, and 1876 cost plans. Components may not add to totals due to rounding. Over 90 percent of PDPs and over 95 percent of MA-PD plans have a specialty tier in addition to the tiers listed above.

Source: MedPAC-sponsored analysis by NORC/Georgetown University/Social and Scientific Systems analysis of formularies submitted to CMS.

- Most Part D enrollees continue to choose plans that distinguish between preferred and nonpreferred brand-name drugs, with an increasing number choosing a formulary that also distinguishes between preferred and nonpreferred generic drugs. The majority of these plans use a separate (fifth) tier for specialty drugs. In 2014, 73 percent of PDP enrollees are in plans that have two tiers for generic drugs and two tiers for brand-name drugs, an increase from 64 percent in 2013. About the same share of MA-PD enrollees (72 percent) are in such plans in 2014, up from 62 percent in 2013.
- For enrollees in PDPs with two generic and two brand-name tiers, the median copay in 2014 is \$40 for a preferred brand and \$85 for a nonpreferred brand. The median copay for generic drugs is \$2 for preferred-tier drugs and \$5 for nonpreferred-tier drugs. For MA-PD enrollees, in 2014, the median copay is \$45 for a preferred brand, \$95 for a nonpreferred brand, and \$4 and \$10 for a generic drug on preferred and nonpreferred tiers, respectively. In 2014, some plans are offering a “value” tier with low or no copays.
- Most plans, except those that use the defined standard benefit’s 25 percent coinsurance for all drugs, also use a specialty tier for drugs that have a negotiated price of \$600 per month or more. In 2014, median cost sharing for a specialty tier drug is 25 percent among PDPs and 33 percent among MA-PD plans. Enrollees may not appeal cost sharing for drugs in specialty tiers.

Chart 10-11. In 2014, use of prior authorization continues to increase for PDPs and MA-PDs



Note: PDP (prescription drug plan), MA-PD (Medicare Advantage-Prescription Drug [plan]). Calculations are weighted by enrollment. All calculations exclude employer-only groups and plans offered in U.S. territories. In addition, MA-PD plans exclude demonstration programs, special needs plans, and 1876 cost plans. Values reflect the share of listed chemical entities that are subject to utilization management, weighted by plan enrollment. "Prior authorization" means that the enrollee must get preapproval from the plan before coverage. "Step therapy" refers to a requirement that the enrollee try specified drugs before moving to other drugs. "Quantity limits" means that plans limit the number of doses of a drug available to the enrollee in a given time period.

Source: MedPAC-sponsored analysis by NORC/Georgetown University/Social and Scientific Systems analysis of formularies submitted to CMS.

- The number of drugs listed on a plan's formulary does not necessarily represent beneficiary access to medications. Plans' processes for nonformulary exceptions, prior authorization (preapproval from plans before coverage), quantity limits (plans limiting the number of doses of a particular drug covered in a given period), and step therapy requirements (enrollees must try specified drugs before moving to other drugs) can affect access to certain drugs. For example, unlisted drugs may be covered through the nonformulary exceptions process, which may be relatively easy for some plans and more burdensome for others. Alternatively, on-formulary drugs may not be covered in cases in which a plan does not approve a prior authorization request. Also, a formulary's size can be deceptively large if it includes drugs that are no longer used in common practice.
- In 2014, the average enrollee in a stand-alone PDP faces some form of utilization management for about 38 percent of drugs listed on a plan's formulary, a decrease from 40 percent in 2013. In comparison, the average MA-PD enrollee faces some form of utilization management for about 32 percent of drugs listed on a plan's formulary, which is an increase from 29 percent in 2013. Part D plans typically use quantity limits or prior authorization to manage enrollees' prescription drug use.

(Chart continued next page)

Chart 10-11. In 2014, use of prior authorization continues to increase for PDPs and MA-PDs (continued)

- In 2014, the share of drugs listed on plan formularies that require quantity limits decreased from about 22 percent to about 14 percent among stand-alone PDPs, while the use increased from slightly less than 12 percent to about 14 percent among MA-PDs. The share of drugs listed on plan formularies that require the use of step therapy continued to decrease for both stand-alone PDPs and MA-PDs.

Chart 10-12. Characteristics of Part D enrollees, 2012

	All Medicare	Part D	Plan type		Subsidy status	
			PDP	MA–PD	LIS	Non-LIS
Beneficiaries ^a (in millions)	53.4	33.8	21.3	12.5	12.1	21.7
Percent of all Medicare	100%	63%	40%	23%	23%	41%
Gender						
Male	45%	42%	41%	43%	39%	43%
Female	55	58	59	57	61	57
Race/ethnicity						
White, non-Hispanic	77	74	76	70	57	83
African American, non-Hispanic	10	11	11	11	20	6
Hispanic	9	10	7	14	15	7
Asian	3	3	3	3	5	2
Other	2	2	2	2	2	1
Age (years)^d						
<65	19	21	24	15	42	9
65–69	26	23	21	26	15	27
70–74	19	19	18	21	12	23
75–79	14	14	13	16	10	16
80+	23	23	23	22	20	24
Urbanicity^c						
Metropolitan	81	82	77	90	80	82
Micropolitan	10	10	13	6	11	10
Rural	8	8	10	4	9	7

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), LIS (low-income subsidy). Percentages may not sum to 100 due to rounding.

^a Figures for Medicare and Part D include all beneficiaries with at least one month of enrollment in the respective program. A beneficiary is classified as LIS if that individual received Part D's LIS at some point during the year. For individuals who switch plan types during the year, classification into plan types is based on a greater number of months of enrollment.

^b Age as of July 2012.

^c Urbanicity is based on the Office of Management and Budget's core-based statistical areas as of February 2013. A metropolitan area contains a core urban area of 50,000 or more people, and a micropolitan area contains an urban core of at least 10,000 (but less than 50,000) people. About 1 percent of Medicare beneficiaries were excluded because of an unidentifiable core-based statistical area designation.

Source: MedPAC analysis of Medicare Part D denominator and Risk Adjustment System files from CMS.

- In 2012, 33.8 million Medicare beneficiaries (63 percent) enrolled in Part D at some point in the year. Most of them (21.3 million) were in stand-alone PDPs, with 12.5 million in MA–PD plans. Slightly over 12 million enrollees received Part D's LIS.
- Compared with the overall Medicare population, Part D enrollees are more likely to be female and non-White. MA–PD enrollees are less likely to be disabled beneficiaries under age 65 and more likely to be Hispanic compared with PDP enrollees; LIS enrollees are more likely to be female, non-White, and disabled beneficiaries under age 65 compared with non-LIS enrollees.
- Patterns of enrollment by urbanicity for Part D enrollees were similar to the overall Medicare population, with 82 percent in metropolitan areas, 10 percent in micropolitan areas, and the remaining 8 percent in rural areas.

Chart 10-13. Part D enrollment trends, 2007–2012

	2007	2008	2009	2010	2011	2012
Part D enrollment (in millions)*						
Total	26.1	27.5	28.7	29.7	31.5	33.8
By plan type						
PDP	18.3	18.6	18.7	18.9	20.1	21.3
MA–PD	7.8	8.9	10.0	10.6	11.4	12.5
By subsidy status						
LIS	10.4	10.7	10.9	11.3	11.8	12.1
Non-LIS	15.7	16.9	17.8	18.4	19.7	21.7
By race/ethnicity						
White, non-Hispanic	19.4	20.5	21.4	22.0	23.3	25.0
African American, non-Hispanic	2.9	3.1	3.2	3.3	3.5	3.7
Hispanic	2.5	2.7	2.8	3.0	3.2	3.4
Other	1.3	1.3	1.3	1.4	1.5	1.7
By age (years)**						
<65	5.5	5.7	6.0	6.3	6.8	7.1
65–69	5.4	5.9	6.3	6.6	6.9	7.7
70–79	8.8	9.2	9.6	9.9	10.4	11.2
80+	6.4	6.7	6.9	7.1	7.4	7.7
Enrollment growth (in percent)						
Total	N/A	5%	4%	4%	6%	7%
By plan type						
PDP	N/A	2	< 1	1	6	6
MA–PD	N/A	14	12	6	8	10
By subsidy status						
LIS	N/A	2	2	4	4	3
Non-LIS	N/A	8	6	3	7	10
By race/ethnicity						
White, non-Hispanic	N/A	5	4	3	6	7
African American, non-Hispanic	N/A	5	4	4	5	7
Hispanic	N/A	6	6	6	6	7
Other	N/A	6	< 1	6	9	8
By age (years)**						
<65	N/A	5	4	5	8	5
65–69	N/A	9	7	4	5	12
70–79	N/A	4	4	3	6	8
80+	N/A	4	3	2	4	4

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), N/A (not applicable), LIS (low-income [drug] subsidy).

*Figures include all beneficiaries with at least one month of enrollment.

**Age as of July. A beneficiary is classified as LIS if that individual received Part D's LIS at some point during the year. If a beneficiary was enrolled in both a PDP and an MA–PD plan during the year, that individual was classified into the type of plan with a greater number of months of enrollment. Numbers may not sum to totals due to rounding.

Source: MedPAC analysis of Medicare Part D denominator file from CMS.

- Part D enrollment has grown faster between 2010 and 2012 (6 percent in 2011 and 7 percent in 2012) compared with annual growth of 4 percent to 5 percent between 2007 and 2010. Between 2010 and 2011, the largest growth in enrollment was observed for beneficiaries who were under age 65 (8 percent), while the largest growth in enrollment was observed for beneficiaries ages 65 to 69 between 2011 and 2012 (12 percent).

(Chart continued next page)

Chart 10-13. Part D enrollment trends, 2007–2012 (continued)

- Between 2007 and 2012, MA–PD plan enrollment grew faster (by about 10 percent per year, on average) compared with growth rates of about 3 percent per year, on average, for PDPs.
- The number of enrollees receiving the LIS grew modestly between 2007 and 2009 at 2 percent per year. Higher growth rates (3 percent to 4 percent) were observed between 2009 and 2012. The growth in the number of non-LIS enrollees declined between 2007 and 2010 (from 8 percent in 2008 to 3 percent in 2010), but experienced an increase between 2010 and 2012 (7 percent in 2011 and 10 percent in 2012).

