

J U L Y 2 0 2 1

A DATA BOOK

Health Care Spending
and the
Medicare Program

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 is unique to the Data Book. The information is presented in 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

Changes in aggregate spending for the fee-for-service sectors presented in this Data Book partly reflect the shift in Medicare enrollment from the traditional fee-for-service program to Medicare Advantage. Fee-for-service spending per capita may present a more complete picture of spending changes.

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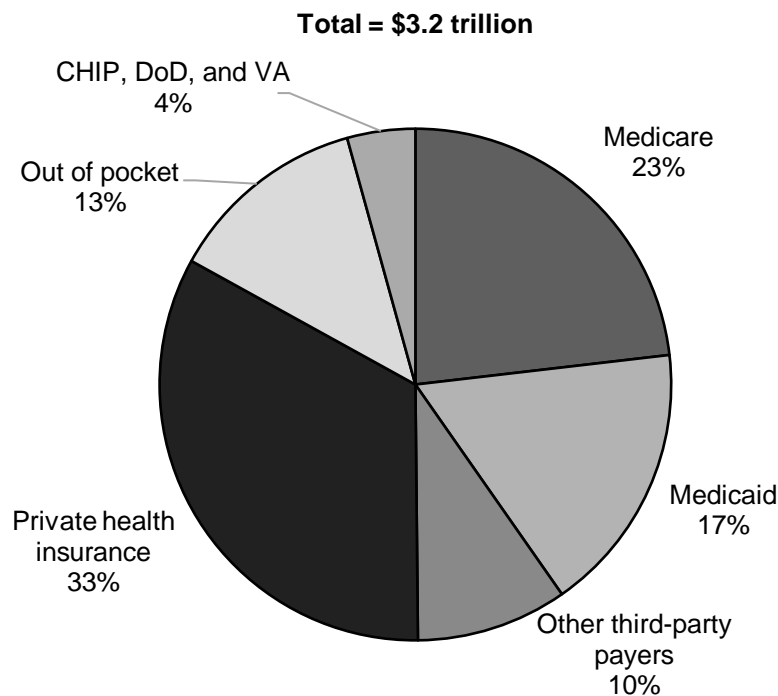
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SECTION

1

**National health care and
Medicare spending**

Chart 1-1. Medicare was the largest single purchaser of personal health care, 2019

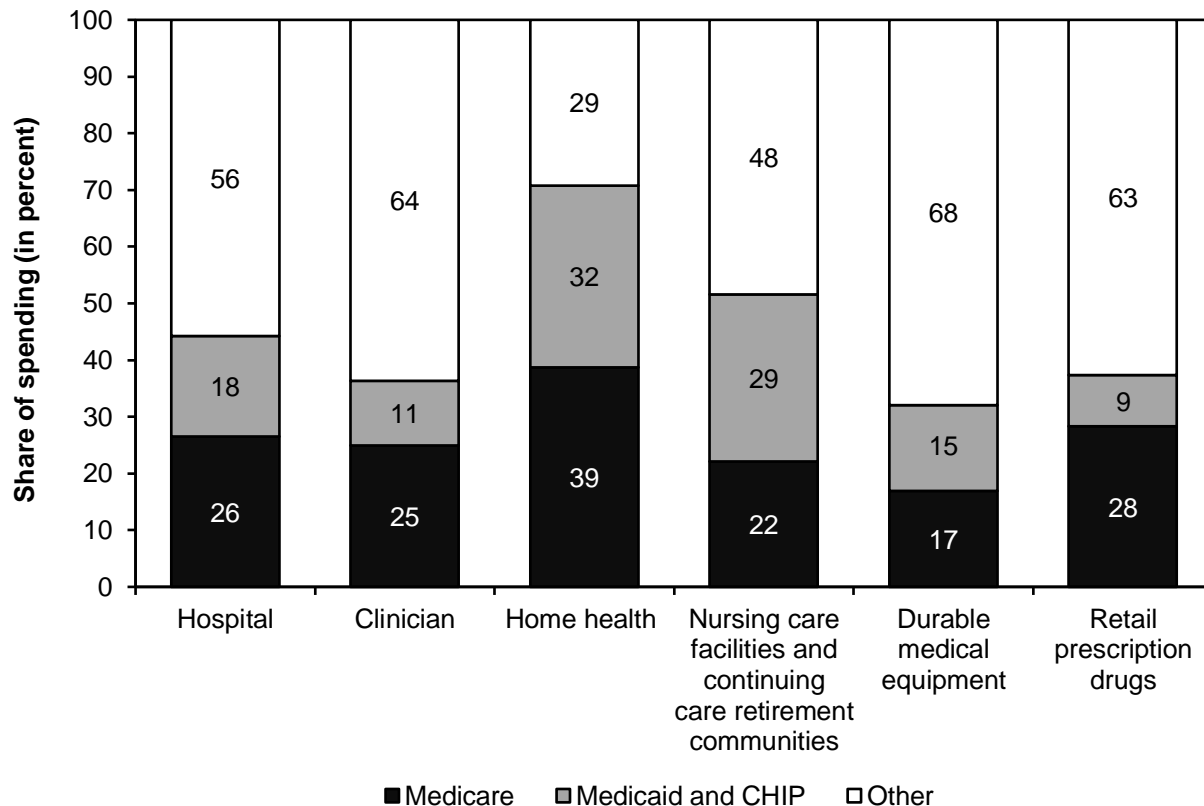


Note: CHIP (Children's Health Insurance Program), DoD (Department of Defense), VA (Department of Veterans Affairs). "Personal health care" is a subset of national health expenditures. It includes spending for all medical goods and services that are provided for the treatment of an individual and excludes 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 health insurance) rather than in the share of the "out-of-pocket" category. "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, the 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 1970–2019," released December 2020.

- Medicare is the largest single purchaser of health care in the U.S. (Although the share of spending accounted for by private health insurance is greater than Medicare's share, private health insurance is not a single purchaser of health care; rather, it includes many private plans, including managed care, self-insured health plans, and indemnity plans.) Of the \$3.2 trillion spent on personal health care in 2019, Medicare accounted for 23 percent, or \$743 billion. This amount includes spending on direct patient care and excludes certain administrative and business costs.
- Private health insurance plans financed 33 percent of personal health care spending, and consumer out-of-pocket spending (not including premiums) amounted to 13 percent of the total.
- In this chart, enrollees' premium contributions are included in the spending category of their insurance type.

Chart 1-2. Medicare’s share of spending on personal health care varied by type of service, 2019

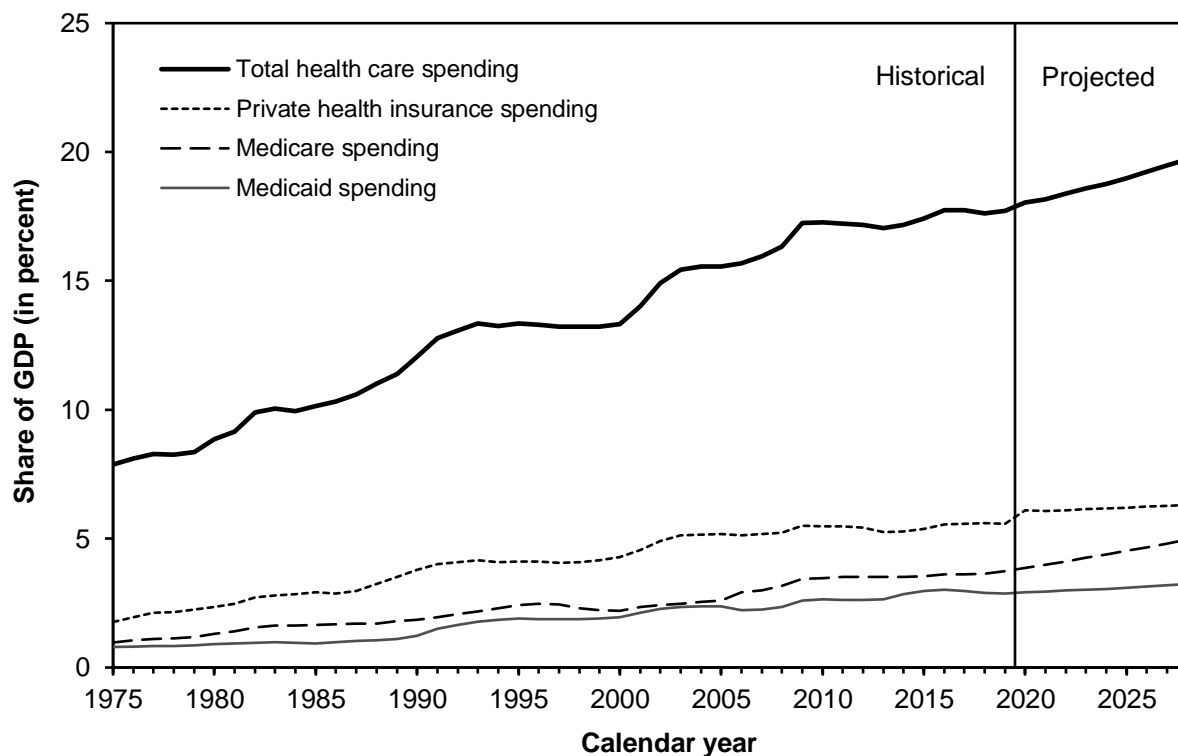


Note: CHIP (Children’s Health Insurance Program). “Personal health care” is a subset of national health expenditures. It includes spending for all medical goods and services that are provided for the treatment of an individual and excludes other spending such as government administration, the net cost of health insurance, public health, and investment. “Other” includes private health insurance, out-of-pocket spending, and other private and public spending. Other service categories included in personal health care that are not shown here are other professional services; dental services; other health, residential, and personal care; and other nondurable medical equipment. Bars may not total 100 percent because of rounding.

Source: CMS Office of the Actuary, National Health Expenditure Accounts, historical data released December 2020.

- While Medicare’s share of total personal health care spending was 23 percent in 2019 (see Chart 1-1), its share of spending by type of service varied, from 17 percent of spending on durable medical equipment to 39 percent of spending on home health care.
- Medicare’s share of spending on nursing care facilities and continuing care retirement communities was smaller than Medicaid’s share. 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.

Chart 1-3. Health care spending has consumed an increasing share of the country's GDP

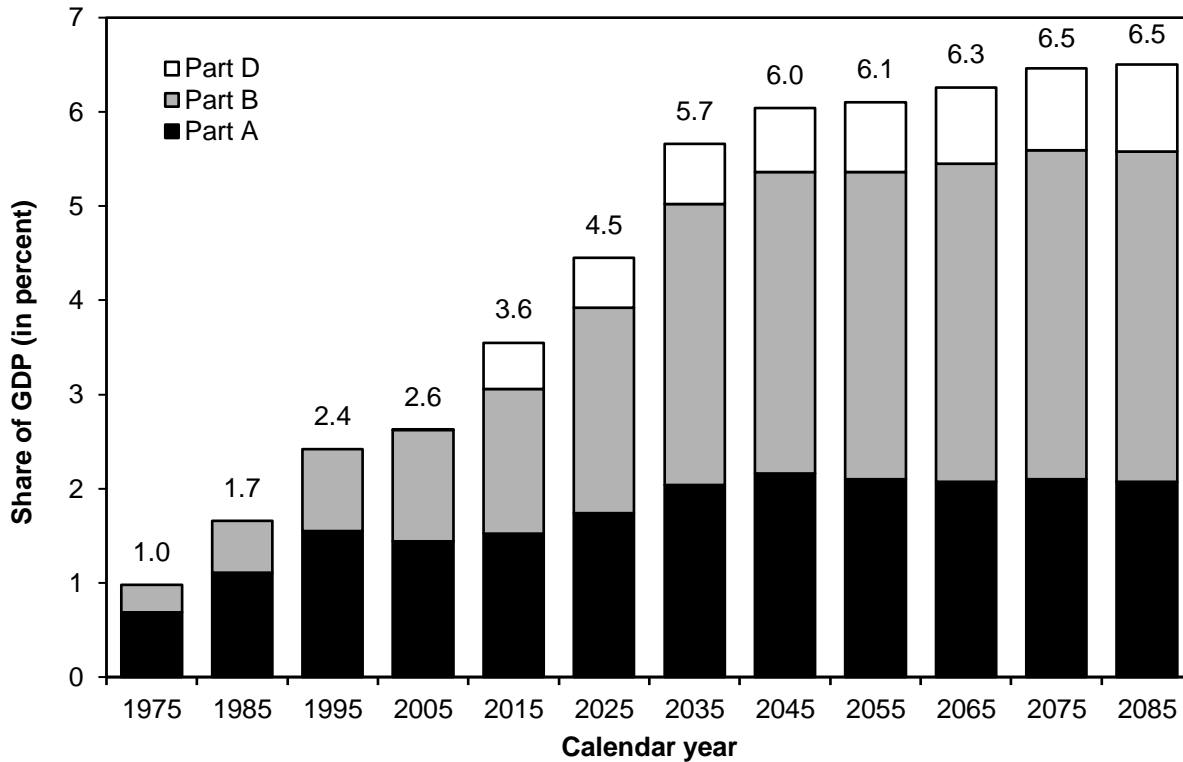


Note: GDP (gross domestic product). The potential effects of the coronavirus pandemic are not reflected in these projections.

Source: CMS Office of the Actuary, National Health Expenditure Accounts, historical data released December 2020 and projections released April 2020.

- In 2019, total health care spending made up 17.7 percent of the country's GDP. Private health insurance spending constituted 5.6 percent of GDP spending, Medicare constituted 3.7 percent, and Medicaid constituted 2.9 percent.
- Health care spending as a share of GDP more than doubled from 1975 to 2019, increasing from 7.9 percent to 17.7 percent. Over this period, spending on private health insurance, Medicare, and Medicaid grew even faster: Each more than tripled as a share of GDP. Spending on private health insurance increased from 1.8 percent to 5.6 percent of GDP, Medicare increased from 1.0 percent to 3.7 percent of GDP, and Medicaid increased from 0.8 percent to 2.9 percent of GDP.

Chart 1-4. Trustees project Medicare spending to continue to increase as a share of GDP

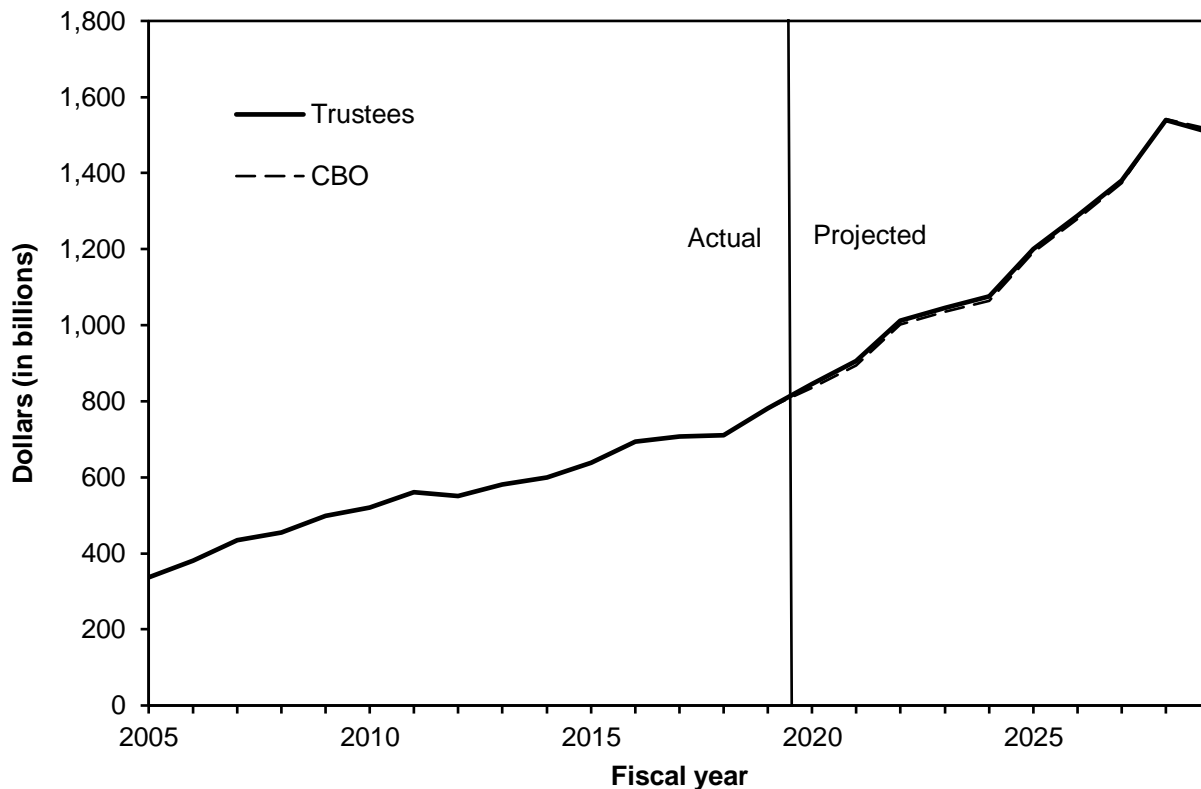


Note: GDP (gross domestic product). The Part D benefit began in 2006. Shares for 2025 and later are projections based on the Trustees' intermediate set of assumptions. The potential effects of the coronavirus pandemic are not reflected in these projections.

Source: The annual report of the Boards of Trustees of the Medicare trust funds 2020.

- Over time, Medicare spending has accounted for an increasing share of GDP. From 1 percent in 1975, it is projected to reach 6 percent of GDP in 2045.
- The Medicare Trustees project that spending will rise from 3.6 percent of GDP in 2015 to 5.7 percent of GDP by 2035, largely because of rapid growth in the number of beneficiaries, and then to 6.5 percent of GDP by 2075, with growth in spending per beneficiary becoming the greater factor in the 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 enroll in Medicare.
- In the later decades of the Trustees' forecast, Medicare spending is projected to continue rising as a share of GDP, but at a slower pace than in the past.
- Drug costs are projected to grow faster than Part A and Part B expenditures and to account for 14 percent of Medicare expenditures by 2085.

Chart 1-5. Trustees and CBO project Medicare spending to exceed \$1 trillion by 2022



Note: CBO (Congressional Budget Office). The potential effects of the coronavirus pandemic are not reflected in these projections. All data are nominal, mandatory outlays (benefit payments plus mandatory administrative expenses) by fiscal year.

Source: Congressional Budget Office's March 2020 baseline spending projections for Medicare; the annual report of the Boards of Trustees of the Medicare trust funds 2020.

- Medicare spending has more than doubled since 2005, increasing from \$337 billion to \$782 billion by 2019. (These data are by fiscal year and include benefit payments and mandatory administrative expenses. They do not reflect the potential effects of the coronavirus pandemic.)
- The Medicare Trustees and CBO both project that spending for Medicare between 2019 and 2029 will grow at an average annual rate of 6.8 percent. Medicare spending will reach \$1 trillion in 2022 under both sets of projections.
- Forecasts of future Medicare spending are inherently uncertain, and differences can stem from different assumptions about the economy that in turn affect annual updates to provider payments and the number of workers paying Medicare payroll taxes. In addition, forecasts can assume different amounts of growth in the volume and intensity of services delivered to Medicare beneficiaries, among other factors.

Chart 1-6. Factors contributing to Medicare’s projected spending growth from 2020 to 2029 (not including general economy-wide inflation)

Average annual percent change in:

Medicare part	Medicare prices	Number of beneficiaries	Beneficiary demographic mix	Volume and intensity of services used	Medicare’s projected spending
Part A	0.2%	2.3%	0.1%	1.2%	3.8%
Part B	-0.7	2.3	0.0	4.0	5.7
Part D	-0.4	2.6	-0.1	1.8	3.9
Total*	-0.3	N/A**	0.0	2.6	4.7

Note: N/A (not available). Includes Medicare Advantage enrollees. Price increases reflect Medicare’s annual updates to payment rates (not including inflation, as measured by the consumer price index), multifactor productivity reductions, and any other reductions required by law or regulation (including a statutorily required 2 percent sequester to Medicare benefit payments, which was scheduled to increase to 4 percent for a six-month period in 2029 at the time these projections were developed, but has since been delayed). Part A prices are expected to rise faster than economy-wide inflation in the 2020s in part due to statutorily required increases. Specifically, in each of fiscal years 2020 through 2023, there is a statutory 0.5 percent increase in inpatient operating payments due to unwinding a temporary reduction in payments that was put in place to recoup past overpayments resulting from changes in providers’ documentation and coding. Volume and intensity together are the residual after the other three factors shown in the table (Medicare price increases, the increase in the number of beneficiaries, and changes in beneficiary demographic mix) are removed. Much of the 1.2 percent projected increase in Part A volume and intensity may be due to increased coding of hospital severity of illness, which may reflect real changes in patients’ needs and/or coding changes; we do not expect the 1.2 percent to reflect increases in volume per capita given that the number of discharges per beneficiary has declined for several decades and fell by 6.1 percent from 2015 to 2019. The “Medicare’s projected spending” column is the product of the other columns in the table. Any potential effects of the coronavirus pandemic are not reflected in these projections.

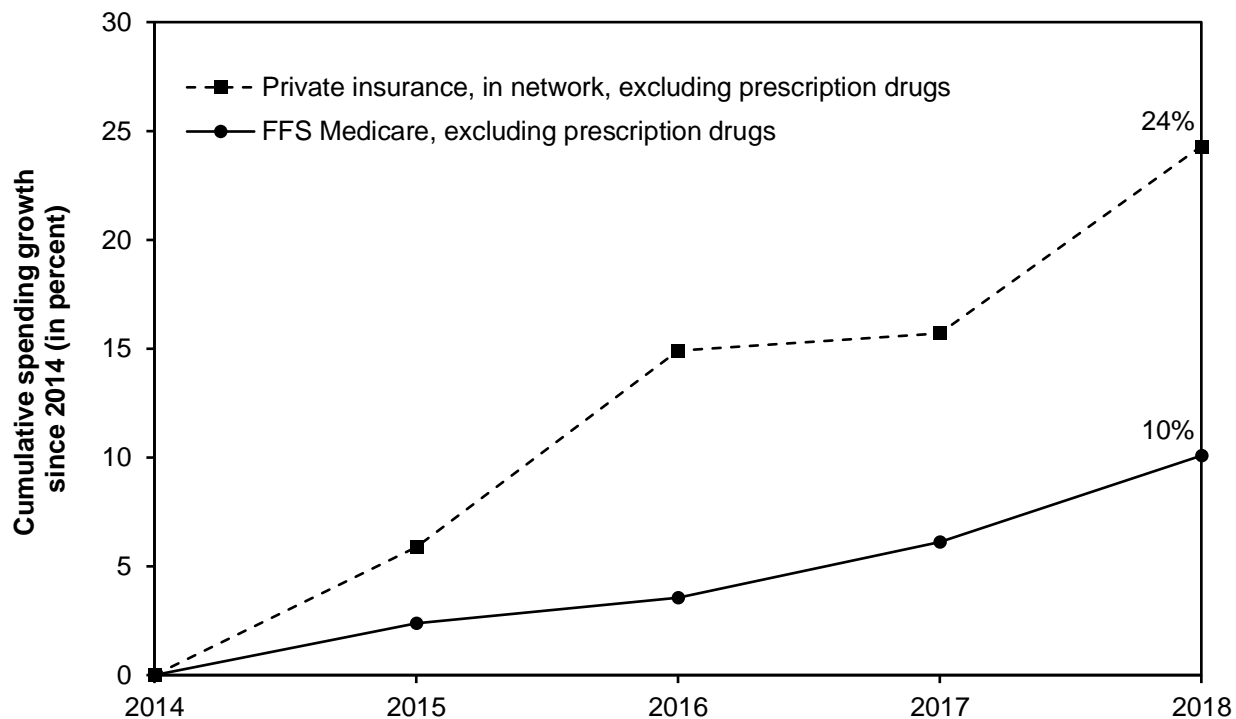
*The “Total” row is the sum of the other rows of the table, each weighted by its Part’s share of total Medicare spending in 2019 (as measured by shares of gross domestic product).

**We are unable to calculate the total contribution of the increasing number of beneficiaries to projected spending growth because there is beneficiary overlap in enrollment in Part A, Part B, and Part D.

Source: MedPAC analysis of data from the annual report of the Boards of Trustees of the Medicare trust funds 2020.

- Medicare’s spending is projected to grow 4.7 percent per year, on average, between 2020 and 2029 (not including growth due to general economy-wide inflation).
- Medicare’s projected spending growth is driven by growth in the number of beneficiaries (expected to increase by a little more than 2 percent per year over this period) and growth in the volume and intensity of services delivered per beneficiary (expected to rise by 2.6 percent per year).
- Unlike in the private health care sector, price growth is not expected to drive Medicare’s increased spending because Medicare is able to unilaterally set prices for many health care providers.

Chart 1-7. Health care spending per enrollee grew faster for those who were privately insured than for beneficiaries in traditional FFS Medicare, 2014–2018

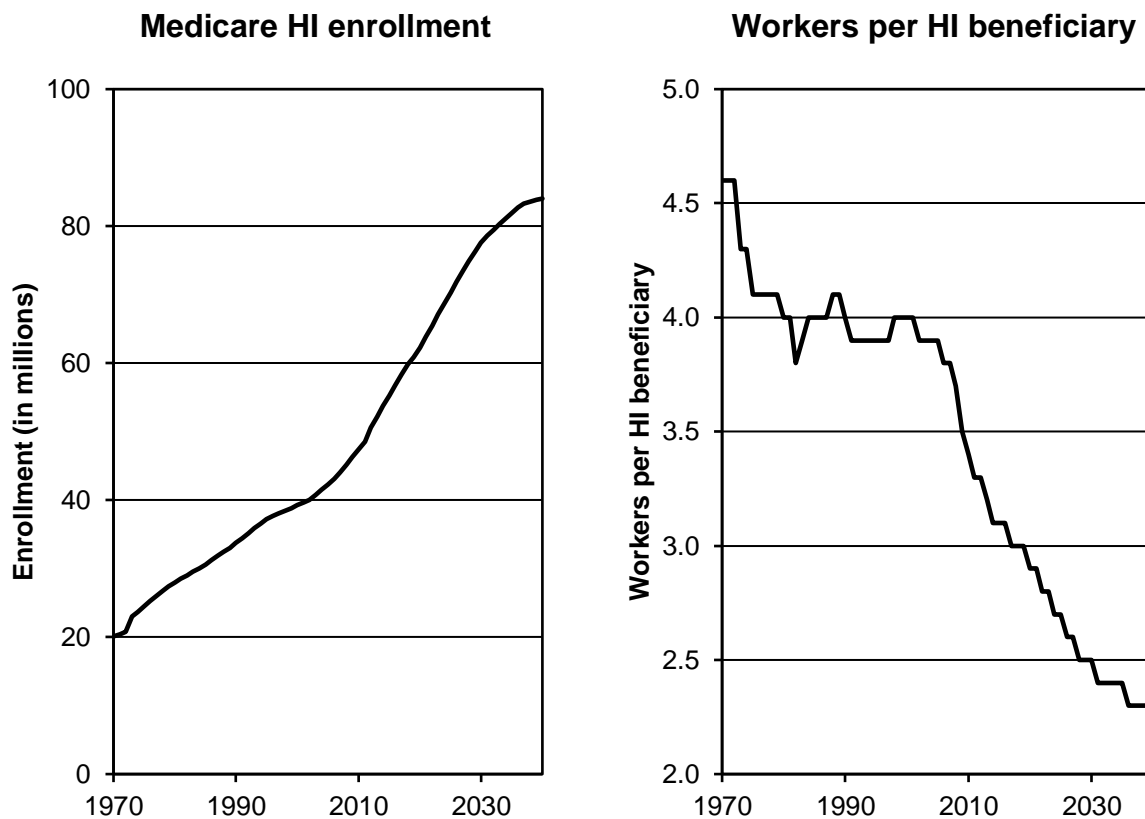


Note: FFS (fee-for-service). The figure shows cumulative spending growth since 2014. It reflects payments to providers from health insurers and patients (i.e., cost sharing) but not payments from other sources (e.g., workers' compensation or auto insurance). Spending on retail prescription drugs is not available for those who are privately insured, so it is excluded from both lines in this graph. Spending on out-of-network services for those who are privately insured is not available and thus not included in this graph. "Private insurance" reflects spending contributed by national and regional plans and third-party administrators nationwide for adults ages 18 to 64 in self-insured plans (i.e., employer self-funded plans) and fully insured plans, including individual and group plans, marketplace plans, and Medicare Advantage plans for non-elderly disabled individuals. The figure reflects spending for individuals with full-year insurance coverage (including individuals with \$0 of health care spending).

Source: MedPAC analysis of Medicare's Master Beneficiary Summary File; FAIR Health analysis of its National Private Insurance Claims database (which reflects 150 million covered lives) for the subset of enrollees ages 18 to 64.

- Between 2014 and 2018, total health care spending per enrollee (including cost sharing) grew 24 percent for those who were privately insured, compared with 10 percent for beneficiaries in traditional fee-for-service Medicare.
- Increased prices were largely responsible for spending growth in the private sector. One key driver of the private sector's higher prices has been provider market power. Hospitals and physician groups have increasingly consolidated, in part to gain leverage over insurers in negotiating higher payment rates. By 2017, 57 percent of hospital markets were so concentrated that one health system produced a majority of hospital discharges (data not shown). Studies have found that prices paid by private payers tend to increase as provider consolidation increases.

Chart 1-8. Medicare enrollment is rising while the number of workers per HI beneficiary is declining

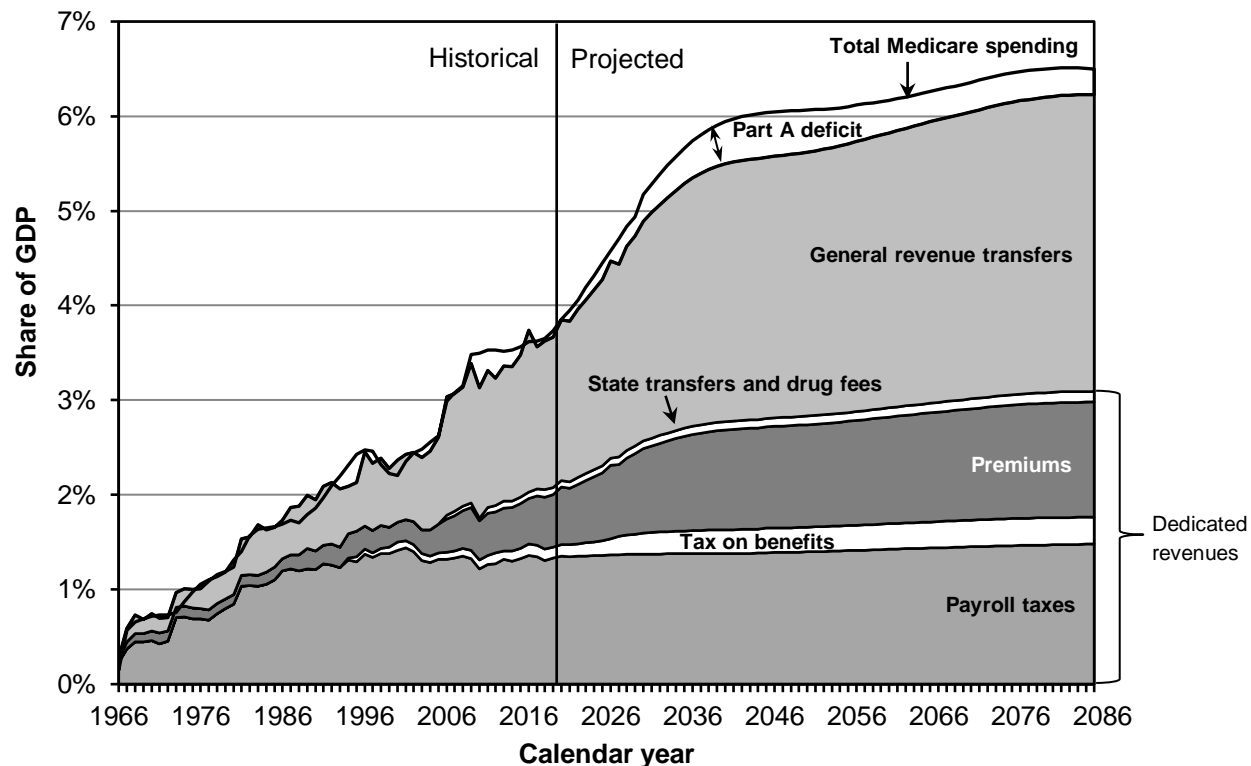


Note: HI (Hospital Insurance). Hospital Insurance is also known as Medicare Part A. The potential effects of the coronavirus pandemic are not included in these projections.

Source: The annual report of the Boards of Trustees of the Medicare trust funds 2020.

- As the baby-boom generation ages, enrollment in the Medicare program is surging. By 2033, Medicare is projected to have 80 million beneficiaries—up from 62 million beneficiaries in 2020.
- While Medicare enrollment is rising, the number of workers per beneficiary is rapidly declining. Workers are the primary funder of Medicare’s HI Trust Fund, which they fund through payroll taxes. However, the number of workers per Medicare beneficiary has declined from 4.6 during the early years of the program to 2.9 in 2020 and is projected by the Medicare Trustees to fall to 2.5 by 2028.
- These demographics threaten the financial stability of the Medicare program.

Chart 1-9. General revenues have overtaken Medicare payroll taxes as the largest source of Medicare funding



Note: GDP (gross domestic product). These projections are based on the Trustees' intermediate set of assumptions and do not reflect the potential effects of the coronavirus pandemic. "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") refers to payments from the states to Medicare for assuming primary responsibility for prescription drug spending that were mandated by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003. "Drug fees" refers to the fee imposed by the 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: The annual report of the Boards of Trustees of the Medicare trust funds 2020.

- Medicare spending accounted for 3.7 percent of GDP in 2019. The Medicare Trustees project that Medicare's share of GDP will rise to 5.5 percent by 2033 and to 5.9 percent by 2038.
- In the early years of the Medicare program, payroll taxes deposited into Medicare's Hospital Insurance Trust Fund (which finances Part A) were the main source of funding for the program, but beginning in 2009, general revenue transfers (which help finance Part B and Part D) became the largest single source of Medicare funding. General revenue transfers are expected to continue to be a substantial share of Medicare financing, growing to about 49 percent by 2034, then remaining stable through the rest of the century.
- As more general revenues are devoted to Medicare, fewer resources will be available to invest in growing the economic output of the future or in supporting other national priorities.

Chart 1-10. Increases in payroll tax or decreases in Part A spending needed to maintain HI Trust Fund solvency for certain amounts of time

To maintain HI Trust Fund solvency for:	Increase 2.9% payroll tax to:	Or decrease Part A spending by:
25 years (2020–2044)	3.67%	17.1%
50 years (2020–2069)	3.71	17.3
75 years (2020–2094)	3.66	16.0

Note: HI (Hospital Insurance). Hospital Insurance is also known as Medicare Part A. The potential effects of the coronavirus pandemic are not reflected in these projections.

Source: The annual report of the Boards of Trustees of the Medicare trust funds 2020.

- The HI Trust Fund, which helps pay for Part A services such as inpatient hospital stays and post-acute care provided by skilled nursing facilities and hospice, is mainly financed through a dedicated payroll tax (i.e., a tax on wage earnings).
- From 2008 to 2015, the HI Trust Fund ran an annual deficit (i.e., paid more in benefits than it collected in payroll taxes) (data not shown). In 2016 and 2017, the HI Trust Fund ran a surplus (data not shown). However, deficits returned in 2018 and 2019 and are projected to continue until trust fund assets are depleted in 2026 (under the Trustees' intermediate assumptions). Under high-cost assumptions, the HI Trust Fund could be depleted as early as 2023. Under low-cost assumptions, it would remain able to pay full benefits indefinitely.
- To keep the HI Trust Fund solvent over the next 25 years, the Medicare Trustees estimate that either the payroll tax would need to be increased immediately from its current rate of 2.9 percent to about 3.7 percent, or Part A spending would need to be permanently reduced by about 17 percent (about \$62 billion in 2021). Alternatively, some combination of smaller tax increases and smaller spending reductions could be used to achieve solvency.

Chart 1-11. Medicare Part A and Part B benefits and cost sharing per FFS beneficiary, 2019

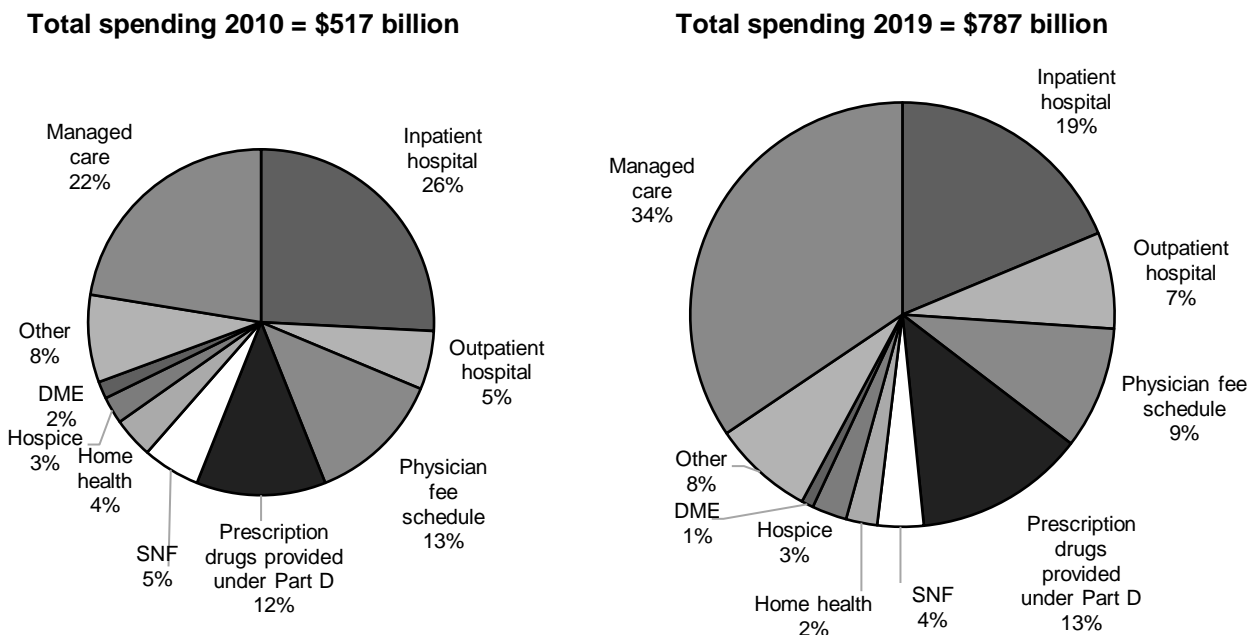
	Average benefit in 2019 (in dollars)	Average cost sharing in 2019 (in dollars)
Part A	\$5,051	\$406
Part B	6,258	1,582

Note: FFS (fee-for-service). Dollar amounts are nominal 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 and excludes all monthly premiums. The "Part A" row reflects spending for 38 million beneficiaries with Part A, and the "Part B" row reflects spending for 33 million beneficiaries with Part B.