Chart 10-14. Part D enrollment by region, 2012

PDP region	State(s)	Percent of Medicare enrollment		Percent of Part D enrollment			
		Part D	RDS	Plan type		Subsidy status	
				PDP	MA-PD	LIS	Non-LIS
1	ME, NH	59%	10%	83%	17%	46%	54%
2	CT, MA, RI, VT	63	14	70	30	42	58
3	NY	65	16	53	47	44	56
4	NJ	64	12	81	19	29	71
5	DE, DC, MD	49	16	85	15	40	60
6	PA, WV	67	11	56	44	32	68
7	VA	55	8	76	24	35	65
8	NC	62	14	72	28	40	60
9	SC	57	14	71	29	41	59
10	GA	63	8	65	35	41	59
11	FL	66	10	51	49	34	66
12	AL, TN	63	11	63	37	44	56
13	MI	58	22	75	25	34	66
14	OH	68	11	66	34	30	70
15	IN, KY	65	11	77	23	36	64
16	WI	61	10	60	40	30	70
17	IL	58	17	86	14	36	64
18	MO	65	10	67	33	33	67
19	AR	63	7	77	23	43	57
20	MS	67	4	85	15	51	49
21	LA	68	8	64	36	44	56
22	TX	58	14	67	33	44	56
23	OK	61	6	77	23	37	63
24	KS	64	6	83	17	28	72
25	IA, MN, MT, NE, ND, SD, WY	68	7	73	27	26	74
26	NM	65	6	60	40	38	62
27	CO	61	11	49	51	28	72
28	AZ	64	9	45	55	30	70
29	NV	60	9	49	51	28	72
30	OR, WA	62	9	54	46	30	70
31	ID, UT	61	8	54	46	26	74
32	CA	71	8	50	50	38	62
33	HI	68	3	39	61	28	72
34	AK	39	24	98	2	60	40
	Mean	63	11	63	37	36	64
	Minimum	39	3	39	2	26	40
	Maximum	71	24	98	61	60	74

Note: PDP (prescription drug plan), RDS (retiree drug subsidy), MA-PD (Medicare Advantage-Prescription Drug [plan]), LIS (low-income subsidy). Definition of regions is based on PDP regions used in Part D.

Source: MedPAC analysis of Part D enrollment data from CMS.

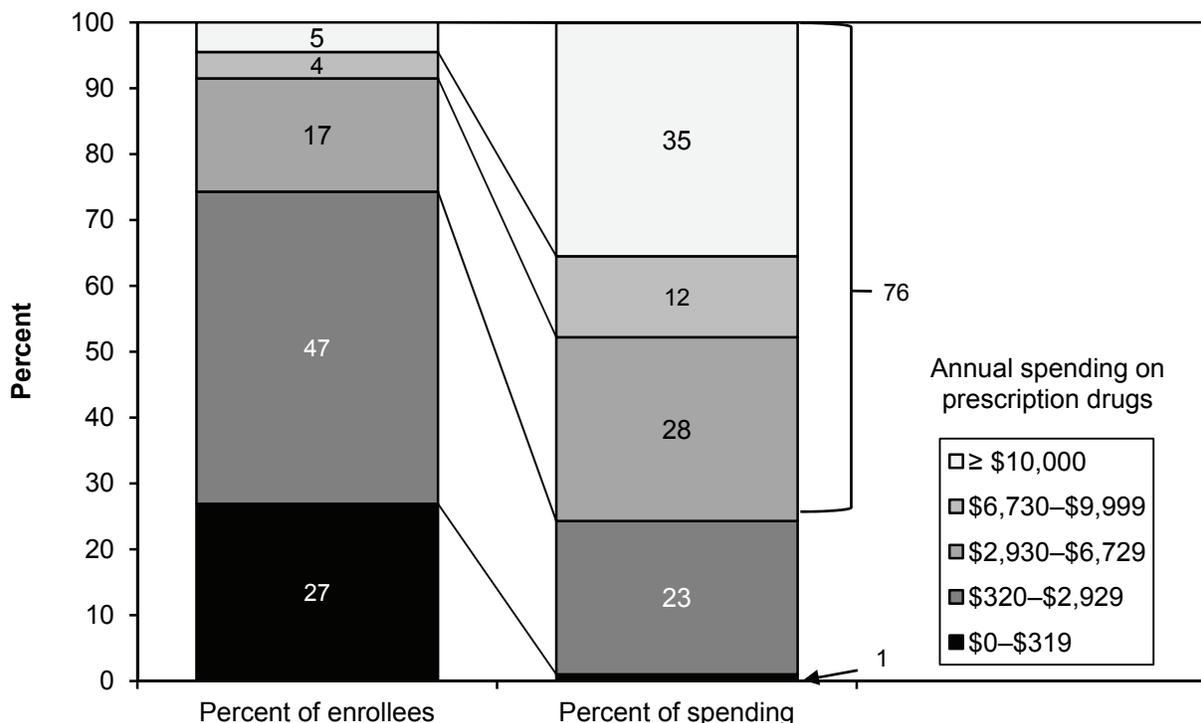
- Among Part D regions, in 2012, between 39 percent and 71 percent of all Medicare beneficiaries enrolled in Part D. Beneficiaries were less likely to enroll in Part D in regions where a relatively high take-up rate for the RDS was observed. For example, in Region 13 (MI) and Region 34 (AK), the shares of Medicare beneficiaries enrolled in Part D were 58 percent and 39 percent, respectively. In these two regions, over 20 percent of beneficiaries were enrolled in employer-sponsored plans that received the RDS.
- A wide variation was seen in the shares of Part D enrollees who enrolled in PDPs and MA-PD plans across PDP regions. The pattern of MA-PD enrollment is generally consistent with enrollment in Medicare Advantage plans.

(Chart continued next page)

Chart 10-14. Part D enrollment by region, 2012 (continued)

- The share of Part D enrollees receiving the LIS ranged from 26 percent in Region 25 (IA, MN, MT, NE, ND, SD, and WY) and in Region 31 (ID and UT) to 60 percent in Region 34 (AK). In 22 of the 34 PDP regions, LIS enrollees accounted for 30 percent to 50 percent of enrollment. In two regions, Region 20 (MS) and Region 34 (AK), LIS enrollees accounted for more than half of Part D enrollment.

Chart 10-15. The majority of Part D spending is incurred by only one-quarter of all Part D enrollees, 2012



Note: Annual spending cuts used for this analysis generally correspond to the parameters of the defined standard benefit. In 2012, an individual not receiving Part D’s low-income subsidy and without other sources of supplemental coverage would have reached the catastrophic phase of the benefit at \$6,730.39 in total drug spending, assuming that expenses for brand-name drugs accounted for 86.3 percent of total drug spending in the coverage gap. Components may not sum to totals due to rounding.

Source: MedPAC analysis of Medicare Part D prescription drug event data from CMS.

- Medicare Part D spending is concentrated in a subset of beneficiaries. In 2012, 26 percent of Part D enrollees had annual spending of \$2,930 or more, at which point enrollees were responsible for a higher proportion of the cost of the drug until their spending reached \$6,730.39 under the defined standard benefit. These beneficiaries accounted for 76 percent of total Part D spending.
- The costliest 9 percent of beneficiaries, those with drug spending above the catastrophic threshold under the defined standard benefit, accounted for 48 percent of total Part D spending. Over 70 percent of beneficiaries with the highest spending received Part D’s low-income subsidy (see Chart 10-16). Spending on prescription drugs is less concentrated than Medicare Part A and Part B spending. In 2010, the costliest 5 percent of beneficiaries accounted for 39 percent of annual Medicare fee-for-service (FFS) spending, and the costliest quartile accounted for 82 percent of Medicare FFS spending.
- In 2012, the share of spending accounted for by the costliest 5 percent of beneficiaries increased to 35 percent from 33 percent in 2011.

Chart 10-16. Characteristics of Part D enrollees, by spending levels, 2012

	Annual drug spending		
	< \$2,930	\$2,930–\$6,729	≥ \$6,730
Sex			
Male	43%	39%	41%
Female	57	61	59
Race/ethnicity			
White, non-Hispanic	74	75	70
African American, non-Hispanic	11	11	14
Hispanic	10	10	10
Other	5	5	6
Age (years)			
<65	18	21	43
65–69	25	19	16
70–74	20	19	14
75–80	14	15	11
80+	23	26	17
LIS status*			
LIS	30	45	72
Non-LIS	70	55	28
Plan type**			
PDP	60	69	78
MA–PD	40	31	22

Note: LIS (low-income subsidy), PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). A small number of beneficiaries were excluded from the analysis because of missing data. Percentages may not sum to 100 due to rounding.
 *A beneficiary is assigned LIS status if that individual received Part D's LIS at some point during the year.
 **If a beneficiary was enrolled in both a PDP and an MA–PD plan during the year, that individual was classified in the type of plan with the greater number of months of enrollment.

Source: MedPAC analysis of Medicare Part D prescription drug event data and Part D denominator file from CMS.

- In 2012, Part D enrollees with annual drug spending between \$2,930 and \$6,729 and those with spending at or above \$6,730 were more likely to be female than enrollees with annual spending below \$2,930 (61 percent and 59 percent compared with 57 percent).
- Part D enrollees with annual spending at or above \$6,730 are more likely to be non-White, disabled enrollees under age 65, and receive the LIS, compared with those with annual spending below \$2,730.
- Most Part D enrollees with spending at or above \$6,730 were enrolled in stand-alone PDPs (78 percent) compared with MA–PD plans (22 percent). On the other hand, beneficiaries with annual spending below \$2,930 were more likely to be in MA–PDs compared with those with higher annual spending (40 percent compared with 22 percent). This finding reflects the fact that most LIS enrollees are more costly on average and are in PDPs.

Chart 10-17. Part D spending and utilization per enrollee, 2012

	Part D	Plan type		LIS status	
		PDP	MA–PD	LIS	Non-LIS
Total gross spending (billions) ^a	\$89.8	\$64.4	\$25.4	\$48.4	\$41.4
Total number of prescriptions ^b (millions)	1,640	1,073	567	691	949
Average spending per prescription	\$55	\$60	\$45	\$70	\$44
Per enrollee per month					
Total spending ^a	\$235	\$270	\$178	\$362	\$167
Out-of-pocket spending ^c	33	34	31	7	47
Plan liability ^d	143	160	115	213	106
Low-income cost-sharing subsidy	50	65	25	143	N/A
Number of prescriptions ^b	4.3	4.5	4.0	5.2	3.8

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), LIS (low-income subsidy), N/A (not applicable). Part D prescription drug event (PDE) records are classified into plan types based on the contract identification on each record. For purposes of classifying the PDE records by LIS status, monthly LIS eligibility information in Part D's denominator file was used. Estimates are sensitive to the method used to classify PDE records to each plan type and LIS status. Numbers may not sum to totals due to rounding.

^a Total (gross) spending includes slightly over \$2.7 million in manufacturer discounts for brand-name drugs filled by non-LIS enrollees during the coverage gap.

^b Number of prescriptions is standardized to a 30-day supply.

^c Out-of-pocket (OOP) spending includes all payments that count toward the annual OOP spending threshold.

^d Plan liability includes plan payments for drugs covered by both basic and supplemental (enhanced) benefits.

Source: MedPAC analysis of Medicare Part D PDE data and denominator file from CMS.

- In 2012, gross spending on drugs for the Part D program totaled \$89.8 billion, with about 72 percent (\$64.4 billion) accounted for by Medicare beneficiaries enrolled in PDPs. Part D enrollees receiving the LIS accounted for about 54 percent (\$48.4 billion) of the total. Manufacturer discounts for brand-name drugs filled by non-LIS enrollees while they are in the coverage gap accounted for about 3 percent of the total (or about 6 percent of the gross spending by non-LIS enrollees).
- The number of prescriptions filled by Part D enrollees totaled 1.64 billion, with about two-thirds (1,073 million) accounted for by PDP enrollees. The 36 percent of enrollees who received the LIS accounted for about 42 percent (691 million) of the total number of prescriptions filled.
- Part D enrollees filled 4.3 prescriptions at \$235 per month on average, a decrease from \$239 per month in 2011 for roughly the same number of prescriptions filled, on average. PDP enrollees have higher average monthly spending and more prescriptions filled compared with MA–PD plan enrollees.
- The average monthly plan liability for MA–PD enrollees (\$115) is considerably lower than that of PDP enrollees (\$160), while average monthly OOP spending is similar for enrollees in both types of plans (\$31 vs. \$34). The average monthly low-income cost-sharing subsidy is much lower for MA–PD enrollees (\$25) compared with PDP enrollees (\$65).
- Average monthly spending per enrollee for an LIS enrollee (\$362) is more than double that of a non-LIS enrollee (\$167), while the average number of prescriptions filled per month by an LIS enrollee is 5.2 compared with 3.8 for a non-LIS enrollee. LIS enrollees have much lower OOP spending, on average, than non-LIS enrollees (\$7 vs. \$47). Part D's LIS pays for most of the cost sharing for LIS enrollees, averaging \$143 per month.

Chart 10-18. Trend in Part D spending and utilization per enrollee, 2007–2012

	Part D spending and utilization per enrollee							
	Average spending / utilization						Average annual growth rate, 2007–2012	
	2007	2008	2009	2010	2011	2012	Number	Percent
Average spending								
All Part D	\$212	221	228	231	239	235	\$5	2.1%
By LIS status								
LIS	\$301	324	339	348	364	362	\$12	3.8
Non-LIS	\$156	159	163	163	167	167	\$2	1.4
By plan type								
PDP	\$239	250	260	265	274	270	\$6	2.5
MA–PD	\$151	162	169	172	178	178	\$5	3.3
Average number of prescriptions*								
All Part D	3.9	4.1	4.1	4.2	4.3	4.3	0.1	1.9%
By LIS status								
LIS	4.6	4.9	5.0	5.1	5.1	5.2	0.1	2.4
Non-LIS	3.4	3.6	3.6	3.7	3.8	3.8	0.1	2.4
By plan type								
PDP	4.1	4.3	4.4	4.4	4.5	4.5	0.1	1.7
MA–PD	3.4	3.6	3.7	3.8	3.9	4.0	0.1	2.9

Note: LIS (low-income subsidy), PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). Part D prescription drug event (PDE) records are classified into plan types based on the contract identification on each record. For purposes of classifying the PDE records by LIS status, monthly LIS eligibility information in Part D's denominator file was used. Estimates are sensitive to the method used to classify PDE records to each plan type and LIS status. Numbers may not sum to totals due to rounding.

* Number of prescriptions is standardized to a 30-day supply.

Source: MedPAC analysis of Medicare Part D PDE data and denominator file from CMS.

- Between 2007 and 2012, the average per capita spending for Part D–covered drugs grew at an average annual rate of 2.1 percent, or by about 11 percent cumulatively. Growth in average per capita spending has fluctuated over the years, ranging from a negative 1.5 percent growth between 2011 and 2012, to a growth of over 4 percent during the first few years of the program.
- Spending for non-LIS enrollees remained relatively flat compared with LIS enrollees (average annual growth rate of 1.4 percent compared with 3.8 percent) during the 2007 to 2012 period, resulting in a larger difference in per capita spending between the two groups—from \$145 in 2007 to nearly \$200 per member per month in 2012. The growth in the number of prescriptions filled by LIS and non-LIS enrollees was comparable during this period.
- The growth in per capita drug spending among MA–PD enrollees exceeded that of PDP enrollees during the 2007 to 2012 period (3.3 percent compared with 2.5 percent), but the average growth was lower for MA–PD enrollees in terms of the dollar increase (\$5 compared with \$6), and the average per capita spending for MA–PD enrollees continued to be below that of PDP enrollees by around \$90 per member per month.

Chart 10-19. Top 15 therapeutic classes of drugs under Part D, by spending and volume, 2012

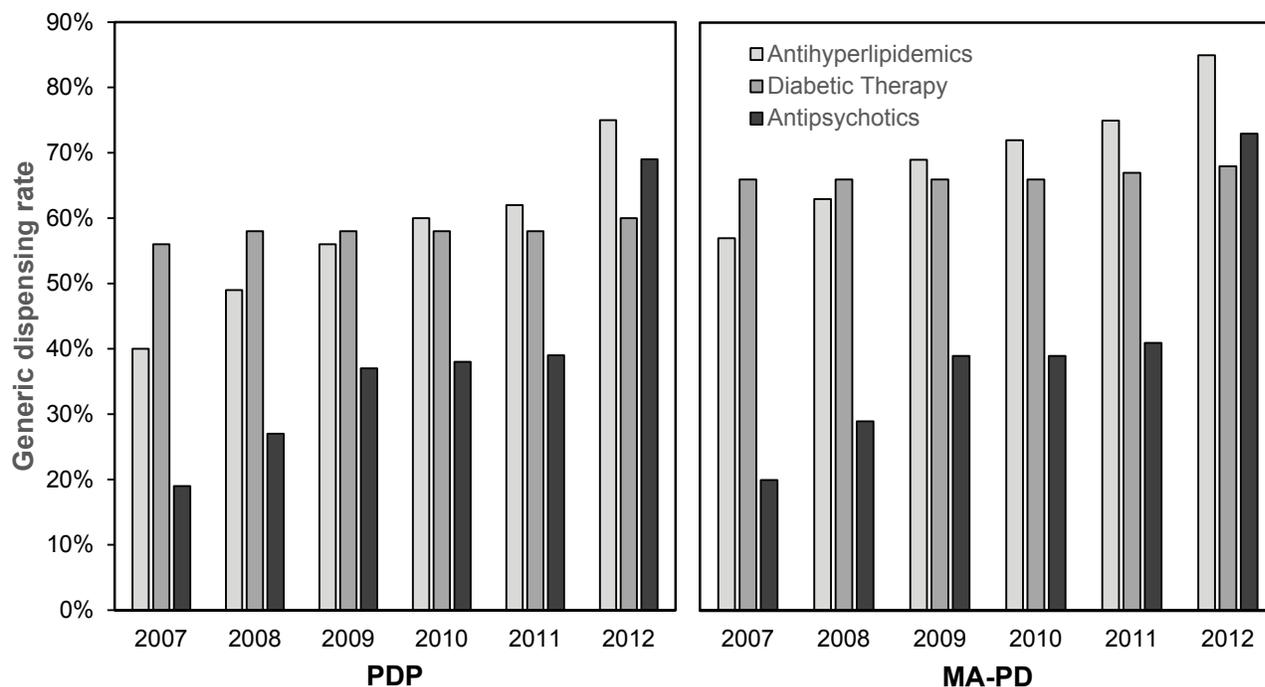
Top 15 therapeutic classes by spending			Top 15 therapeutic classes by volume		
	Dollars			Prescriptions	
	Billions	Percent		Millions	Percent
Diabetic therapy	\$8.7	9.7%	Antihypertensive therapy agents	171.4	10.5%
Antihyperlipidemics	7.5	8.4	Antihyperlipidemics	163.8	10.0
Asthma/COPD therapy agents	6.8	7.5	Beta adrenergic blockers	104.4	6.4
Antipsychotics	6.3	7.0	Diabetic therapy agents	102.6	6.3
Antihypertensive therapy agents	5.3	5.9	Antidepressants	93.1	5.7
Antivirals	4.0	4.4	Diuretics	85.8	5.2
Peptic ulcer therapy	3.7	4.1	Peptic ulcer therapy	83.9	5.1
Antidepressants	3.4	3.8	Analgesics (narcotic)	76.1	4.6
Analgesics (narcotic)	3.2	3.5	Calcium channel blockers	71.4	4.4
Platelet aggregation inhibitors	2.6	2.9	Thyroid therapy	60.2	3.7
Analgesic (anti-inflammatory/antipyretic, non-narcotic)	2.6	2.9	Anticonvulsant	48.2	2.9
Anticonvulsant	2.5	2.8	Antibacterial agents	45.0	2.7
Cognitive disorder therapy (antidementia)	2.2	2.5	Asthma/COPD therapy agents	44.6	2.7
Calcium and bone metabolism regulators	1.7	1.9	Analgesic (anti-inflammatory/antipyretic, non-narcotic)	30.8	1.9
Antineoplastic enzyme inhibitors	1.7	1.9	Anticoagulants	27.1	1.6
Subtotal, top 15 classes	62.2	69.2	Subtotal, top 15 classes	1,208.3	73.7
Total, all classes	89.8	100.0	Total, all classes	1,639.9	100.0

Note: COPD (chronic obstructive pulmonary disease). Volume is the number of prescriptions, standardized to a 30-day supply. Therapeutic classification is based on the First DataBank Enhanced Therapeutic Classification System 1.0. Numbers may not sum to totals due to rounding.

Source: MedPAC analysis of Medicare Part D prescription drug event data from CMS.

- The list of the top 15 therapeutic classes has been stable since 2007, with the majority of therapeutic classes appearing on the list in every year. In 2012, gross spending on prescription drugs covered by Part D plans totaled \$89.8 billion. The top 15 therapeutic classes by spending accounted for about 69 percent of the total. Over 1.6 billion prescriptions were dispensed in 2012, with the top 15 therapeutic classes by volume accounting for nearly 74 percent of the total.
- In 2012, gross spending on drugs to treat diabetes totaled \$8.7 billion, exceeding spending on drugs to treat high cholesterol (antihyperlipidemics) and psychiatric conditions (antipsychotics) for the first time since 2007. Gross spending on antipsychotics declined by \$1.3 billion (a decrease of about 17 percent) between 2011 and 2012.
- Nine therapeutic classes are among the top 15, based on both spending and volume. Central nervous system agents (antipsychotics, anticonvulsants, and antidepressants) and cardiovascular agents (antihyperlipidemics and antihypertensive therapy agents) dominate the list by spending, each accounting for about one-fifth of spending, while cardiovascular agents (antihyperlipidemics, antihypertensive therapy agents, beta-adrenergic blockers, calcium channel blockers, and diuretics) dominate the list by volume, accounting for about 50 percent of the prescriptions in the top 15 therapeutic classes.