Source: CMS Office of Enterprise Data and Analytics, CMS Program Statistics, Medicare Utilization and Payments, 2019.

- In calendar year 2019, the Medicare program made \$5,051 in Part A benefit payments and \$6,258 in Part B benefit payments, on average, per FFS beneficiary.
- Beneficiaries owed an average of \$406 in cost sharing for Part A and \$1,582 in cost sharing for Part B in calendar year 2019. (Cost sharing excludes all monthly premiums.)
- To cover some of those cost-sharing requirements, 89 percent of FFS beneficiaries had coverage that supplemented or replaced the Medicare benefit package in 2018, such as Medicare Advantage, Medigap coverage, supplemental coverage through former employers, or Medicaid (see Chart 3-1).

Chart 1-12. Medicare spending is concentrated in certain services and has shifted over time

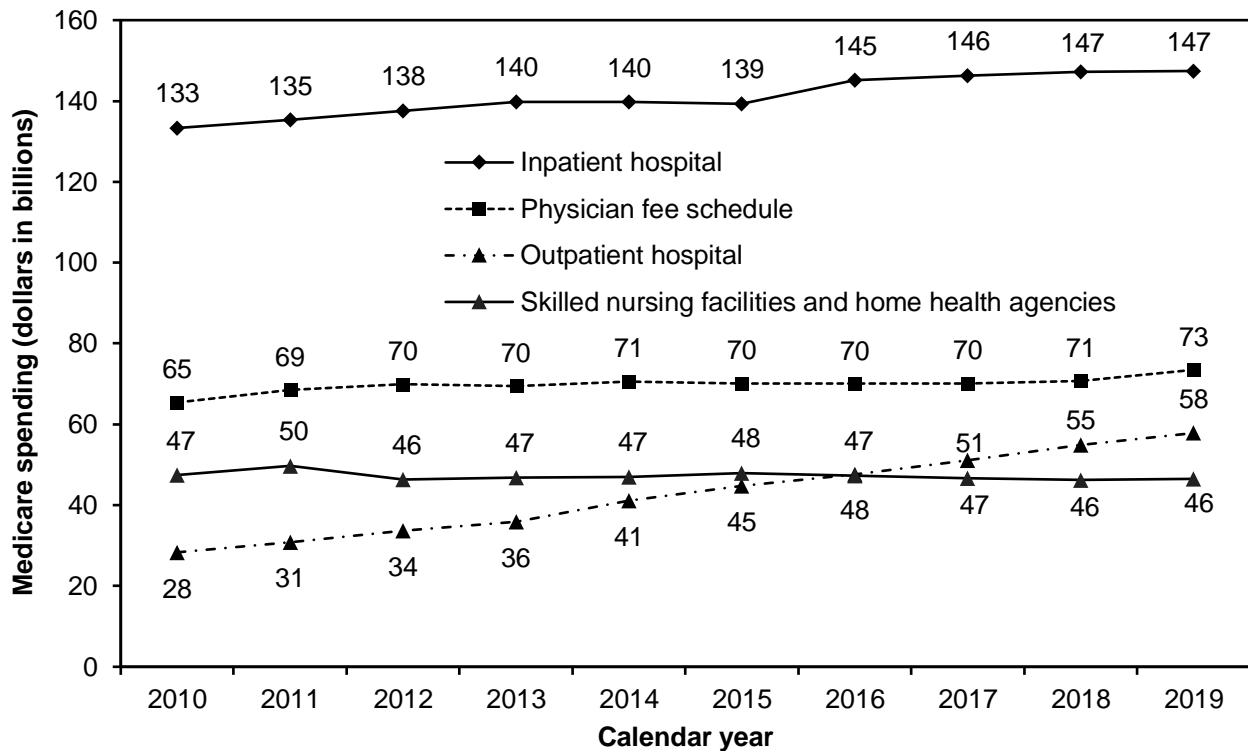


Note: DME (durable medical equipment), SNF (skilled nursing facility). All data are by calendar year. Dollar amounts are Medicare spending only and do not include beneficiary cost sharing. "Other" includes items such as laboratory services, physician-administered drugs, renal dialysis performed in freestanding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

Source: The annual report of the Boards of Trustees of the Medicare trust funds 2020.

- In 2019, Medicare spent \$787 billion on benefits. Managed care (Medicare Advantage) was the largest spending category (34 percent), followed by FFS inpatient hospital services (19 percent), prescription drugs provided under Part D (13 percent), and FFS services reimbursed under the physician fee schedule (9 percent). Spending on managed care included spending on health care services and items purchased through these plans.
- The distribution of Medicare spending among services has changed over time. Spending on managed care plans has grown from 22 percent of Medicare spending in 2010 to 34 percent in 2019. This growth is largely because the number of beneficiaries enrolled in Medicare Advantage nearly doubled over this period (data not shown). Meanwhile, the number of beneficiaries in fee-for-service (FFS) Medicare has stayed relatively flat (data not shown).
- Spending on FFS inpatient hospital services has declined as a share of total Medicare spending, falling from 26 percent in 2010 to 19 percent in 2019. Spending on physician fee schedule services has also declined as a share of Medicare spending, falling from 13 percent to 9 percent over this period. At the same time, spending on FFS outpatient services has grown (from 5 percent to 7 percent of Medicare spending), partly due to physician practices being acquired by hospitals and beginning to bill under the outpatient payment system.

Chart 1-13. Aggregate Medicare spending for FFS beneficiaries, by sector, 2010–2019

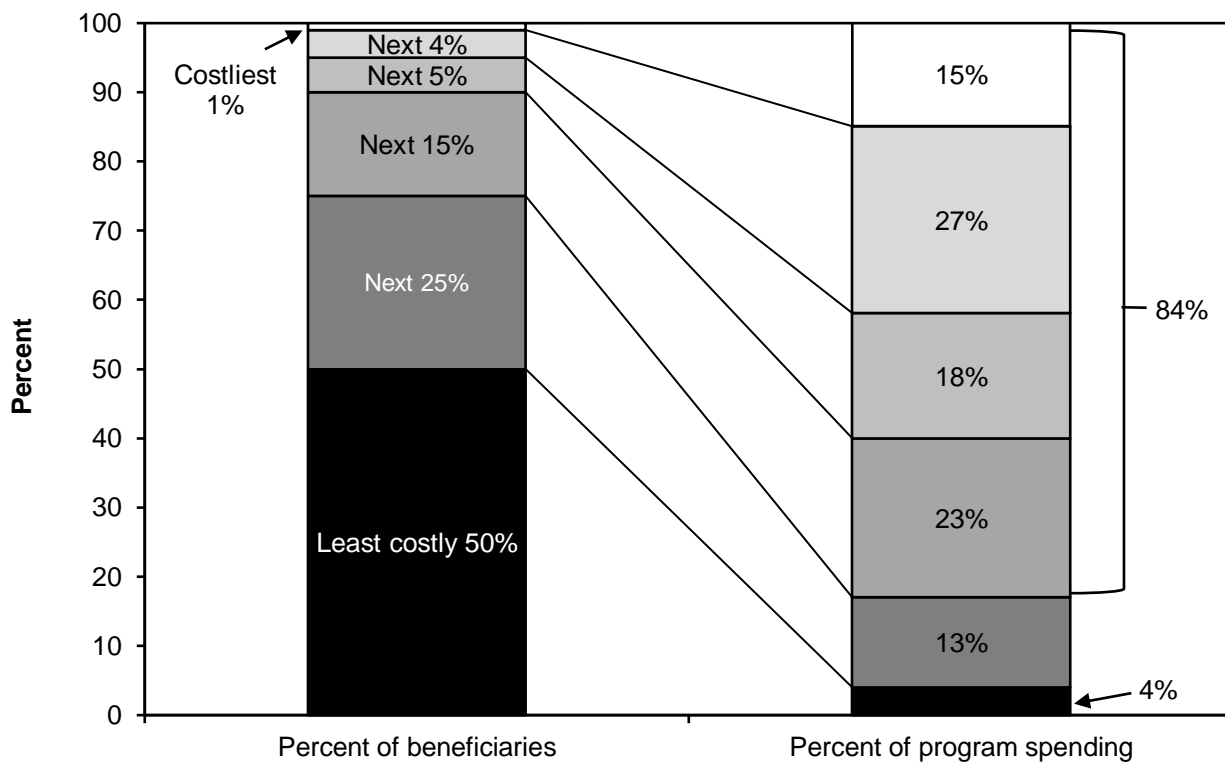


Note: FFS (fee-for-service). “Physician fee schedule” includes spending on services provided by physicians and other health professionals such as nurse practitioners, physician assistants, and physical therapists. Dollar amounts are Medicare spending for FFS beneficiaries only and do not include beneficiary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

Source: The annual report of the Boards of Trustees of the Medicare trust funds 2020.

- Medicare fee-for-service spending on inpatient hospital services and physician fee schedule services increased modestly from 2010 to 2019, averaging 1.1 percent and 1.3 percent growth per year, respectively. Spending on skilled nursing facilities and home health services decreased over this period, contracting by –0.2 percent per year on average.
- In contrast, spending on outpatient hospital services doubled during this period (averaging growth of 8.3 percent per year from 2010 to 2019) as more physician practices were acquired by hospitals and began billing Medicare’s outpatient payment system.

Chart 1-14. FFS program spending was highly concentrated in a small group of beneficiaries, 2018



Note: FFS (fee-for-service). Analysis excludes beneficiaries with any enrollment in a Medicare Advantage plan or other health plan that covers Part A and Part B services (e.g., Medicare cost plans, Medicare–Medicaid Plans, and Medicare and Medicaid’s Program of All-Inclusive Care for the Elderly [PACE]).

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, 2018.

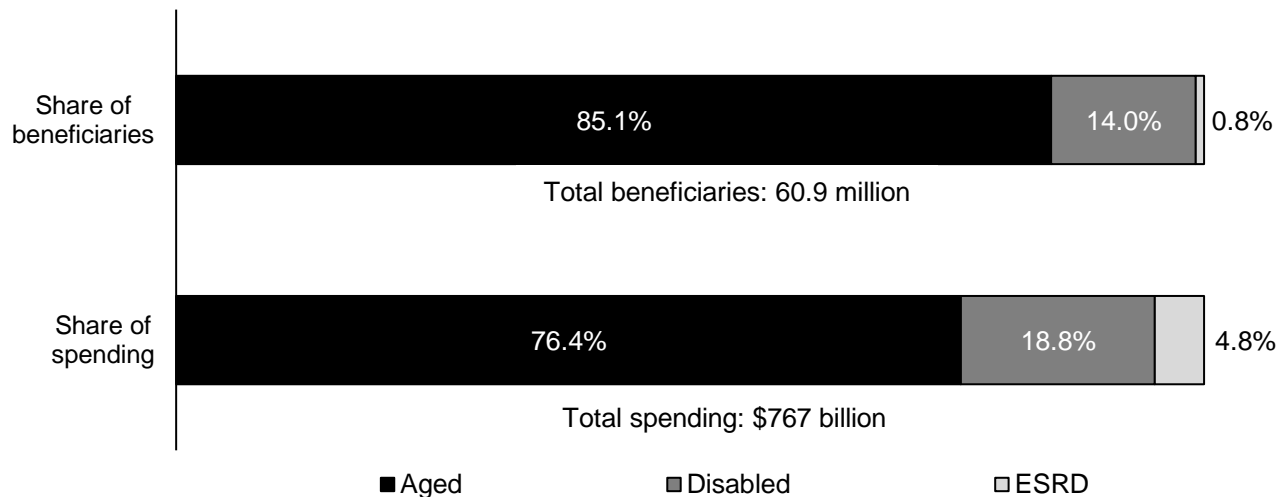
- Medicare FFS spending is concentrated among a small number of beneficiaries. In 2018, the costliest 5 percent of beneficiaries (i.e., adding the costliest 1 percent and the next-costliest 4 percent at the top of the bar at left) accounted for 43 percent of annual Medicare FFS spending (calculated on unrounded numbers). The costliest 25 percent of beneficiaries accounted for 84 percent of Medicare spending (calculated on unrounded numbers). The least costly 50 percent of beneficiaries accounted for only 4 percent of FFS spending.
- Costly beneficiaries tend to be 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.

SECTION

2

**Medicare beneficiary
demographics**

Chart 2-1. Aged beneficiaries accounted for the greatest share of the Medicare population and program spending, 2018

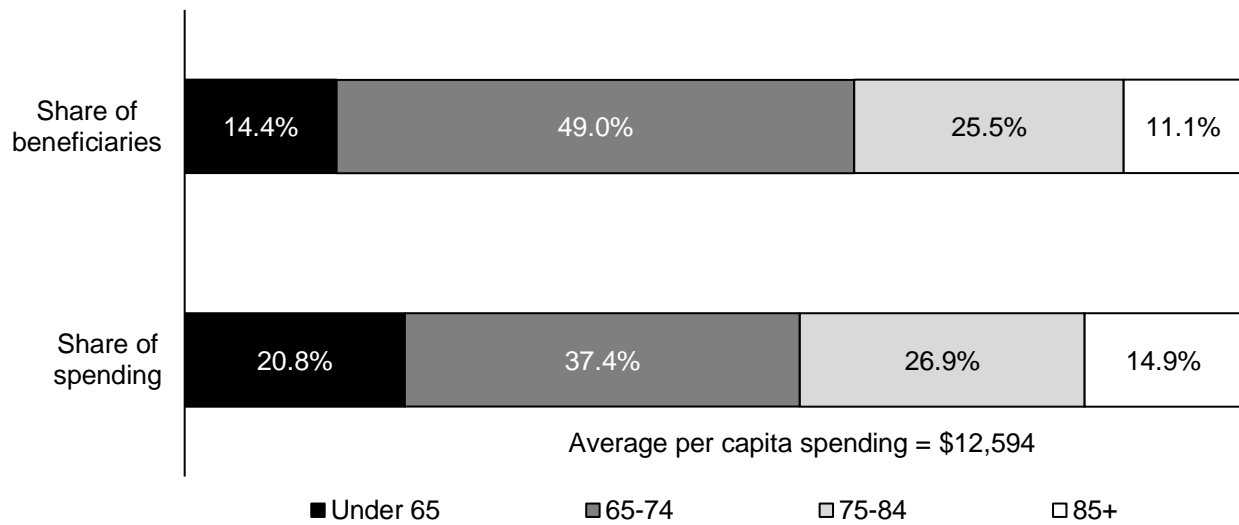


Note: ESRD (end-stage renal disease). The “aged” category includes beneficiaries ages 65 and older without ESRD. The “disabled” category includes beneficiaries under age 65 without ESRD. The “ESRD” category includes beneficiaries with ESRD, regardless of age. Results include fee-for-service, Medicare Advantage, community-dwelling, and institutionalized beneficiaries. The Medicare Current Beneficiary Survey is a point-in-time survey from a sample of Medicare beneficiaries. Year-to-year variation in reported data is expected. Totals may not sum to 100 percent due to rounding.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost Supplement file 2018.

- In 2018, beneficiaries ages 65 and older without ESRD composed 85.1 percent of the beneficiary population and accounted for 76.4 percent of Medicare spending. Beneficiaries under 65 with a disability and beneficiaries with ESRD accounted for the remaining population and spending.
- A disproportionate share of Medicare expenditures is on behalf of Medicare beneficiaries with ESRD. On average, these beneficiaries incur spending that is more than six times greater than spending for aged beneficiaries (ages 65 years and older without ESRD) and more than four times greater than spending for beneficiaries under age 65 with a disability (non-ESRD).

Chart 2-2. Beneficiaries younger than 65 accounted for a disproportionate share of Medicare spending, 2018

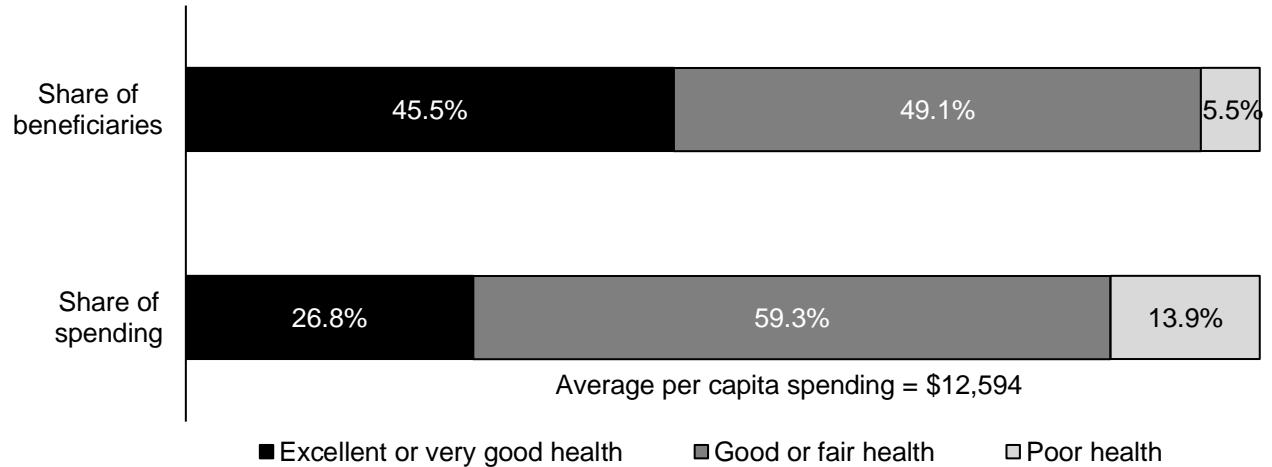


Note: Results include fee-for-service, Medicare Advantage, community-dwelling, and institutionalized beneficiaries. The Medicare Current Beneficiary Survey is a point-in-time survey from a sample of Medicare beneficiaries. Year-to-year variation in reported data is expected.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost Supplement file 2018.

- Beneficiaries younger than 65 made up 14.4 percent of the beneficiary population in 2018 but accounted for 20.8 percent of Medicare spending.
- In 2018, average Medicare spending per beneficiary was \$12,594.
- For the aged population (65 and older), per capita expenditures increase with age. In 2018, per capita expenditures were \$9,611 for beneficiaries 65 to 74 years old, \$13,300 for those 75 to 84 years old, and \$16,787 for those 85 or older (data not shown).
- In 2018, per capita expenditures for Medicare beneficiaries under age 65 who were enrolled because of end-stage renal disease or disability were \$18,250 (data not shown).

Chart 2-3. Beneficiaries who reported being in poor health accounted for a disproportionate share of Medicare spending, 2018

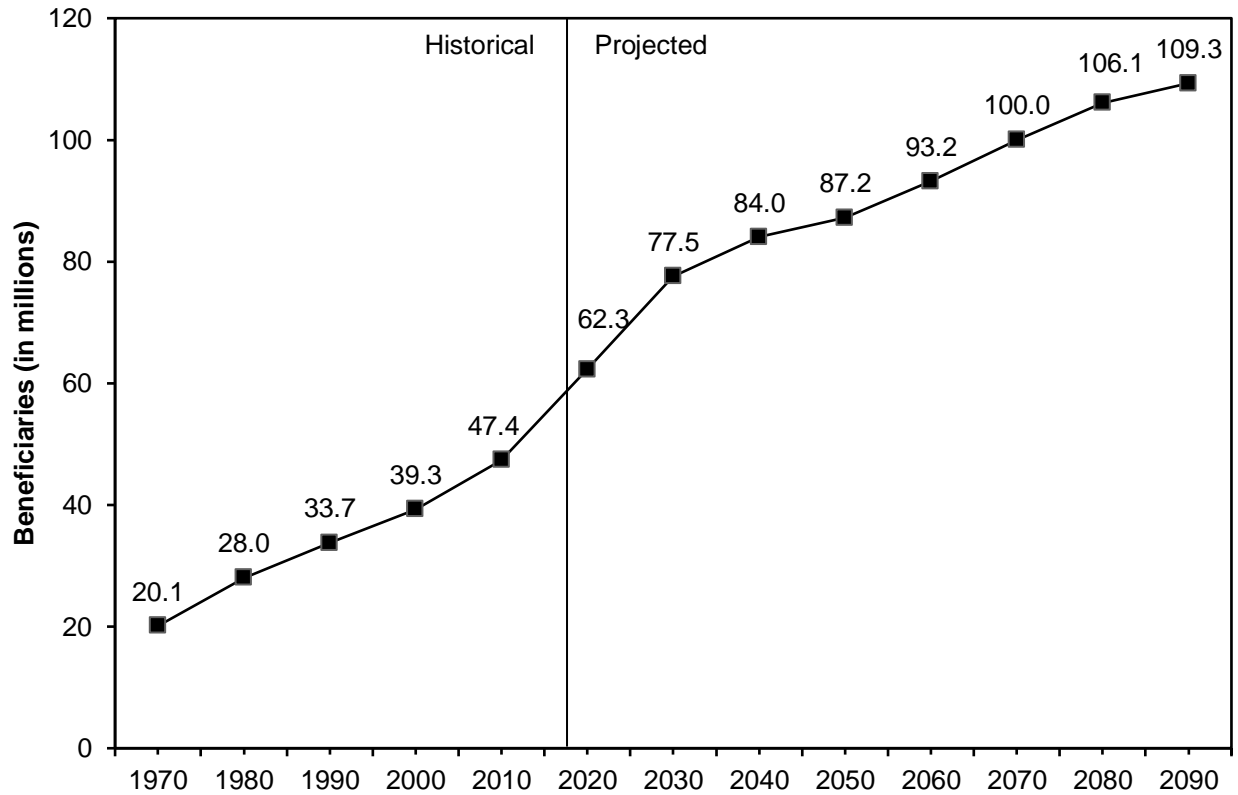


Note: Results include fee-for-service, Medicare Advantage, community-dwelling, and institutionalized beneficiaries. “Other” category excluded. The Medicare Current Beneficiary Survey is a point-in-time survey from a sample of Medicare beneficiaries. Year-to-year variation in reported data is expected. Totals may not sum to 100 percent due to rounding.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost Supplement file 2018.

- In 2018, most beneficiaries reported fair to excellent health. Only about 6 percent reported poor health.
- Medicare spending is strongly associated with self-reported health status. In 2018, per capita expenditures were \$7,098 for those who reported excellent or very good health, \$14,567 for those who reported good or fair health, and \$30,634 for those who reported poor health (data not shown).

Chart 2-4. Enrollment in the Medicare program is projected to grow rapidly through 2030



Note: Enrollment numbers are based on Part A enrollment only. Beneficiaries enrolled only in Part B are not included. The potential effects of the coronavirus pandemic are not reflected in these projections.

Source: The annual report of the Boards of Trustees of the Medicare trust funds 2020.

- The total number of people enrolled in the Medicare program is projected to increase from about 62 million in 2020 to about 78 million in 2030.
- The rate of increase in Medicare enrollment has begun to accelerate as more members of the baby-boom generation become eligible for the program. Beginning in 2030, when the entire baby-boom generation will have become eligible, Medicare enrollment will continue to increase, but more slowly.

Chart 2-5. Characteristics of the Medicare population, 2018

Characteristic	Share of the Medicare population	Characteristic	Share of the Medicare population
Total (55.8 million)	100%	Living arrangement	
Sex		Institution	3%
Male	46	Alone	28
Female	54	With spouse	47
Race/ethnicity		Other	22
White, non-Hispanic	75	Education	
Black, non-Hispanic	10	No high school diploma	15
Hispanic	8	High school diploma only	26
Other	7	Some college or more	58
Age		Income status	
<65	15	Below poverty	15
65–74	48	100–125% of poverty	6
75–84	27	125–200% of poverty	17
85+	11	200–400% of poverty	27
Health status		Over 400% of poverty	35
Excellent or very good	45	Supplemental insurance status	
Good or fair	48	Medicare only	16
Poor	6	Managed care	35
Residence		Employer-sponsored insurance	18
Urban	80	Medigap	19
Rural	20	Medigap with employer-sponsored insurance	1
		Medicaid	11
		Other	1

Note: Total number of beneficiaries, age, and health status values may slightly differ from previous figures because only beneficiaries with complete characteristic data were included in this analysis. Components may not sum to 100 percent due to rounding and exclusion of an “other” category. “Urban” indicates beneficiaries living in metropolitan statistical areas (MSAs). “Rural” indicates beneficiaries living outside MSAs. In 2018, “poverty” was defined as income of \$12,043 for single individuals ages 65 and older and \$15,193 for married couples ages 65 and older. Poverty thresholds are calculated by the U.S. Census Bureau (<https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html>). Some beneficiaries may have more than one type of supplemental insurance. The Medicare Current Beneficiary Survey is a point-in-time survey from a sample of Medicare beneficiaries. Year-to-year variation in reported data is expected.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost Supplement file 2018.

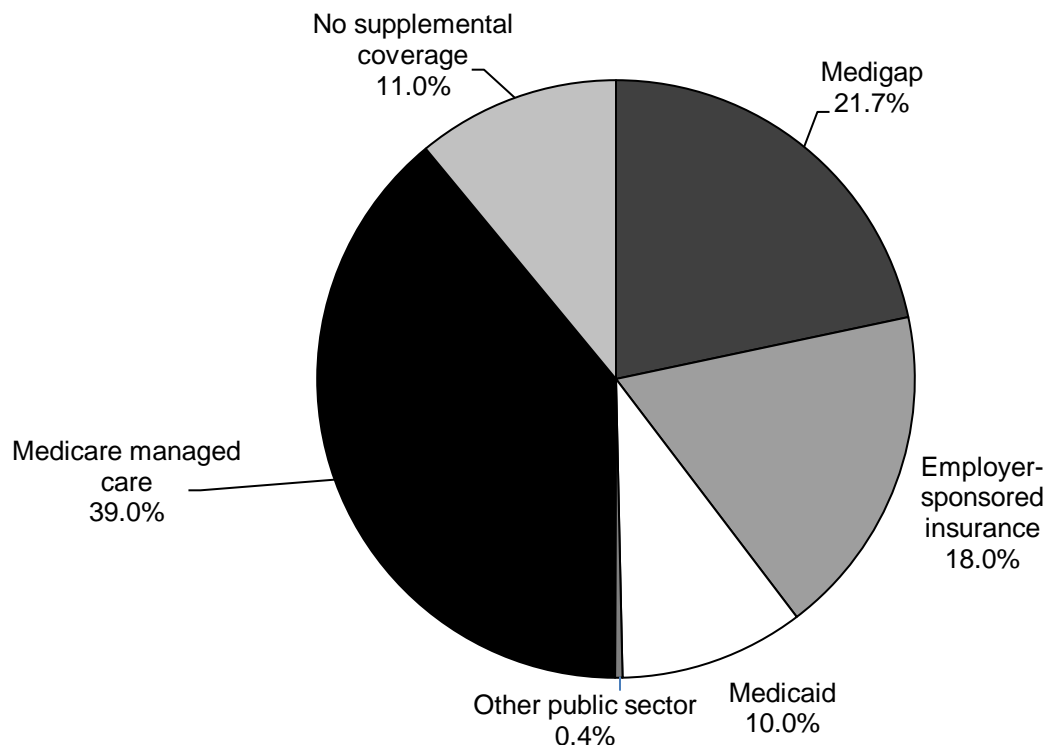
- A majority of Medicare beneficiaries are female (rather than male) and White (rather than other races/ethnicities).
- About one-fifth of beneficiaries live in rural areas.
- Twenty-eight percent of the Medicare population lives alone.
- Most Medicare beneficiaries have some source of supplemental insurance. Managed care 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, 2018



Note: We assigned beneficiaries to the supplemental coverage category they were in for the most time in 2018. They could have had coverage in other categories during 2018. "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 2018 or who had Medicare as a secondary payer. Numbers do not total 100 because of rounding.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Survey file 2018.

- Most beneficiaries living in the community (i.e., noninstitutionalized) have coverage that supplements or replaces the Medicare benefit package. In 2018, 89 percent of beneficiaries had supplemental coverage or participated in Medicare managed care.
- About 40 percent of beneficiaries had private sector supplemental coverage such as Medigap (about 22 percent) or employer-sponsored retiree coverage (18 percent).
- About 10 percent of beneficiaries had public sector supplemental coverage, primarily Medicaid.
- Thirty-nine percent of beneficiaries participated in Medicare managed care. This coverage includes Medicare Advantage, health care prepayment, and cost plans. These types of arrangements generally replace Medicare's fee-for-service coverage and often provide more coverage.
- The numbers in this chart differ from those in Chart 2-5, Chart 4-1, and Chart 4-4 because of differences in the populations represented in the charts. This chart excludes beneficiaries in long-term care institutions, while Chart 2-5 and Chart 4-4 include all Medicare beneficiaries, and Chart 4-1 excludes beneficiaries in Medicare Advantage.

Chart 3-2. Sources of supplemental coverage among noninstitutionalized Medicare beneficiaries, by beneficiaries' characteristics, 2018

	Number of beneficiaries (thousands)	Employer-sponsored insurance	Medigap insurance	Medicaid	Medicare managed care	Other public sector	Medicare only
All beneficiaries	48,821	18%	22%	10%	39%	0%	11%
Age							
<65	6,947	6	3	36	37	1	17
65–69	10,850	16	24	7	40	0	13
70–74	11,950	21	25	5	38	1	11
75–79	8,578	20	25	5	42	0	8
80–84	5,436	24	24	6	38	0	8
85+	5,060	21	26	6	38	0	9
Income-to-poverty ratio							
≤1.00	8,038	3	6	42	39	0	10
1.00 to 1.20	2,765	4	11	23	48	0	14
1.20 to 1.35	1,908	4	18	13	42	1	22
1.35 to 2.00	8,182	11	20	5	48	1	15
>2.00	27,927	27	28	1	35	0	9
Eligibility status							
Aged	41,630	20	25	6	39	0	10
Disabled	6,783	6	3	36	37	1	17
ESRD	408	11	21	29	21	2	15
Residence							
Urban	38,986	18	20	9	42	0	10
Rural	9,835	18	27	14	26	0	15
Sex							
Male	21,964	19	20	9	38	1	13
Female	26,857	17	23	11	40	0	10
Health status							
Excellent/very good	22,409	22	26	4	39	0	9
Good/fair	23,410	16	19	13	40	1	12
Poor	2,787	9	12	29	34	1	15

Note: ESRD (end-stage renal disease). We assigned beneficiaries to the supplemental coverage category they were in for the most time in 2018. They could have had coverage in other categories during 2018. "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. "Urban" indicates beneficiaries living in metropolitan statistical areas (MSAs) as indicated by core-based statistical areas. "Rural" indicates beneficiaries living outside MSAs, which includes both micropolitan statistical areas and rural areas as indicated by core-based statistical areas. Analysis excludes beneficiaries living in institutions such as nursing homes. Analysis also excludes beneficiaries who were not in both Part A and Part B throughout their enrollment in 2018 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 some rows do not sum to 100 percent because of rounding.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Survey file 2018.

- Beneficiaries most likely to have employer-sponsored supplemental coverage are those who are age 65 or older, have income above twice the poverty level, are eligible because of age, and report better than poor health.
- Medigap is most common among those who are age 65 or older, have income higher than 1.35 times the poverty level, are eligible because of age or ESRD, are rural dwelling, and report better than poor health.
- Medicaid coverage is most common among those who are under age 65, have income lower than 1.2 times the poverty level, are eligible because of 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 70, have income between 1.00 and 2.00 times the poverty level, are eligible because of disability or ESRD, are rural dwelling, are male, and report poor health.

Chart 3-3. Covered benefits and enrollment in standardized Medigap plans, 2019

Benefit	Medigap standardized plan type										
	A	B	C*	D	F*	High deductible F	G	K	L	M	N
Part A hospital costs	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Part B cost sharing	✓	✓	✓	✓	✓	✓	✓	50%	75%	✓	\$20/\$50
Blood (first 3 pints)	✓	✓	✓	✓	✓	✓	✓	50%	75%	✓	✓
Hospice cost sharing	✓	✓	✓	✓	✓	✓	✓	50%	75%	✓	✓
SNF coinsurance			✓	✓	✓	✓	✓	50%	75%	✓	✓
Part A deductible		✓	✓	✓	✓	✓	✓	50%	75%	50%	✓
Part B deductible			✓		✓	✓					
Part B excess charges					✓	✓	✓				
Foreign travel emergency			✓	✓	✓	✓	✓			✓	✓
Lives covered (in thousands)	108	207	628	129	6,804	306	3,067	81	43	4	1,360

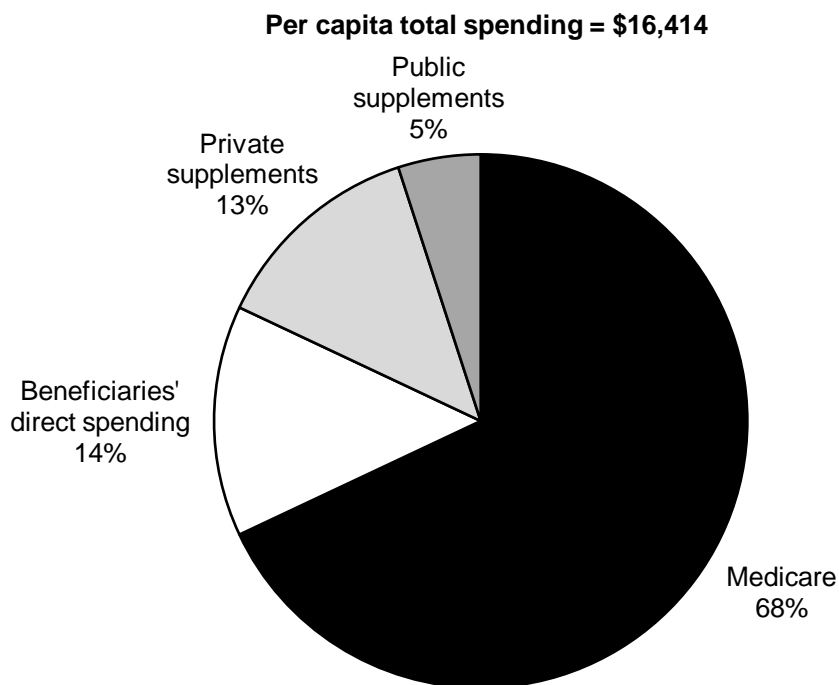
Note: SNF (skilled nursing facility). Three states (Massachusetts, Minnesota, and Wisconsin) have different plan types and are not included in this chart. The ✓ indicates that the plan covers all cost sharing. Percentages indicate that the plan covers that share of the total cost sharing. The \$20/\$50 indicates that the plan covers all but \$20 for physician office visits and all but \$50 for emergency room visits.

*Beginning in 2020, new policies for Plans C or F are not allowed to be sold. However, beneficiaries who purchased C plans or F plans before 2020 will be able to continue to purchase those plans.

Source: MedPAC analysis of National Association of Insurance Commissioners data, 2020.

- Medicare beneficiaries often purchase Medigap plans, also known as Medicare supplementary insurance plans, to cover fee-for-service Medicare cost sharing. Statute specifies 11 standardized plans. States enforce the standards based on model regulations developed by the National Association of Insurance Commissioners. Three states (Massachusetts, Minnesota, and Wisconsin) have waivers from these standards and have different standard plan types not included in this chart.
- Plan F, which covers all Medicare cost sharing, is the most popular plan, with 6.8 million enrollees. However, because the Congress was concerned about the overutilization of Medicare services, legislation prohibits the sale of new Plan F policies as of 2020. As a result, insurers have begun to direct beneficiaries into other plan types, namely plans G, K, and N, which do not cover the Part B deductible.
- During 2019, 14 million beneficiaries enrolled in Medigap plans (including those in Massachusetts, Minnesota, and Wisconsin). Of all Medicare beneficiaries, about one-fifth were enrolled in Medigap plans.