Chart 10-20. Generic dispensing rate for selected therapeutic classes, by plan type, 2007–2012

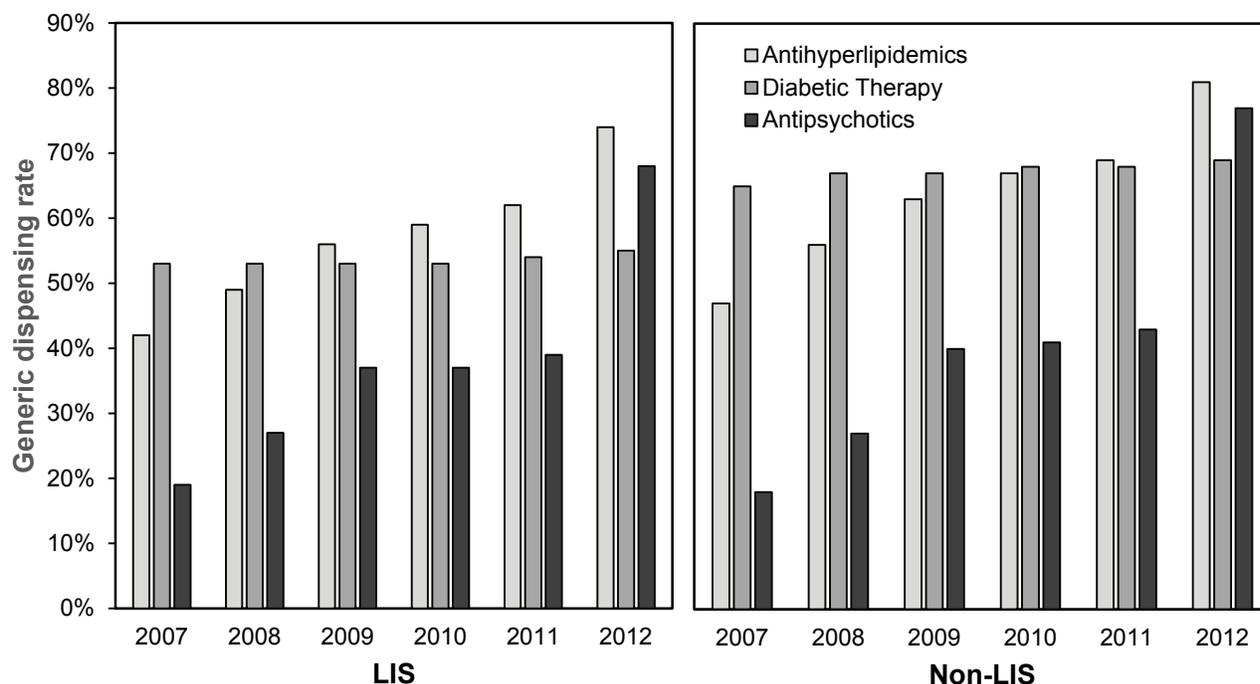


Note: PDP (prescription drug plan), MA-PD (Medicare Advantage–Prescription Drug [plan]). Prescriptions are standardized to a 30-day supply. Therapeutic classification is based on the First DataBank Enhanced Therapeutic Classification System 1.0. “Generic dispensing rate” is defined as the proportion of generic prescriptions dispensed within a therapeutic class. Part D prescription drug event records are classified as PDP or MA-PD records based on the contract identification on each record.

Source: MedPAC analysis of Medicare Part D prescription drug event data from CMS.

- The share of prescriptions that are for generic drugs (generic dispensing rate, or GDR) has increased steadily over the years, from 61 percent in 2007 to 81 percent in 2012 across all therapeutic classes (data not shown).
- The GDR in a given class depends, in large part, on the availability of generic drugs in the class. For example, the GDR for antipsychotics was among the lowest within the top 15 therapeutic classes until some of the key drugs came off patent and generic versions became available in 2011 and 2012. Other factors, such as prescribing behavior and patients’ medication needs and/or patient preference can also affect the GDR.
- Between 2007 and 2012, GDRs for PDP enrollees were generally lower than those of MA-PD enrollees for most of the top 15 therapeutic classes. For example, GDRs for diabetic therapy among the MA-PD enrollees exceeded that of PDP enrollees by between 8 percentage points and 10 percentage points during this period. The difference in GDRs for antihyperlipidemics between MA-PD enrollees and PDP enrollees decreased during this period (from 17 percentage points in 2007 to about 10 percentage points in 2012), but antihyperlipidemics are still one of the classes with the largest difference in GDRs between PDPs and MA-PDs. Some of the difference in GDRs reflects the fact that, relative to MA-PDs, PDPs have a higher proportion of LIS enrollees, who are less likely to take a generic medication in a given therapeutic class (see Chart 10-21).

Chart 10-21. Generic dispensing rate for selected therapeutic classes, by LIS status, 2012



Note: LIS (low-income subsidy). Prescriptions are standardized to a 30-day supply. Therapeutic classification is based on the First DataBank Enhanced Therapeutic Classification System 1.0. “Generic dispensing rate” is defined as the proportion of generic prescriptions dispensed within a therapeutic class. Part D prescription drug event (PDE) records are classified as LIS or non-LIS records based on monthly LIS eligibility information in Part D’s denominator file. Estimates are sensitive to the method used to classify PDE records as LIS or non-LIS.

Source: MedPAC analysis of Medicare Part D prescription drug event data and Part D denominator file from CMS.

- Between 2007 and 2012, the share of prescriptions that are for generic drugs (generic dispensing rate, or GDR) have increased for both LIS and non-LIS enrollees. However, LIS enrollees have had a consistently lower GDR than non-LIS enrollees, and the difference has grown from 2 percentage points in 2007 to 5 percentage points in 2012 (data not shown).
- The difference in GDRs for antihyperlipidemics between LIS and non-LIS enrollees remained stable at around 7 percentage points to 8 percentage points for most of the years between 2007 to 2012, which is in contrast to the large differences observed between PDP and MA-PD enrollees, which ranged from 10 percentage points to 17 percentage points during this period (see Chart 10-20). These trends suggest that the narrowing of the gap in GDRs between PDPs and MA-PDs is likely attributable to the increase in the use of generic antihyperlipidemics by non-LIS enrollees in PDPs.
- Other notable differences in GDRs between LIS and non-LIS enrollees include a large and persistent difference of around 14 percentage points to 15 percentage points for diabetic therapy and a 9 percentage point difference in GDRs for antipsychotics observed in 2012 (compared to a difference of less than 4 percentage points prior to 2012) after generics versions became available for some of the key drugs in the class. Multiple factors likely contribute to the difference in GDRs.

Chart 10-22. Drug spending and use, and characteristics of beneficiaries filling the most prescriptions, 2012

	Beneficiaries in the top 5 percent ^a		All Part D
		As a percent of Part D	
Number of beneficiaries (in millions)	1.6	5%	33.8
Aggregate spending and use			
Gross spending (in billions)	\$17.4	19%	\$89.8
Number of prescriptions ^b (in millions)	229	19%	1,217
Average spending per prescription	\$76		\$74
Per enrollee per year			
Gross spending	\$10,923		\$2,824
Out-of-pocket spending ^c	\$490		\$392
Number of prescriptions ^b	144		38
Demographic characteristics			
Percent female	66%		58%
Percent White	71		74
Percent LIS	79		36
Percent PDP	77		63

Note: LIS (low-income subsidy), PDP (prescription drug plan).
^a Top 5 percent is based on volume of prescriptions filled among those who filled at least one prescription in 2012. Because roughly 7 percent of Part D enrollees did not fill any prescriptions for a Part D–covered drug in 2012, the “top 5 percent” translates to about 4.7 percent of all Part D enrollees. The figures reported in the table include slightly over 600 beneficiaries who did not have a record of Part D enrollment in the denominator file. These enrollees filled over 88,000 prescriptions, accounting for about \$6 million in gross drug spending in 2012.
^b Number of prescriptions are based on counts of prescription drug events (PDEs) (not standardized to a 30-day supply).
^c Out-of-pocket (OOP) spending includes all payments that count toward the annual OOP spending threshold.

Source: MedPAC analysis of Medicare Part D PDE data and denominator file from CMS.

- In 2012, Part D enrollees in the top 5 percent (1.6 million), based on the number of prescriptions filled, accounted for \$17.4 billion in gross spending (19 percent of total gross spending) for drugs covered under the Part D program.
- The number of prescriptions filled by enrollees in the top 5 percent totaled 229 million, or 19 percent of all prescriptions filled under the Part D program.
- In 2012, Part D enrollees in the top 5 percent each filled a total of 144 prescriptions at a gross cost of \$10,923, on average, compared with an average of 38 prescriptions each at a gross cost of \$2,824 for all Part D enrollees. Compared with the difference in gross spending and the number of prescriptions filled, the difference in beneficiary out-of-pocket spending between enrollees in the top 5 percent and all Part D enrollees was much smaller (\$490 compared with \$392).
- Compared with the overall Part D population, enrollees in the top 5 percent were more likely to be female and non-White. Nearly 80 percent of the enrollees in the top 5 percent received the low-income subsidy compared with 36 percent for all Part D enrollees, and 77 percent were enrolled in a stand-alone prescription drug plan compared with 63 percent for all Part D enrollees.

SECTION

11

Other services

Dialysis

Hospice

Clinical laboratory

Chart 11-1. Number of dialysis facilities is growing and share of for-profit and freestanding dialysis providers is increasing

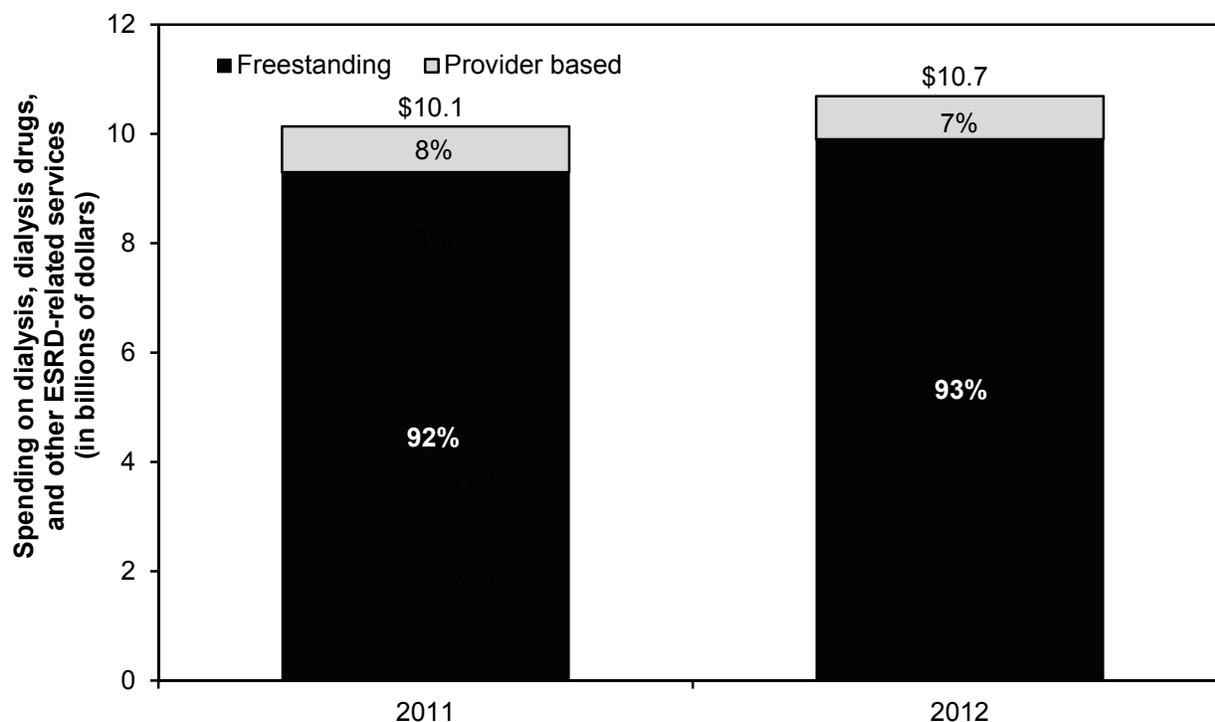
	2013	Average annual percent change	
		2008–2013	2012–2013
Total number of:			
Dialysis facilities	6,012	3%	3%
Hemodialysis stations	106,472	4	3
Mean number of hemodialysis stations per facility	18	0	0
	<u>Percent of total</u>		
Hospital based	8%	–4	–4
Freestanding	92	4	4
Urban	79	3	4
Rural, micropolitan	13	1	2
Rural, adjacent to urban	5	3	3
Rural, not adjacent to urban	3	2	3
Frontier	1	–2	0
For profit	86	4	4
Nonprofit	14	–3	–1

Note: Nonprofit includes facilities designated as either nonprofit or government. “Average annual percent change” based on comparing 2008, 2012, and 2013 end-of-year files.

Source: Compiled by MedPAC from the 2008, 2012, and 2013 CMS Dialysis Compare end-of-year files.

- Between 2008 and 2013, the number of freestanding and for-profit facilities increased, while hospital-based and nonprofit facilities decreased. Freestanding facilities increased from 88 percent to 92 percent of all facilities, and for-profit facilities increased from 82 percent to 86 percent of all facilities.
- Between 2008 and 2013, the proportion of facilities located in rural areas has remained relatively constant.
- Since 2008, the number of facilities has increased 3 percent per year. The average size of a facility has remained relatively constant, averaging about 18 dialysis treatment stations per facility.

Chart 11-2. Medicare spending for outpatient dialysis services furnished by freestanding and hospital-based dialysis facilities, 2011 and 2012



Note: ESRD (end-stage renal disease).

Source: Compiled by MedPAC from the 2011 and 2012 institutional outpatient files from CMS.

- In 2012, total spending for dialysis, dialysis drugs, and ESRD-related clinical laboratory tests was \$10.7 billion. For most facilities, 2012 is the first year that Medicare paid them using a modernized prospective payment that includes in the payment bundle certain dialysis drugs and ESRD-related clinical laboratory tests for which facilities and clinical laboratories previously received separate payments.
- Between 2011 and 2012, total ESRD expenditures increased by about 6 percent.
- Freestanding dialysis facilities treat most dialysis beneficiaries and accounted for 92 percent and 93 percent of expenditures in 2011 and 2012, respectively.

Chart 11-3. The ESRD population is growing, and most ESRD patients undergo dialysis

	2001		2007		2011	
	Patients (thousands)	Percent	Patients (thousands)	Percent	Patients (thousands)	Percent
Total	411.2	100%	529.0	100%	615.9	100%
Dialysis	296.1	72	370.5	70	430.3	70
In-center hemodialysis	268.5	65	340.2	64	390.1	63
Home hemodialysis*	1.3	0.3	2.7	0.5	5.5	0.9
Peritoneal dialysis*	25.3	6	26.3	5	32.9	5
Unknown	1.1	0.3	1.2	0.2	1.7	0.3
Functioning graft and kidney transplants	115.0	28	158.5	30	185.6	30

Note: ESRD (end-stage renal disease). Totals may not equal sum of components due to rounding. Data include both Medicare and non-Medicare patients.
* Home dialysis methods.

Source: Compiled by MedPAC from the United States Renal Data System.

- Persons with ESRD require either dialysis or a kidney transplant to maintain life. The total number of ESRD patients increased by 4 percent annually between 2001 and 2011.
- In hemodialysis, a patient's blood flows through a machine with a special filter that removes wastes and extra fluids. In peritoneal dialysis, the patient's blood is cleaned by using the lining of his or her abdomen as a filter. Peritoneal dialysis is the most common form of home dialysis.
- Most ESRD patients undergo hemodialysis administered in a dialysis facility three times a week. Between 2001 and 2011, the total number of in-center hemodialysis patients increased by 4 percent annually, while the number of peritoneal dialysis patients increased 3 percent annually. Although only a small proportion of all dialysis patients undergo home hemodialysis, the number of these patients grew 16 percent per year during this time period.
- Functioning graft patients are patients who have had a successful kidney transplant. Patients undergoing kidney transplant may receive either a living kidney or a cadaveric kidney donation. In 2011, about 33 percent of transplanted kidneys were from living donors and the remainder were from cadaver donors.

Chart 11-4. Asian Americans and Hispanics are among the fastest growing segments of the ESRD population

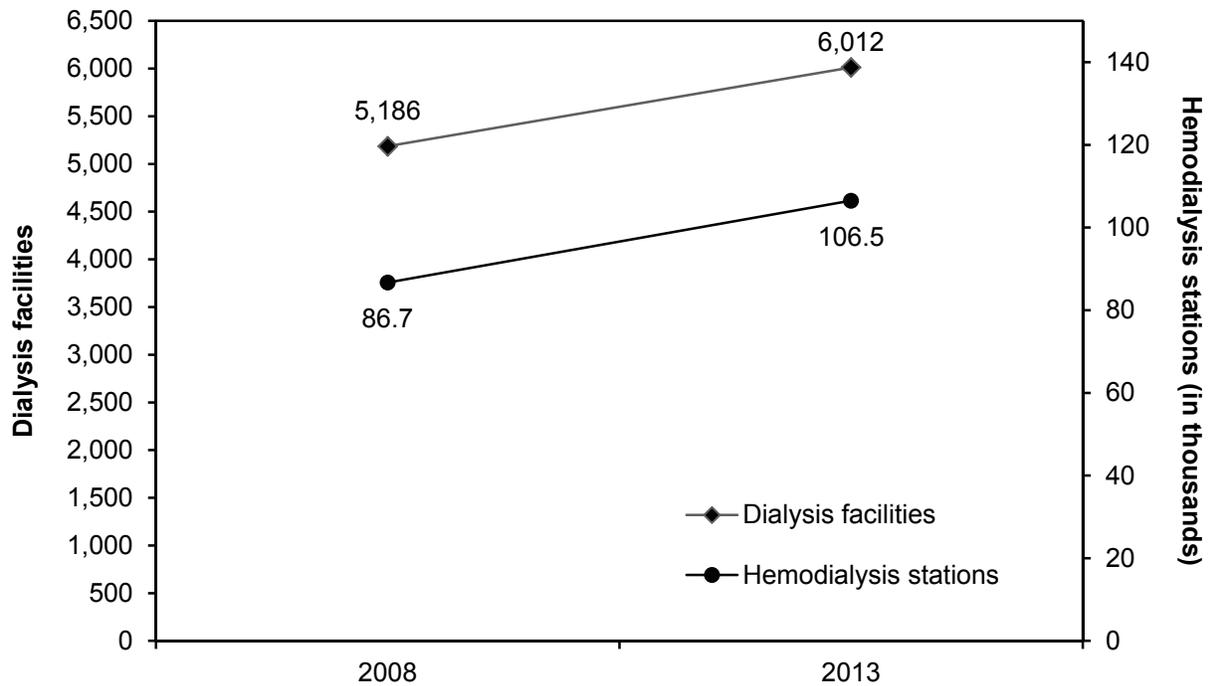
	Percent of total in 2011	Average annual percent change 2006–2011
Total (<i>n</i> = 615,899)	100%	4%
Age (years)		
0–19	1	1
20–44	17	1
45–64	45	4
65–79	28	5
80+	9	5
Sex		
Male	57	4
Female	43	3
Race/ethnicity		
White	60	4
African American	32	4
Native American	1	4
Asian American	6	8
Hispanic	16	6
Non-Hispanic	84	4
Underlying cause of ESRD		
Diabetes	38	4
Hypertension	25	4
Glomerulonephritis	14	2
Other causes	23	4

Note: ESRD (end-stage renal disease). Totals may not equal sum of the components due to rounding. ESRD patients include those who undergo maintenance dialysis and those who have a functioning kidney transplant.

Source: Compiled by MedPAC from the United States Renal Data System.

- Among ESRD patients, 37 percent are over age 65. About 60 percent are White.
- Diabetes is the most common cause of renal failure.
- The number of ESRD patients increased by 4 percent annually between 2006 and 2011. Among the fastest growing groups of patients are Asian Americans and Hispanics.

Chart 11-5. Dialysis facilities' capacity increased between 2008 and 2013



Source: Compiled by MedPAC from the Dialysis Compare database from CMS.

- As the number of dialysis patients has grown, dialysis providers have met the demand by opening new facilities. In 2013, an average facility had about 18 hemodialysis stations.
- Between 2008 and 2013, the total number of dialysis facilities grew by about 3 percent annually, and the number of hemodialysis stations grew by 4 percent annually.

Chart 11-6. Characteristics of Medicare fee-for-service dialysis patients, 2012

	Percent of all FFS dialysis patients
Age (years)	
Under 45	12%
45–64	38
65–74	25
75–84	18
85+	7
Sex	
Male	54
Female	46
Race	
White	49
African American	36
All other	14
Residence	
Urban county	82
Rural county, micropolitan	11
Rural county, adjacent to urban	5
Rural county, not adjacent to urban	3
Frontier county	1
Prescription drug coverage status	
Enrolled in Part D plan	77
Coverage through employers that receive RDS	8
Coverage through other creditable sources	4
No creditable coverage	11
LIS	58
Medicare as the secondary payer	9
Dually eligible for Medicare and Medicaid	48

Note: FFS (fee-for-service), RDS (retiree drug subsidy), LIS (low-income [drug] subsidy). Urban counties contain a core area with 50,000 or more people, rural micropolitan counties contain at least one cluster of at least 10,000 and less than 50,000 people, rural counties adjacent to urban areas do not have a city of 10,000 people in the county, and rural counties not adjacent to urban areas do not have a city of 10,000 people. Frontier counties are counties with six or fewer people per square mile. Totals may not sum to 100 percent due to rounding.