Chart 3-4. Total spending on health care services for noninstitutionalized FFS Medicare beneficiaries, by source of payment, 2018

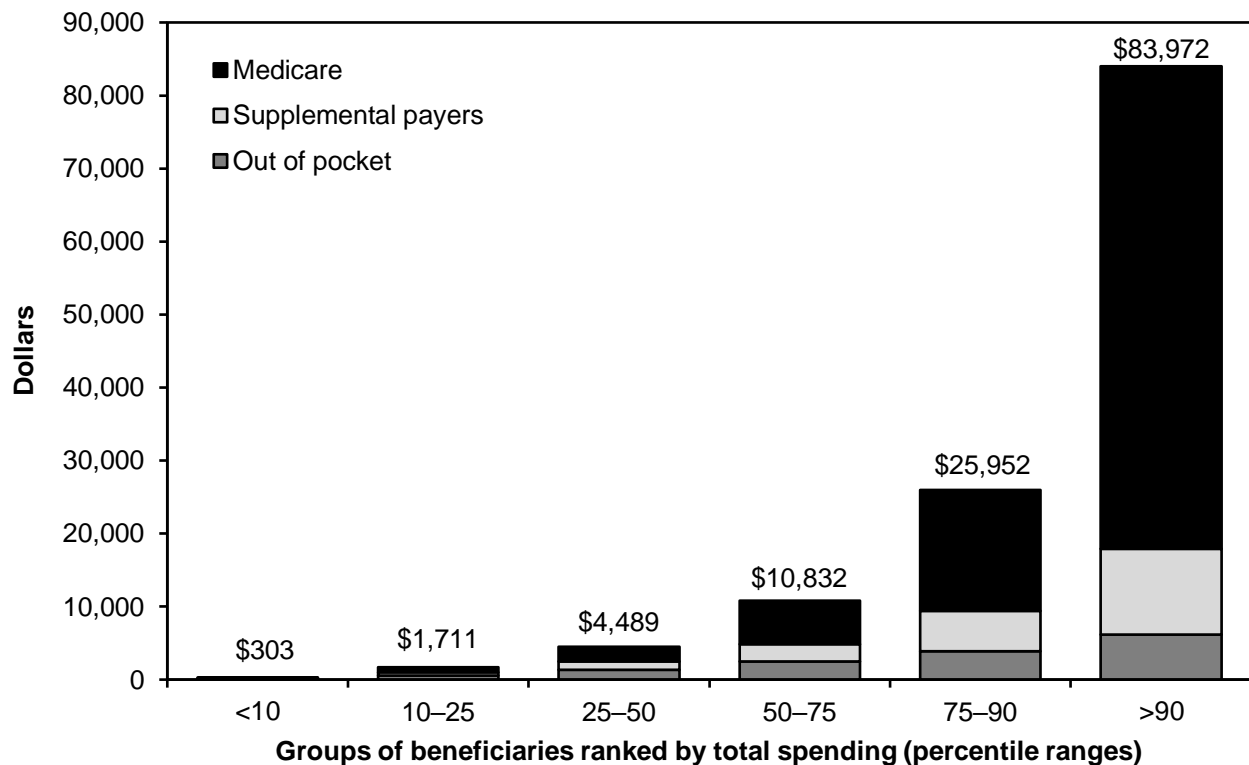


Note: FFS (fee-for-service). "Private supplements" includes employer-sponsored plans and individually purchased coverage. "Public supplements" includes Medicaid, Department of Veterans Affairs, and other public coverage. "Beneficiaries' direct spending" is on Medicare cost sharing and noncovered services, 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 Supplement file, 2018.

- Among FFS beneficiaries living in the community (that is, they are not institutionalized), the total cost of health care services (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 \$16,400 in 2018. Medicare was the largest source of payment: It paid about 68 percent of the health care costs for FFS beneficiaries living in the community, an average of \$11,195 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 about 13 percent of beneficiaries' costs, an average of \$2,172 per beneficiary.
- Beneficiaries paid about 14 percent of their health care costs out of pocket, an average of \$2,249 per beneficiary.
- Public sources of supplemental coverage—primarily Medicaid—paid about 5 percent of beneficiaries' health care costs, an average of \$798 per beneficiary.

Chart 3-5. Per capita total spending on health care services among noninstitutionalized FFS beneficiaries, by source of payment, 2018

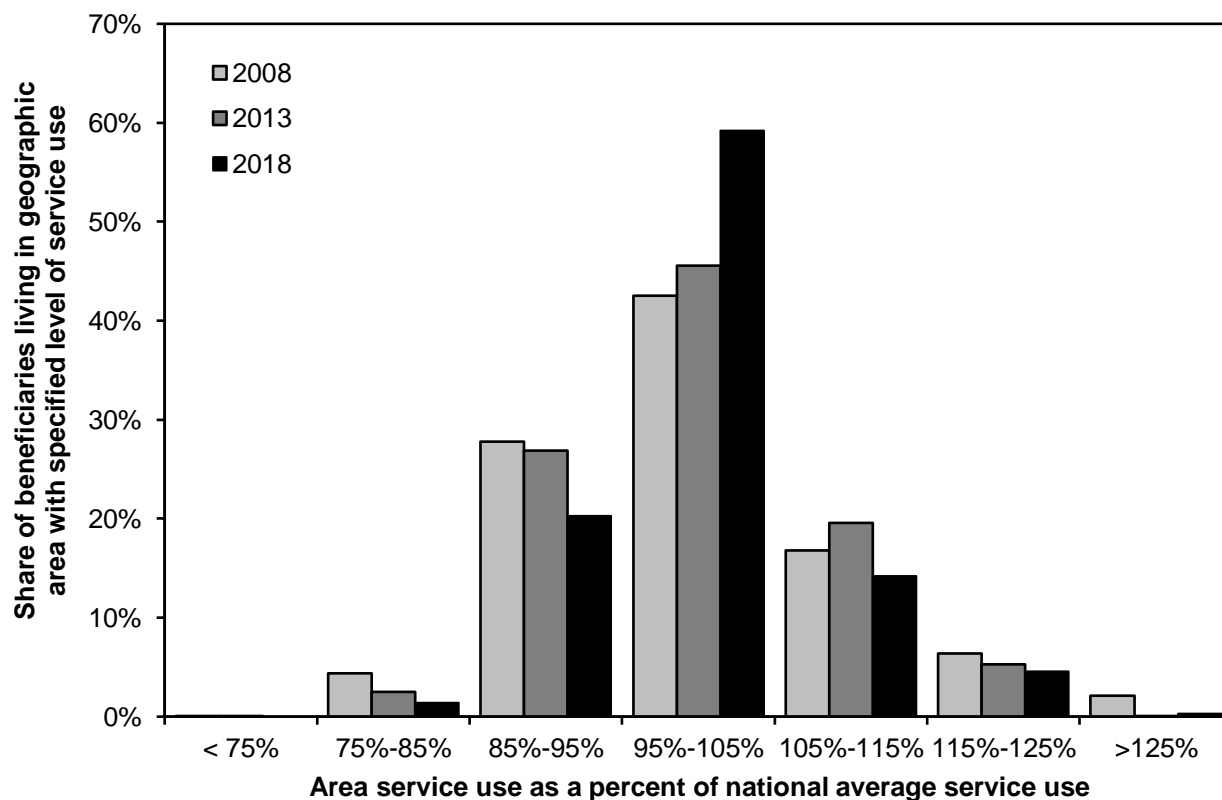


Note: FFS (fee-for-service). Analysis excludes those who are not in FFS Medicare and those living in institutions such as nursing homes. “Out-of-pocket” spending includes Medicare cost sharing and noncovered services, but not supplemental premiums.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost Supplement file, 2018.

- Total spending on health care services varied dramatically among FFS beneficiaries living in the community in 2018. Per capita spending for the 10 percent of beneficiaries with the highest total spending averaged nearly \$84,000. Per capita spending for the 10 percent of beneficiaries with the lowest total spending averaged \$303.
- Among FFS beneficiaries living in the community, Medicare paid a larger share and beneficiaries’ out-of-pocket spending was a smaller share as total spending increased. For example, Medicare paid 68 percent of total spending for all beneficiaries, but paid 79 percent of total spending for the 10 percent of beneficiaries with the highest total spending. Across FFS beneficiaries living in the community, out-of-pocket spending amounted to 14 percent of total spending, but only 7 percent of total spending for the 10 percent of beneficiaries with the highest total spending (data not shown).

Chart 3-6. Geographic variation in use of services has decreased among FFS Medicare beneficiaries, 2008–2018



Note: FFS (fee-for-service). “Service use” is per capita monthly Part A and Part B service use among FFS beneficiaries in each area. We defined areas as metropolitan statistical areas within each state for urban counties and rest-of-state nonmetropolitan areas for nonurban counties.

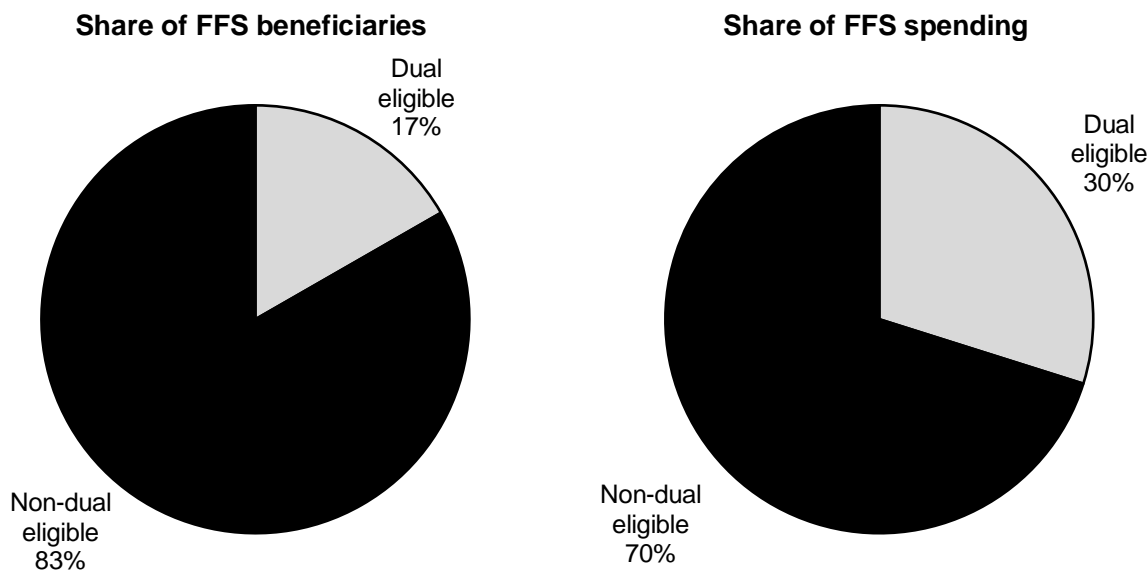
Source: MedPAC analysis of 2008, 2013, and 2018 beneficiary-level spending from the Medicare Beneficiary Summary Files and Medicare inpatient claims.

- FFS beneficiaries’ use of Medicare-covered services varies by geographic area, but that variation decreased from 2008 to 2018. The share of FFS beneficiaries living in geographic areas that had service use within 5 percent of the national average (95 percent to 105 percent) increased from 43 percent in 2008 to 59 percent in 2018. Also, the share of FFS beneficiaries living in geographic areas that had service use more than 25 percent higher than the national average (>125 percent) decreased from 2 percent in 2008 to almost 0 percent in 2018.
- The service sector that had the largest decrease in variation from 2008 to 2018 was post-acute care, especially home health care (data not shown). From 2008 to 2018, the variation in use of home health services across geographic areas declined by 24 percent.

SECTION **4**

**Dual-eligible
beneficiaries**

Chart 4-1. Dual-eligible beneficiaries accounted for a disproportionate share of Medicare spending, 2018

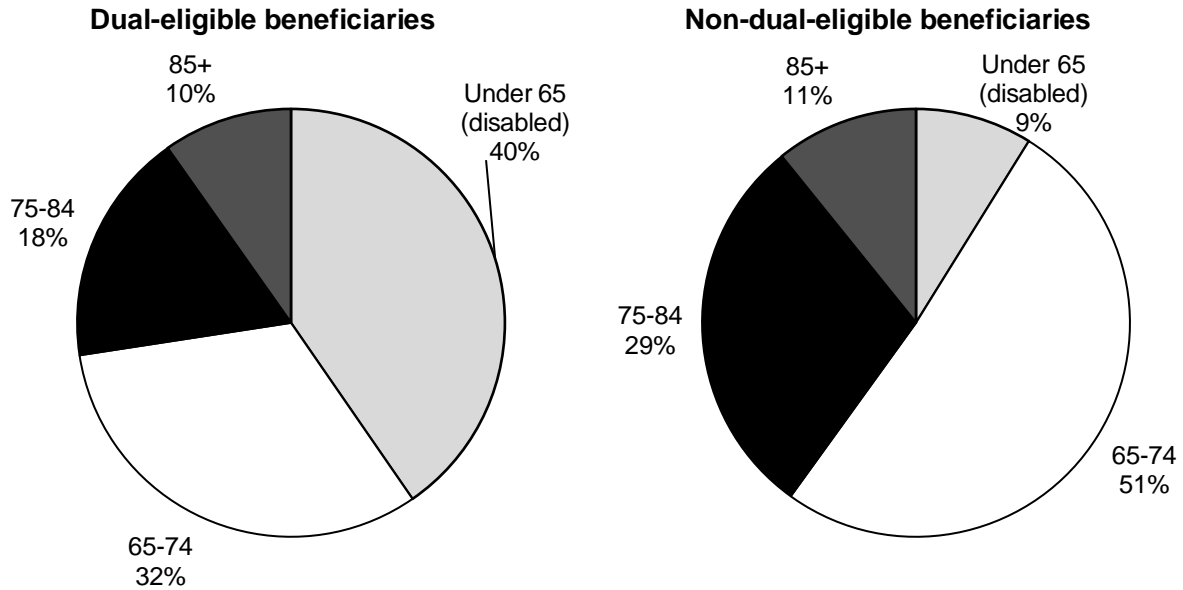


Note: FFS (fee-for-service). "Dual-eligible beneficiaries" are defined as beneficiaries who were eligible for both Medicare and Medicaid for at least one month during the year.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, 2018.

- 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. Although they were 17 percent of the Medicare FFS population in 2018, they represented 30 percent of aggregate Medicare FFS spending.
- On average, Medicare FFS per capita spending is more than twice as high for dual-eligible beneficiaries compared with non-dual-eligible beneficiaries: In 2018, \$21,390 was spent per dual-eligible beneficiary, and \$10,072 was spent per non-dual-eligible beneficiary (data not shown).
- In 2018, average total spending—which includes Medicare, Medicaid, supplemental insurance, and out-of-pocket spending across all payers—for dual-eligible beneficiaries was \$31,339 per beneficiary, about twice the amount for other Medicare beneficiaries (data not shown).

Chart 4-2. Dual-eligible beneficiaries were more likely than non-dual-eligible beneficiaries to be under age 65 and have a disability, 2018

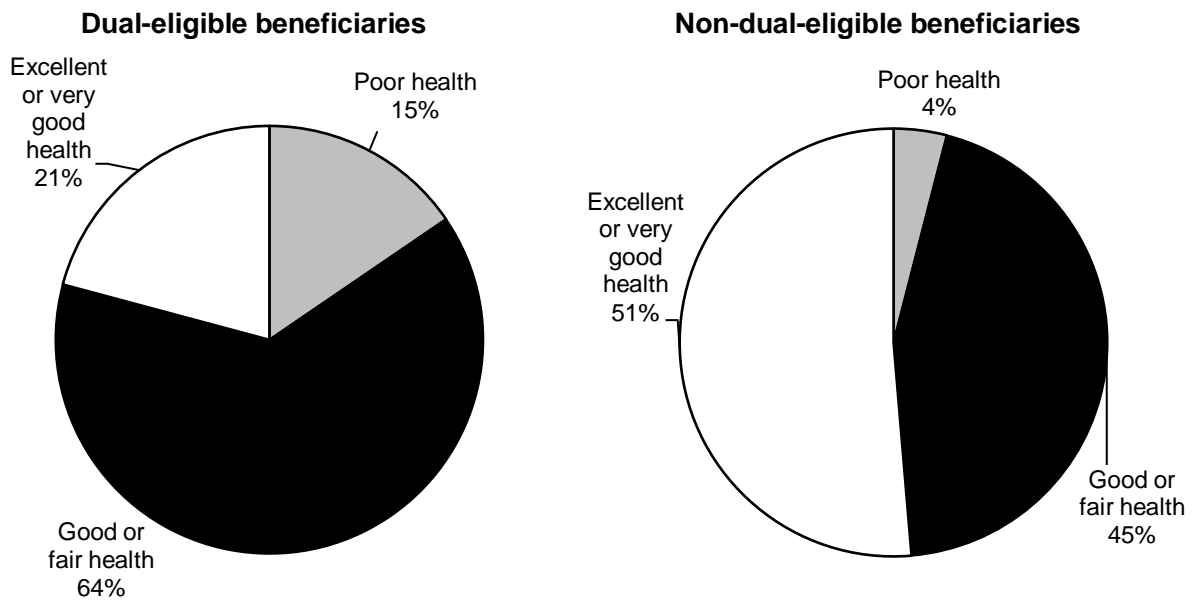


Note: Beneficiaries who are under age 65 generally qualify for Medicare because of disability. Once beneficiaries with disabilities reach age 65, they are counted as aged beneficiaries. "Dual-eligible beneficiaries" are defined as beneficiaries who were eligible for both Medicare and Medicaid for at least one month during the year.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, 2018.

- 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 have a disability. In 2018, 40 percent of dual-eligible beneficiaries were under age 65 with a disability compared with 9 percent of the non-dual-eligible population.

Chart 4-3. Dual-eligible beneficiaries were more likely than non-dual-eligible beneficiaries to report being in poor health, 2018



Note: "Dual-eligible beneficiaries" are defined as beneficiaries who were eligible for both Medicare and Medicaid for at least one month during the year.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, 2018.

- Dual-eligible beneficiaries are more likely than non-dual-eligible beneficiaries to report being in poor health. In 2018, 15 percent of dual-eligible beneficiaries reported being in poor health compared with 4 percent of non-dual-eligible beneficiaries.
- Just over half of non-dual-eligible beneficiaries (51 percent) reported being in excellent or very good health in 2018. In comparison, about one-fifth (21 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, 2018

Characteristic	Share of dual-eligible beneficiaries	Share of non-dual-eligible beneficiaries
Sex		
Male	38%	47%
Female	62	53
Race/ethnicity		
White, non-Hispanic	51	81
African American, non-Hispanic	21	7
Hispanic	19	6
Other	9	6
Limitations in ADLs		
No limitations in ADLs	49	76
Limitations in 1–2 ADLs	25	16
Limitations in 3–6 ADLs	26	8
Residence		
Urban	79	81
Rural	21	19
Living arrangement		
Institution	9	1
Alone	36	26
With spouse	15	55
With children, nonrelatives, others	39	18
Education		
No high school diploma	37	10
High school diploma only	32	25
Some college or more	30	65
Income status		
Below poverty	60	5
100–125% of poverty	17	4
125–200% of poverty	16	17
200–400% of poverty	6	31
Over 400% of poverty	1	43
Supplemental insurance status		
Medicare or Medicare/Medicaid only	52	19
Medicare managed care	42	35
Employer-sponsored insurance	1	22
Medigap	3	23
Medigap/employer	<1	1
Other*	2	1

Note: ADL (activity of daily living). “Dual-eligible beneficiaries” are defined as beneficiaries who were eligible for both Medicare and Medicaid for at least one month during the year. “Urban” indicates beneficiaries living in metropolitan statistical areas (MSAs). “Rural” indicates beneficiaries living outside of MSAs. In 2018, poverty was defined as annual income of \$12,043 for people living alone and \$15,193 for married couples. Poverty thresholds are calculated by the U.S. Census Bureau (<https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html>). Totals may not sum to 100 percent due to rounding and exclusion of an “other” category.

*Includes public programs such as the Department of Veterans Affairs and state-sponsored drug plans.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, 2018.

- Dual-eligible beneficiaries qualify for Medicaid due in part to low incomes. In 2018, 60 percent of dual-eligible beneficiaries lived below the poverty threshold, and 93 percent lived below 200 percent of the poverty threshold. Compared with non-dual-eligible beneficiaries, dual-eligible beneficiaries are more likely to be female, be African American or Hispanic, lack a high school diploma, have greater limitations in activities of daily living, and live in an institution. They are less likely to have supplemental employer-sponsored or Medigap coverage.

Chart 4-5. Differences in Medicare spending and service use between dual-eligible beneficiaries and non-dual-eligible beneficiaries, 2018

Service	Dual-eligible beneficiaries	Non-dual-eligible beneficiaries
Average FFS Medicare payment for all beneficiaries		
Total Medicare FFS payments	\$21,390	\$10,072
Inpatient hospital	4,349	2,721
Physician ^a	3,343	2,657
Outpatient hospital	3,318	1,750
Home health	612	368
Skilled nursing facility ^b	1,017	499
Hospice	412	224
Prescribed medication ^c	8,317	1,848
Share of FFS beneficiaries using service		
Share using any type of service	96.9%	85.7%
Inpatient hospital	21.1	13.2
Physician ^a	91.5	81.4
Outpatient hospital	75.7	62.1
Home health	10.4	7.9
Skilled nursing facility ^b	5.3	3.6
Hospice	3.2	1.8
Prescribed medication ^c	93.0	58.7

Note: FFS (fee-for-service). Data in this analysis are restricted to beneficiaries in FFS Medicare. “Dual-eligible beneficiaries” are defined as beneficiaries who were eligible for both Medicare and Medicaid for at least one month during the year. 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 due to omitted “other” category.

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

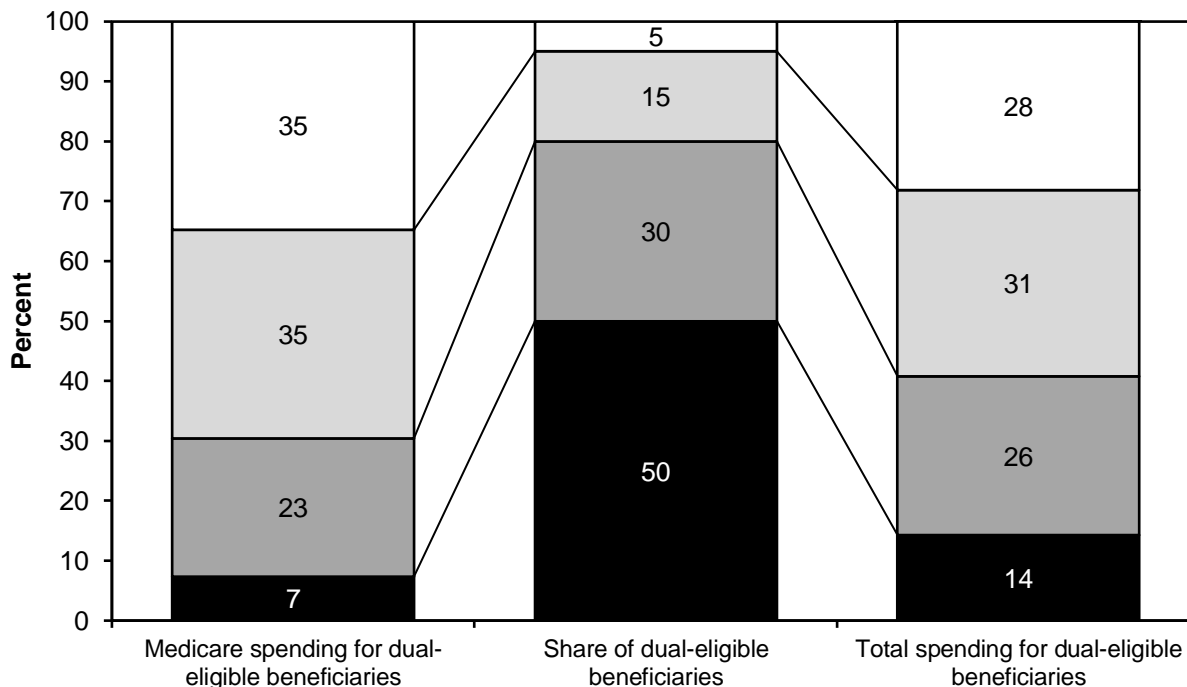
^b Individual short-term facility (usually skilled nursing facility) stays for the MCBS population.

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

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, 2018.

- In 2018, average per capita Medicare FFS spending for dual-eligible beneficiaries was more than twice that for non-dual-eligible beneficiaries—\$21,390 compared with \$10,072.
- For each type of service, average Medicare FFS per capita spending was 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 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 were concentrated among dual-eligible beneficiaries, 2018



Note: "Total spending" includes Medicare, Medicaid, supplemental insurance, and out-of-pocket spending. Data in this analysis are restricted to beneficiaries in fee-for-service (FFS) Medicare. "Dual-eligible beneficiaries" are defined as beneficiaries who were eligible for both Medicare and Medicaid for at least one month during the year.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, 2018.

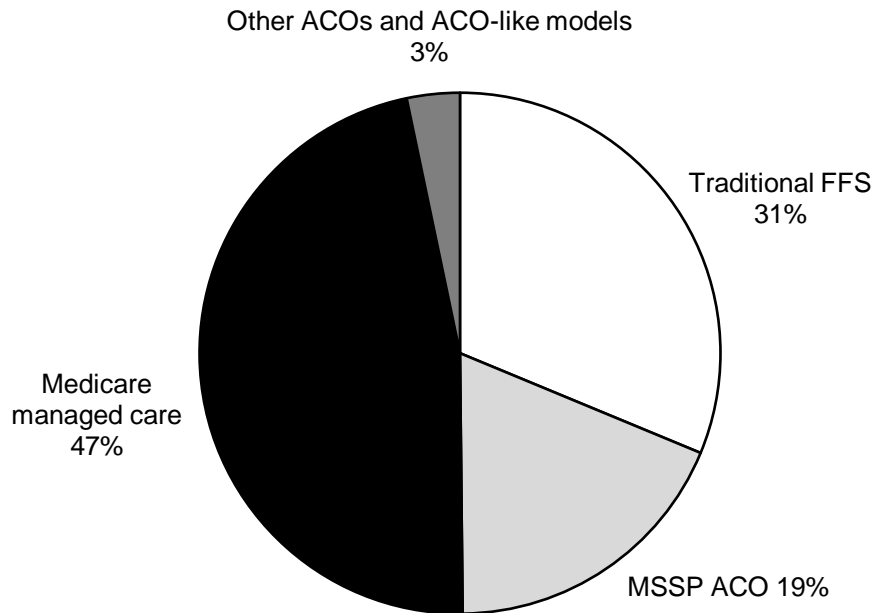
- Annual Medicare FFS and total spending on dual-eligible beneficiaries are concentrated among a small number of people. The costliest 5 percent of dual-eligible beneficiaries accounted for 35 percent of Medicare spending and 28 percent of total spending on dual-eligible beneficiaries in 2018. In contrast, the least costly 50 percent of dual-eligible beneficiaries accounted for only 7 percent of Medicare FFS spending and 14 percent of total spending on dual-eligible beneficiaries.
- On average, total spending (including Medicaid, Medigap, etc.) for dual-eligible beneficiaries in 2018 was almost twice that for non-dual-eligible beneficiaries—\$31,339 compared with \$16,622, respectively (data not shown).

SECTION

5

**Alternative
payment models**

Chart 5-1. Most Medicare beneficiaries are in managed care plans or are assigned to accountable care organizations, 2021

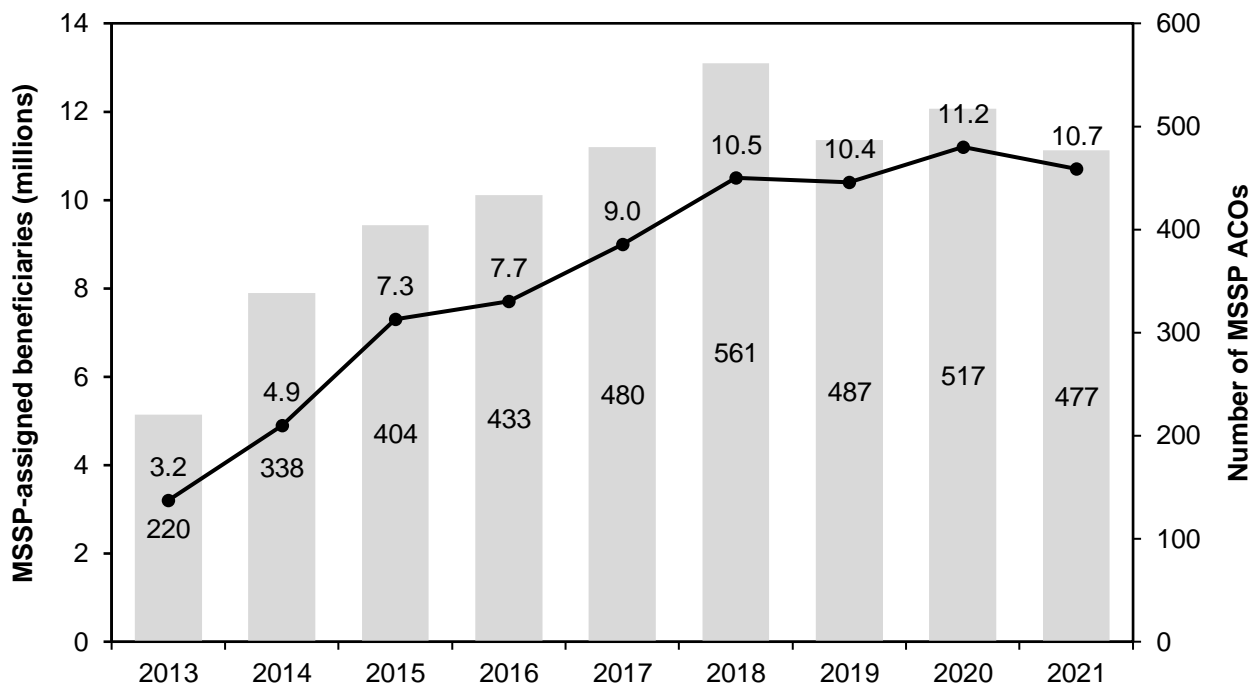


Note: ACO (accountable care organization), FFS (fee-for-service), MSSP (Medicare Shared Savings Program). This chart includes only beneficiaries enrolled in both Part A and Part B in January 2021. Both Part A and Part B coverage is necessary for either Medicare Advantage enrollment or ACO assignment. In general, Medicare managed care plans include Medicare Advantage plans as well as cost-reimbursed plans. Other ACOs and ACO-like models include the Next Generation ACO model, the Maryland Total Cost of Care (TCOC) model, and the Vermont All-Payer ACO. In the Maryland TCOC model, all FFS beneficiaries are assigned to a hospital, and each hospital is responsible for all Part A and Part B spending for all Medicare beneficiaries in its market. This system creates ACO-like incentives for the hospital and qualifies physicians affiliated with those hospitals for the Medicare Access and CHIP Reauthorization Act (MACRA) bonus payments for participation in eligible alternative payment models.

Source: CMS January 2021 enrollment dashboard data, CMS Shared Savings Program January 2021 Fast Facts, CMS ACO Next Generation 2019 performance data and 2020 participant lists, and State of Vermont Green Mountain Care Board 2020 report.

- Among the 57.6 million Medicare beneficiaries with both Part A and Part B coverage in 2021, approximately two-thirds are in Medicare managed care (Medicare Advantage or other private plans) or ACO models.
- The Medicare Shared Savings Program—a permanent ACO model established through the Affordable Care Act of 2010—accounts for most of the beneficiaries assigned to ACO or ACO-like payment models.
- Only 31 percent of Medicare beneficiaries with both Part A and Part B coverage are now in traditional FFS Medicare—a share that has declined in recent years.
- Even among the share of beneficiaries in traditional FFS, some beneficiaries may be assigned to other alternative payments models such as the Bundled Payments for Care Improvement Advanced model or the Comprehensive Primary Care Plus model.

Chart 5-2. The number of beneficiaries assigned to MSSP ACOs grew rapidly through 2018 and then leveled off

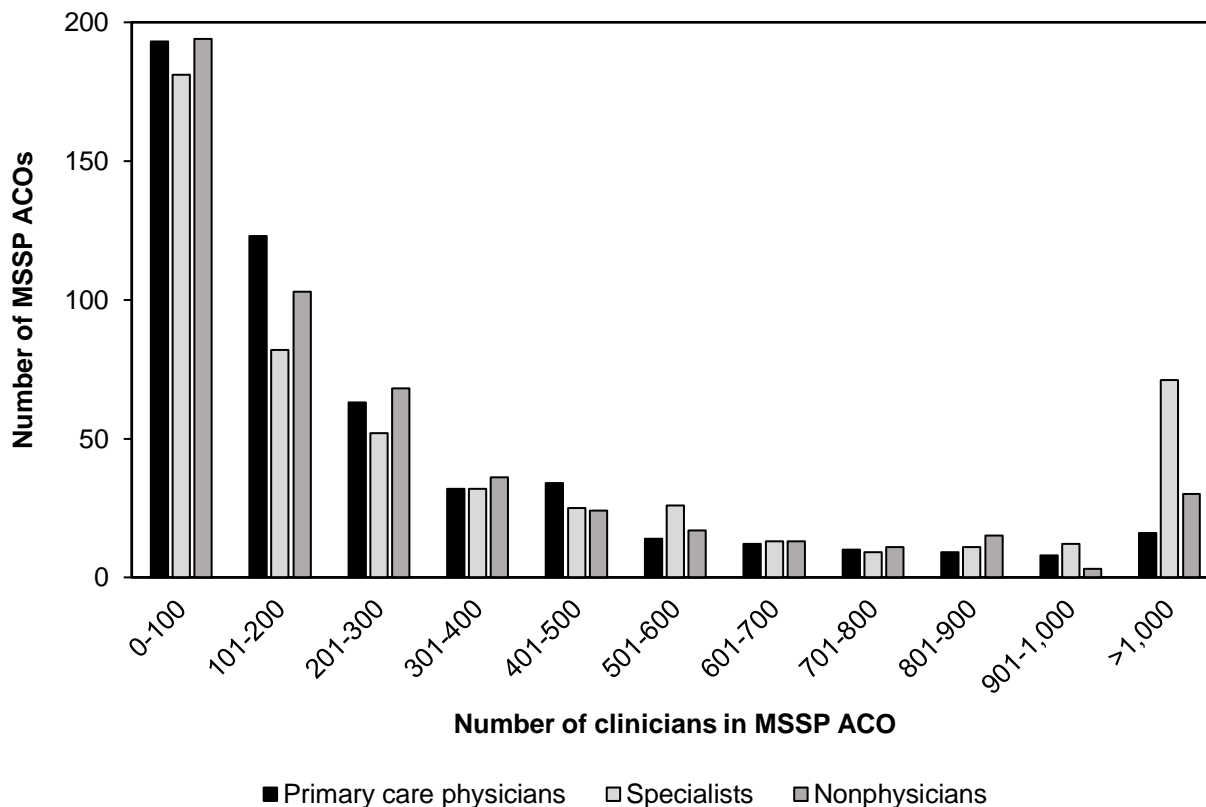


Note: MSSP (Medicare Shared Savings Program), ACO (accountable care organization). Numbers are as of January in each year. In 2019, MSSP ACOs were allowed to join the program in July 2019. Those ACOs and the beneficiaries assigned to them were not in the program as of January 2019 and are therefore not included in the 2019 counts on this chart. As of July 2019, there were 518 MSSP ACOs and 10.9 million beneficiaries assigned to them. In 2021, new MSSP ACOs were not allowed to join the program due to the coronavirus pandemic, though ACOs were still allowed to exit the program.

Source: CMS Shared Savings Program January 2021 Fast Facts.

- The number of beneficiaries assigned to MSSP ACOs grew rapidly through 2018 but has leveled off in recent years.
- The number of ACOs peaked in 2018 and then declined between 2018 and 2021, in part due to CMS restricting new ACOs from entering MSSP in 2021 because of the coronavirus pandemic.
- While the number of ACOs and assigned beneficiaries has leveled off in recent years, the number of beneficiaries per ACO continues to increase (data not shown).
- CMS finalized changes to the MSSP program at the end of 2018 that included (1) requiring ACOs to transition toward greater levels of risk and (2) using regional spending as a component of all ACO benchmarks (the spending levels used to measure an ACO's financial performance). These changes coincided with some ACOs dropping out of the program and fewer new ACOs joining the program.

Chart 5-3. Distribution of clinicians participating in the Medicare Shared Savings Program, by type of provider, 2019

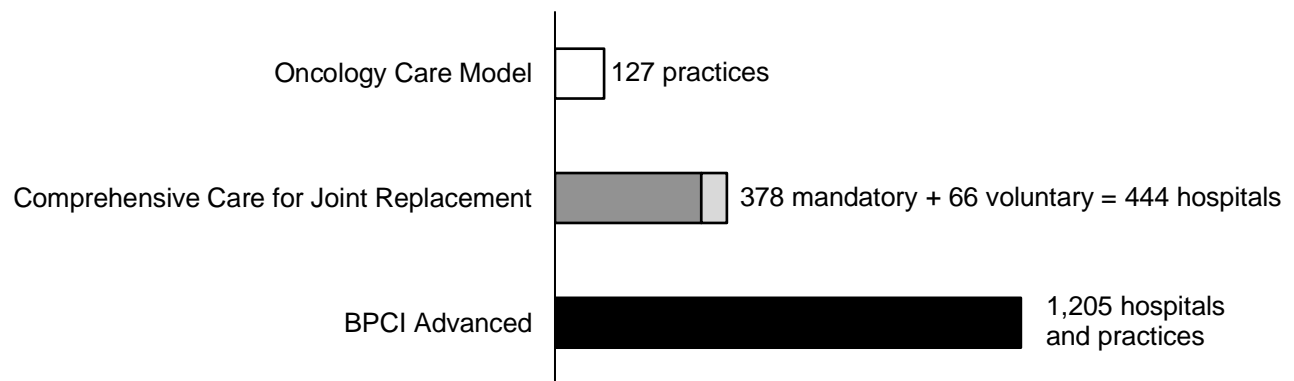


Note: MSSP (Medicare Shared Savings Program), ACO (accountable care organization). As of December 2019, there were 514 MSSP ACOs. “Nonphysician” clinicians include nurse practitioners, physician assistants, and clinical nurse specialists.

Source: Shared Savings Program Accountable Care Organizations public use files.

- MSSP ACOs usually have a combination of primary care physicians, specialists, and nonphysician practitioners. On average, MSSP ACOs have about 260 primary care physicians, 480 specialists, and 300 nonphysician practitioners (data not shown).
- Nearly 200 MSSP ACOs have 100 or fewer primary care physicians, specialists, or nonphysician practitioners. Sixty-seven ACOs have 100 or fewer total clinicians (data not shown).
- Sixteen ACOs have more than 1,000 primary care physicians, and 71 ACOs have more than 1,000 specialists; 157 ACOs have more than 1,000 total clinicians (data not shown).