Source: MedPAC analysis of dialysis claims files and denominator files from CMS.

- Compared with all Medicare patients, FFS dialysis patients are disproportionately younger and African American.
- In 2012, nearly 20 percent of FFS dialysis patients resided in a rural county.
- Nearly half of all dialysis patients were dually eligible for Medicare and Medicaid services.
- Medicare was the secondary payer (for Part A and Part B) for 9 percent of FFS dialysis patients who were insured by an employer group health plan at the time they were diagnosed with end-stage renal disease.
- About 90 percent of FFS dialysis patients were enrolled in Part D plans or had other sources of creditable drug coverage.

Chart 11-7. Aggregate margins vary by type of freestanding dialysis facility, 2012

Type of facility	Percentage of freestanding facilities	Aggregate margin
All facilities	100%	3.9%
Urban	85	4.7
Rural	15	-0.08
LDOs	69	4.2
Non-LDOs	31	3.5
Treatment volume (quintile)		
Lowest	20	-13.0
Second	20	-3.4
Third	20	2.1
Fourth	20	5.2
Highest	20	9.4

Note: LDO (large dialysis organization). Margins include payments and costs for composite rate services, injectable drugs, and other end-stage renal disease–related services.

Source: Compiled by MedPAC from 2012 cost reports and the 2012 institutional outpatient file from CMS.

- For 2012, the aggregate Medicare margin for composite rate services and injectable drugs was 3.9 percent.
- Generally, freestanding dialysis facilities' margins vary by the size of the facility; facilities with greater treatment volume have higher margins on average. Differences in capacity and treatment volume explain some of the differences observed between the margins of urban and rural facilities. Urban facilities are larger on average than rural facilities with respect to the number of dialysis treatment stations and Medicare treatments provided. The Commission will continue to monitor the adequacy of Medicare's payments for urban and rural facilities in upcoming years. Some rural facilities have benefited from the low-volume adjustment that is included in the new end-stage renal disease payment method that began in 2011.
- Facilities affiliated with the two largest dialysis organizations tended to have higher margins than other freestanding facilities. This difference stems from differences in the average cost per treatment. Compared with their counterparts, the average cost per treatment for the two largest multifacility dialysis organizations was about 1 percent lower.

Chart 11-8. Medicare hospice use and spending grew substantially from 2000 to 2012

	2000	2011	2012	Average annual change, 2000–2011	Change, 2011–2012
Beneficiaries in hospice (in millions)	0.534	1.219	1.274	7.8%	4.5%
Medicare payments (in billions)	\$2.9	\$13.8	\$15.1	15.2%	9.3%
Average length of stay among decedents (in days)	54	86	88	4.5%	2.0%
Median length of stay among decedents (in days)	17	17	18	No change	+1 day

Note: Average length of stay is calculated for decedents who used hospice at the time of death or before death and reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during his/her lifetime. Due to rounding, the percent change displayed in the chart may not equal the percent change calculated using the yearly data displayed in the chart.

Source: MedPAC analysis of the denominator file, the Medicare Beneficiary Database, and the 100 percent hospice claims Standard Analytic File from CMS.

- The number of Medicare beneficiaries receiving hospice services more than doubled between 2000 and 2011 and continued to grow in 2012, suggesting that access to hospice care has increased.
- Average length of stay increased to 88 days in 2012, up from 86 days in 2011 and 54 days in 2000.
- Total Medicare payments to hospices increased from just under \$3 billion in 2000 to just over \$15 billion in 2012 due to increased hospice enrollment and longer lengths of stay.

Chart 11-9. Hospice use increased across beneficiary groups from 2000 to 2012

	Percent of decedents using hospice			Average annual percentage point change 2000–2011	Percentage point change 2011–2012
	2000	2011	2012		
All	22.9%	45.2%	46.7%	2.0%	1.5%
FFS beneficiaries	21.5	44.2	45.6	2.2	1.4
MA beneficiaries	30.9	48.9	50.2	1.6	1.3
Dual eligibles	17.5	40.3	41.6	2.1	1.3
Non–dual eligibles	24.5	46.8	48.3	2.0	1.5
Age (years)					
<65	17.0	27.8	29.1	1.0	1.3
65–84	24.7	43.7	44.9	1.7	1.2
85+	21.4	52.0	53.9	2.8	1.9
Race/ethnicity					
White	23.8	47.0	48.5	2.1	1.5
Minority	17.3	35.1	36.4	1.6	1.3
Gender					
Male	22.4	41.3	42.7	1.7	1.4
Female	23.3	48.6	50.1	2.3	1.5
Beneficiary location					
Urban	24.3	46.6	47.9	2.0	1.3
Micropolitan	18.5	41.4	43.2	2.1	1.8
Rural, adjacent to urban	17.6	40.2	42.1	2.1	1.9
Rural, nonadjacent to urban	15.8	35.9	37.6	1.8	1.7
Frontier	13.2	30.7	31.7	1.6	1.0

Note: FFS (fee-for-service), MA (Medicare Advantage). “Beneficiary location” refers to the beneficiary’s county of residence. Urban, micropolitan, and rural designations are based on the urban influence codes. The frontier category is defined as population density equal to or less than six persons per square mile.

Source: MedPAC analysis of data from the denominator file and the Medicare Beneficiary Database from CMS.

- Hospice use grew in all beneficiary groups in 2012, continuing the trend of a growing proportion of beneficiaries using hospice at the end of life.
- Despite this growth, hospice use continued to vary by demographic and beneficiary characteristics. Medicare decedents who were older, White, female, MA enrollees, not dual eligible, or living in an urban area were more likely to use hospice than their counterparts.

Chart 11-10. Number of Medicare-participating hospices has increased due to growth in for-profit hospices

	2000	2010	2011	2012
All hospices	2,255	3,498	3,585	3,720
For profit	672	1,952	2,054	2,196
Nonprofit	1,324	1,324	1,314	1,313
Government	257	222	217	210
Freestanding	1,069	2,397	2,491	2,633
Hospital based	785	612	587	571
Home health based	378	466	486	493
SNF based	22	23	21	23
Urban	1,424	2,430	2,536	2,638
Rural	788	1,002	986	982

Note: SNF (skilled nursing facility). Numbers may not sum to totals because of missing data for a small number of providers.

Source: MedPAC analysis of Medicare cost reports, Provider of Services file, and the Standard Analytic File of hospice claims from CMS.

- There were more than 3,700 Medicare-participating hospices in 2012. Most of them were for-profit hospices.
- Between 2000 and 2012, the number of Medicare-participating hospices grew by nearly 1,500 providers. For-profit hospices accounted almost entirely for that growth.
- Growth in the number of providers has occurred predominantly among freestanding and home health–based providers. The number of hospital-based providers has declined.
- The number of hospices in rural and urban areas was substantially higher in 2012 than in 2000, although the number of hospices in rural areas declined modestly in the past few years. The share of hospices located in rural areas (27 percent) and urban areas (73 percent) is similar to the share of Medicare beneficiaries residing in these two types of areas.

Chart 11-11. Hospice cases and length of stay, by diagnosis, 2012

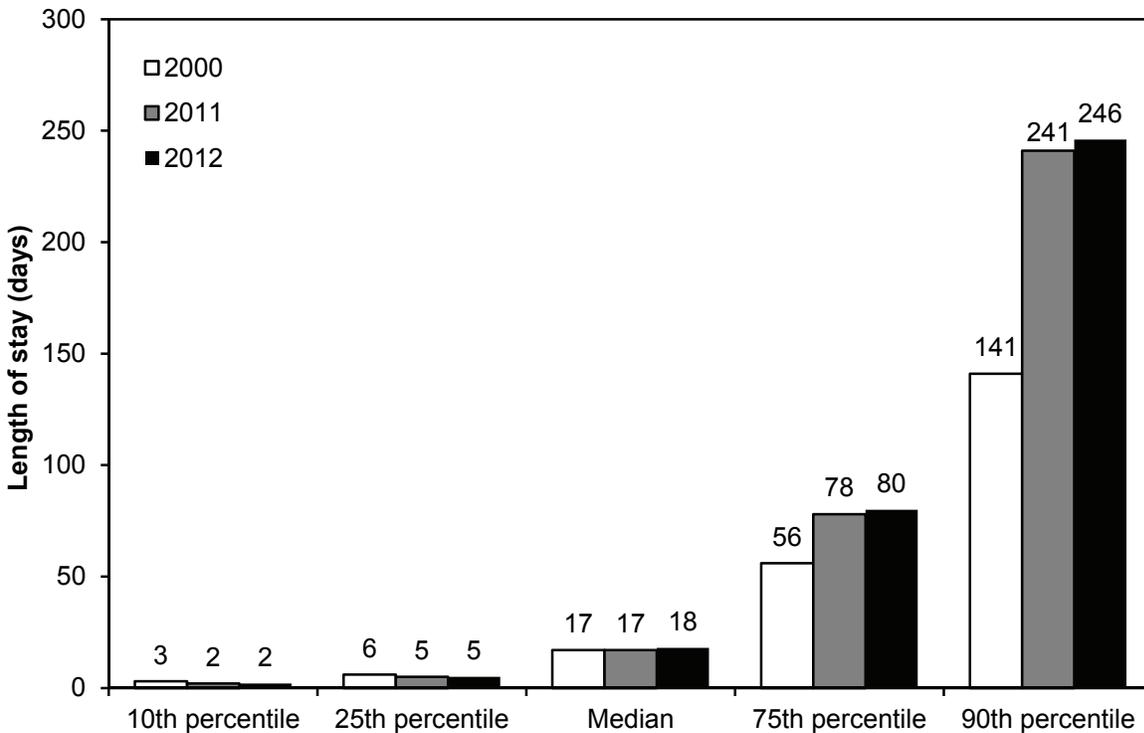
Diagnosis	Share of total cases	Percent of cases with length of stay greater than 180 days
Cancer (except lung cancer)	20%	9%
Debility, NOS	11	25
Circulatory, except heart failure	10	19
Lung cancer	8	8
Heart failure	7	20
Unspecific symptoms/signs	6	24
Chronic airway obstruction, NOS	5	27
Alzheimer's and similar diseases	5	36
Dementia	5	31
Organic psychoses	5	28
Respiratory disease	3	11
Nervous system, except Alzheimer's	3	31
Genitourinary disease	3	6
Digestive disease	2	7
Other	1	8
All	100	21

Note: NOS (not otherwise specified). Cases include all patients who received hospice care in 2012, not just decedents. Percent of cases by diagnosis does not sum to 100 due to the exclusion of patients with multiple diagnoses.

Source: MedPAC analysis of 100 percent hospice claims Standard Analytic File from CMS and the Medicare Beneficiary Database.