Chart 5-4. Bundled Payments for Care Improvement Advanced is Medicare’s largest episode-based payment model, 2021



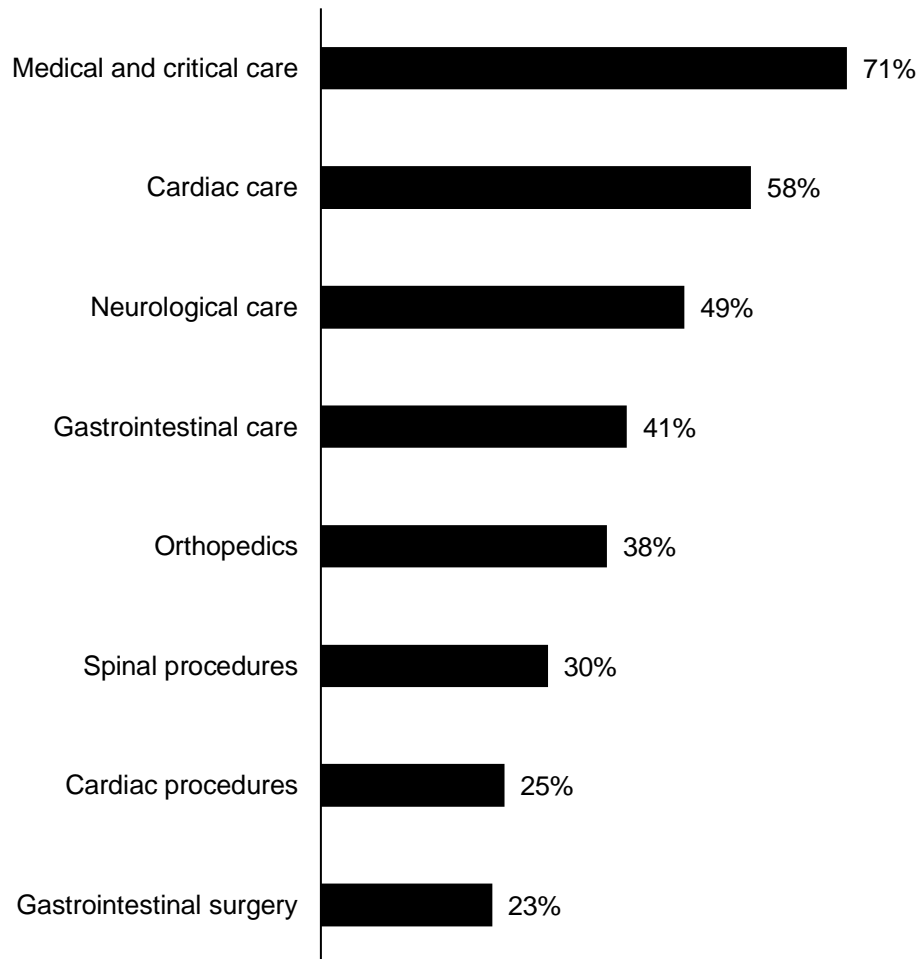
Number of participating health care organizations

Note: BPCI (Bundled Payments for Care Improvement).

Source: CMS's Oncology Care Model website (<https://innovation.cms.gov/innovation-models/oncology-care>); Comprehensive Care for Joint Replacement website (<https://innovation.cms.gov/innovation-models/cjr>); information on BPCI Advanced participants: CMS's Where Innovation Is Happening website (<https://innovation.cms.gov/innovation-models/map#model=bpci-advanced>).

- Medicare fee-for-service (FFS) providers can participate in episode-based payment models.
- Episode-based payment models give health care providers a spending target for most types of care provided during a clinical episode (e.g., six months of chemotherapy or an inpatient admission or outpatient procedure plus most other care provided in the subsequent 90 days). If total spending is less than the target, Medicare pays providers a bonus; if total spending is more than the target, Medicare recoups money from providers.
- Within FFS Medicare, the episode-based payment model with broadest participation (1,205 acute care hospitals and physician group practices participating) is the BPCI Advanced model.

Chart 5-5. Share of BPCI Advanced participants accepting financial responsibility for each clinical episode group, 2021

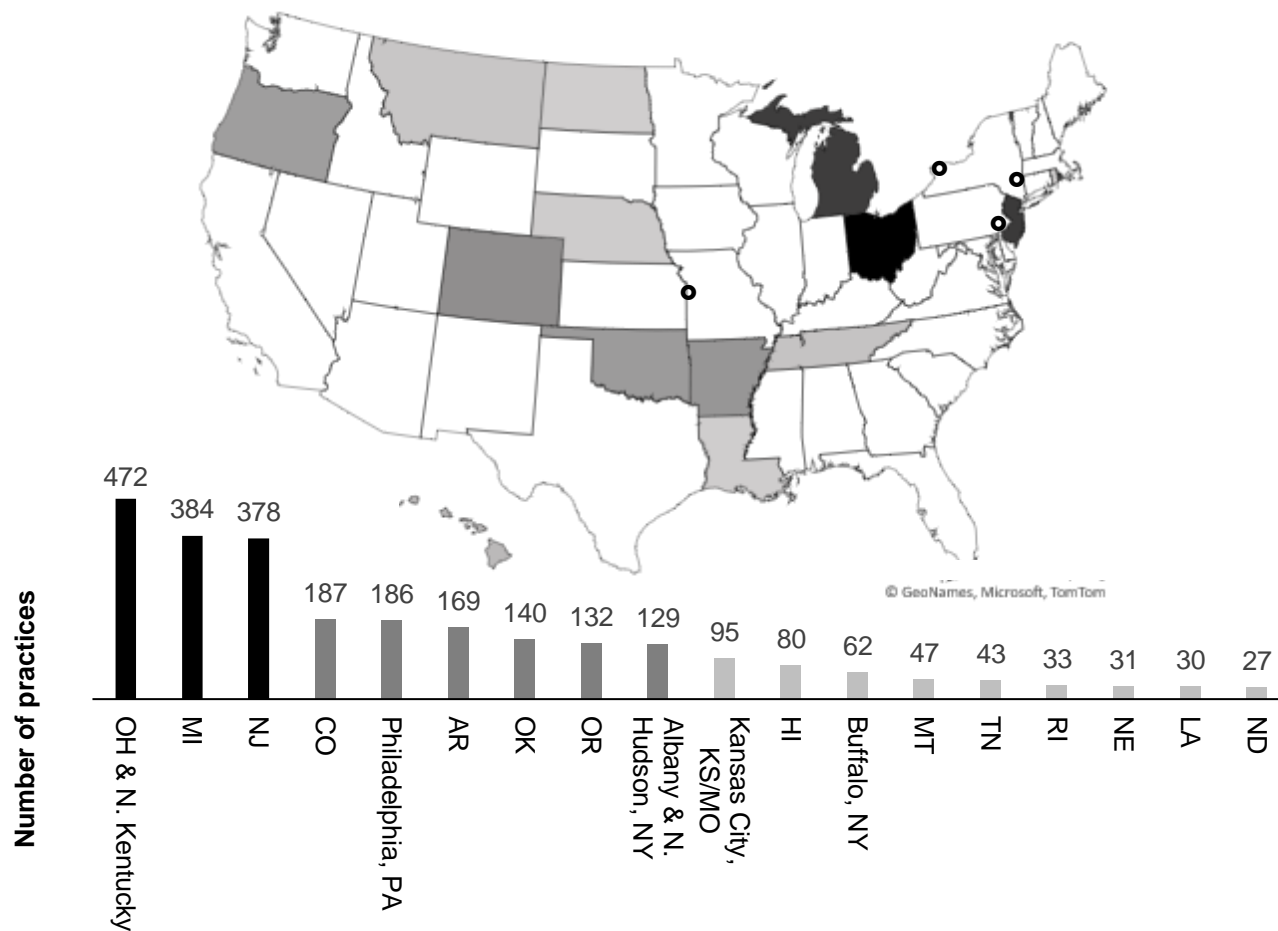


Note: BPCI (Bundled Payments for Care Improvement). BPCI Advanced participants can accept episode-based payments for multiple clinical-episode service-line groups. The denominator is 1,205 BPCI Advanced episode initiators in 2021.

Source: List of clinical episodes each BPCI Advanced participant agreed to take financial responsibility for in Model Year 4 (2021) downloaded from CMS's BPCI Advanced webpage (<https://innovation.cms.gov/innovation-models/bpci-advanced>).

- BPCI Advanced allows hospitals and practices to initiate dozens of clinical episodes, most of which are for inpatient admissions (as opposed to outpatient procedures). Starting in Model Year 4 (2021), episodes under the model are aggregated into eight clinical-episode service-line groups (e.g., the cardiac care group includes acute myocardial infarction, cardiac arrhythmia, and congestive heart failure).
- About two-thirds of BPCI Advanced participants accept episode-based payments for fewer than four clinical-episode service-line groups. Twenty-nine percent accept episode-based payments for only one clinical-episode service-line group (data not shown).

Chart 5-6. 2,625 practices are testing the Comprehensive Primary Care Plus model, 2021

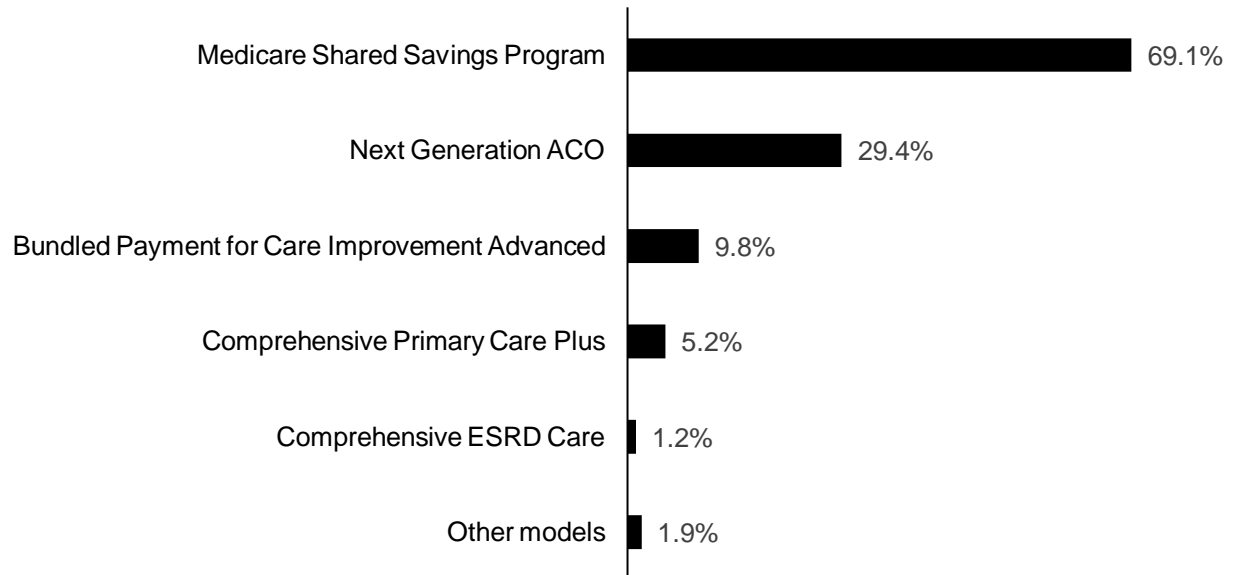


Note: Comprehensive Primary Care Plus (CPC+) is an advanced alternative payment model that CMS began testing in 2017 in some regions and in 2018 in others. CPC+ is a multipayer model, with some Medicaid and private insurers voluntarily paying similar fees for their enrollees. Alaska (not shown) was not selected as a region eligible to participate in the CPC+ model.

Source: CMS's list of CPC+ practices (<https://data.cms.gov/Special-Programs-Initiatives-Speed-Adoption-of-Bes/Comprehensive-Primary-Care-Plus/eevd-hiep>).

- CMS's CPC+ is an advanced alternative payment model that aims to strengthen primary care by providing additional, up-front payments to participating providers of primary care services. These payments are intended to support enhanced, coordinated care management and assist with care delivery transformation.
- Participating practices receive a risk-adjusted per beneficiary per month care management fee, in addition to standard fee-for-service (FFS) payments. Practices can also opt to shift some of their FFS revenue into prospective payments received quarterly.
- CPC+ practices can earn performance bonuses unless they also participate in a Medicare Shared Savings Program (MSSP) accountable care organization (since bonuses are already available through the MSSP). About half the CPC+ practices also participate in the MSSP.

Chart 5-7. About 70 percent of the clinicians who qualified for a 5 percent A-APM bonus in 2021 were in the Medicare Shared Savings Program



Note: A-APM (advanced alternative payment model), ACO (accountable care organization), ESRD (end-stage renal disease). Clinicians' 2019 A-APM participation determines their 2021 bonuses. Clinicians can participate in more than one A-APM simultaneously. To qualify for the A-APM bonus in 2021, clinicians had to receive 50 percent of their professional services payments or provide 35 percent of their patients with professional services through an A-APM in 2019. The A-APM bonus is equal to 5 percent of a clinician's professional services payments from Medicare (not including cost sharing paid by beneficiaries). "Other models" includes the Maryland Total Cost of Care model, Comprehensive Care for Joint Replacement model, Vermont ACO model, and Oncology Care Model. For the payment models shown, only those model tracks that require clinicians to take on some financial risk qualify as A-APMs (e.g., physicians participating in Track 1 of the Medicare Shared Savings Program did not qualify for A-APM bonuses because Track 1 involved no financial risk for participants).

Source: CMS data on clinicians who qualified for the 5 percent bonus in 2021 based on clinicians' 2019 model participation.

- The payment models that CMS has designated as A-APMs place health care providers at some financial risk for Medicare spending while expecting them to meet quality goals for a defined patient population. Clinicians who participate in A-APMs qualify for bonuses equal to 5 percent of their professional services payments from Medicare. These bonus payments are available from 2019 to 2024.
- In 2021, nearly 195,000 clinicians nationwide qualified for the A-APM bonus (based on 2019 A-APM participation). About 96 percent of these clinicians participated in ACOs, which give clinicians an opportunity to earn shared savings payments from Medicare if they lower health care spending while meeting care quality standards (data not shown).
- Among clinicians who qualified for an A-APM bonus in 2021, 39 percent were specialists, 26 percent were primary care physicians, and 35 percent were nonphysician practitioners (data not shown).

SECTION

6

Acute inpatient services
General short-term hospitals
Inpatient psychiatric facilities

Chart 6-1. Urban IPPS hospitals comprised half of short-term acute care hospitals but accounted for over 85 percent of all-payer and Medicare FFS inpatient stays in 2019

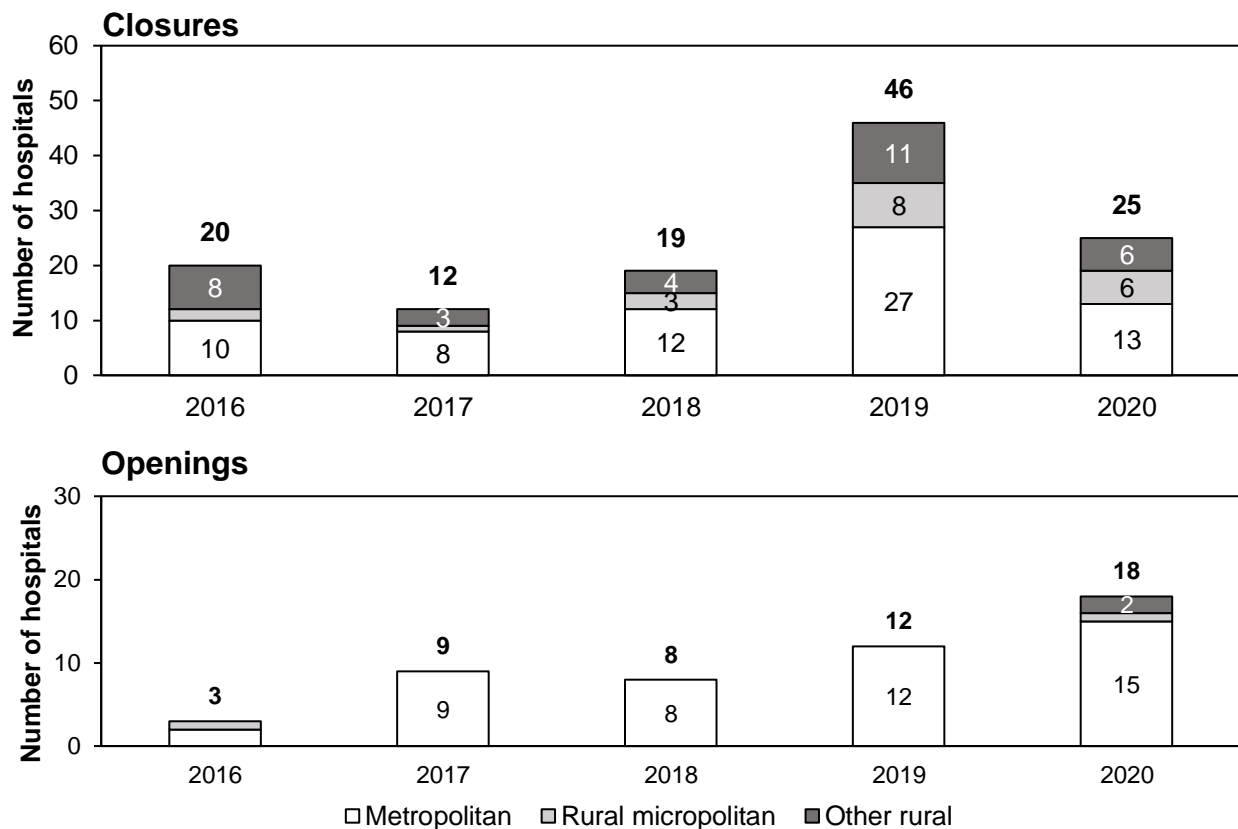
Hospital group	Hospitals		Inpatient stays			
	Number (in thousands)	Share of total	All payer		Medicare FFS	
			Number (in millions)	Share of total	Number (in millions)	Share of total
All short-term acute	4.5	100	31.5	100	9.1	100
IPPS	3.1	68	29.7	94	8.6	94
Metropolitan (urban)	2.3	51	27.6	87	7.7	85
Rural micropolitan	0.5	11	1.8	6	0.7	8
Other rural	0.2	5	0.3	1	0.1	1
For profit	0.8	17	4.9	16	1.4	16
Nonprofit	1.9	41	20.9	66	6.1	67
Government	0.5	10	4.0	13	1.0	11
DSH and teaching	1.1	23	18.6	59	5.0	55
DSH only	1.5	34	9.0	29	2.9	31
Teaching only	0.1	2	0.9	3	0.3	3
Neither	0.4	9	1.2	4	0.5	5
Sole community	0.4	8	1.1	4	0.4	5
Medicare dependent	0.1	3	0.2	1	0.1	1
Neither	2.6	57	28.4	90	8.0	88
Critical access	1.3	29	0.6	2	0.3	3
Maryland	<0.1	1	0.5	2	0.2	2

Note: IPPS (inpatient prospective payment system), FFS (fee-for-service), DSH (disproportionate share hospital). Data are for short-term acute care hospitals in the U.S. (excluding territories) that had a cost report with a midpoint in fiscal year 2019. "Number of hospitals" is the number of Medicare provider numbers; a single provider number can represent multiple hospital locations. Metropolitan (urban) counties contain an urban cluster of 50,000 or more people, and rural micropolitan counties contain a cluster of 10,000 to 50,000 people. Components may not sum to totals due to rounding and because children's and cancer hospitals are not listed separately.

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

- Estimates of the total number of short-term acute care hospitals differ somewhat, depending on the source of data. Using cost report data, we estimate that there were about 4,500 short-term acute care hospitals participating in the Medicare program in 2019, including 3,100 paid under the inpatient prospective payment system and 1,300 small, rural hospitals designated as critical access hospitals.
- Metropolitan (urban) IPPS hospitals accounted for 51 percent of short-term acute care hospitals but accounted for 87 percent of the 31.5 million all-payer inpatient stays and 85 percent of the 9.1 million Medicare FFS inpatient stays in 2019.

Chart 6-2. Fewer general short-term acute care hospitals closed in 2020 and openings increased

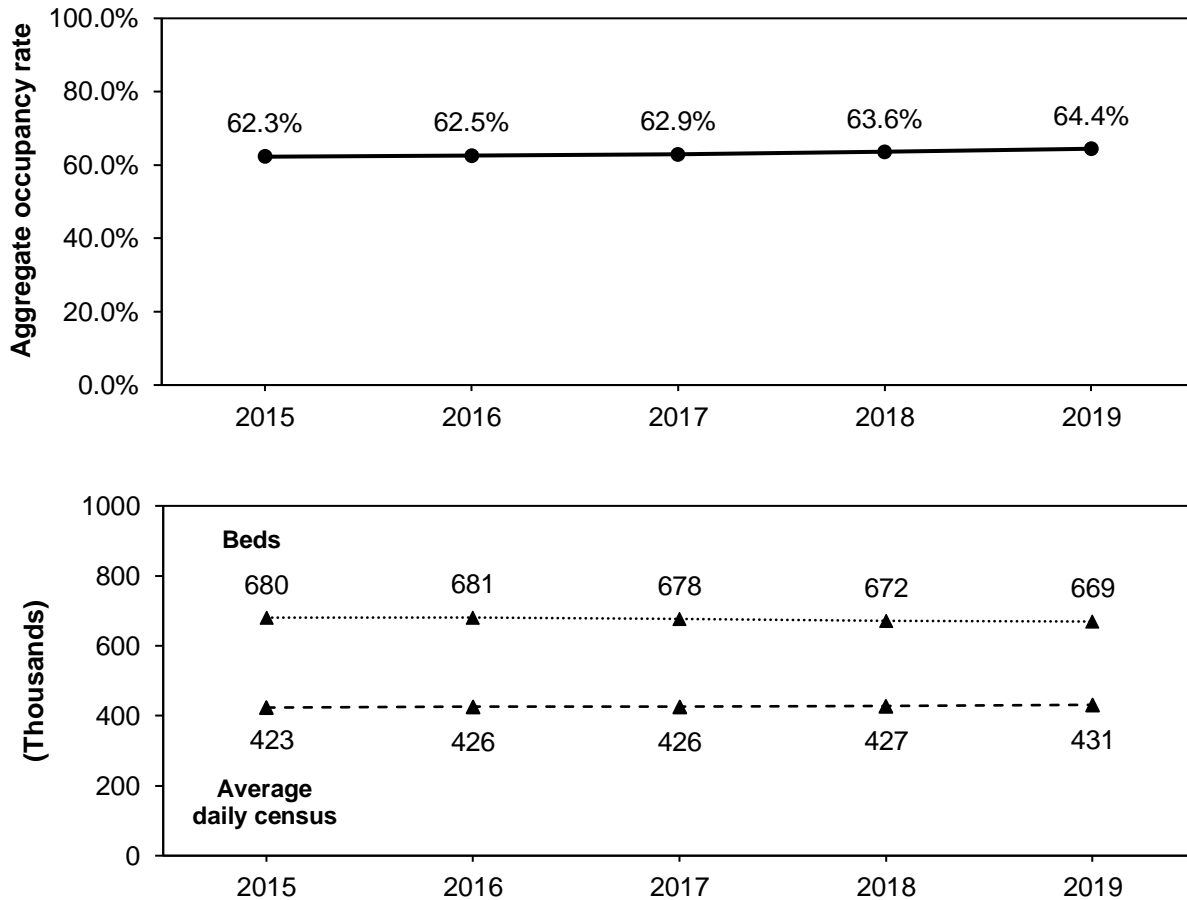


Note: "Closure" refers to a hospital location that ceased inpatient services, while "opening" refers to a new location for inpatient services. The chart does not include the relocation of inpatient services from one hospital to another under common ownership within 10 miles, nor does it include hospitals that both opened and closed within a 5-year time period. Data are for general short-term acute care hospitals in the U.S. paid under the inpatient prospective payment system, designated as critical access hospitals, or covered under the Maryland state waiver. Metropolitan (urban) counties contain an urban cluster of 50,000 or more people, and rural micropolitan counties contain a cluster of 10,000 to 50,000 people. The counts in this chart differ from those previously published for several reasons, such as removing hospitals previously counted as closures but that have since reopened. Year refers to fiscal year.

Source: MedPAC analysis of the CMS Provider of Services file, census data on metropolitan and micropolitan areas, internet searches, and personal communication with the Department of Health and Human Services Office of Rural Health Policy.

- In fiscal year 2020, 25 general short-term acute care hospitals participating in the Medicare program closed, and 18 hospitals opened. The number of closures decreased from the peak in 2019, while the number of openings increased.
- Among the 25 hospital closures in 2020, 13 were in metropolitan counties, 6 were in rural micropolitan counties, and 6 were in other rural counties. Similar to prior years, the hospitals that closed in 2020 tended to be small (18 had 100 or fewer beds), had low inpatient occupancy rates (approximately 29 percent, on average), and had poor profitability (all-payer margin of -11 percent, on average, in the year before closure) (data not shown).
- Nearly all of the hospital openings from 2016 to 2020 were in metropolitan counties.

Chart 6-3. Aggregate occupancy rate at short-term acute care hospitals increased, 2015–2019

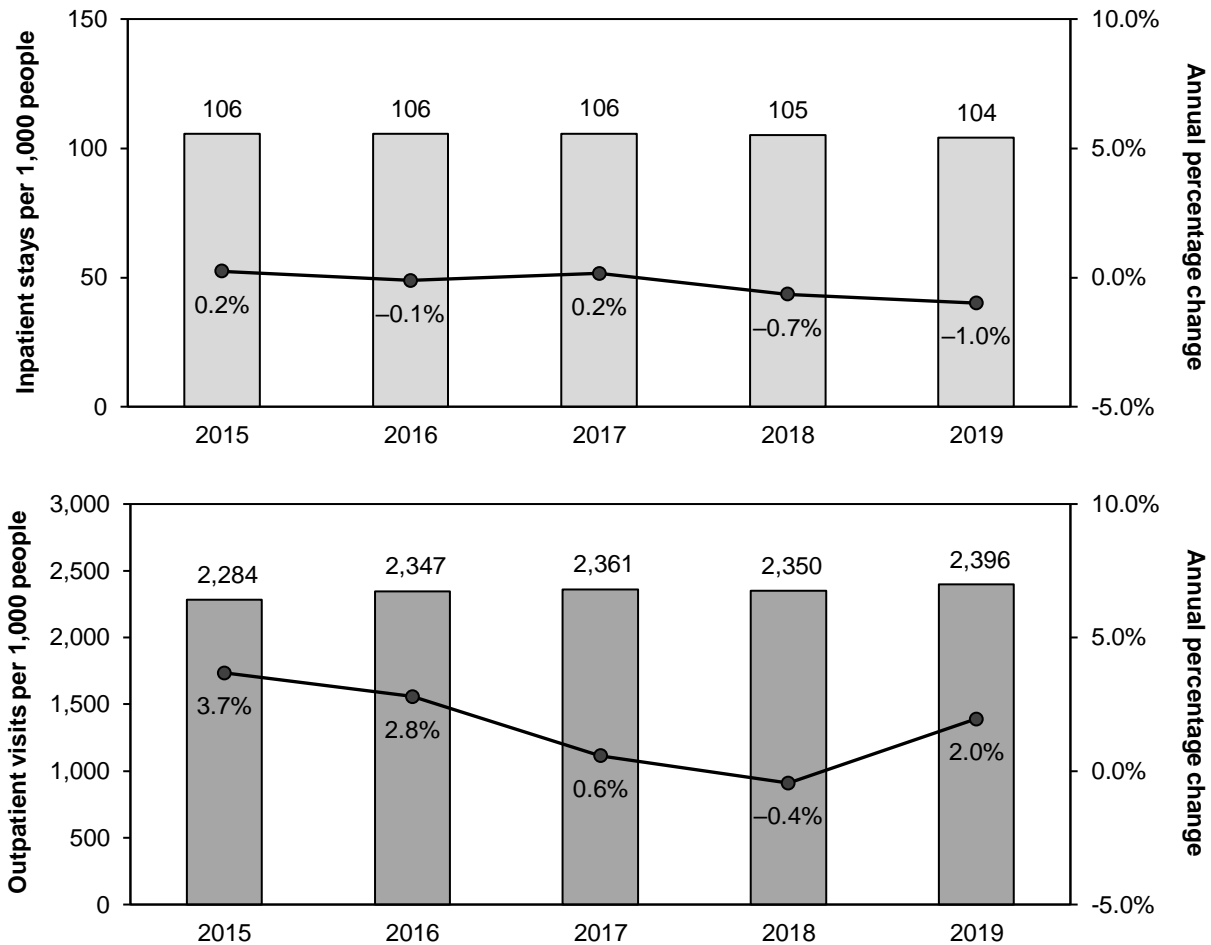


Note: "Aggregate occupancy rate" is calculated as total used bed days (including inpatient, swing, and observation bed days but excluding nursery bed days) divided by total bed days available. "Average daily census" is calculated as total used bed days divided by 365; "beds" refers to total bed days available divided by 365. Data are for short-term acute care hospitals in the U.S. (excluding territories) that had a cost report with a midpoint in fiscal year 2019. Occupancy rates may vary slightly from calculations of components due to rounding.

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

- The aggregate occupancy rate at short-term acute care hospitals increased slightly between 2015 and 2019, from 62.3 percent to 64.4 percent. This increase in occupancy rate reflects a combination of an increase in hospitals' average daily inpatient census and a decrease in hospitals' inpatient beds.
- The occupancy rate varied significantly across different groups of hospitals. For example, in 2019, metropolitan (urban) inpatient prospective payment system hospitals had an occupancy rate of 67.6 percent, while critical access hospitals had an occupancy rate of 31.0 percent (data not shown).

Chart 6-4. All-payer inpatient visits per capita decreased while outpatient visits per capita increased, 2015–2019

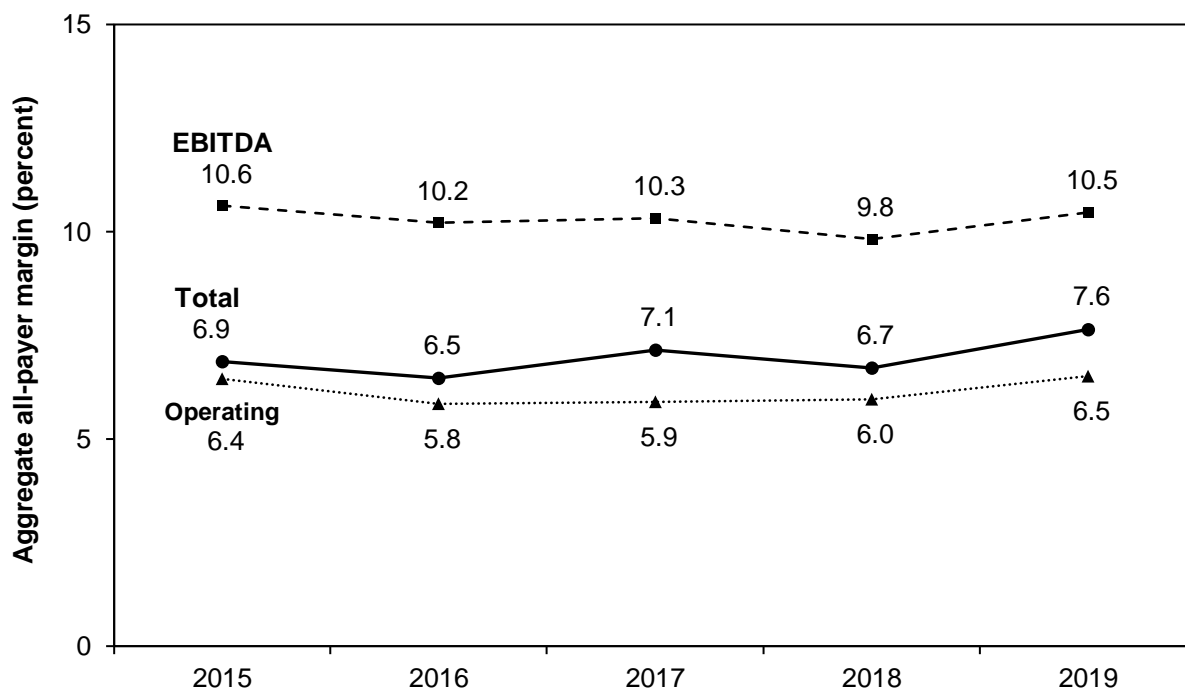


Note: “Outpatient visits” includes all clinic visits, referred visits, observation services, outpatient surgeries, and emergency department visits, regardless of the number of diagnostic and/or therapeutic treatments the patient received during the visit. Data are for community hospitals (nonfederal short-term general and specialty hospitals), estimated from those who responded to the American Hospital Association (AHA) survey. With the 2019 edition of *Hospital Statistics*, the AHA began using a new methodology to classify facilities as hospitals. As a result of the application of the new, broader hospital definition, the number of community hospitals in each year increased by approximately 400.

Source: MedPAC analysis of Hospital Statistics data from the American Hospital Association and CMS National Health Expenditure data.

- From 2015 to 2019, there were divergent trends in all-payer inpatient stays and hospital outpatient visits per capita, with declines in inpatient stays and growth in outpatient visits.
- All-payer inpatient stays per capita held relatively steady from 2015 to 2017, but declined 0.7 percent in 2018 and 1.0 percent in 2019—a cumulative change of -1.6 percent from 2015 to 2019.
- All-payer outpatient visits per capita grew more than 2 percent in each of 2015 and 2016, were steadier in 2017 and 2018, and then returned to 2 percent growth in 2019—a cumulative change of 4.9 percent from 2015 to 2019.

Chart 6-5. IPPS hospitals' aggregate total and operating all-payer margins reached record highs in 2019

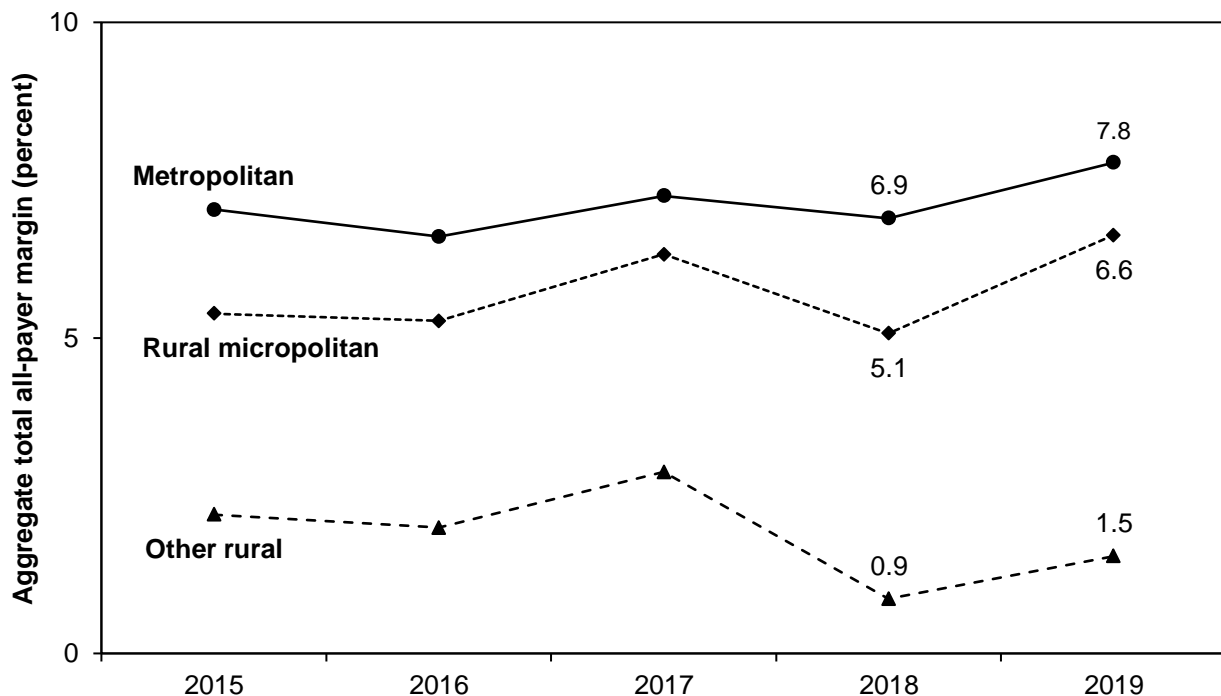


Note: IPPS (inpatient prospective payment system), EBITDA (earnings before interest, taxes, depreciation, and amortization). Hospitals' aggregate margin is calculated as aggregate payments minus aggregate allowable costs, divided by aggregate payments. "All-payer" margin includes payments from all payers. "Total" margin includes investment income; "operating" margin is limited to patient care revenue; and EBITDA margin is a measure of cash flow. Analysis includes short-term acute care hospitals in the U.S. (excluding territories) paid under the IPPS with complete cost report data.

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

- Hospitals' aggregate all-payer margin reflects the relationship between hospitals' payments and costs across all payers (Medicare, Medicaid, other government payers, and private payers).
- In 2019, IPPS hospitals' aggregate total all-payer margin (which includes investment income) increased to an all-time high of 7.6 percent. Similarly, IPPS hospitals' aggregate operating margin increased to an all-time high of 6.5 percent, slightly above the prior all-time high in 2015.
- In addition, IPPS hospitals' cash flow margin (which includes earnings before interest, taxes, depreciation, and amortization (EBITDA)) increased to 10.5 percent in 2019, the highest level since 2015.
- Within these aggregate results, there continued to be substantial variation in hospitals' financial performance. For example, in 2019, for-profit IPPS hospitals' all-payer operating margin was 12.5 percent, compared with nonprofit IPPS hospitals' all-payer margin of 7.3 percent (data not shown). In contrast, the all-payer operating margin at rural nonmetropolitan IPPS hospitals was only 1.5 percent in 2019.

Chart 6-6. Urban IPPS hospitals continued to have a higher aggregate total all-payer margin than rural IPPS hospitals, 2015–2019

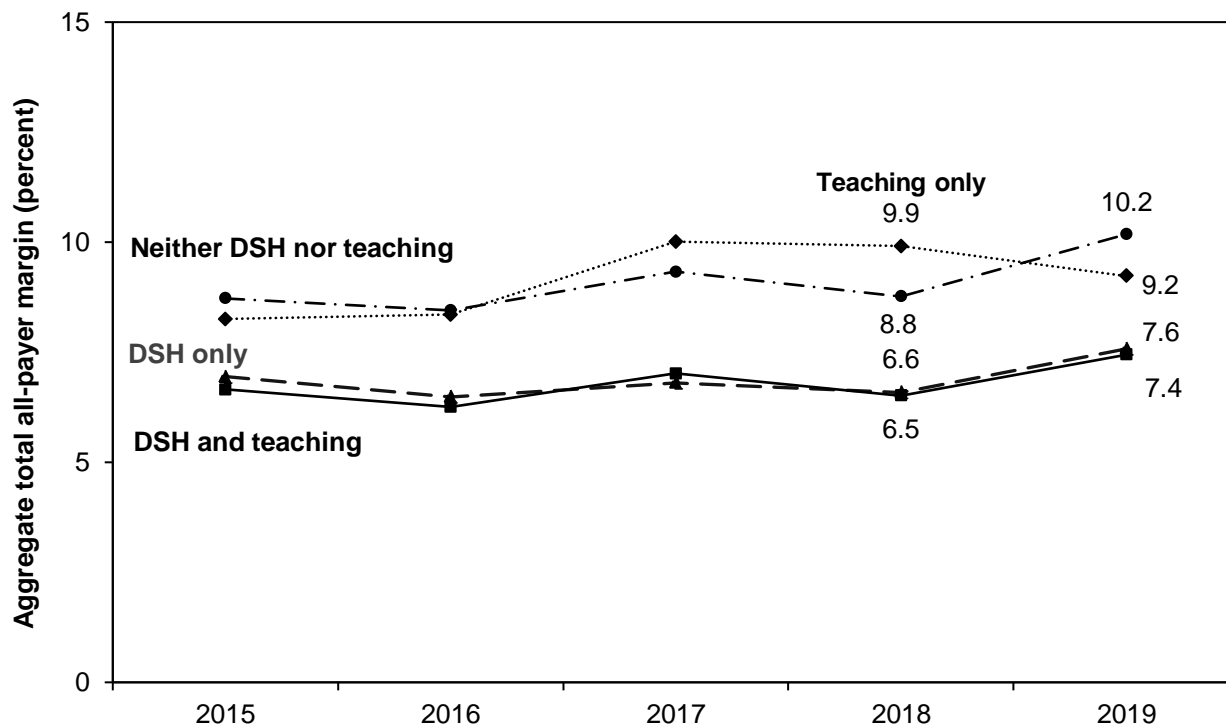


Note: IPPS (inpatient prospective payment system). Hospitals' aggregate margin is calculated as aggregate payments minus aggregate allowable costs, divided by aggregate payments. "Total all-payer" margin includes payments from all payers and from investments. Metropolitan (urban) counties contain an urban cluster of 50,000 or more people, and rural micropolitan counties contain a cluster of 10,000 to 50,000 people; all other counties are classified as "other rural." Analysis includes short-term acute care hospitals in the U.S. (excluding territories) paid under the IPPS with complete cost report data.

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

- Metropolitan (urban) IPPS hospitals continued to have a higher aggregate total all-payer margin than rural micropolitan or other rural IPPS hospitals in 2019. (In contrast, rural IPPS hospitals had a higher aggregate overall Medicare margin, see Chart 6-11.)
- From 2018 to 2019, the aggregate total all-payer margin for metropolitan IPPS hospitals increased from 6.9 percent to a relative high of 7.8 percent, while the margin for rural micropolitan IPPS hospitals increased from 5.1 to a relative high of 6.6 percent. These 2019 margins were the highest since the late 1990s (data not shown). From 2018 to 2019, the aggregate all-payer total margin for other rural IPPS hospitals also increased, from 0.9 to 1.5 percent, but remained below 2015 to 2017 levels.
- From 2018 to 2019, the aggregate all-payer total margin for critical access hospitals also increased, from a relative low of 2.8 percent to 3.6 percent (data not shown).

Chart 6-7. IPPS hospitals, including those that treat a disproportionate share of low-income patients, reached record highs in aggregate total all-payer margin, 2019

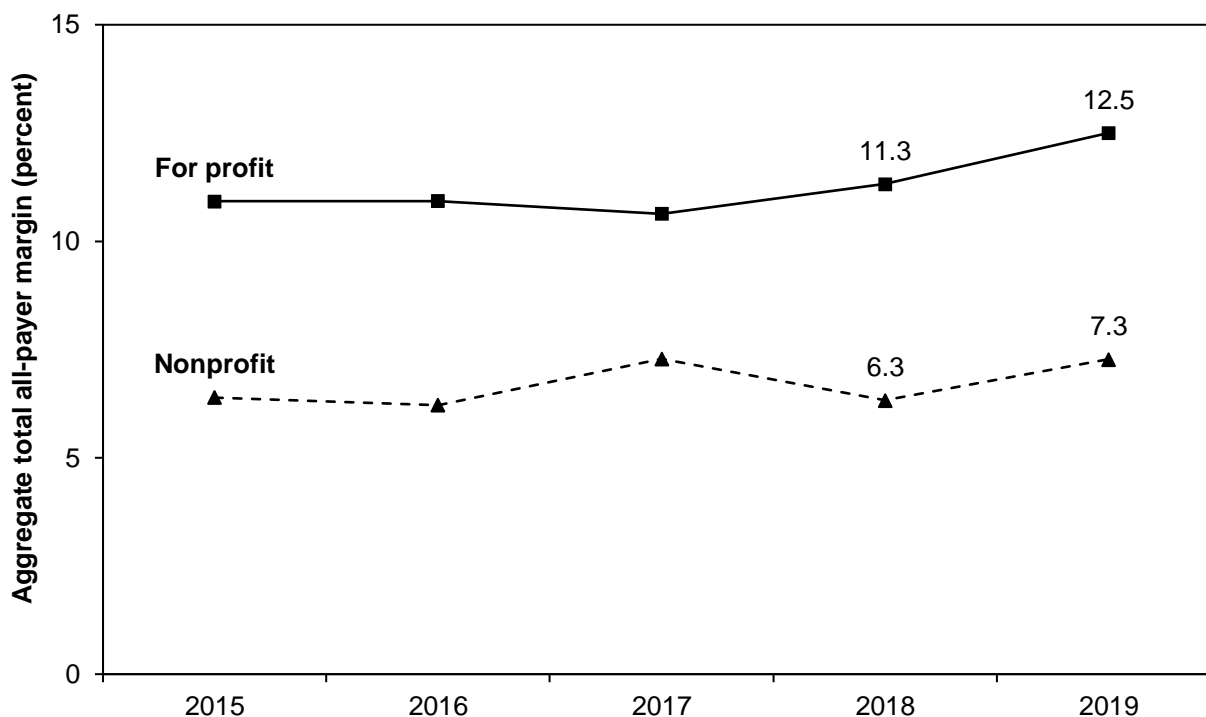


Note: IPPS (inpatient prospective payment system), DSH (disproportionate share hospital). Hospitals' aggregate margin is calculated as aggregate payments minus aggregate allowable costs, divided by aggregate payments. "Total all-payer" margin includes payments from all payers and from investments. Analysis includes short-term acute care hospitals in the U.S. (excluding territories) paid under the IPPS with complete cost report data.

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

- IPPS hospitals that treated a disproportionate share of low-income patients (DSHs) continued to have a lower aggregate total all-payer margin than non-DSH hospitals, regardless of whether the hospital was a teaching hospital. (In contrast, DSHs had a higher aggregate overall Medicare margin than other hospitals; see Chart 6-12.)
- From 2018 to 2019, the aggregate total all-payer margin for DSHs and teaching IPPS hospitals increased from 6.5 percent to 7.4 percent, with a similar increase among DSHs but non-teaching hospitals (from 6.6 percent to 7.6 percent)—all-time highs since the late-1990s in both categories (data not shown).
- Over this same time period, IPPS hospitals that were neither DSHs nor teaching hospitals experienced a larger increase in aggregate total all-payer margin, from 8.8 percent to 10.2 percent—an all-time high since the late-1990s (data not shown). In contrast, the aggregate total all-payer margin at the smaller number of teaching but non-disproportionate share hospitals decreased from 9.9 percent to 9.2 percent.

Chart 6-8. For-profit IPPS hospitals' aggregate total all-payer margin reached an all-time high in 2019

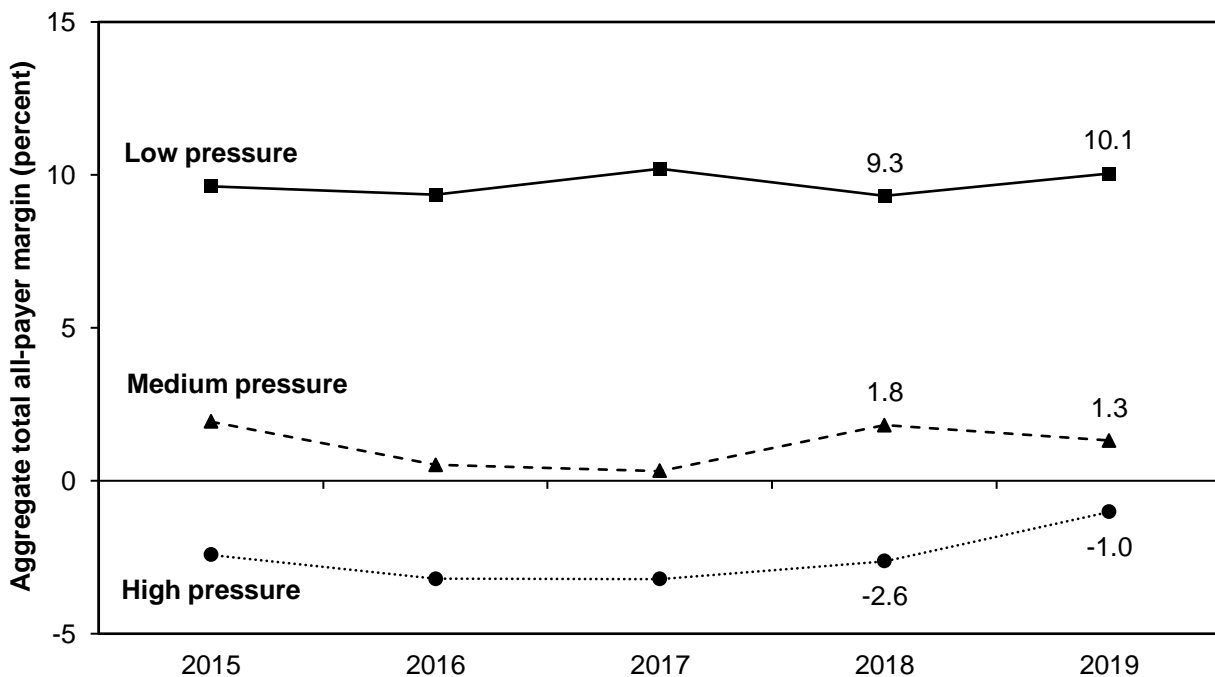


Note: IPPS (inpatient prospective payment system). Hospitals' aggregate margin is calculated as aggregate payments minus aggregate allowable costs, divided by aggregate payments. "Total all-payer" margin includes payments from all payers and from investments. Analysis includes short-term acute care hospitals in the U.S. (excluding territories) paid under the IPPS with complete cost report data.

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

- For-profit IPPS hospitals continued to have a higher aggregate total all-payer margin than nonprofit IPPS hospitals. (For-profit IPPS hospitals also have a higher overall Medicare margin; see Chart 6-13.)
- From 2018 to 2019, for-profit hospitals' aggregate total all-payer margin increased from 11.3 percent to 12.5 percent. This was the highest level since the late-1990s (data not shown).
- Over this same period, nonprofit IPPS hospitals' aggregate total all-payer margin increased from 6.3 percent to 7.3 percent, returning to the level in 2017. The 2017 and 2019 total all-payer margins were the highest since an all-time high of 7.4 percent in 2014 (data not shown).

Chart 6-9. IPPS hospitals under low fiscal pressure continued to have a higher aggregate total all-payer margin than those under higher fiscal pressure, 2015–2019

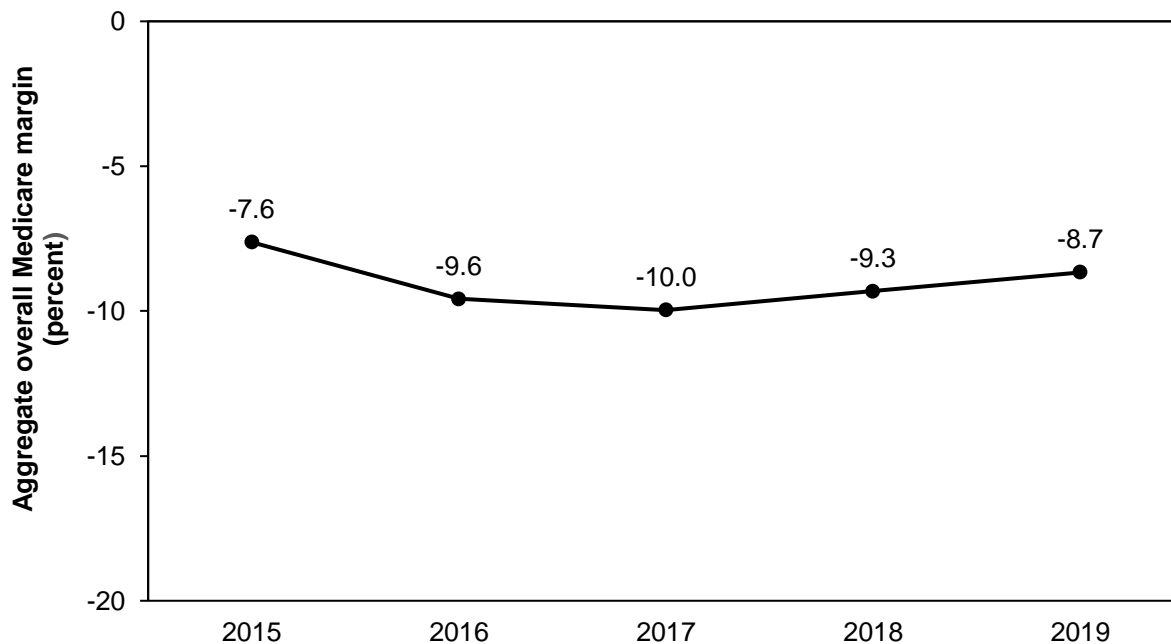


Note: IPPS (inpatient prospective payment system). Hospitals' aggregate margin is calculated as aggregate payments minus aggregate allowable costs, divided by aggregate payments. "Total all-payer" margin includes payments from all payers and from investments. "High-pressure" hospitals are defined as those with a median non-Medicare profit margin of 1 percent or less over five years and a net worth (assets minus liabilities) that would have grown by less than 1 percent per year over that period if the hospital's Medicare profits had been zero. "Low-pressure" hospitals are defined as those with a median non-Medicare profit margin greater than 5 percent over five years and a net worth that would have grown by more than 1 percent per year over that period if the hospital's Medicare profits had been zero. "Medium-pressure" hospitals are those that fit into neither the high- nor the low-pressure categories. Analysis includes short-term acute care hospitals in the U.S. (excluding territories) paid under the IPPS with complete cost report data.

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

- IPPS hospitals' total all-payer margin varied depending on their level of fiscal pressure. IPPS hospitals under the highest fiscal pressure—defined as those with a median non-Medicare profit margin of 1 percent or less and lacking material growth in net worth—continued to have a lower aggregate total all-payer margin than hospitals under less fiscal pressure. (IPPS hospitals under fiscal pressure have a higher overall Medicare margin, see Chart 6-14.)
- IPPS hospitals under low fiscal pressure maintained a strong and steady aggregate total all-payer margin, including an increase to an all-time high of 10.1 percent in 2019.
- In contrast, hospitals under high fiscal pressure maintained a negative aggregate total all-payer margin, though it increased to a relative high of –1 percent.

Chart 6-10. IPPS hospitals' aggregate overall Medicare margin remained negative, but increased in 2019

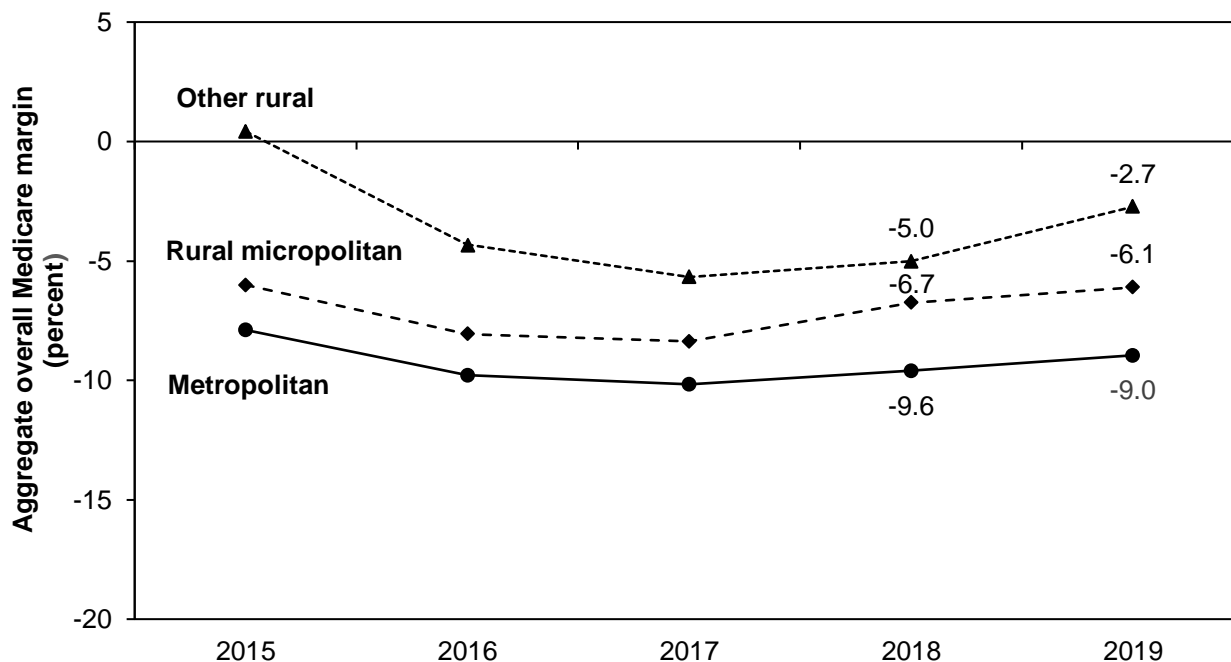


Note: IPPS (inpatient prospective payment system). Hospitals' Medicare margin is calculated as aggregate Medicare payments minus aggregate allowable Medicare costs, divided by aggregate Medicare payments. "Overall Medicare margin" refers to the aggregate margin across hospital service lines (including inpatient, outpatient, swing bed, skilled nursing, rehabilitation, psychiatric, and home health services), as well as supplemental payments not tied to the provision of services (such as direct graduate medical education and uncompensated care payments) and bad debt payments. Analysis includes short-term acute care hospitals in the U.S. (excluding territories) paid under the IPPS with complete cost report data.

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

- Hospitals' aggregate overall Medicare margin reflects the relationship between hospitals' Medicare fee-for-service payments and Medicare-allowable costs across inpatient, outpatient, and other services, as well as supplemental Medicare payments not tied to the provision of services (such as uncompensated care and direct graduate medical education payments).
- From 2018 to 2019, IPPS hospitals' aggregate overall Medicare margin increased from -9.3 percent to -8.7 percent. However, the margin remains well below pre-2014 levels (data not shown), when Congress reduced DSH payments and added uncompensated care payments proportional to the decline in the national uninsured rate (see Chart 6-18).
- The range of overall Medicare margins at individual IPPS hospitals varied substantially. For example, in 2019, 25 percent of hospitals had an overall Medicare margin of 3 percent or higher, and another 25 percent had a margin of -18 percent or lower (data not shown).

Chart 6-11. Rural IPPS hospitals continued to have a higher aggregate overall Medicare margin than urban IPPS hospitals, 2015–2019

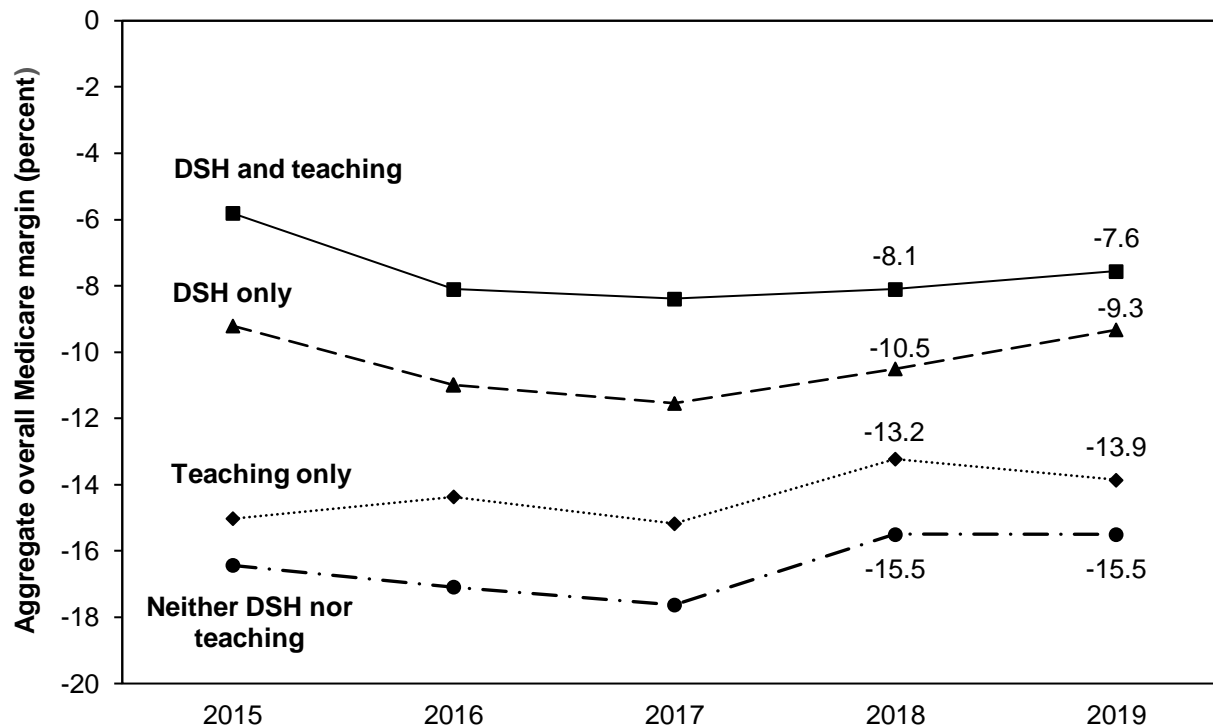


Note: IPPS (inpatient prospective payment system). Hospitals' Medicare margin is calculated as aggregate Medicare payments minus aggregate allowable Medicare costs, divided by aggregate Medicare payments. "Overall Medicare margin" refers to the aggregate margin across hospital service lines (including inpatient, outpatient, swing bed, skilled nursing, rehabilitation, psychiatric, and home health services), as well as supplemental payments not tied to the provision of services (such as direct graduate medical education and uncompensated care payments) and bad debt payments. Metropolitan (urban) counties contain an urban cluster of 50,000 or more people, and rural micropolitan counties contain a cluster of 10,000 to 50,000 people; all other counties are classified as "other rural." Analysis includes short-term acute care hospitals in the U.S. (excluding territories) paid under the IPPS with complete cost report data.

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

- IPPS hospitals in rural micropolitan and other rural areas continued to have higher aggregate overall Medicare margins than metropolitan (urban) IPPS hospitals. (The reverse holds for the total all-payer margin; see Chart 6-6.) The higher margins at IPPS rural hospitals were in large part attributable to the additional IPPS payments many rural hospitals received for their inpatient services through the sole community hospital, Medicare-dependent hospital, and low-volume hospital designations (see Chart 6-17).
- From 2018 to 2019, the overall Medicare margin increased for urban, rural micropolitan, and other rural hospitals. However, the increase was largest for IPPS hospitals in rural nonmicropolitan ("other rural") areas (from -5.0 percent to -2.7 percent, the highest level since 2015).
- From 2018 to 2019, the overall Medicare margin for critical access hospitals remained steady, near -2 percent (data not shown).

Chart 6-12. IPPS hospitals that treat a disproportionate share of low-income patients or are teaching hospitals continued to have higher aggregate overall Medicare margins than other hospitals, 2015–2019

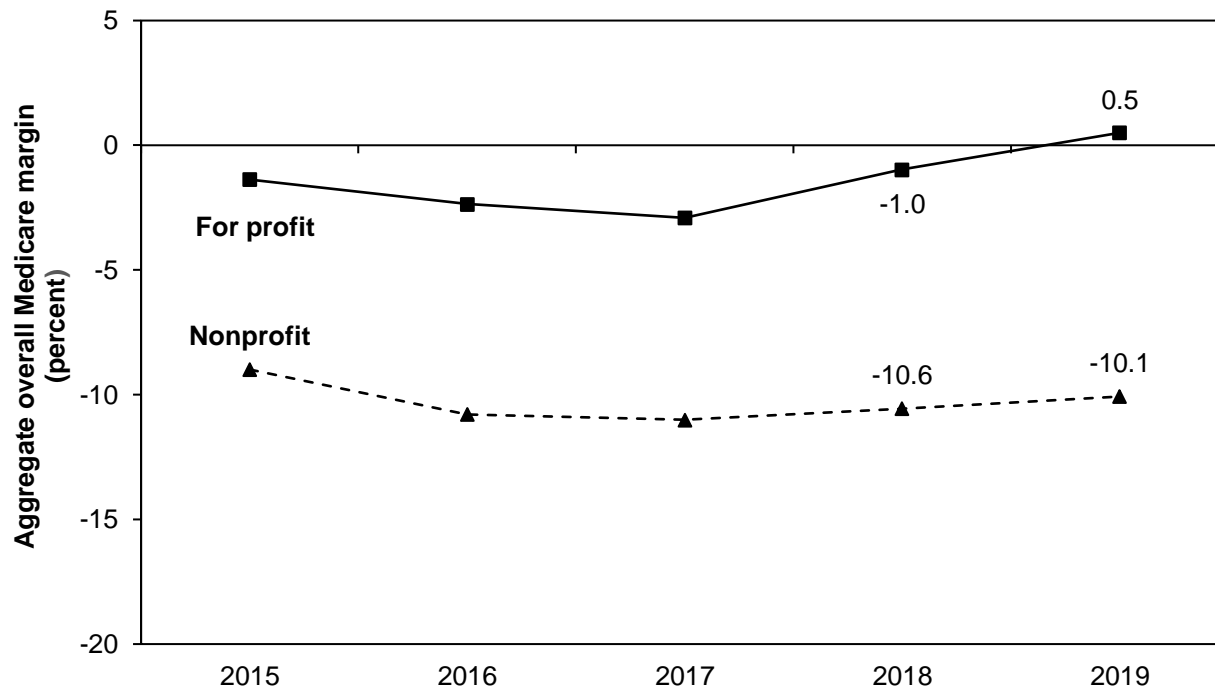


Note: IPPS (inpatient prospective payment system), DSH (disproportionate share hospital). Hospitals' Medicare margin is calculated as aggregate Medicare payments minus aggregate allowable Medicare costs, divided by aggregate Medicare payments. "Overall Medicare margin" refers to the aggregate margin across hospital service lines (including inpatient, outpatient, swing bed, skilled nursing, rehabilitation, psychiatric, and home health services), as well as supplemental payments not tied to the provision of services (such as direct graduate medical education and uncompensated care payments) and bad debt payments. Analysis includes short-term acute care hospitals in the U.S. (excluding territories) paid under the IPPS with complete cost report data.

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

- IPPS hospitals that treat a disproportionate share of low-income patients (DSHs) or are teaching hospitals continued to have a higher aggregate overall Medicare margin than other IPPS hospitals. (The reverse holds for the total all-payer margin; see Chart 6-7.) The higher margins at DSH and teaching IPPS hospitals were in large part attributable to the additional IPPS payments DSH and teaching hospitals received for inpatient services (see Chart 6-17), as well as supplemental uncompensated care payments.
- From 2018 to 2019, the aggregate overall Medicare margin increased for DSH hospitals—both those that were and were not also teaching hospitals—driven by higher uncompensated care payments (see Chart 6-18).

Chart 6-13. For-profit IPPS hospitals continued to have a higher aggregate overall Medicare margin than nonprofit IPPS hospitals and increased to a positive margin in 2019

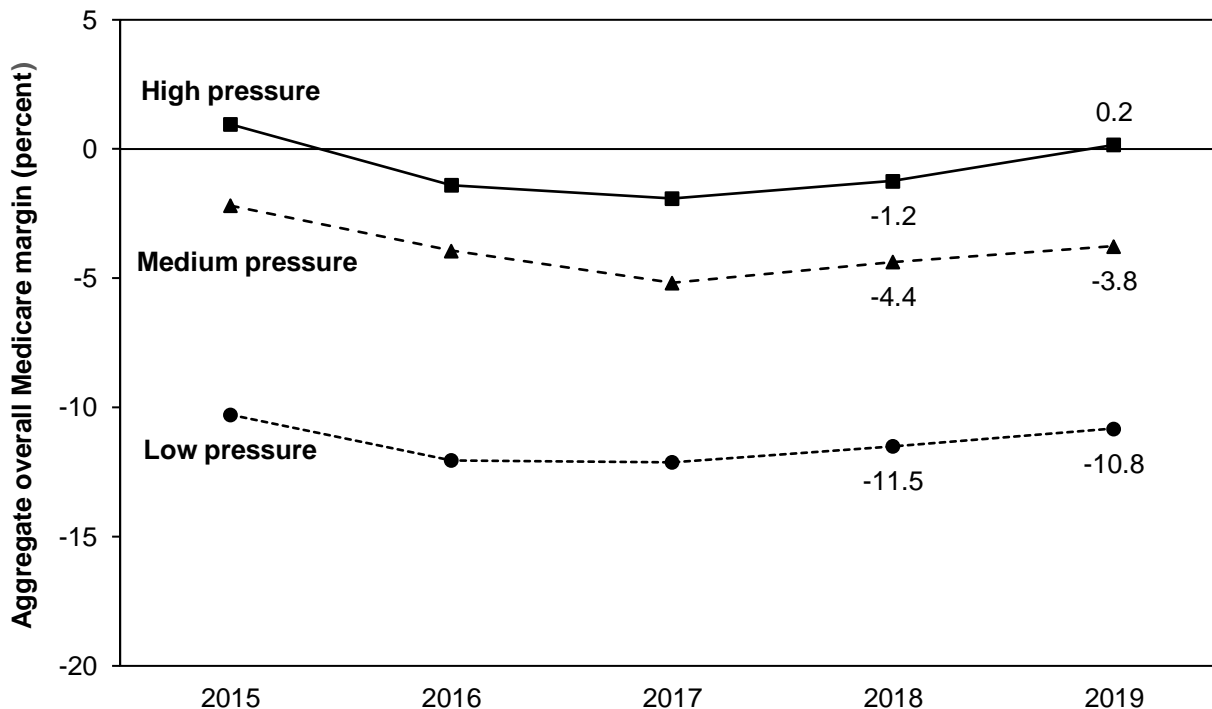


Note: IPPS (inpatient prospective payment system). Hospitals' Medicare margin is calculated as aggregate Medicare payments minus aggregate allowable Medicare costs, divided by aggregate Medicare payments. "Overall Medicare margin" refers to the aggregate margin across hospital service lines (including inpatient, outpatient, swing bed, skilled nursing, rehabilitation, psychiatric, and home health services), as well as supplemental payments not tied to the provision of services (such as direct graduate medical education and uncompensated care payments) and bad debt payments. Analysis includes short-term acute care hospitals in the U.S. (excluding territories) paid under the IPPS with complete cost report data.

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

- For-profit IPPS hospitals continued to have a higher aggregate overall Medicare margin than nonprofit hospitals.
- From 2018 to 2019, for-profit IPPS hospitals' aggregate overall Medicare margin increased from -1.0 to 0.5 percent. This was the highest level since 2014 (data not shown).
- From 2018 to 2019, nonprofit IPPS hospitals' aggregate overall Medicare margin also increased, but by a smaller amount.

Chart 6-14. IPPS hospitals under high fiscal pressure continued to have a higher aggregate overall Medicare margin than those under medium and low fiscal pressure, 2015–2019



Note: IPPS (inpatient prospective payment system). Hospitals' Medicare margin is calculated as aggregate Medicare payments minus aggregate allowable Medicare costs, divided by aggregate Medicare payments. "Overall Medicare margin" refers to the aggregate margin across hospital service lines (including inpatient, outpatient, swing bed, skilled nursing, rehabilitation, psychiatric, and home health services), as well as supplemental payments not tied to the provision of services (such as direct graduate medical education and uncompensated care payments) and bad debt payments. "High-pressure" hospitals are defined as those with a median non-Medicare profit margin of 1 percent or less over five years and a net worth (assets minus liabilities) that would have grown by less than 1 percent per year over that period if the hospital's Medicare profits had been zero. "Low-pressure" hospitals are defined as those with a median non-Medicare profit margin greater than 5 percent over five years and a net worth that would have grown by more than 1 percent per year over that period if the hospital's Medicare profits had been zero. "Medium-pressure" hospitals are those that fit into neither the high- nor the low-pressure categories. Analysis includes short-term acute care hospitals in the U.S. (excluding territories) paid under the IPPS with complete cost report data.

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

- IPPS hospitals under the highest fiscal pressure—defined as those with a median non-Medicare profit margin of 1 percent or less and a lack of material growth in worth—continued to have a higher aggregate overall Medicare margin than hospitals under less fiscal pressure. (In contrast, IPPS hospitals under fiscal pressure have a lower total all-payer margin; see Chart 6-9.)
- From 2018 to 2019, high-pressure IPPS hospitals' aggregate overall Medicare margin increased from -1.2 to 0.2 percent, the highest level since 2015.
- From 2018 to 2019, the aggregate overall Medicare margin among IPPS hospitals under medium and low fiscal pressure also increased, but by a smaller amount.

Chart 6-15. Financial pressure led to lower hospital costs per discharge in 2019

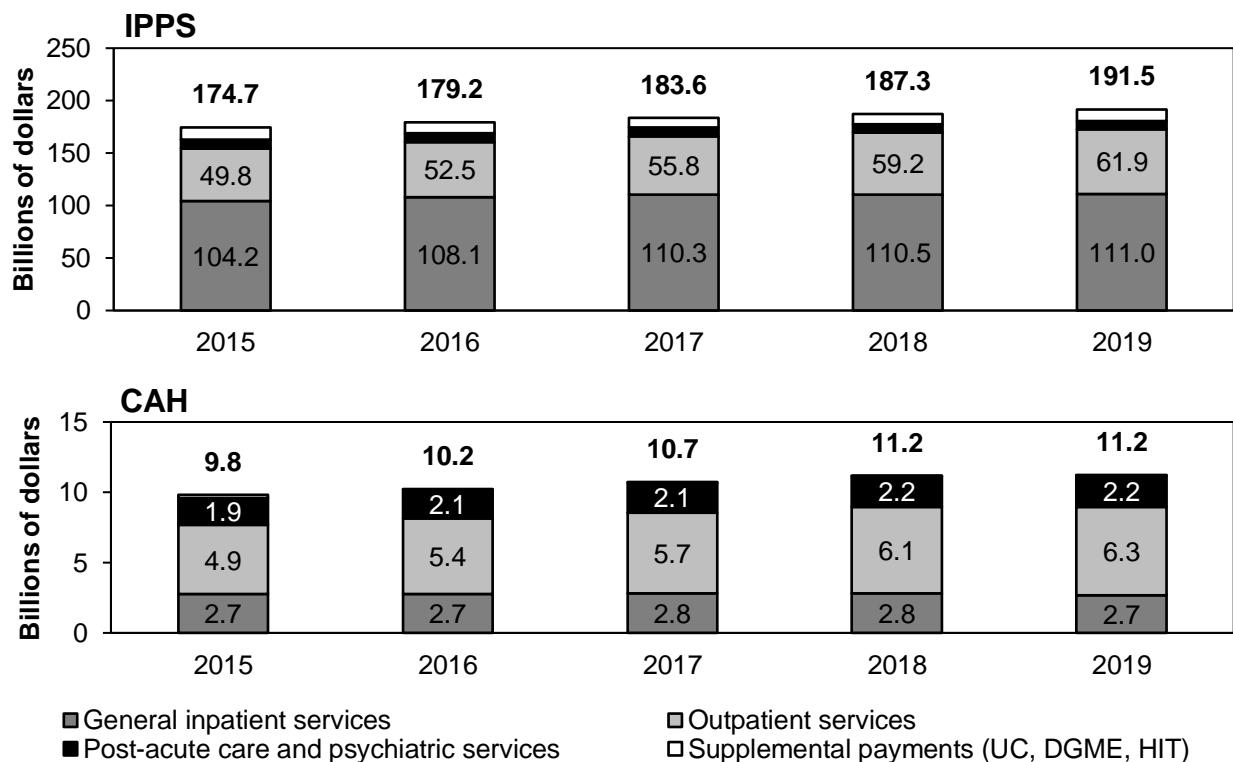
	Level of financial pressure, 2014–2018		
	High pressure (non-Medicare margin ≤ 1%)	Medium pressure	Low pressure (non-Medicare margin > 5%)
Number of hospitals	480	265	1,329
Financial characteristics, 2019 (medians)			
Non-Medicare margin (private, Medicaid, uninsured)	–3%	3%	14%
Standardized cost per Medicare discharge (as a share of the national median)			
For-profit and nonprofit hospitals	0.95	1.00	1.04
Nonprofit hospitals	0.97	1.01	1.06
For-profit hospitals	0.88	0.93	0.96
Annual growth in cost per discharge, 2016–2019	2%	2%	2%
Overall 2019 Medicare margin	0%	–2%	–9%
Patient characteristics (medians)			
Total hospital discharges in 2019	3,287	5,655	8,503
Medicare share of inpatient days	37%	35%	35%
Medicaid share of inpatient days	6%	6%	6%
Medicare case-mix index	1.46	1.57	1.69

Note: Standardized costs are adjusted for hospital case mix, wage index, outliers, transfer cases, interest expense, and the effects of teaching and low-income Medicare patients on hospital costs. The sample includes short-term acute care hospitals paid under the inpatient prospective payment system with over 500 discharges that had complete cost reports on file with CMS by October 2020. “High-pressure” hospitals are defined as those with a median non-Medicare profit margin of 1 percent or less over five years and a net worth (assets minus liabilities) that would have grown by less than 1 percent per year over that period if the hospital’s Medicare profits had been zero. “Low-pressure” hospitals are defined as those with a median non-Medicare profit margin greater than 5 percent over five years and a net worth that would have grown by more than 1 percent per year over that period if the hospital’s Medicare profits had been zero. “Medium-pressure” hospitals are those that fit into neither the high- nor the low-pressure categories.