- In 2012, the most common terminal diagnosis among Medicare hospice patients was cancer (all types), accounting for about 28 percent of cases. The next most common diagnoses were Alzheimer's disease, dementia, organic psychoses, and other neurological conditions (18 percent of cases); debility and unspecific signs and symptoms (17 percent); and heart failure and other circulatory conditions (17 percent of cases).
- Length of stay varies by diagnosis. Nearly one-quarter or more of hospice patients in 2012 with Alzheimer's disease, dementia, organic psychoses, chronic airway obstruction, debility, and unspecific signs and symptoms had lengths of stay exceeding 180 days. Long hospice stays were least common among beneficiaries with genitourinary disease, digestive disease, and cancer.

Chart 11-12. Growth in hospice length of stay has occurred predominantly among hospice patients with the longest stays



Note: Data reflect hospice length of stay for Medicare decedents who used hospice at the time of death or before death. "Length of stay" reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during his or her lifetime.

Source: MedPAC analysis of the denominator file and the Medicare Beneficiary Database from CMS.

- Since 2000, long hospice stays have grown longer. For example, hospice length of stay among decedents at the 90th percentile increased from 141 days in 2000 to 241 days in 2011 and 246 days in 2012.
- Short stays in hospice have changed little since 2000. The median length of stay in hospice held steady at 17 or 18 days from 2000 to 2012. Hospice length of stay at the 25th percentile has remained at five or six days since 2000.

Chart 11-13. Hospice length of stay among decedents, by beneficiary and hospice characteristics, 2012

	Average length of stay (in days)	Length of stay percentiles (in days)		
		10th	50th	90th
Beneficiary				
Diagnosis				
Cancer	51	3	17	126
Neurological	139	3	26	426
Heart/circulatory	76	2	11	215
Debility	100	3	25	293
COPD	112	2	21	333
Other	89	2	13	266
Site of service				
Home	90	4	27	237
Nursing facility	112	3	22	335
Assisted living facility	154	5	53	435
Hospice				
For profit	105	3	22	306
Nonprofit	69	2	14	185
Freestanding	91	3	18	258
Home health based	70	2	16	191
Hospital based	59	2	13	160

Note: COPD (chronic obstructive pulmonary disease). Average length of stay is calculated for Medicare beneficiaries who died in 2012 and used hospice that year, and it reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during his or her lifetime.

Source: MedPAC analysis of 100 percent hospice claims Standard Analytic File data, Medicare Beneficiary Database, Medicare hospice cost reports, and Provider of Services file data from CMS.

- Hospice average length of stay among decedents varies by both beneficiary and provider characteristics. Most of this variation reflects differences in length of stay among patients with the longest stays (e.g., at the 90th percentile). Length of stay varies much less for patients with shorter stays (e.g., at the 10th or 50th percentile).
- Beneficiaries with neurological conditions, COPD, and debility have the longest stays, while beneficiaries with cancer have the shortest stays on average.
- Beneficiaries who receive hospice services in assisted living facilities and nursing facilities have longer stays on average than beneficiaries who receive care at home or in a hospice facility or hospital.
- For-profit and freestanding hospices have longer average lengths of stay than nonprofit and provider-based hospices.

Chart 11-14. More than half of Medicare hospice spending in 2012 was for patients with stays exceeding 180 days

	Medicare hospice spending, 2012 (in billions)
All hospice users in 2012	\$15.1
Beneficiaries with LOS > 180 days	8.8
Days 1–180	2.9
Days 181–365	2.8
Days 366+	3.1
Beneficiaries with LOS ≤ 180 days	6.2

Note: LOS (length of stay). LOS reflects the beneficiary's lifetime LOS as of the end of 2012 (or at the time of discharge in 2012 if the beneficiary was not enrolled in hospice at the end of 2012). All spending reflected in the chart occurred only in 2012. Break-out groups do not sum to total because they exclude about \$0.1 billion in payments to hospices for physician visits.

Source: MedPAC analysis of 100 percent hospice claims Standard Analytic File data and the common Medicare enrollment file from CMS.

- In 2012, Medicare hospice spending on patients with stays exceeding 180 days was nearly \$9 billion, more than half of all Medicare hospice spending that year.
- About \$3.1 billion, or about 20 percent, of Medicare hospice spending in 2012 was on additional hospice care for patients who had already received at least one year of hospice.

Chart 11-15. Hospice aggregate Medicare margins, 2005–2011

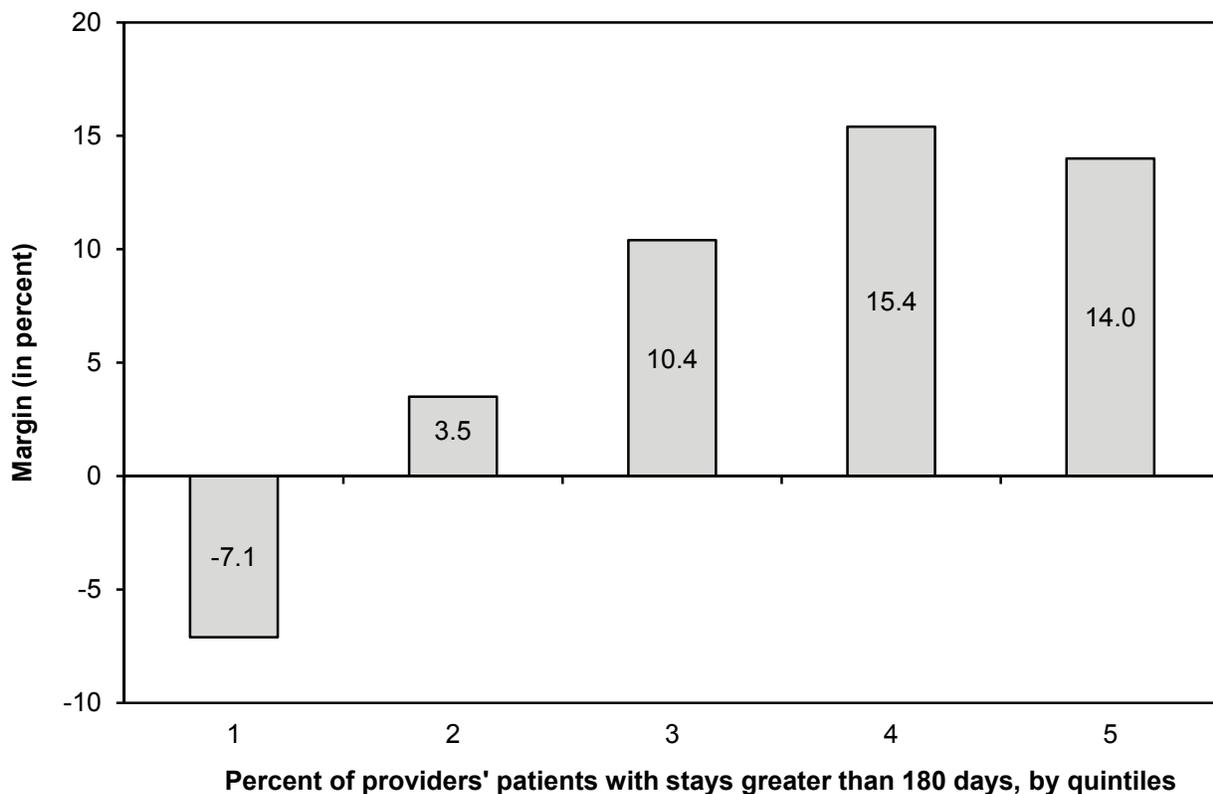
	Percent of hospices (2011)	Medicare margin				
		2005	2008	2009	2010	2011
All	100%	4.6%	5.5%	7.4%	7.4%	8.7%
Freestanding	69	7.2	8.3	10.2	10.7	11.8
Home health based	14	3.1	3.4	5.9	3.2	5.0
Hospital based	16	-9.1	-11.3	-12.2	-16.6	-15.9
For profit	57	9.9	10.3	11.7	12.3	14.5
Nonprofit	37	1.0	0.7	3.8	3.0	2.5
Government	6	N/A	N/A	N/A	N/A	N/A
Urban	72	5.1	5.9	7.9	7.7	9.0
Rural	28	0.2	2.1	3.7	5.2	6.2
Below cap	90.2	5.1	5.9	7.9	7.7	9.0
Above cap	9.8	-0.8	1.2	1.4	3.2	4.1
Above cap (including cap overpayments)	9.8	20.7	19.0	18.3	17.4	18.4

Note: N/A (not available). Margins for all provider categories exclude overpayments to above-cap hospices, except where specifically indicated. Margins are calculated based on Medicare-allowable, reimbursable costs. Percent of freestanding and provider-based (home health-based and hospital-based) hospices does not sum to 100 percent because skilled nursing facility-based hospices are not broken out separately. Percent of hospices may not sum to 100 percent for other categories due to rounding.

Source: MedPAC analysis of Medicare hospice cost reports, 100 percent hospice claims Standard Analytic File, and Medicare Provider of Services data from CMS.

- The aggregate Medicare margin was 8.7 percent in 2011, up from 7.4 percent in 2010.
- Margin estimates do not include nonreimbursable costs associated with bereavement services and volunteers (which, if included, would reduce margins by at most 1.4 and 0.3 percentage points, respectively). Margins also do not include the costs and revenues associated with fundraising.
- Freestanding hospices had higher margins than provider-based (home health- and hospital-based) hospices in part due to differences in their indirect costs. Provider-based hospices' indirect costs are higher than those of freestanding providers and are likely inflated due to the allocation of overhead from the parent provider.
- In 2011, for-profit hospice margins were strong at 14.5 percent. The aggregate margin for nonprofit hospices was 2.5 percent. The subset of nonprofit hospices that were freestanding had a higher margin, 6.4 percent (not shown in chart).
- Hospices that exceeded the cap (Medicare's aggregate average per beneficiary payment limit) had a margin of more than 18 percent before the return of the cap overpayments.

Chart 11-16. Medicare margins are higher among hospices with more long stays, 2011



Note: Margins exclude overpayments to hospices that exceed the cap on the average annual Medicare payment per beneficiary. Margins are calculated based on Medicare-allowable, reimbursable costs.

Source: MedPAC analysis of Medicare hospice cost reports and 100 percent hospice claims Standard Analytic File from CMS.

- Medicare’s per diem payment system for hospice provides an incentive for longer lengths of stay.
- Hospices with more patients who had stays greater than 180 days generally have higher margins. Hospices in the lowest length-of-stay quintile have a margin of –7.1 percent compared with a 15.4 percent margin for hospices in the second highest length-of-stay quintile.
- Margins are somewhat lower in the highest length-of-stay quintile (14.0 percent) compared with the second highest quintile (15.4 percent) because some hospices in the highest quintile exceeded Medicare’s aggregate payment cap and were required to repay the overage. Hospices exceeding the cap had a margin of more than 18 percent before the return of overpayments (Chart 11-15).