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

- Hospitals under high financial pressure had 5 percent lower standardized costs per discharge than the national median. For-profit hospitals tended to constrain their costs more than nonprofit hospitals. The median for-profit hospital had costs that were 4 percent below the median even when they were not under financial pressure.
- Hospitals with lower volume, lower case mix, and higher Medicare shares of discharges are more likely to be under financial pressure.
- One limitation of this analysis is that it measures only hospital inpatient costs. To the extent that hospitals with strong profit margins direct their resources toward non-inpatient expenditures (such as the purchase or subsidization of physician practices), those costs would not be included in our standardized costs per discharge.

Chart 6-16. Medicare FFS payments for inpatient services were the largest component of payments to IPPS hospitals but not to CAHs, 2015–2019



Note: FFS (fee-for-service), IPPS (inpatient prospective payment system), CAH (critical access hospital), UC (uncompensated care), DGME (direct graduate medical education), HIT (health information technology). Medicare-designated CAHs are limited to 25 beds and primarily operate in rural areas; Medicare pays these hospitals based on their reported costs. Analysis includes short-term acute care hospitals in the U.S. (excluding territories) paid under the IPPS or CAH payment system with complete cost report data. Components may not sum to totals due to rounding and components with values not shown.

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

- In fiscal year 2019, IPPS hospitals received \$191.5 billion in Medicare FFS payments, including \$111.0 billion for general inpatient services and \$61.9 billion for outpatient services. From 2015 to 2019, IPPS hospitals' Medicare FFS inpatient payments increased at an average annual rate of 1.6 percent, while outpatient payments increased 5.6 percent. These increases were driven by increases in payments per service (data not shown).
- In fiscal year 2019, CAHs received \$11.2 billion in Medicare FFS payments, including \$2.7 billion for general inpatient services, \$6.3 billion for outpatient services, and \$2.2 billion in post-acute care services (mainly provided in swing beds). From 2015 to 2019, CAHs' Medicare FFS inpatient payments held relatively steady, while outpatient revenue increased 6.4 percent, and post-acute care revenue increased 3.7 percent. These increases were driven by increases in payments per service (data not shown).

Chart 6-17. About 15 percent of IPPS payments were from adjustments and additional payments, 2019

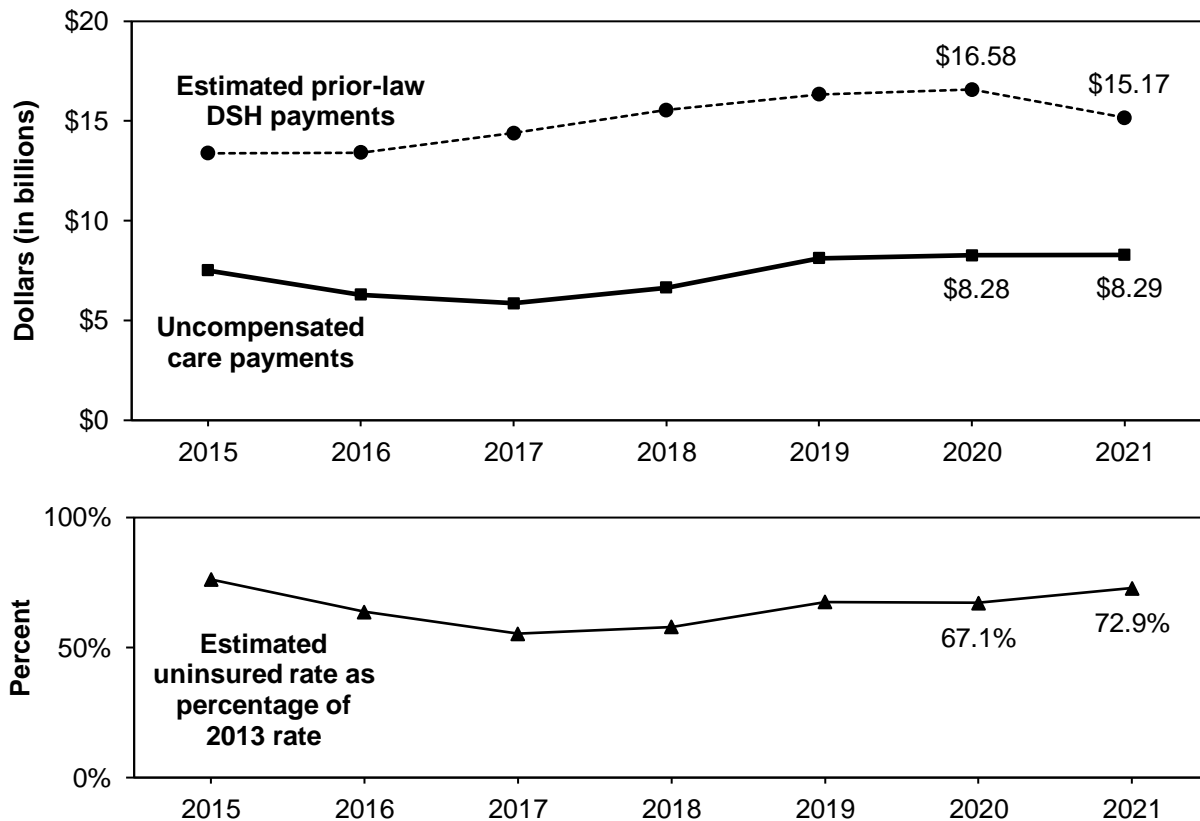
Hospital group	Share of IPPS payments					
	Base PPS	Low income (DSH)	Teaching (IME)	Outliers	Rural and/or Isolated	Quality
All IPPS	84.9%	3.2%	6.5%	4.7%	1.4%	-0.8%
Metropolitan (urban)	85.0	3.3	6.9	4.9	0.7	-0.8
Micropolitan	84.3	2.4	2.1	2.3	9.4	-0.5
Other rural	80.1	2.3	0.5	1.3	16.2	-0.3
For profit	90.0	3.4	3.6	3.0	1.0	-1.2
Nonprofit	85.1	3.1	6.5	4.5	1.4	-0.7
Government	77.5	4.0	9.8	7.2	2.1	-0.8
DSH and teaching	81.4	3.7	9.7	5.4	0.6	-0.8
DSH only	91.2	3.2	0.0	3.2	3.2	-0.8
Teaching only	88.4	0.1*	6.3	4.7	0.9	-0.4
Neither	93.9	0.1*	0.0	2.8	3.4	-0.4
Sole community	79.1	2.2	2.4	2.4	14.3	-0.4
Medicare dependent	83.3	1.9	0.4	1.1	13.7	-0.4
Low volume	79.1	2.0	0.5	1.4	17.4	-0.2

Note: IPPS (inpatient prospective payment system), DSH (disproportionate share hospital), IME (indirect medical education). Payments are shares of total inpatient operating and capital PPS payments, and exclude uncompensated care, direct graduate medical education, Medicare Advantage IME, and other pass-through payments outside of the IPPS. "Rural and/or isolated" includes additional payments to sole community hospitals, Medicare-dependent hospitals, and low-volume hospitals; while sole community and Medicare-dependent hospitals that are paid on their hospital-specific rate do not technically receive any base PPS payments or adjustments, the "Rural and/or Isolated" column includes only the amount by which their rate exceeds the otherwise applicable IPPS payments. "Quality" includes payments and penalties from the Value-Based Purchasing Program, Hospital Readmissions Reduction Program, and Hospital Acquired Conditions Reduction Program. Metropolitan (urban) counties contain an urban cluster of 50,000 or more people; rural micropolitan counties contain a cluster of 10,000 to 50,000 people; all other counties are classified as "other rural." Analysis limited to IPPS hospitals in the U.S. with a complete cost report having a midpoint in fiscal year 2019. Components may not sum to totals due to rounding and because other types of payments, such as new technology payments, are not included in the table.
* DSH group defined as receiving inpatient operating DSH payments, while DSH payments column includes both inpatient operating and capital DSH payments. All urban hospitals with more than 100 beds are eligible for inpatient capital DSH payments.

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

- Base payments accounted for about 85 percent of IPPS payments to hospitals for inpatient services provided to Medicare FFS beneficiaries, while low-income and teaching adjustments, outlier payments, rural and/or isolated payments, and quality payments and penalties accounted for the remaining 15 percent.
- The share of IPPS payments from different payment types varied substantially across different groups of hospitals. For example, while special payments to rural or isolated hospitals accounted for 1.4 percent of all IPPS payments to hospitals, they accounted for over 13 percent of payments to hospitals designated as sole community, Medicare dependent, and/or low-volume hospitals.

Chart 6-18. Medicare’s uncompensated care payments to IPPS hospitals have increased from a relative low in 2017

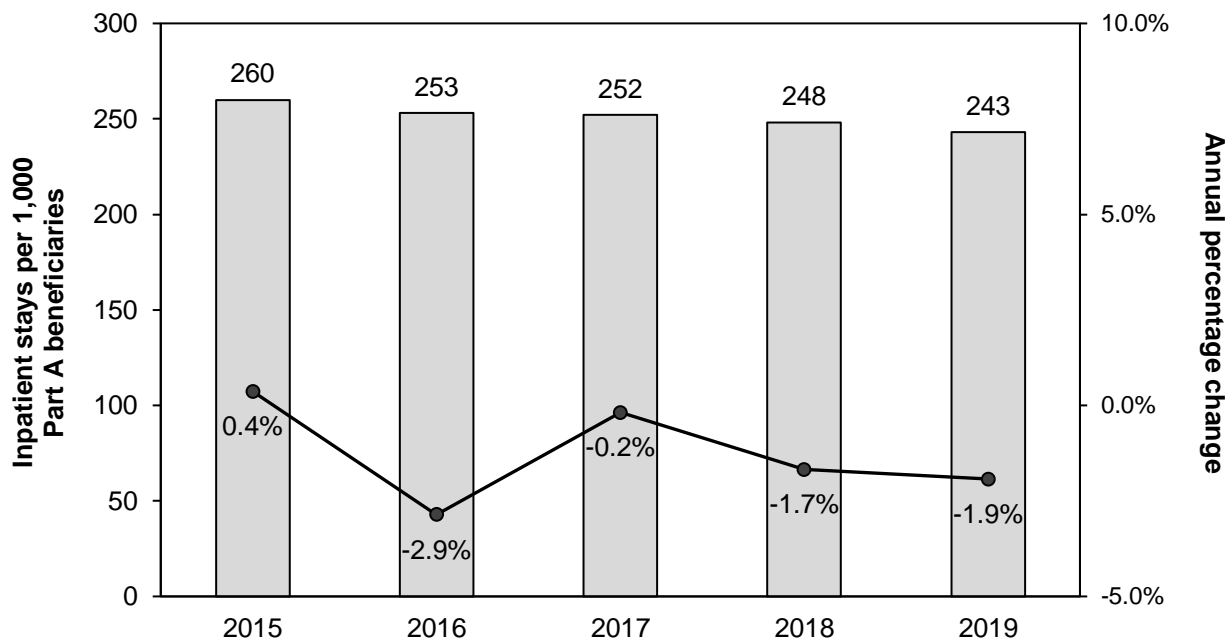


Note: IPPS (inpatient prospective payment system), DSH (disproportionate share). Uncompensated care payments are post-sequestration. Chart does not include capital DSH payments.

Source: CMS IPPS final rules.

- In addition to IPPS payments for fee-for-service Medicare beneficiaries’ inpatient stays, the Medicare program makes uncompensated care payments to IPPS hospitals to help cover their costs of treating uninsured patients. Pursuant to a provision in the Affordable Care Act of 2010, beginning in 2014, each eligible hospital receives (1) a reduced operating DSH payment and (2) an uncompensated care payment. Under the revised operating DSH payment equation, hospitals receive 25 percent of the DSH funds they would have received under prior law. Second, each hospital receives uncompensated care payments equal to its share of a fixed pool of dollars, defined as 75 percent of estimated aggregated operating DSH payments under the prior-law DSH formula multiplied by the national uninsured rate as a percentage of the uninsured rate in 2013. Therefore, when the rate of uninsured individuals increases and hospitals have greater losses on uncompensated care, CMS gives hospitals higher uncompensated care add-on payments to their IPPS rates.
- Between 2019 and 2021, Medicare’s uncompensated care payments were relatively steady. This reflected three factors roughly offsetting each other in those years: the change in estimated prior-law DSH payments, the change in the national uninsured rate, and the portion of the year that Medicare sequestration was suspended.

Chart 6-19. Medicare FFS inpatient stays per capita decreased, 2015–2019

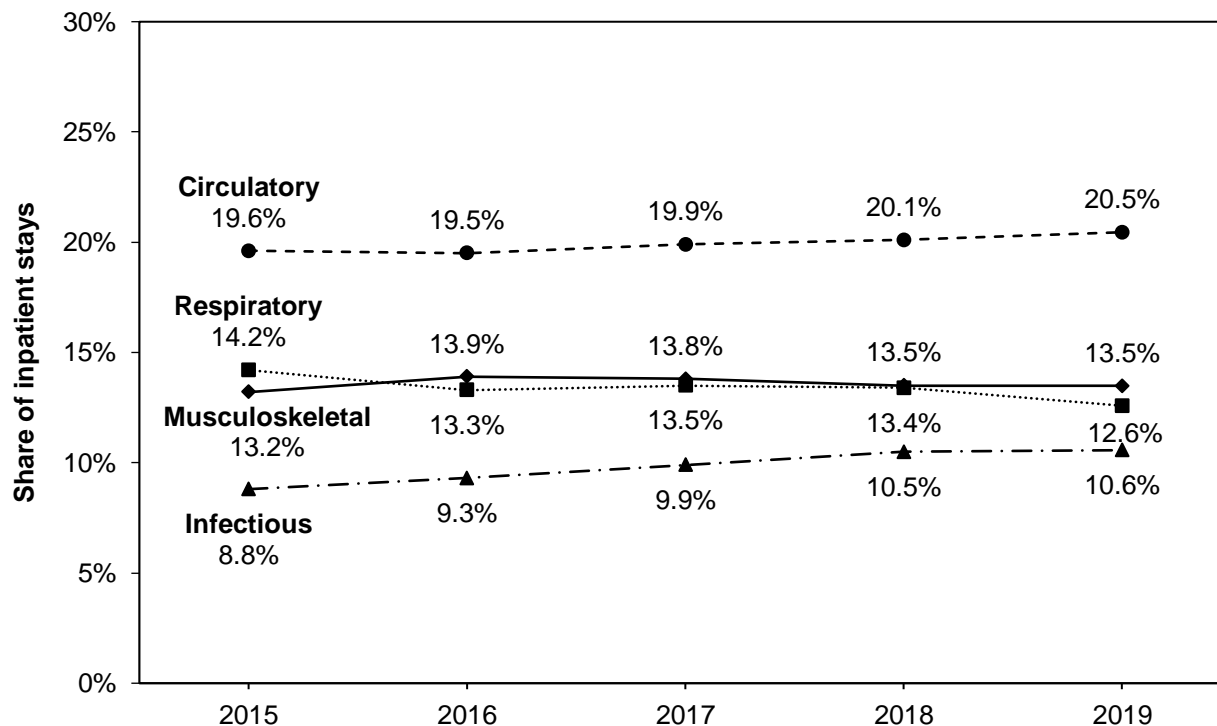


Note: FFS (fee-for-service). Data are for short-term acute care hospitals in the U.S. (exclusive of territories).

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

- The number of inpatient stays per 1,000 Medicare FFS beneficiaries decreased from 260 in 2015 to 243 in 2019. This is a slower decline than earlier in the decade (data not shown) but is still a faster decline than all-payer inpatient stays per capita (see Chart 6-4).
- The magnitude of the decrease in Medicare FFS inpatient stays per capita varied across types of hospitals. For example, from 2018 to 2019, the number of inpatient stays per capita fell 1.6 percent at hospitals located in metropolitan (urban) areas, 3.8 percent at those in rural micropolitan areas, and 6 percent at those located in other rural areas (data not shown).

Chart 6-20. Four major diagnostic categories accounted for over half of all Medicare FFS inpatient stays at short-term acute care hospitals, 2015–2019

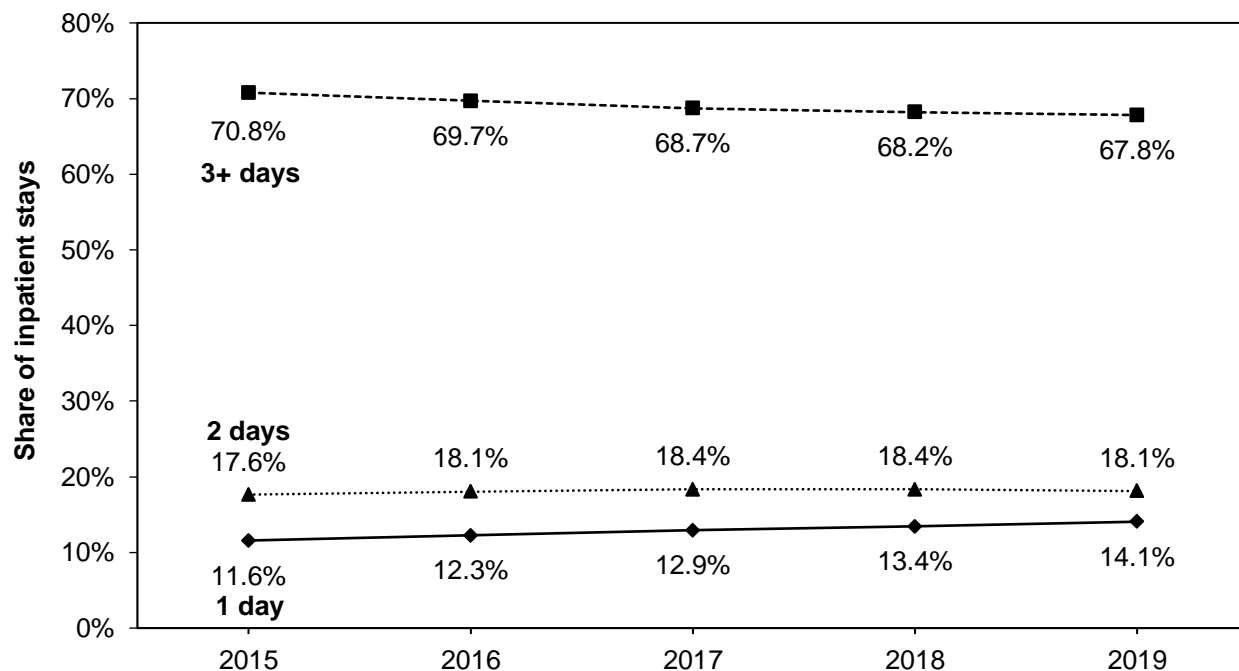


Note: FFS (fee-for-service). Data are for short-term acute care hospitals in the U.S. (exclusive of territories).

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

- Over half of all Medicare FFS inpatient stays at short-term acute care hospitals were for beneficiaries with a primary diagnosis in one of four major diagnostic categories: circulatory, musculoskeletal, respiratory, or infectious diseases.
- The most common major diagnostic category of Medicare FFS inpatient stays is diseases of the circulatory system, such as heart failure and cardiac arrhythmia. After a relative low in 2016, its share increased to over 20 percent in 2019.
- Of the four most common major diagnostic categories, the one with the largest increase from 2015 to 2019 was infectious and parasitic diseases, such as septicemia. This rise continued a longer term trend, with the share of Medicare FFS beneficiaries' inpatient stays for infectious diseases doubling since 2010 (data not shown).

Chart 6-21. Share of one-day stays among Medicare FFS beneficiaries at short-term acute care hospitals increased, 2015–2019

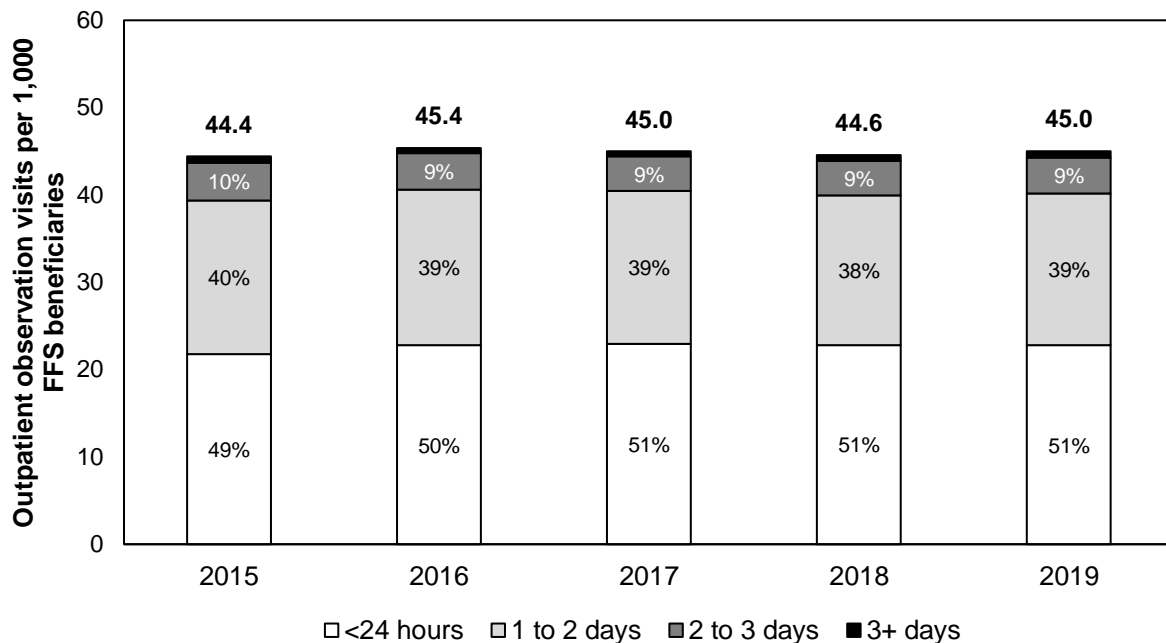


Note: FFS (fee-for-service). Data are for short-term acute care hospitals in the U.S. (exclusive of territories). Components may not sum to 100 percent due to rounding.

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

- The share of Medicare FFS beneficiaries' inpatient stays at short-term acute care hospitals that were only one day long increased from 2015 to 2019. This reversed the prior trend of declining one-day stays from 2010 to 2014 (data not shown). As the Commission has previously noted, growth in the number of one-day stays starting in 2015 could be due to the reduced likelihood that CMS's recovery audit contractors (RACs) would deny payment for one-day stays. In 2015, CMS ceased patient status reviews (which previously resulted in challenges to one-day stay claims). The result was that from 2014 to 2015, claims challenged by the RACs as overpayments fell by 91 percent (data not shown).
- From 2015 to 2019, there was also a slight increase in the share of stays that were two days long and a decrease in the share of stays three days or longer.
- Together, these changes correspond to a 1.9 percent decrease in the average length of stay, from 5.05 days in 2015 to 4.95 days in 2019 (data not shown). Over 90 percent of Medicare FFS beneficiaries' inpatient stays in 2019 were 10 days or fewer; however, a small share (0.66 percent) of stays lasted over a month (data not shown).

Chart 6-22. Number of Medicare FFS outpatient observation visits per capita remained relatively steady, and nearly half were longer than 24 hours, 2015–2019

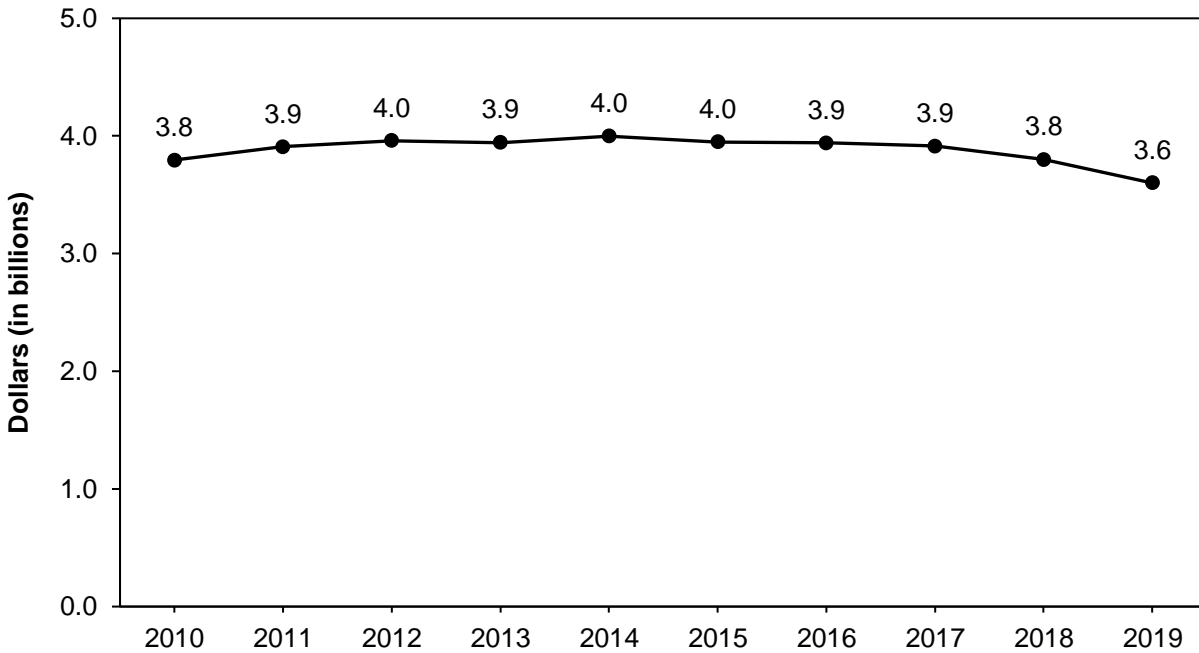


Note: FFS (fee-for-service). Observation visits are separately payable visits with a length of stay of at least eight hours. Data for outpatient observation visits include short-term acute care hospitals in the U.S. (exclusive of territories) paid under the inpatient prospective payment system or under the Maryland state waiver. “Outpatient observation visits per capita” refers to outpatient observation visits—that is, observation visits that did not result in an inpatient admission—per Medicare FFS Part B beneficiary. Years are calendar years. Components may not sum to 100 percent due to rounding and component values not shown.

Source: MedPAC analysis of outpatient standard analytical file data from CMS.

- Hospitals sometimes use observation care to determine whether a patient should be hospitalized for inpatient care, transferred to an alternative treatment setting, or sent home. On April 1, 2002, Medicare began providing separate payments to hospitals for some observation services. Previously, the observation services were packaged into the payments for the emergency department or clinic visits that occurred with observation care.
- The number of Medicare FFS outpatient observation visits per capita remained relatively steady from 2015 to 2019, at about 45 visits per 1,000 beneficiaries.
- The decision on whether to discharge or admit a patient can usually be made in less than 24 hours; however, the Medicare benefit does not limit the length of outpatient observation stays. In each year from 2015 to 2019, nearly half of outpatient observation visits were longer than 24 hours, including 9 to 10 percent that spanned more than 2 days and 1 to 2 percent that spanned more than 3 days.

Chart 6-23. Medicare FFS payments to inpatient psychiatric facilities decreased in 2019



Note: FFS (fee-for-service). These fiscal year-incurred data represent only program spending; they do not include beneficiary cost sharing. Spending for inpatient psychiatric care furnished in scatter beds in acute care hospitals (and paid for under the acute care inpatient prospective payment system) is not included in this chart.

Source: CMS Office of the Actuary.

- Medicare pays for inpatient psychiatric facility (IPF) care under the IPF prospective payment system.
- Payments have been relatively steady at about \$4 billion since 2012.
- However, since 2017, Medicare's payments to IPFs have declined about 9 percent, consistent with a 13 percent decrease in IPF stays (data not shown).

Chart 6-24. The share of for-profit Medicare-certified inpatient psychiatric facilities increased, 2012–2019

Type of IPF	2012	2015	2018	2019	Average annual change		
					2012–2015	2015–2018	2018–2019
All	1,568	1,576	1,584	1,530	0.2%	0.2%	–3.4%
Urban	1,241	1,245	1,254	1,225	0.1	0.2	–2.3
Rural	326	330	327	303	0.4	–0.3	–7.3
Freestanding	450	483	524	527	2.4	2.8	0.6
Hospital-based units	1,118	1,093	1,060	1,003	–0.8	–1.0	–5.4
Nonprofit	762	726	723	682	–1.6	–0.1	–5.7
For profit	436	503	523	522	4.9	1.3	–0.2
Government	370	347	338	326	–2.1	–0.9	–3.6

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

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

- Between 2012 and 2015, the number of IPFs that filed Medicare cost reports grew, on average, 0.2 percent per year. Similarly, between 2015 and 2018, the supply of IPFs increased slightly, growing, on average, 0.2 percent per year. However, in 2019, the number of IPFs fell by 3.4 percent.
- A growing share of Medicare IPF users receive care in for-profit facilities. Between 2012 and 2015, the number of for-profit IPFs grew 4.9 percent per year, on average. Over the same period, the number of nonprofit IPFs fell more than 1 percent per year, on average. The number of for-profit IPFs continued to grow through 2018, while the number of nonprofit IPFs slightly declined. From 2018 to 2019, the number of for-profit IPFs remained relatively stable, while the number of nonprofit facilities decreased by 5.7 percent.

Chart 6-25. Almost three-quarters of Medicare FFS beneficiaries' stays at IPFs were for psychosis, 2019

MS-DRG	Diagnosis	Share
885	Psychosis	73.4%
884	Organic disturbances and mental retardation	7.0
057	Degenerative nervous system disorders without MCC	5.5
897	Alcohol/drug abuse or dependency, no rehabilitation, without MCC	4.4
881	Depressive neurosis	3.2
895	Alcohol/drug abuse or dependency with rehabilitation, without MCC	1.6
882	Neurosis except depressive	1.3
880	Acute adjustment reaction and psychosocial dysfunction	0.9
883	Disorders of personality and impulse control	0.7
056	Degenerative nervous system disorders with MCC	0.5
894	Alcohol/drug use—left AMA	0.4
886	Behavioral and developmental disorders	0.2
896	Alcohol/drug abuse or dependency without rehabilitation, with MCC	0.1
876	OR procedure with principal diagnosis of mental illness	0.1
887	Other mental disorders	0.1
081	Nontraumatic stupor and coma without MCC	<0.1
080	Nontraumatic stupor and coma with MCC	<0.1
	Nonpsychiatric MS-DRGs	0.8
	Total	100.0

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

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

- Medicare patients in IPFs are generally assigned 1 of 17 psychiatric MS-DRGs.
- The MS-DRG system does not differentiate well among Medicare beneficiaries in IPFs. The most frequently occurring IPF diagnosis—psychosis—accounted for about 73 percent of IPF discharges in 2019. This broad category includes patients with principal diagnoses of schizophrenia, bipolar disorder, and major depression.
- In 2019, the next most common discharge diagnosis, accounting for 7 percent of IPF cases, was organic disturbances and mental retardation.

Chart 6-26. The majority of Medicare FFS beneficiaries who received IPF services were under the age of 65, 2019

Characteristic	Share of all IPF users	Share of IPF users with more than one IPF stay
Current eligibility status		
Aged	43.3%	30.5%
Disabled	56.6	69.4
ESRD only	0.1	0.1
Age		
<45	23.6	31.8
45–64	32.5	36.9
65–79	30.0	23.9
80+	14.0	7.4
All	100.0	27.5

Note: FFS (fee-for-service), IPF (inpatient psychiatric facility), ESRD (end-stage renal disease). The “aged” category includes beneficiaries ages 65 and older without ESRD. The “disabled” category includes beneficiaries under age 65 without ESRD. The “ESRD only” category includes beneficiaries with ESRD, regardless of age. Components may not sum to totals due to rounding.

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

- Of Medicare beneficiaries who had at least one IPF stay in 2019, 56.6 percent qualified for Medicare because of a disability. These beneficiaries tend to be younger and poorer than the typical fee-for-service beneficiary.
- Approximately 28 percent of Medicare beneficiaries who used an IPF in 2019 had more than one IPF stay during the year. These beneficiaries were much more likely than all IPF users to be disabled, often because of a psychiatric diagnosis.

SECTION

7

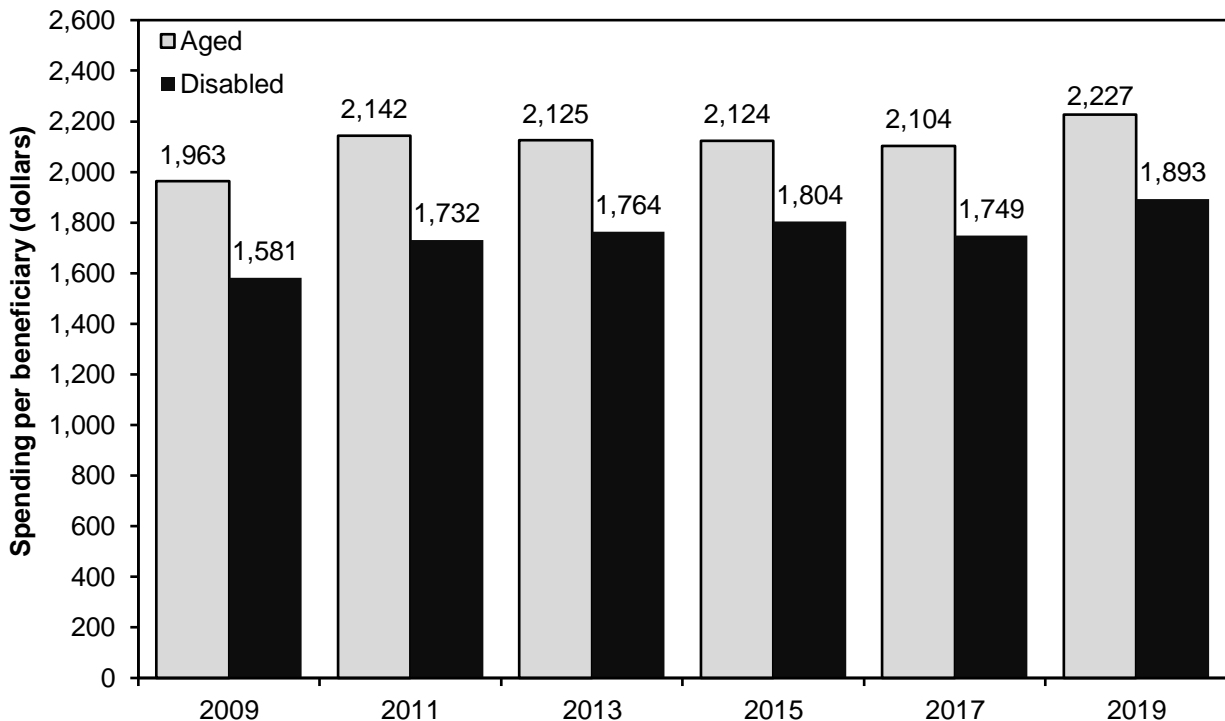
Ambulatory care

**Physicians and other
health professionals**

Hospital outpatient services

Ambulatory surgical centers

Chart 7-1. Medicare spending per fee-for-service beneficiary on services in the fee schedule for physicians and other health professionals, 2009–2019

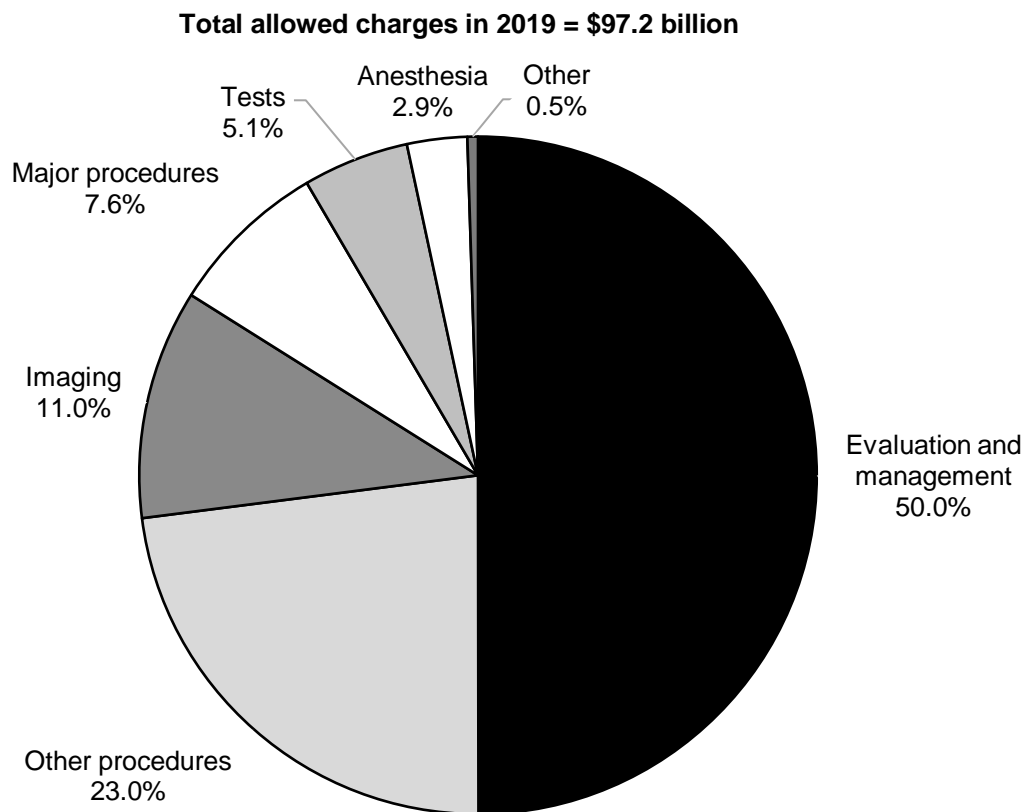


Note: Dollar amounts are Medicare spending only and do not include beneficiary cost sharing. The category “disabled” excludes beneficiaries who qualify for Medicare because they have end-stage renal disease. All beneficiaries age 65 and over are included in the “aged” category.

Source: The annual report of the Boards of Trustees of the Medicare trust funds 2020.

- The fee schedule for physicians and other health professionals includes a broad range of services such as office visits, surgical procedures, and diagnostic and therapeutic services. “Other health professionals” refers to nurse practitioners, physician assistants, physical therapists, and other clinicians. Total fee schedule spending (excluding beneficiary cost sharing) was \$73.5 billion in 2019 (data not shown).
- Spending per fee-for-service beneficiary for fee schedule services increased between 2009 and 2011, remained stable between 2011 and 2017, and began growing again after 2017. From 2009 to 2019, spending per beneficiary (across aged beneficiaries and those with disabilities) grew at a cumulative rate of 15 percent.
- Per capita spending for beneficiaries with disabilities (under age 65) is lower than per capita spending for aged beneficiaries (ages 65 and over). In 2019, for example, per capita spending for beneficiaries with disabilities was \$1,893 compared with \$2,227 for aged beneficiaries. However, spending per capita grew much faster for beneficiaries with disabilities than aged beneficiaries between 2009 and 2019 (20 percent vs. 13 percent, respectively).

Chart 7-2. Physician fee schedule—allowed charges by type of service, 2019



Note: Components may not sum to 100 percent due to rounding.

Source: MedPAC analysis of the Carrier Standard Analytic File for 100 percent of beneficiaries.

- In 2019, allowed charges for physician fee schedule services totaled \$97.2 billion. Allowed charges include both program spending and beneficiary cost sharing.
- In 2019, half of all allowed charges were for evaluation and management (E&M) services.
- Within the E&M category, about half of allowed charges were for office/outpatient visits. The remaining allowed charges within the E&M category were for various types of services provided across a broad range of settings, including hospital inpatient departments, emergency departments, and nursing facilities (data not shown).

Chart 7-3. Total encounters per FFS beneficiary increased and mix of clinicians furnishing them changed from 2014 to 2019

Specialty category	Encounters per beneficiary		Percent change in encounters per beneficiary	
	2014	2019	Average annual	Total
Total (all clinicians)	20.8	22.2	1.3%	6.5%
Primary care physicians	3.9	3.5	-2.4	-11.5
Specialists	12.6	12.9	0.5	2.3
APRNs/PAs	1.4	2.5	11.5	72.1
Other practitioners	2.9	3.4	3.2	17.1

Note: FFS (fee-for-service), APRN (advanced practice registered nurse), PA (physician assistant). We define “encounters” as unique combinations of beneficiary identification numbers, claim identification numbers (for paid claims), and national provider identifiers of the clinicians who billed for the service. Figures may not sum to totals due to rounding. Figures do not account for “incident to” billing, meaning, for example, that encounters with APRNs/PAs that are billed under Medicare’s “incident to” rules are included in the physician totals. We use the number of FFS beneficiaries enrolled in Part B to define encounters per beneficiary.

Source: MedPAC analysis of the Carrier Standard Analytic File for 100 percent of beneficiaries and 2020 annual report of the Boards of Trustees of the Medicare trust funds.

- Encounters measure beneficiary interactions with clinicians. For example, if a physician billed for an office visit and an X-ray on the same claim, we count that as one encounter.
- The number of encounters per beneficiary grew 1.3 percent per year from 2014 to 2019, suggesting stable access to care.
- Encounters with specialist physicians accounted for a majority of all encounters and grew modestly from 2014 to 2019.
- In contrast, encounters with APRNs or PAs grew rapidly from 2014 to 2019, and encounters with primary care physicians declined substantially. These changes continue a longer term trend of declines in services billed by primary care physicians and rapid increases in services billed by APRNs and PAs).
- The decline in encounters with primary care physicians occurred across a broad range of services, including evaluation and management services, tests, procedures, and imaging services (data not shown).

Chart 7-4. Medicare beneficiaries' ability to get timely appointments with physicians was comparable with that of privately insured individuals, 2017–2020

Survey question	Medicare (ages 65 and older)				Private insurance (ages 50–64)			
	2017	2018	2019	2020	2017	2018	2019	2020
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% ^{ab}	70% ^a	72% ^b	69% ^a	69% ^{ab}	64% ^{ab}	74%	73% ^a
Sometimes	20 ^{ab}	20 ^a	20	22 ^a	22 ^{ab}	26 ^{ab}	19	20 ^a
Usually	3	5 ^b	3	3	4	5	4	4
Always	3	3 ^a	3	3	3	4 ^{ab}	3	3
For illness or injury								
Never	80 ^a	79 ^a	80	79	76 ^{ab}	74 ^{ab}	81	80
Sometimes	15 ^a	15 ^a	14	15	18 ^{ab}	19 ^{ab}	15	15
Usually	2	2	2	2	2	3	2	3
Always	1 ^a	2 ^b	2	2	2 ^a	2	1	2

Note: Numbers may not sum to 100 percent due to rounding and to some responses (“Don’t Know” or “Refused”) not being presented. Overall sample sizes for each group (Medicare and privately insured) were approximately 4,000 in all years. Sample sizes for individual questions varied. Survey includes beneficiaries enrolled in traditional fee-for-service Medicare or Medicare Advantage.

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

^b Statistically significant difference (at a 95 percent confidence level) from 2020 within the same insurance coverage category.

Source: MedPAC-sponsored annual telephone surveys conducted 2017–2020.

- Most Medicare beneficiaries have one or more doctor appointments in a given year. Their ability to schedule timely appointments is one indicator of access that we examine.
- Medicare beneficiaries ages 65 and older report similar access to physicians for appointments as compared with privately insured individuals ages 50 to 64. For example, in 2020, among those needing an appointment for routine care, 69 percent of Medicare beneficiaries reported that they never had to wait longer than they wanted, which is similar to the 73 percent of privately insured individuals who reported this. Among those needing an appointment for illness or injury, 79 percent of Medicare beneficiaries reported never waiting longer than they wanted to get an appointment, which was not statistically significantly different from the 80 percent of privately insured individuals who reported this.
- Appointment scheduling for illness or injury is better than for routine care appointments for both Medicare beneficiaries and privately insured individuals.

Chart 7-5. Medicare and privately insured patients reported more difficulty finding a new primary care provider than a new specialist, 2017–2020

Survey question	Medicare (ages 65 and older)				Private insurance (ages 50–64)			
	2017	2018	2019	2020	2017	2018	2019	2020
Looking for a new provider: “In the past 12 months, have you tried to get a new ...?” (Percent answering “Yes”)								
Primary care provider	9% ^a	10% ^b	8%	8%	11% ^{ab}	10% ^b	9%	7%
Specialist	17 ^{ab}	19 ^{ab}	17 ^b	15	20 ^{ab}	21 ^{ab}	15	13
Getting a new provider: Among those who tried to get an appointment with a new provider, “How much of a problem was it finding a primary care provider/specialist who would treat you? Was it ... ?”								
Primary care provider								
No problem	69 ^{ab}	71 ^b	72 ^{ab}	60	59 ^a	67 ^b	62 ^a	57
Small problem	13	13	13 ^a	16 ^a	18	16 ^b	20 ^a	24 ^a
Big problem	14 ^{ab}	14 ^b	14 ^b	22	22 ^a	16	17	18
Specialist								
No problem	83	84 ^b	85 ^{ab}	79	81	80	79 ^a	77
Small problem	11	7	6 ^a	9	11	9	11 ^a	11
Big problem	5 ^{ab}	8 ^b	8	11	8 ^a	10	9	11

Note: Numbers may not sum to 100 percent due to rounding and to some responses (“Don’t Know” or “Refused”) not being presented. Overall sample sizes for each group (Medicare and privately insured) were approximately 4,000 in all years. Sample sizes for individual questions varied. Survey includes beneficiaries enrolled in traditional fee-for-service Medicare or Medicare Advantage.

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

^b Statistically significant difference (at a 95 percent confidence level) from 2020 within the same insurance coverage category.

Source: MedPAC-sponsored annual telephone surveys, conducted 2017–2020.

- In 2020, only 8 percent of Medicare beneficiaries and 7 percent of privately insured individuals reported looking for a new primary care provider. This finding suggests that most people were either satisfied with their current provider or did not need to look for one.
- In 2020, Medicare beneficiaries and privately insured individuals were more likely to report problems finding a new primary care provider than a new specialist.
- Of the 8 percent of Medicare beneficiaries who looked for a new primary care provider in 2020, 22 percent reported a “big problem” finding a new one, and another 16 percent reported a “small problem” finding a new one. Although this finding means that only 3 percent of the total Medicare population reported problems finding a new primary care provider, the Commission is concerned about the continuing pattern of greater problems accessing primary care than specialty care.
- Of the 7 percent of privately insured individuals who looked for a new primary care provider in 2020, 18 percent reported a “big problem” finding a new one, and another 24 percent reported a “small problem” finding a new one.

Chart 7-6. Slightly higher shares of non-White patients reported delays getting appointments compared with White patients, regardless of insurance type, 2020

Survey question	Medicare (ages 65 and older)			Private insurance (ages 50–64)		
	All	White	Non-White	All	White	Non-White
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	69% ^a	71% ^{ab}	63% ^{ab}	73% ^a	75% ^{ab}	69% ^{ab}
Sometimes	22 ^a	22 ^a	24	20 ^a	19 ^a	22
Usually	3	3	3	4	4	4
Always	3	2 ^b	4 ^b	3	2	4
For illness or injury						
Never	79	80 ^b	74 ^b	80	81 ^b	76 ^b
Sometimes	15	15	17	15	15	15
Usually	2	2	3	3	2 ^b	4 ^b
Always	2	1	2	2	1 ^b	3 ^b

Note: “White” refers to non-Hispanic White respondents. Numbers may not sum to 100 percent due to rounding and to some responses (“Don’t Know” or “Refused”) not being presented. Overall sample size for each group (Medicare and privately insured) was approximately 4,000 in 2020. Sample size for individual questions varied. Survey includes beneficiaries enrolled in traditional fee-for-service Medicare or Medicare Advantage.

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

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

Source: MedPAC-sponsored telephone survey conducted in 2020.

- In 2020, White respondents were more likely to report that they never had to wait longer than they wanted to get an appointment for routine care or for an illness or injury compared to non-White respondents. This trend was observed both for Medicare beneficiaries and for privately insured individuals.

Chart 7-7. Slightly higher shares of non-White patients reported difficulties finding a new specialist compared with White patients, but these differences were not statistically significant, 2020

Survey question	Medicare (ages 65 and older)			Private insurance (ages 50–64)		
	All	White	Non-White	All	White	Non-White
Looking for a new provider: “In the past 12 months, have you tried to get a new ...?”						
Primary care provider	8%	8%	9%	7%	7%	8%
Specialist	15	15 ^b	12 ^b	13	14	12
Getting a new provider: Among those who tried to get an appointment with a new provider, “How much of a problem was it finding a primary care provider/specialist who would treat you?”						
Was it ... ?”						
Primary care provider						
No problem	60	61	57	57	54	63
Small problem	16 ^a	16 ^a	18	24 ^a	25 ^a	22
Big problem	22	22	22	18	20	14
Specialist						
No problem	79	81	75	77	78	74
Small problem	9	8	11	11	10	14
Big problem	11	11	14	11	11	13

Note: “White” refers to non-Hispanic White respondents. Numbers may not sum to 100 percent due to rounding and to some responses (“Don’t Know” or “Refused”) not being presented. Overall sample size for each group (Medicare and privately insured) was approximately 4,000 in 2020. Sample size for individual questions varied. Survey includes beneficiaries enrolled in traditional fee-for-service Medicare or Medicare Advantage.

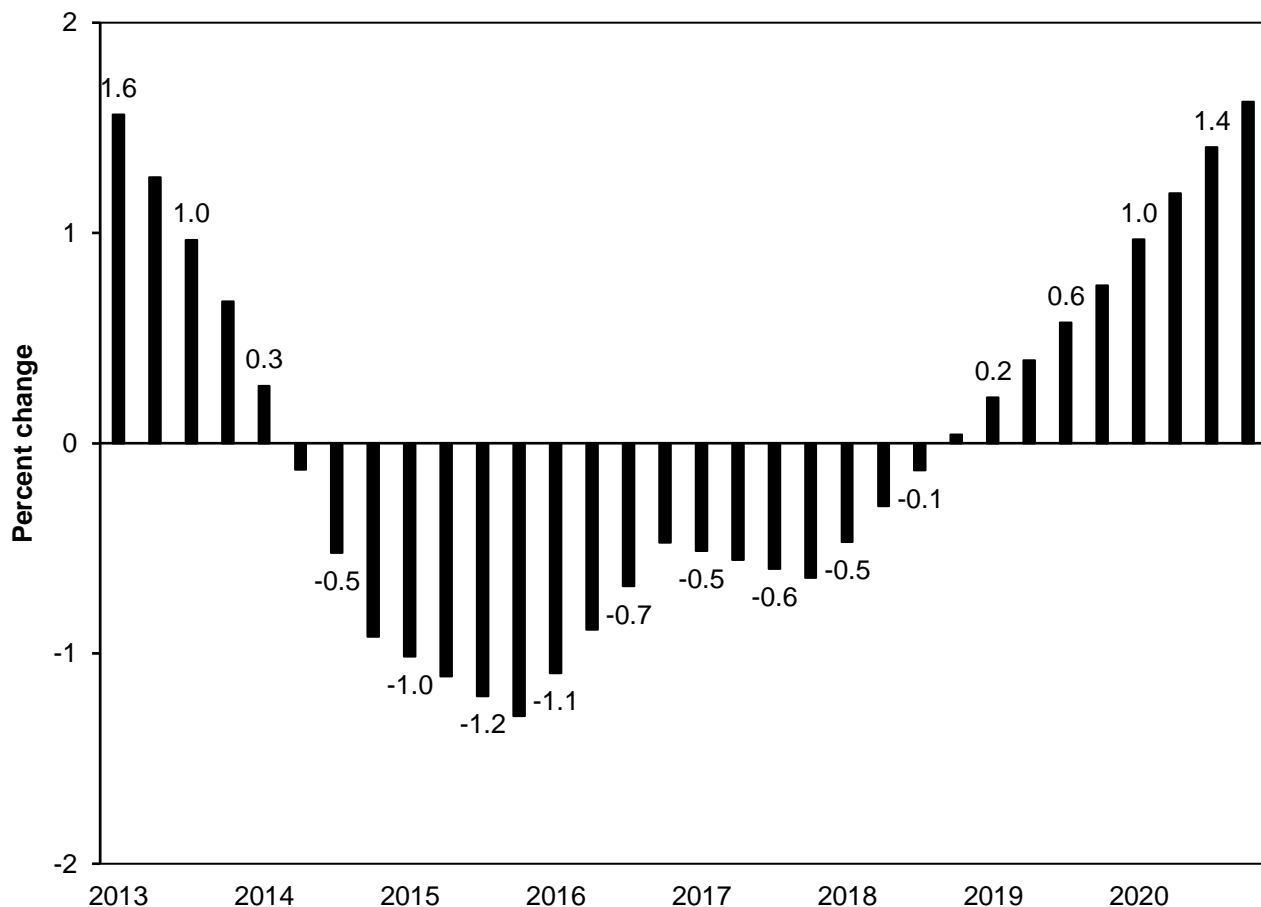
^a Statistically significant difference (at a 95 percent confidence level) between Medicare and privately insured respondents in the given category.

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

Source: MedPAC-sponsored telephone survey conducted in 2020.

- In 2020, slightly higher shares of non-White respondents reported difficulties finding a new specialist compared to White respondents, regardless of insurance type, but these differences were not statistically significant. Non-White Medicare beneficiaries also reported slightly more difficulties finding a primary care provider than did White beneficiaries, but this difference was also not statistically significant.
- More privately insured individuals reported experiencing a small problem finding a new primary care provider than did Medicare beneficiaries.

Chart 7-8. Changes in physicians' professional liability insurance premiums, 2013–2020

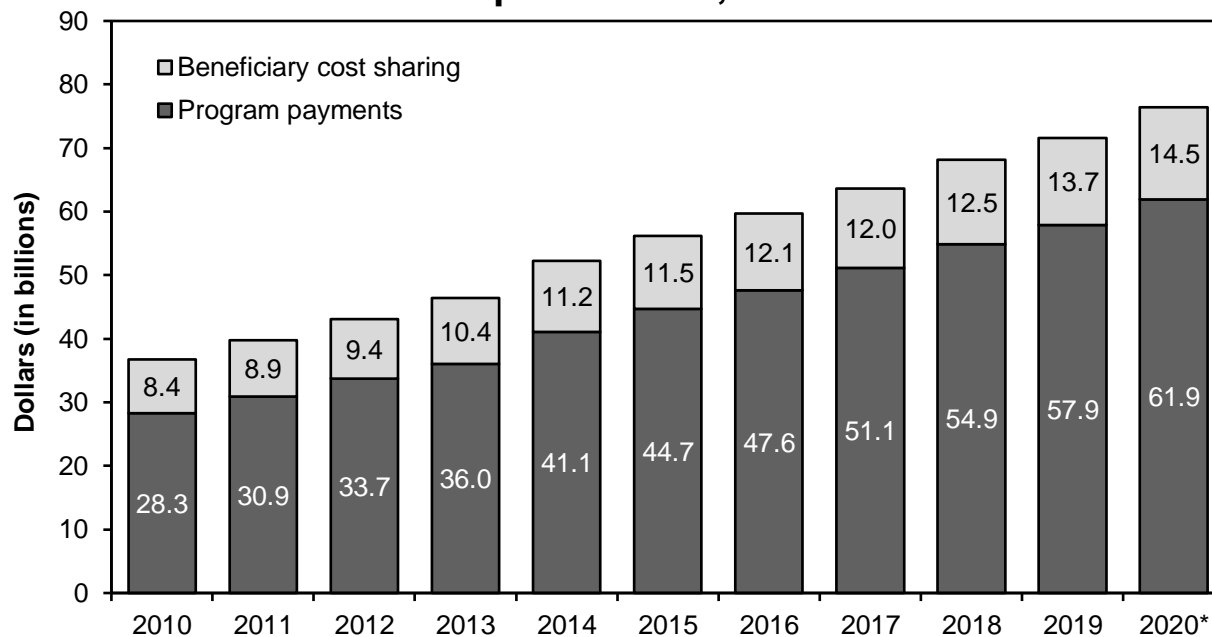


Note: Bars represent a four-quarter moving average percentage change.

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

- Medicare's fee schedule for physicians and other health professionals includes payments to clinicians that are intended to cover the relative cost of professional liability insurance (PLI) premiums. Payments for PLI account for 4.3 percent of total payments under the fee schedule (data not shown).
- Changes in the PLI premiums paid by physicians and other health professionals reflect 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).
- Premiums grew slowly from the first quarter of 2013 through the first quarter of 2014, declined from the second quarter of 2014 through the third quarter of 2018, and began increasing again in the first quarter of 2019.

Chart 7-9. Spending on hospital outpatient services covered under the outpatient PPS, 2010–2020



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, except those packaged into payment bundles.
*Estimated figures.

Source: CMS, Office of the Actuary.

- The Office of the Actuary estimates that spending under the outpatient PPS was \$76.4 billion in 2020 (\$61.9 billion in program spending, \$14.5 billion in beneficiary copayments). We estimate that the outpatient PPS accounted for about 7 percent of total Medicare program spending in 2020 (data not shown).
- From calendar year 2010 to 2020, overall spending by Medicare and beneficiaries on hospital outpatient services covered under the outpatient PPS increased by 108 percent, an average of 7.6 percent per year. The Office of the Actuary projects continued growth in total spending, averaging 10.5 percent per year from 2020 to 2022 (data not shown).
- Beneficiary cost sharing under the outpatient PPS includes the Part B deductible and coinsurance for each service. Under the outpatient PPS, beneficiary cost sharing was about 19 percent in 2020 (data not shown).

Chart 7-10. Most hospitals provide outpatient services

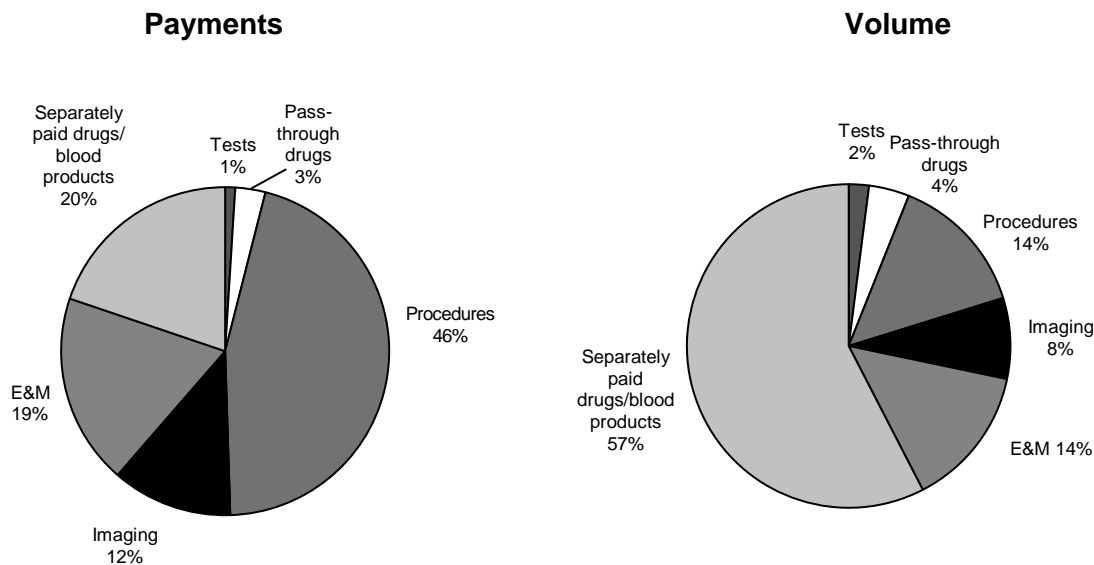
Year	Acute care hospitals	Share offering		
		Outpatient services	Outpatient surgery	Emergency services
2008	3,607	94%	87%	N/A
2010	3,518	95	90	N/A
2012	3,483	95	91	93%
2014	3,429	96	92	93
2016	3,370	96	93	93
2018	3,301	96	93	90
2019	3,245	96	93	91
2020	3,194	96	93	91

Note: N/A (not applicable). We list emergency services from 2008 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 share 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 acute care 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 has declined slowly since 2008, from 3,607 in 2008 to 3,194 in 2020.
- The share of hospitals providing outpatient services remained stable, and the share offering outpatient surgery steadily increased from 2008 through 2014 and has remained stable since then. The share offering emergency services declined slightly from 2016 to 2018.

Chart 7-11. Payments and volume of services under the Medicare hospital outpatient PPS, by type of service, 2019



Note: PPS (prospective payment system), E&M (evaluation and management). “Payments” include both program spending and beneficiary cost sharing. We grouped services into the following categories, according to the Berenson-Eggers Type of Service codes developed by CMS: evaluation and management, procedures, imaging, and tests. “Pass-through drugs” and “separately paid drugs/blood products” are classified by their payment status indicator. The percentages in both figures do not sum to 100 due to rounding.

Source: MedPAC analysis of standard analytic file of outpatient claims for 2019.

- 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 from volume. For example, in 2019, procedures accounted for 46 percent of payments but only 14 percent of volume.
- Procedures (e.g., endoscopies, surgeries, and skin and musculoskeletal procedures) accounted for the greatest share of payments for services (46 percent) in 2019, followed by separately paid drugs and blood products (20 percent), E&M services (19 percent), and imaging services (12 percent).
- Payments for separately payable drugs and blood products and pass-through drugs have increased in relation to other categories in the outpatient PPS, increasing from 15 percent of total outpatient PPS spending in 2013 (data not shown) to 23 percent of total outpatient PPS spending in 2019. Pass-through drugs are new drugs that have been approved by the Food and Drug Administration; were not paid under Medicare’s hospital outpatient payment system before January 1, 1997; and have been determined to have costs that are not insignificant in relation to the outpatient PPS payment rate for the applicable service. Statute allows drugs to have pass-through status for two to three years.

Chart 7-12. Hospital outpatient services with the highest Medicare expenditures, 2019

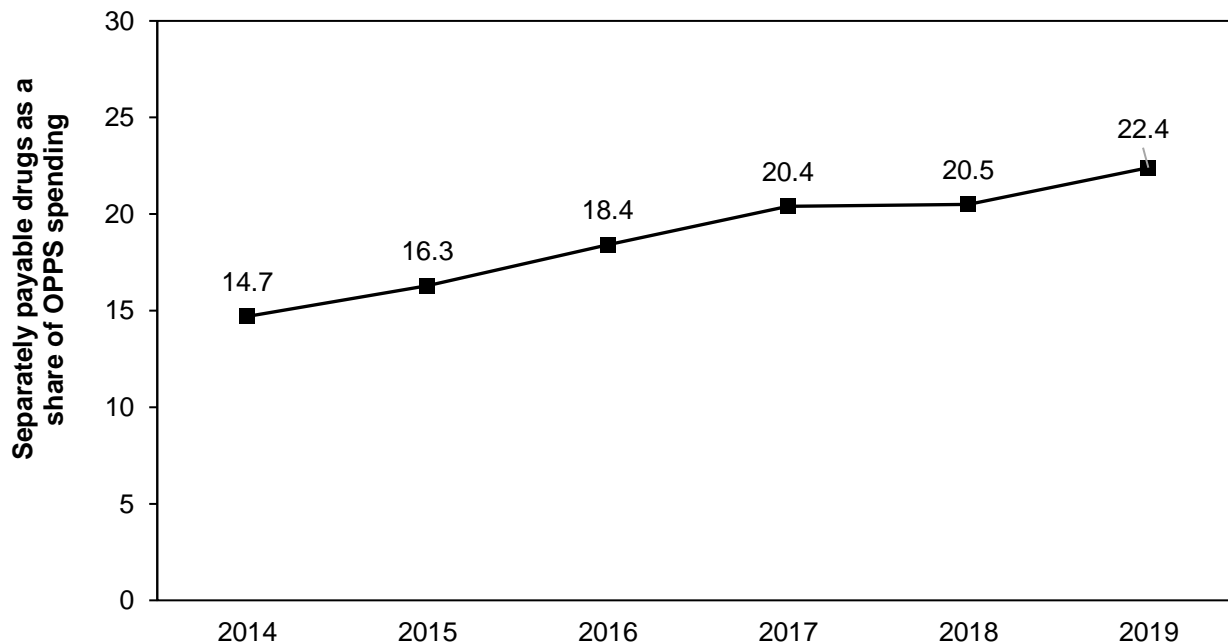
APC title	Share of Medicare expenditures	Volume (thousands)	Payment rate
Total	51%		
All emergency visits	6	12,547	\$345
Clinic visits	6	32,684	116
Comprehensive observation services	5	1,430	2,387
Level 5 musculoskeletal procedures	3	174	10,714
Level 3 endovascular procedures	2	167	9,669
Level 3 electrophysiologic procedures	2	75	19,214
Level 4 musculoskeletal procedures	2	218	5,700
Level 3 drug administration	2	6,521	187
Level 2 ICD and similar procedures	2	37	30,656
Level 3 radiation therapy	2	1,943	520
Level 1 endovascular procedures	2	357	2,810
Level 2 imaging without contrast	1	8,501	113
Level 2 imaging with contrast	1	2,441	386
Level 4 imaging without contrast	1	1,855	497
Level 2 lower GI procedures	1	1,012	980
Level 1 laparoscopy and related procedures	1	194	4,596
Level 4 endovascular procedures	1	60	15,355
Level 3 nuclear medicine and related services	1	696	1,129
Level 1 intraocular procedures	1	428	1,917
Level 1 imaging without contrast	1	3,486	231
Level 4 drug administration	1	2,518	288
Level 3 pacemaker and similar procedures	1	68	9,897
Level 1 upper GI procedures	1	955	762
Level 2 excision/biopsy/incision and drainage	1	460	1,376
Level 3 vascular procedures	1	234	2,642
Level 4 nuclear medicine and related services	1	443	1,376
Level 5 urology and related services	1	152	4,021
Average APC		600	168

Note: APC (ambulatory payment classification), ICD (implantable cardioverter-defibrillator), GI (gastrointestinal). The payment rate for "all emergency visits" is a weighted average of payment rates for 10 emergency visit APCs (not listed on this chart). The shares of payments for the 27 APC categories do not add to the total share of payments (51 percent) because of rounding. The average APC figures in the last line represent averages for all APCs.

Source: MedPAC analysis of 100 percent analytic files of outpatient claims for calendar year 2019.

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

Chart 7-13. Separately payable drugs have increased as a share of total spending in the outpatient prospective payment system, 2014–2019



Note: OPSS (outpatient prospective payment system).

Source: MedPAC analysis of hospital outpatient standard analytic claims files from 2014 through 2019.

- The OPSS packages the cost of most drugs into the payment for the related services. However, the OPSS has two programs that provide separate payment for higher cost drugs: the pass-through program, which is focused on drugs that are new to the market, and the program for separately payable non-pass-through (SPNPT) drugs, which is focused on drugs that have been established in the drug market. Pass-through drugs can hold that status for two to three years, after which they can become SPNPT drugs. Most SPNPT drugs were previously pass-through drugs.
- Separately payable drugs have become an increasingly larger share of OPSS spending, increasing from 14.7 percent in 2014 to 22.4 percent in 2019.
- The share of OPSS spending attributable to separately payable drugs increased each year from 2014 to 2019, but the increase was relatively small from 2017 to 2018. The small increase during that period was the result of a policy implemented by CMS that substantially decreased the payment rates for SPNPT drugs that hospitals obtained through the 340B Drug Pricing Program. Without that policy, we estimate that separately payable drugs would have been 22.7 percent of OPSS spending in 2018 and 24.8 percent in 2019.

Chart 7-14. Number of Medicare-certified ASCs increased by 11 percent, 2013–2019

	2013	2014	2015	2016	2017	2018	2019
Medicare payments (billions of dollars)	\$3.7	\$3.8	\$4.1	\$4.3	\$4.6	\$4.9	\$5.2
New centers (during year)	178	191	170	171	216	230	226
Closed or merged centers (during year)	120	123	109	101	101	103	84
Net total number of centers (end of year)	5,233	5,301	5,362	5,432	5,547	5,674	5,816
Net percent growth in number of centers	1.1%	1.3%	1.2%	1.3%	2.1%	2.3%	2.5%
Share of all centers that are:							
For profit	95	95	95	95	95	95	95
Nonprofit	4	4	4	4	4	4	4
Government	2	2	2	1	1	1	1
Urban	93	93	93	93	93	93	93
Rural	7	7	7	7	7	7	7

Note: ASC (ambulatory surgical center). Medicare payments include program spending and beneficiary cost sharing for ASC facility services. Some figures differ from Chart 7-14 in our 2020 data book because CMS updated the Provider of Services file. Some totals may not sum to 100 percent due to rounding.

Source: MedPAC analysis of Provider of Services file from CMS 2019. Payment data are from CMS, Office of the Actuary.

- ASCs are distinct entities that furnish ambulatory surgical services not requiring an overnight stay in a hospital. The most common ASC procedures are cataract removal with lens insertion, upper gastrointestinal endoscopy, colonoscopy, and nerve procedures.
- Total Medicare payments per fee-for-service (FFS) Medicare beneficiary for ASC services increased by approximately 6 percent per year, on average, from 2013 through 2019 (data not shown). Payments per FFS beneficiary served in an ASC grew by 4.9 percent per year during this period. From 2018 to 2019, total payments rose by 7.3 percent, and payments per beneficiary grew by 8.3 percent (per beneficiary data not shown).
- The number of Medicare-certified ASCs grew at an average annual rate of 1.8 percent from 2013 through 2019. In this same period, an annual average of 197 new facilities entered the market, while an average of 106 closed or merged with other facilities.

Chart 7-15. Between 33 and 70 low-value services were provided per 100 FFS beneficiaries in 2018; Medicare spent between \$2.4 billion and \$6.9 billion on these services

Measure	Broader version of measure			Narrower version of measure		
	Count per 100 beneficiaries	Share of beneficiaries affected	Spending (millions)	Count per 100 beneficiaries	Share of beneficiaries affected	Spending (millions)
Imaging for nonspecific low back pain	12.6	9.2%	\$263	3.5	3.2%	\$73
PSA screening at age >75 years	8.7	5.9	82	4.9	4.0	46
Colon cancer screening for older adults	6.9	6.6	412	0.2	0.2	3
Spinal injection for low back pain	6.9	3.6	1,418	3.1	1.9	633
PTH testing in early CKD	5.4	3.3	109	4.6	2.8	93
Carotid artery disease screening in asymptomatic adults	4.6	4.2	262	3.7	3.4	212
T3 level testing for patients with hypothyroidism	4.3	2.5	28	4.3	2.5	28
Preoperative chest radiography	4.0	3.6	63	0.9	0.9	15
Stress testing for stable coronary disease	3.7	3.6	1,129	0.4	0.4	132
Head imaging for uncomplicated headache	3.7	3.3	268	2.3	2.2	167
Cervical cancer screening at age >65 years	1.6	1.6	35	1.4	1.4	32
Homocysteine testing in cardiovascular disease	1.2	0.9	10	0.2	0.2	2
Head imaging for syncope	1.2	1.1	84	0.7	0.7	51
Preoperative echocardiography	0.9	0.9	78	0.3	0.3	24
Preoperative stress testing	0.6	0.6	192	0.2	0.2	61
CT for uncomplicated rhinosinusitis	0.6	0.5	45	0.2	0.2	19
Screening for carotid artery disease for syncope	0.5	0.5	30	0.4	0.4	22
Imaging for plantar fasciitis	0.5	0.4	11	0.3	0.2	4
BMD testing at frequent intervals	0.5	0.5	11	0.3	0.3	7
Vitamin D testing in absence of hypercalcemia or decreased kidney function	0.4	0.4	7	0.4	0.3	7
Cancer screening for patients with CKD on dialysis	0.3	0.3	10	0.1	0.1	1
PCI/stenting for stable coronary disease	0.3	0.3	1,435	0.1	0.1	254
Arthroscopic surgery for knee osteoarthritis	0.2	0.2	188	0.04	0.04	35
Preoperative PFT	0.2	0.2	2	0.1	0.1	1
Vertebroplasty/kyphoplasty for osteoporotic vertebral fractures	0.2	0.1	336	0.2	0.1	328
Hypercoagulability testing after DVT	0.2	0.1	5	0.1	0.05	2
IVC filter to prevent pulmonary embolism	0.1	0.1	21	0.1	0.1	21
Renal artery angioplasty/stenting	0.1	0.1	176	0.02	0.02	43
EEG for headache	0.1	0.1	4	0.03	0.03	2
Carotid endarterectomy for asymptomatic patients	0.1	0.1	145	0.02	0.02	59
Pulmonary artery catheterization in ICU	0.01	0.01	0.2	0.005	0.004	0.2
Total	70.5	35.9	6,860	33.1	21.6	2,377

(Chart continued next page)

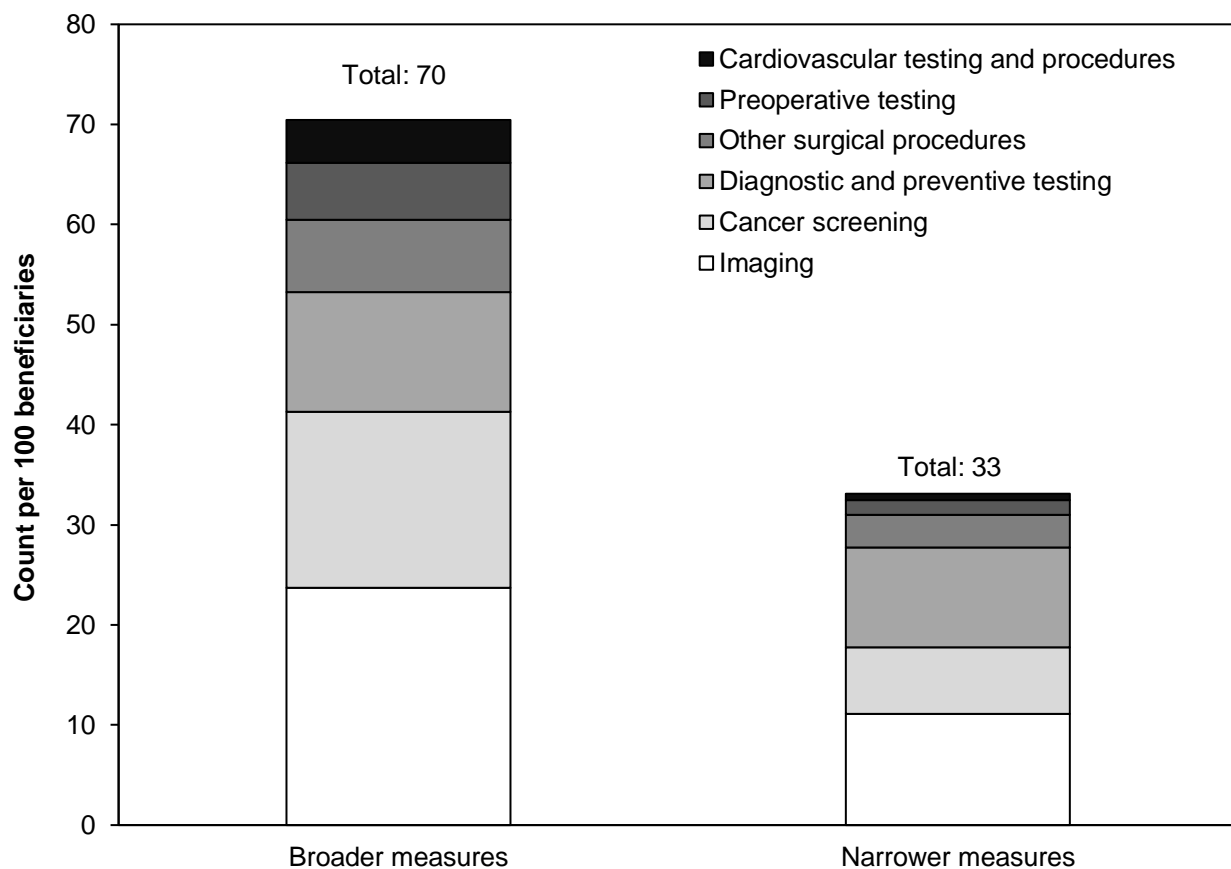
Chart 7-15. Between 33 and 70 low-value services were provided per 100 FFS beneficiaries in 2018; Medicare spent between \$2.4 billion and \$6.9 billion on these services (continued)

Note: FFS (fee-for-service), PSA (prostate-specific antigen), PTH (parathyroid hormone), CKD (chronic kidney disease), CT (computed tomography), BMD (bone mineral density), PCI (percutaneous coronary intervention), PFT (pulmonary function test), DVT (deep vein thrombosis), IVC (inferior vena cava), EEG (electroencephalography), ICU (intensive care unit). “Count” refers to the number of unique services. Numbers may not sum to totals due to rounding. The total for share of beneficiaries affected does not equal the column sum because some beneficiaries received services covered by multiple measures. “Spending” includes Medicare Part A and Part B program spending and beneficiary cost sharing for services detected by measures of low-value care. Spending is based on a standardized price for each service from 2009 that was updated to 2018. The broad and narrow version of the measure for T3 level testing for patients with hypothyroidism is the same.