Chart 11-17. Hospices that exceeded Medicare’s annual payment cap, selected years

	2002	2008	2009	2010	2011
Percent of hospices exceeding the cap	2.6%	10.2%	12.5%	10.1%	9.8%
Average payments over the cap per hospice exceeding the cap (in thousands)	\$470	\$571	\$485	\$426	\$424
Payments over the cap as a percent of overall Medicare hospice spending	0.6%	1.7%	1.7%	1.2%	1.1%

Note: The cap year is defined as the period beginning November 1 and ending October 31 of the following year. These estimates of hospices that exceed the aggregate cap are based on the Commission’s analyses. While the estimates are intended to approximate those of the Medicare claims-processing contractors, they are not necessarily identical to the contractors’ estimates because of differences in available data and methodology.

Source: MedPAC analysis of 100 percent hospice claims Standard Analytic File data, Medicare hospice cost reports, Provider of Services file data from CMS, and CMS Providing Data Quickly system. Data on total spending for each fiscal year are from the CMS Office of the Actuary.

- A slightly smaller share of hospices exceeded Medicare’s aggregate average per beneficiary payment limit, or “cap,” in 2011 than in 2010. About 9.8 percent of hospices exceeded the cap in 2011, down from 10.1 percent in 2010. This is the second consecutive year the share of hospices exceeding the cap declined.
- Medicare payments over the cap represented 1.1 percent of total Medicare hospice spending in 2011.
- On average, above-cap hospices exceeded the cap by about \$424,000 per provider in 2011. Since 2006, the amount by which above-cap hospices have exceeded the cap has declined on average each year.

Chart 11-18. Length-of-stay and live discharge rates for above- and below-cap hospices, 2011

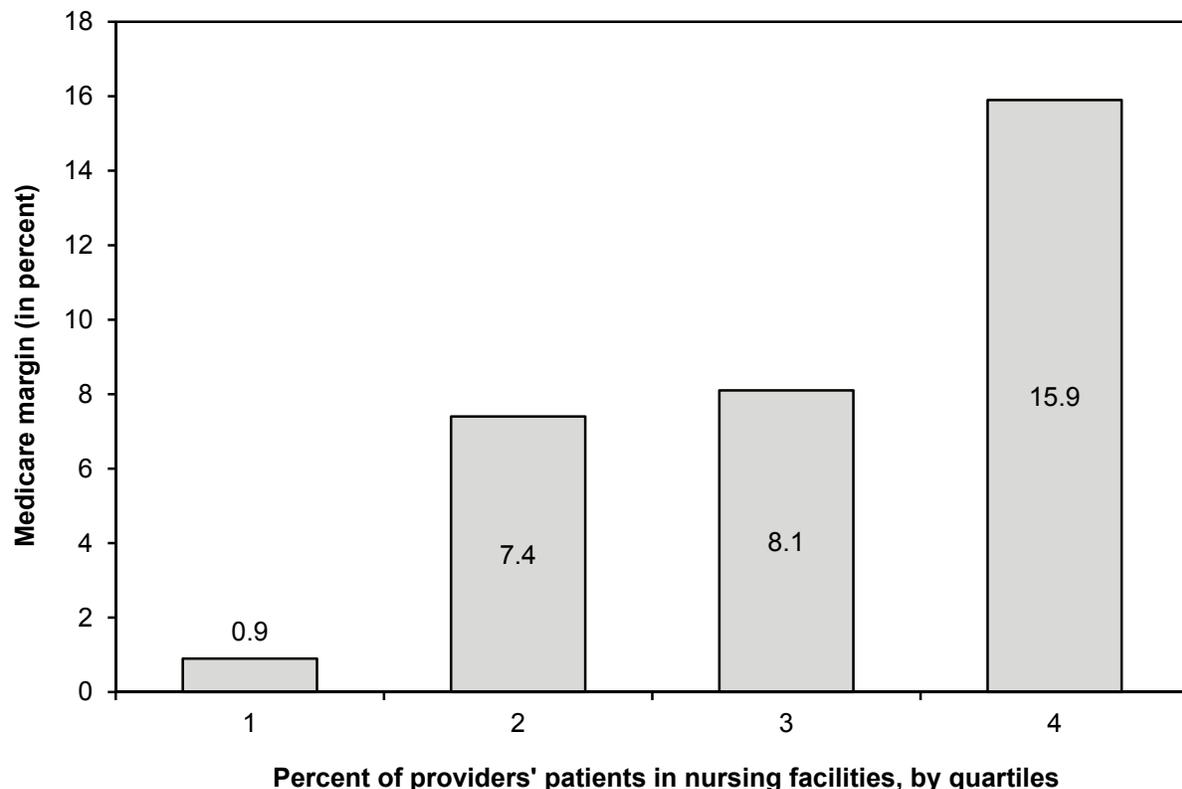
Diagnosis	Percent of hospice users with stays exceeding 180 days		Live discharges as a percent of all discharges	
	Above-cap hospices	Below-cap hospices	Above-cap hospices	Below-cap hospices
All	39%	20%	40%	16%
Cancer	15	9	20	10
Neurological conditions	47	31	30	16
Heart/circulatory	41	18	42	14
Debility	40	24	44	20
COPD	42	26	46	20
Other	46	24	55	25

Note: COPD (chronic obstructive pulmonary disease). Length-of-stay data reflect the percent of hospice users in 2011 whose hospice length of stay was beyond 180 days.

Source: MedPAC analysis of 100 percent hospice claims Standard Analytic File and denominator file from CMS.

- Above-cap hospices have substantially more patients with very long stays and more live discharges than below-cap hospices for all diagnoses.
- In 2011, between 39 percent and 47 percent of above-cap hospices' patients with neurological conditions, heart or circulatory conditions, COPD, or debility had stays exceeding 180 days, compared with 18 percent to 31 percent at below-cap hospices.
- For all diagnoses, the live discharge rates at above-cap hospices were at least roughly double, and in some cases triple, the rates at below-cap hospices. For example, among patients with heart or circulatory conditions, 42 percent of discharges at above-cap hospices were live discharges compared with 14 percent at below-cap hospices.

Chart 11-19. Margins are higher among hospices with a greater share of their patients in nursing facilities, 2011

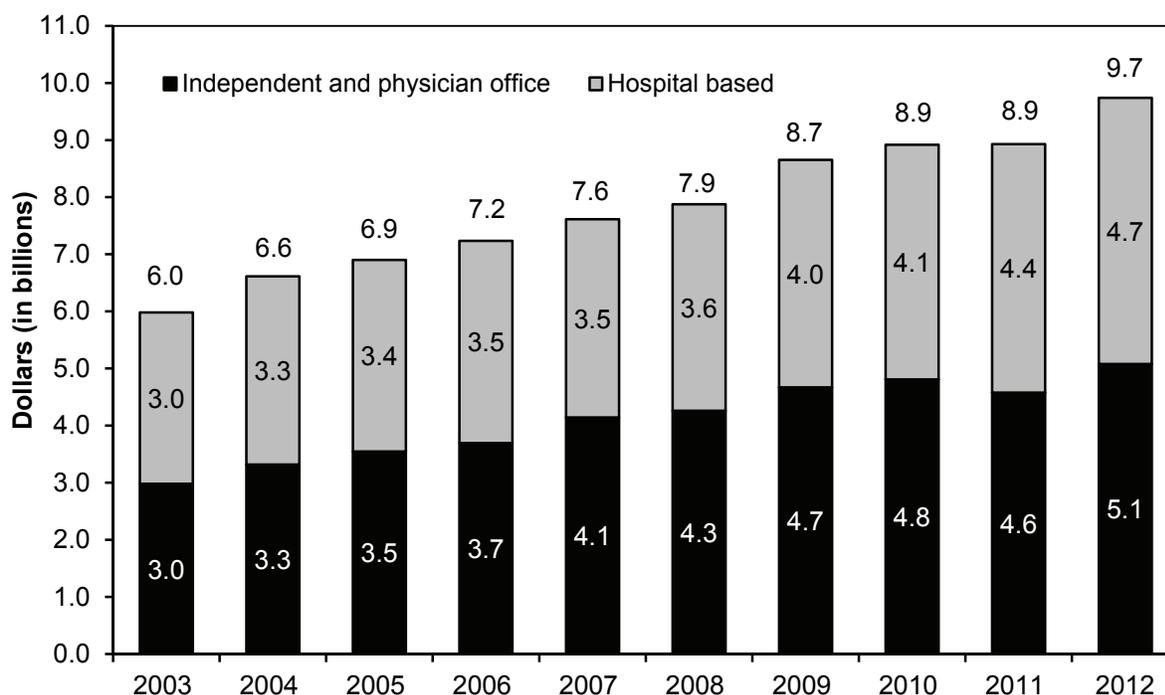


Note: Margins exclude overpayments to hospices that exceed the cap on the average annual Medicare payment per beneficiary. Margins are calculated based on Medicare-allowable, reimbursable costs.

Source: MedPAC analysis of Medicare hospice cost reports and 100 percent hospice claims Standard Analytic File from CMS.

- Hospices with a large share of their patients in nursing facilities have higher margins than other hospices.
- The higher profitability of hospices serving many nursing facility patients may be due to a combination of factors, such as longer lengths of stay, possible efficiencies in treating patients in a centralized location (e.g., lower mileage costs and less staff time for travel), and overlap in responsibilities between the hospice and the nursing facility.

Chart 11-20. Medicare spending for clinical laboratory services, 2003–2012



Note: Spending is for services paid under the clinical laboratory fee schedule. Hospital-based services are furnished in labs owned or operated by hospitals. Total spending appears on top of each bar. The segments of each bar may not sum to the totals on top of each bar due to rounding. The spending data are calendar year figures from the 2013 annual report of the Boards of Trustees of the Medicare Trust Funds. The spending data include only program payments; there is no beneficiary cost sharing for clinical lab services.

Source: **AT THE TIME THIS DATA BOOK WAS PREPARED, THE MEDICARE TRUSTEES' REPORT (WHICH IS THE CUSTOMARY SOURCE OF DATA FOR THIS CHART) HAD NOT YET BEEN RELEASED FOR 2014. THIS CHART REFLECTS DATA FROM THE 2013 MEDICARE TRUSTEES' REPORT. THE READER IS ADVISED TO CONSULT THE 2014 TRUSTEES' REPORT DIRECTLY, WHEN AVAILABLE, FOR THE MOST CURRENT VERSION OF THESE DATA.**

- Medicare spending for clinical laboratory services grew by an average of 5.6 percent per year between 2003 and 2012. This growth was primarily driven by rising volume since there were only three increases in lab payment rates during those years (1.1 percent in 2003, 4.5 percent in 2009, and 0.65 percent in 2012).
- Spending for services in all clinical lab settings increased by 9.1 percent in 2012. Spending for services in independent and physician office labs grew by 10.9 percent, compared with 7.1 percent for hospital-based labs.
- Clinical lab services accounted for 1.7 percent of total program spending in 2012.



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