Source: MedPAC analysis of 100 percent of Medicare claims using measures developed by Schwartz and colleagues (Schwartz, A. L., B. E. Landon, A. G. Elshaug, et al. 2014. Measuring low-value care in Medicare. *JAMA Internal Medicine* 174: 1067–1076; Schwartz, A. L., M. E. Chernew, B. E. Landon, et al. 2015. Changes in low-value services in year 1 of the Medicare Pioneer Accountable Care Organization Program. *JAMA Internal Medicine* 175: 1815–1825).

- Low-value care is the provision of a service that has little or no clinical benefit or care in which the risk of harm from the service outweighs its potential benefit.
- The 31 measures of low-value care in this chart were developed by a team of researchers. The measures are drawn from evidence-based lists—such as Choosing Wisely—and the medical literature. We applied these measures to 100 percent of Medicare claims data from 2018. These 31 measures do not represent *all* instances of low-value care; the actual number (and corresponding spending) may be much higher.
- The researchers developed two versions of each measure: a broader version (more sensitive, less specific) and a narrower version (less sensitive, more specific). Increasing the sensitivity of a measure captures more potentially inappropriate use but is also more likely to misclassify some appropriate use as inappropriate. Increasing a measure’s specificity leads to less misclassification of appropriate use as inappropriate at the expense of potentially missing some instances of inappropriate use.
- Based on the broader versions of the measures, our analysis found about 70 instances of low-value care per 100 beneficiaries in 2018, with about 36 percent of beneficiaries receiving at least 1 low-value service that year. Medicare spending for these services was \$6.9 billion. Based on the narrower versions of the measures, our analysis showed about 33 instances of low-value care per 100 beneficiaries, with almost 22 percent of beneficiaries receiving at least 1 low-value service. Medicare spending for these services totaled about \$2.4 billion.

Chart 7-16. Imaging and cancer screening accounted for most of the volume of low-value care in 2018

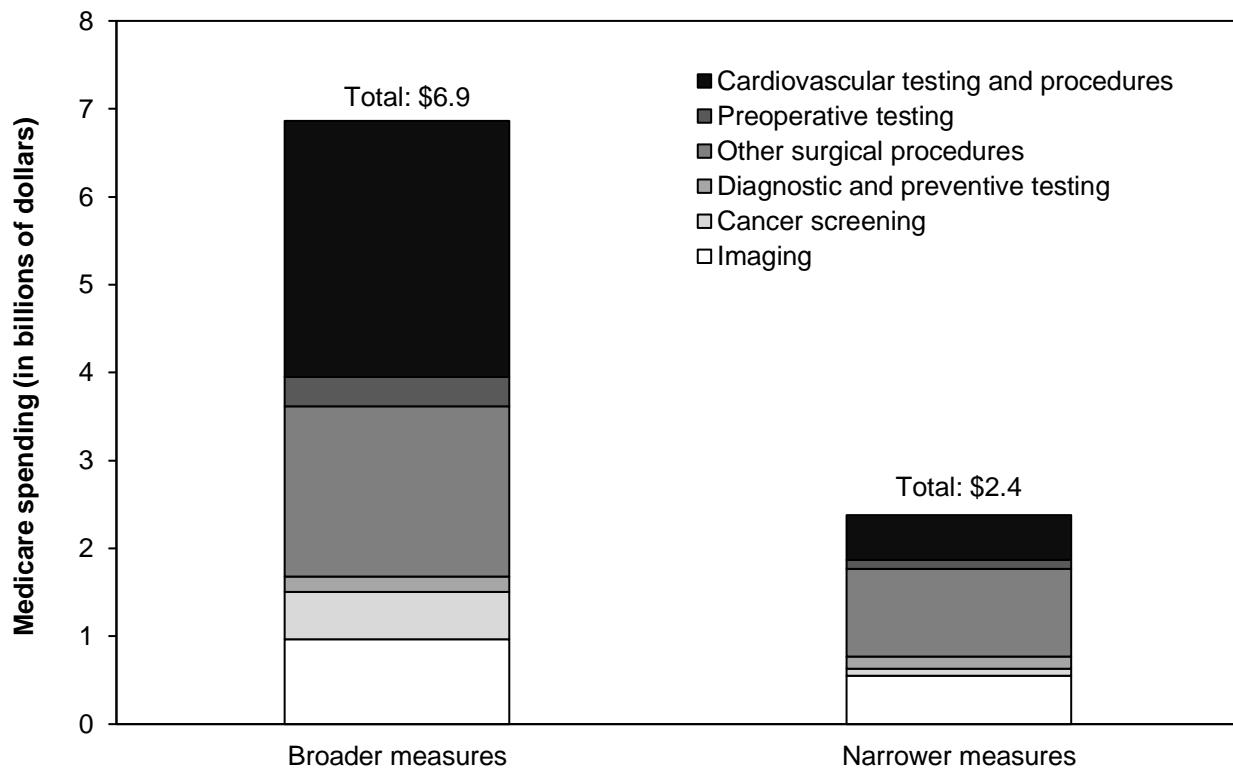


Note: “Count” refers to the number of unique services provided to fee-for-service Medicare beneficiaries.

Source: MedPAC analysis of 100 percent of Medicare claims using measures developed by Schwartz and colleagues (Schwartz, A. L., B. E. Landon, A. G. Elshaug, et al. 2014. Measuring low-value care in Medicare. *JAMA Internal Medicine* 174: 1067–1076; Schwartz, A. L., M. E. Chernew, B. E. Landon, et al. 2015. Changes in low-value services in year 1 of the Medicare Pioneer Accountable Care Organization Program. *JAMA Internal Medicine* 175: 1815–1825).

- We assigned each of the 31 measures of low-value care from Chart 7-15 to 1 of 6 clinical categories.
- Imaging and cancer screening accounted for nearly 60 percent of the volume of low-value care per 100 beneficiaries using the broader versions of the measures. The “imaging” category includes back imaging for patients with nonspecific low back pain and screening for carotid artery disease in asymptomatic adults. The “cancer screening” category includes prostate-specific antigen testing for men ages 75 or older and colorectal cancer screening for older adults.
- Using the narrower versions of the measures, imaging and diagnostic and preventive testing accounted for 64 percent of the volume of low-value care per 100 beneficiaries.

Chart 7-17. Cardiovascular testing and procedures, other surgical procedures, and imaging accounted for most of spending on low-value care in 2018



Note: “Spending” includes Medicare Part A and Part B program spending and beneficiary cost sharing for services detected by measures of low-value care. To estimate spending, we used standardized prices to adjust for regional differences in payment rates. The standardized price is the median payment amount per service in 2009, adjusted for the increase in payment rates between 2009 and 2018. This method was developed by Schwartz et al. (2014).

Source: MedPAC analysis of 100 percent of Medicare claims using measures developed by Schwartz and colleagues (Schwartz, A. L., B. E. Landon, A. G. Elshaug, et al. 2014. Measuring low-value care in Medicare. *JAMA Internal Medicine* 174: 1067–1076; Schwartz, A. L., M. E. Chernew, B. E. Landon, et al. 2015. Changes in low-value services in year 1 of the Medicare Pioneer Accountable Care Organization Program. *JAMA Internal Medicine* 175: 1815–1825).

- Cardiovascular testing and procedures and other surgical procedures accounted for 71 percent of total spending on low-value care using the broader measures. Other surgical procedures and imaging made up nearly two-thirds of spending on low-value care using the narrower measures.
- The “cardiovascular testing and procedures” category includes stress testing for stable coronary disease and percutaneous coronary intervention with balloon angioplasty or stent placement for stable coronary disease. The “other surgical procedures” category includes spinal injection for low back pain and arthroscopic surgery for knee osteoarthritis. The “imaging” category includes back imaging for patients with nonspecific low back pain and screening for carotid artery disease in asymptomatic adults.
- The spending estimates probably understate actual spending on low-value care because they do not include the cost of downstream services (e.g., follow-up tests and procedures) that may result from the initial low-value service. Also, we are not capturing *all* low-value care through these 31 measures.

SECTION

8

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

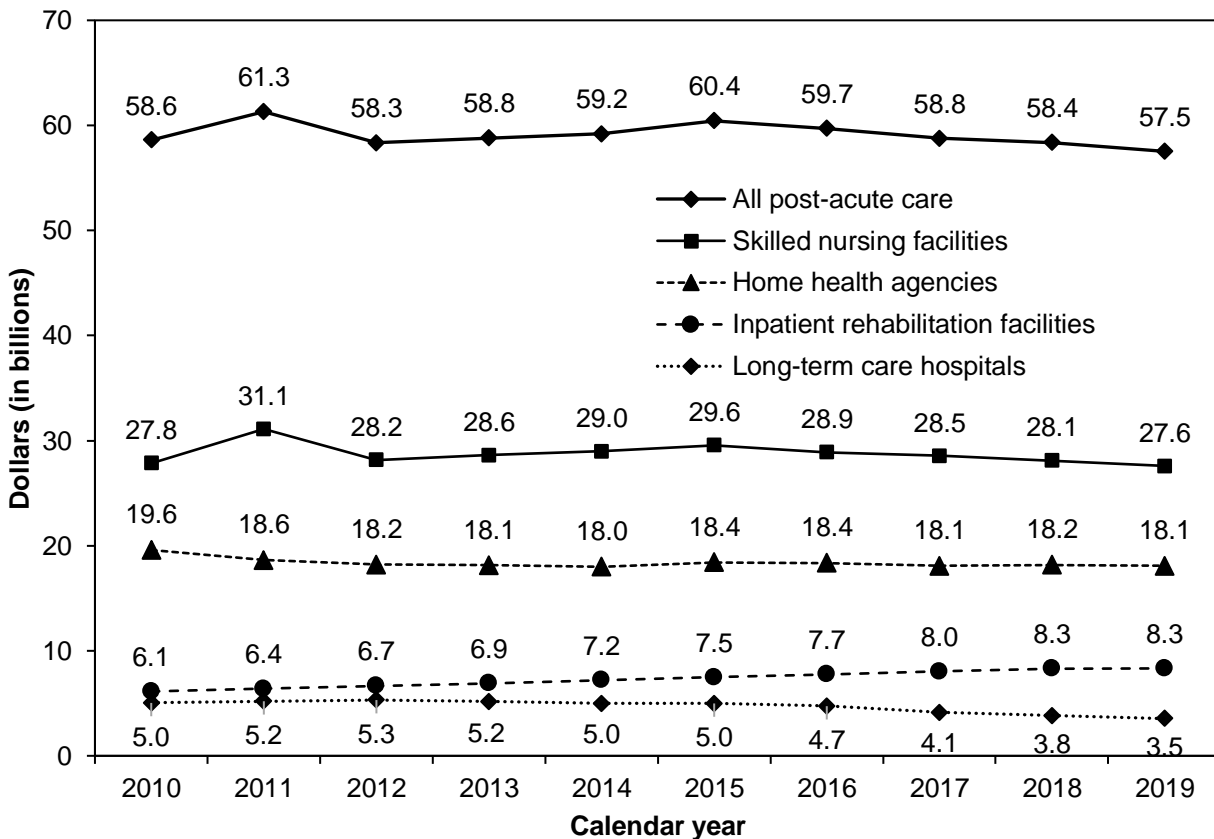
Chart 8-1. The number of post-acute care providers decreased slightly in 2020

	2016	2017	2018	2019	2020	Average annual percent change 2016–2020	Percent change 2019–2020
Home health agencies	12,342	11,964	11,701	11,571	11,456	–1.7	–1.0
Inpatient rehabilitation facilities	1,188	1,178	1,170	1,152	1,113	–1.5	–3.4
Long-term care hospitals	423	411	386	371	351	–4.6	–5.4
Skilled nursing facilities	15,344	15,377	15,350	15,297	15,156	–0.3	–0.9

Source: MedPAC analysis of active provider counts from CMS Survey and Certification’s Quality, Certification, and Oversight reports (skilled nursing facilities and home health agencies) and CMS Provider of Services files (inpatient rehabilitation facilities and long-term care hospitals).

- The number of home health agencies has been declining since 2013 after several years of substantial growth (data not shown). The decline in agencies was concentrated in Texas and Florida, two states that saw considerable growth after the implementation of the home health prospective payment system in October 2000.
- The supply of inpatient rehabilitation facilities (IRFs) has been declining slightly since 2016. Most IRFs are distinct units in acute care hospitals; about one-quarter are freestanding facilities. However, because freestanding IRFs tend to have more beds, they account for about half of Medicare discharges from IRFs.
- After peaking in 2012 (data not shown), the number of long-term care hospitals (LTCHs) has decreased. The decline became more rapid after the implementation of a dual payment-rate system that reduced payments for certain Medicare discharges from LTCHs beginning in fiscal year 2016.
- The total number of skilled nursing facilities rose between 2016 and 2017, then decreased less than 1 percent per year between 2017 and 2019.

Chart 8-2. Medicare fee-for-service spending for post-acute care was relatively stable from 2010 to 2019



Note: These calendar year-incurred data represent program spending only; they do not include beneficiary cost sharing.

Source: CMS Office of the Actuary 2021.

- Aggregate fee-for-service (FFS) spending on post-acute care (PAC) has remained stable since 2012, in part because of expanded enrollment in managed care under Medicare Advantage (Medicare Advantage spending is not included in this chart). However, spending growth has varied by PAC sector.
- 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). Once CMS established that the adjustment it made was too large, it lowered the adjustment, and spending dropped in 2012. Overall, spending on SNF care and home health care was relatively stable between 2012 and 2019, decreasing slightly in the latter part of the period.
- FFS spending on inpatient rehabilitation facilities (IRFs) has increased steadily over the past decade. In all, spending on IRFs increased 36 percent between 2010 and 2019.
- FFS spending on long-term care hospitals (LTCHs) has decreased by 29 percent since 2015, largely due to the implementation of the dual payment-rate system that reduced payments for certain LTCH cases.

Chart 8-3. Freestanding SNFs and for-profit SNFs accounted for the majority of facilities, Medicare stays, and Medicare spending in 2019

Type of SNF	Facilities	Medicare-covered stays	Medicare payments (billions)
Totals	14,923	2,069,107	\$25.4
Freestanding	96%	96%	97%
Hospital based	4	4	3
Urban	73	84	85
Rural	27	16	15
For profit	71	71	75
Nonprofit	23	25	22
Government	6	4	3

Note: SNF (skilled nursing facility). The spending amount included here is lower than that reported by the Office of the Actuary, and the count of SNFs is slightly lower than what is reported in CMS Survey and Certification's Quality, Certification, and Oversight reports.

Source: MedPAC analysis of the Provider of Services and Medicare Provider Analysis and Review files from CMS.

- In 2019, freestanding facilities accounted for 96 percent of SNF stays and 97 percent of Medicare's payments to SNFs.
- Urban facilities accounted for 73 percent of facilities, 84 percent of stays, and 85 percent of Medicare payments in 2019.
- In 2019, for-profit facilities accounted for 71 percent of facilities and stays and 75 percent of Medicare payments.

Chart 8-4. SNF admissions and stays continued to decline in 2019

Volume measure	2014	2016	2018	2019	Percent change 2018–2019
Covered admissions per 1,000 FFS beneficiaries	68.3	65.9	62.5	59.5	–4.8%
Covered days per 1,000 FFS beneficiaries	1,843	1,693	1,559	1,475	–5.4
Covered days per admission	27.0	25.7	25.0	24.8	–0.8

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, 2021.

- In 2019, 4 percent of beneficiaries enrolled in FFS Medicare used SNF services (data not shown).
- Between 2018 and 2019, covered SNF admissions per 1,000 FFS beneficiaries decreased 4.8 percent. The decline is consistent with a decline in FFS per capita inpatient hospital stays that were three days or longer and therefore qualified for Medicare coverage of SNF care (data not shown).
- During the same period, covered days per admission declined 0.8 percent to 24.8 days, so there were fewer covered days per 1,000 beneficiaries.

Chart 8-5. Freestanding SNF Medicare margins remained high in 2019

	2012	2014	2016	2018	2019
All	14.1%	12.8%	11.6%	10.8%	11.3%
Rural	13.3	10.8	9.7	8.5	9.6
Urban	14.2	13.1	11.9	11.2	11.6
Nonprofit	5.7	4.3	2.6	0.8	0.9
For profit	16.3	15.1	14.1	13.5	14.3

Note: SNF (skilled nursing facility).

Source: MedPAC analysis of freestanding SNF cost reports 2012–2019.

- The aggregate Medicare margin for freestanding SNFs in 2019 exceeded 10 percent for the 20th consecutive year (not all years are shown). After reaching over 21 percent in 2011 (data not shown), the margins have declined primarily because current law requires annual market basket increases to payments to be offset by a productivity adjustment. The Medicare margin in 2019 increased from 2018 because SNFs kept their cost growth below the average increase in per day payments.
- In 2019, on average, urban facilities had higher Medicare margins than rural facilities. For-profit SNFs had considerably higher Medicare margins than nonprofit SNFs, reflecting their larger size and lower cost growth.
- In 2019, the average total margin (the margin across all payers and all lines of business) for freestanding facilities was 0.6 percent, up from –0.3 percent in 2018 (data not shown).

Chart 8-6. Cost and payment differences explain variation in Medicare margins for freestanding SNFs in 2019

Characteristic	Highest margin quartile (n = 3,256)	Lowest margin quartile (n = 3,255)	Ratio of highest quartile to lowest quartile
Cost measures			
Standardized cost per day	\$281	\$424	0.66
Standardized cost per discharge	\$11,771	\$14,926	0.79
Average daily census (patients)	89	63	1.40
Revenue measures			
Medicare payment per day	\$544	\$470	1.16
Medicare payment per discharge	\$23,353	\$15,820	1.48
Share of days in intensive therapy	89%	81%	1.10
Share of medically complex days	3	3	1.00
Medicare share of facility revenue	21	11	1.91
Average length of stay (days)	42	34	1.25
Medicaid share of days	68	56	1.20
Patient characteristics			
Case-mix index	1.41	1.32	1.07
Share of dual-eligible beneficiaries	53%	34%	1.56
Share of minority beneficiaries	15	5	3.00
Share of very old beneficiaries	25	33	0.76
Facility mix			
Share for profit	84%	53%	N/A
Share urban	79	71	1.11

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 cost per day" includes Medicare costs adjusted for differences in area wages and the case mix (using the nursing component's relative weights) of Medicare beneficiaries. "Days in intensive therapy" are days classified into ultra-high and very high rehabilitation case-mix groups. "Very old beneficiaries" are 85 years or older. "Medically complex days" are those assigned to clinically complex or special-care case-mix groups. Quartile figures presented in the table are rounded, but the ratio column was calculated using unrounded data.

Source: MedPAC analysis of freestanding SNF claims and cost reports 2019.

- Medicare margins varied widely across freestanding SNFs. One-quarter of SNFs had Medicare margins at or below 0.33 percent, and one-quarter of facilities had Medicare margins at or above 21.4 percent (data not shown).
- High-margin SNFs had lower costs per day (34 percent lower costs than low-margin SNFs), after adjusting for wage and case-mix differences, and higher payment per day (16 percent).
- 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. SNFs' quality measures improved slightly between 2015 and 2019

Measure	2015	2017	2018	2019	Average annual change	
					2015–2019	2018–2019
Successful discharge to the community						
All SNFs	43.9%	44.4%	44.3%	45.8%	1.1%	3.2%
For profit	43.0	43.6	43.5	44.8	1.0	3.0
Nonprofit	47.2	47.6	47.4	48.7	0.8	2.7
Freestanding	43.4	44.0	44.0	45.4	1.1	3.3
Hospital based	52.9	53.8	52.8	53.8	0.4	2.0
Hospitalizations						
All SNFs	15.1	14.4	14.1	13.7	–2.4	–3.1
For profit	15.7	14.9	14.6	14.2	–2.4	–2.6
Nonprofit	13.3	12.9	12.7	12.3	–2.0	–2.9
Freestanding	15.3	14.6	14.3	13.8	–2.5	–3.0
Hospital based	10.6	10.2	10.6	10.0	–1.5	–5.4

Note: SNF (skilled nursing facility). “Successful discharge to the community” includes beneficiaries discharged to the community (including those discharged to the same nursing home they were in before) who did not have an unplanned hospitalization or die in the 30 days after discharge. The hospitalization measure captures all unplanned hospital admissions, readmissions, and outpatient observation stays that occurred during the SNF stay. Both measures are uniformly defined and risk adjusted across SNFs, home health agencies, inpatient rehabilitation facilities, and long-term care hospitals. Providers with at least 60 stays in the year were included in calculating the average facility rate. The “All SNFs” category includes the performance of government-owned SNFs, which are not displayed separately in the table. The average annual changes were calculate using unrounded annual rates.

Source: MedPAC analysis of SNF claims and linked inpatient hospital stays 2015 through 2019 for fee-for-service beneficiaries.

- Rates of successful discharge to the community improved between 2015 and 2019. A greater share of beneficiaries was discharged to the community (45.8 percent compared with 43.9 percent). This pattern held across ownership groups and facility type.
- The rates of hospitalization during the SNF stay improved (decreased) between 2015 and 2019. A smaller share of beneficiaries was hospitalized during a SNF stay (13.7 percent compared with 15.1 percent). This pattern held across ownership groups and facility types.

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

	2011	2019	Percent change 2011–2019	
			Annual average	Cumulative
Number of users (in millions)	3.4	3.3	–0.5%	–4.3%
Share of FFS beneficiaries who used home health care	9.4%	8.6%	–1.1	–8.7
Episodes (in millions)	6.8	6.1	–1.3	–11.0
Episodes per home health patient	2.0	1.9	–0.9	–7.0
Visits per home health episode	17.2	16.4	–0.6	–4.7
Visits per home health patient	34.2	30.4	–1.3	–11.1
Average payment per episode	\$2,916	\$3,167	1.0	8.6

Note: FFS (fee-for-service). Yearly figures presented in the table are rounded, but the percent-change columns were calculated using unrounded data. Average payment per episode excludes payments for low-use episodes (those with fewer than five visits). Other measures of utilization include low-use episodes.

Source: MedPAC analysis of the home health standard analytic file from CMS.

- Between 2011 and 2019, episode volume declined by 11.0 percent and the number of users dropped 4.3 percent.
- The number of visits per patient decreased between 2011 and 2019. This decline was a consequence of two other utilization declines in this period: a decline in average number of episodes per home health patient and a decline in the average number of visits per episode.
- The average payment per full episode was \$3,167 in 2019, an increase of 8.6 percent relative to 2011. Throughout the 2011 to 2019 period, Medicare implemented a number of policies to reduce or slow the growth of home health payments. However, despite these reductions, the margins of freestanding home health agencies averaged in excess of 15 percent in this period, indicating that payments remain well in excess of costs despite these policies (data not shown).

Chart 8-9. Most home health episodes are not preceded by hospitalization or PAC stay

	Number of episodes (in millions)		Percent change 2011–2019	
	2011	2019	Annual average	Cumulative
Episodes preceded by a hospitalization or PAC stay	2.2	2.1	–0.4%	–3.3%
Episodes not preceded by a hospitalization or PAC stay	4.6	4.0	–1.5	–12.8
Share of episodes not preceded by a hospitalization or PAC stay	68%	66%	–0.3	–2.7
Total	6.8	6.1	–1.3	–11.1

Note: PAC (post-acute care). “Episodes preceded by a hospitalization or PAC stay” refers to episodes that occurred less than 15 days after a stay in a hospital (including a long-term care hospital), skilled nursing facility, or inpatient rehabilitation facility. “Episodes not preceded by a hospitalization or PAC stay” refers to episodes for which there was no hospitalization or PAC stay in the previous 15 days.

Source: MedPAC analysis of 2019 home health standard analytic file, 2019 Medicare Provider and Analysis Review file, and 2019 skilled nursing facility standard analytic file from CMS.

- Most home health episodes are not preceded by a hospitalization or institutional PAC stay, and these episodes accounted for about two-thirds of PAC stays in 2011 through 2019. During this period, the number of home health episodes not preceded by a hospitalization or PAC stay declined 12.8 percent, while the number of episodes preceded by a hospitalization or PAC stay decreased 3.3 percent.
- Before the 2011 through 2019 period, there was large growth in the number and share of episodes not preceded by a hospital or institutional PAC stay (data not shown). In 2001, episodes not preceded by a hospital or institutional PAC stay accounted for 53 percent of volume; by 2011, those episodes had increased to 67 percent of total episodes. Over the same period, the share of episodes preceded by a hospitalization or institutional PAC stay declined from 47 percent in 2001 to 33 percent in 2011 (data not shown). The shares of episode volume accounted for by these two categories have not changed substantially since 2011.
- Beneficiaries for whom the majority of home health episodes were preceded by a hospitalization or PAC stay had different characteristics from community-admitted beneficiaries (those who had no prior hospitalization or PAC stay) (data not shown). Community-admitted beneficiaries were more likely to be dually eligible for Medicare and Medicaid, to have more home health episodes, and to have more episodes with a high share of home health aide services compared with other home health users coming from a hospitalization or other PAC stay. Community-admitted users generally had slightly fewer chronic conditions, tended to be older, and were more likely to have dementia or Alzheimer’s disease.

Chart 8-10. Medicare margins for freestanding home health agencies, 2018 and 2019

	2018	2019	Share of agencies 2019
All	15.3%	15.8%	100%
Geography			
Mostly urban	15.7	16.1	83
Mostly rural	12.6	13.9	17
Type of control			
For profit	16.8	17.2	87
Nonprofit	10.1	11.0	13
Volume quintile (lowest to highest)			
First	10.4	9.8	20
Second	11.0	11.5	20
Third	13.8	13.3	20
Fourth	14.4	14.3	20
Fifth	16.7	17.4	20

Note: Agencies are characterized as urban or rural based on the residence of the majority of their patients.

Source: MedPAC analysis of 2018–2019 Medicare Cost Report files from CMS.

- In 2019, freestanding home health agencies (HHAs) (87 percent of all HHAs) had an aggregate margin of 15.8 percent. HHAs that served mostly urban patients in 2019 had an aggregate margin of 16.1 percent; HHAs that served mostly rural patients had an aggregate margin of 13.9 percent. The 2019 margin is consistent with the historically high margins the home health industry has experienced since the prospective payment system (PPS) was implemented in 2000. The margins from 2001 to 2018 averaged 16.2 percent (data not shown), indicating that most agencies have been paid well in excess of their costs under the PPS.
- For-profit agencies in 2019 had an average margin of 17.2 percent, and nonprofit agencies had an average margin of 11.0 percent.
- Agencies with higher episode volumes had higher margins. The agencies in the lowest volume quintile in 2019 had an aggregate margin of 9.8 percent, while those in the highest quintile had an aggregate margin of 17.4 percent.

Chart 8-11. Since 2015, home health agencies have reported a modest improvement in the rate of successful discharge from home health care to the community, but the rate of hospitalization has increased

Measure	2015	2016	2017	2018	2019
Successful discharge to community	68.3%	69.2%	69.6%	70.4%	72.2%
Hospitalization during home health stay	20.6%	20.8%	21.4%	21.5%	21.4%

Note: "Successful discharge to the community" includes beneficiaries discharged to the community (including those discharged to the same nursing home) who did not have an unplanned hospitalization or die in the 30 days after discharge. The hospitalization measure captures all unplanned hospital admissions and readmissions and outpatient observation stays that occur during the stay. Both measures are uniformly defined and risk adjusted across the four post-acute care settings. Providers with at least 60 stays in the year (the minimum count to meet a reliability threshold of 0.7) were included in calculating the average facility rate.

Source: MedPAC analysis of Medicare Provider Analysis and Review and home health standard analytic files from CMS.

- Over the five years between 2015 and 2019, the share of patients successfully discharged from home health care to the community rose from 68.3 percent to 72.2 percent (higher rates indicate better performance). In this period, the share of patients hospitalized during their care increased slightly from 20.6 percent to 21.4 percent (higher rates indicate worse performance).
- In general, hospital-based home health agencies (HHAs), HHAs located in urban areas, and nonprofit HHAs performed better than their counterparts on these measures (data not shown). Performance varied across providers; for example, the HHA at the 25th percentile of the distribution for hospitalization had a rate of 17.3 percent, while the agency at the 75th had a rate of 25.4 percent.

Chart 8-12. Number of FFS IRF cases increased in 2019

	2010	2015	2018	2019	Average annual percent change 2010–2019	Percent change 2018–2019
Number of IRF cases	365,095	393,475	408,038	409,059	1.3%	0.3%
Cases per 10,000 FFS beneficiaries	101.3	103.4	105.7	106.9	0.6	1.6
Payment per case	\$16,814	\$18,527	\$20,124	\$20,417	2.2	1.5
Average length of stay (in days)	13.1	12.7	12.7	12.6	–0.4	–0.5

Note: FFS (fee-for-service), IRF (inpatient rehabilitation facility). Numbers of cases reflect Medicare FFS utilization only. Yearly figures presented in the table are rounded, but the percent-change columns were calculated using unrounded data.

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

- After a period of relative stability from 2015 to 2017, the number of Medicare FFS cases increased 3.0 percent between 2017 and 2018, growing to about 408,000 cases in 2018 (not all data shown). From 2018 to 2019, the number of cases grew slightly by 0.3 percent to about 409,000 cases.
- In 2019, the number of IRF cases per 10,000 FFS beneficiaries grew to 106.9, up 1.6 percent from the previous year. Relatively few Medicare beneficiaries use IRF services because, to qualify for Medicare coverage, IRF patients must be able to tolerate and benefit from rehabilitation therapy that is intensive, which is usually interpreted to mean at least three hours of therapy a day for at least five days a week. Yet, compared with all Medicare beneficiaries, those admitted to IRFs in 2019 were disproportionately over age 85 (data not shown).
- With the increase in the number of IRF cases per FFS beneficiary, FFS Medicare’s share of IRF discharges remains high at 58 percent of total discharges (data not shown).
- From 2018 to 2019, the average length of stay in an IRF decreased slightly, by 0.5 percent, to 12.6 days.

Chart 8-13. Most common types of FFS inpatient rehabilitation facility cases, 2019

Type of case	Share of cases
Stroke	19.8%
Other neurological conditions	14.4
Debility	12.3
Brain injury	11.0
Fracture of the lower extremity	10.0
Other orthopedic conditions	8.1
Cardiac conditions	6.1
Spinal cord injury	4.9
Major joint replacement of lower extremity	3.7
All other	10.0

Note: FFS (fee-for-service). “Other neurological conditions” includes multiple sclerosis, Parkinson’s disease, polyneuropathy, and neuromuscular disorders. “Fracture of the lower extremity” includes hip, pelvis, and femur fractures. Patients with debility have generalized deconditioning not attributable to other conditions. “Other orthopedic conditions” excludes fractures of the hip, pelvis, and femur and hip and knee replacements. “All other” includes conditions such as amputations, arthritis, and pain syndrome. All Medicare FFS inpatient rehabilitation facility cases with valid patient assessment information were included in this analysis.

Source: MedPAC analysis of Inpatient Rehabilitation Facility–Patient Assessment Instrument data from CMS.

- In 2019, the most frequently occurring case type among FFS beneficiaries admitted to inpatient rehabilitation facilities (IRFs) was stroke, which accounted for 19.8 percent of Medicare FFS cases.
- Between 2018 and 2019, we observed disproportionate growth in the number of cases with debility: The share of these cases rose from 11.6 percent to 12.3 percent of FFS IRF cases (2018 data not shown).
- The distribution of case types differs by type of IRF (data not shown). For example, in 2019, only 16 percent of cases in freestanding for-profit IRFs were admitted for rehabilitation following a stroke, compared with 26 percent of cases in hospital-based nonprofit IRFs. Likewise, 20 percent of cases in freestanding for-profit IRFs were admitted with “other neurological conditions,” about twice the share admitted to hospital-based nonprofit IRFs. Cases with other orthopedic conditions also made up a higher share of cases in freestanding for-profit facilities than in all other IRFs.

Chart 8-14. Inpatient rehabilitation facilities' Medicare margins by type of facility, 2010–2019

	2010	2012	2014	2016	2017	2018	2019
All IRFs	8.6%	11.2%	12.2%	13.3%	13.9%	14.7%	14.3%
Hospital based	-0.5	0.7	0.6	0.9	1.5	2.5	2.1
Freestanding	21.4	24.0	25.2	25.9	25.6	25.4	24.6
Urban	9.0	11.6	12.6	13.6	14.2	15.0	14.7
Rural	4.9	6.7	6.5	9.2	8.4	10.1	8.6
Nonprofit	2.1	2.1	1.7	1.6	2.1	2.4	1.2
For profit	19.6	23.1	23.9	24.6	24.3	24.7	24.2

Note: IRF (inpatient rehabilitation facility).

Source: MedPAC analysis of cost report data from CMS.

- In 2019, the aggregate IRF Medicare margin decreased slightly to 14.3 percent.
- Margins varied by ownership, with for-profit IRFs having substantially higher margins. At the same time, Medicare margins in freestanding IRFs far exceeded those of hospital-based facilities.
- Nevertheless, one-quarter of hospital-based IRFs had Medicare margins greater than 12 percent (data not shown), indicating that many hospitals can manage their IRF units profitably. Further, despite comparatively low average margins in hospital-based IRFs, evidence suggests that these units make a positive financial contribution to their parent hospitals. For example, aggregate inpatient Medicare margins for hospitals are consistently higher for hospitals with IRF units versus hospitals without IRF units (1.0 percentage point higher in 2019; data not shown).

Chart 8-15. Low standardized costs led to high margins for both hospital-based and freestanding IRFs, 2019

Characteristic	Lowest cost quartile	Highest cost quartile
Median cost per discharge		
All	\$12,162	\$21,593
Hospital based	12,717	21,648
Freestanding	11,803	21,109
Median Medicare margin		
All	29.6%	-19.7%
Hospital based	25.4	-19.8
Freestanding	31.2	-19.0
Median		
Number of beds	50	18
Occupancy rate	76%	55%
Share of facilities in the quartile that are:		
Hospital based	35%	94%
Freestanding	65	6
Nonprofit	24	71
For profit	72	14
Government	4	15
Urban	96	74
Rural	4	26

Note: IRF (inpatient rehabilitation facility). Cost per discharge is standardized for differences in wages across geographic areas, differences in case mix across providers, and differences across providers in the prevalence of high-cost outliers, short-stay outliers, and transfer cases.

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

- IRFs with the lowest standardized costs (those in the lowest cost quartile) had a median standardized cost per discharge that was 44 percent less than that of the IRFs with the highest standardized costs (those in the highest cost quartile).
- IRFs with the lowest costs tended to be larger: The median number of beds was 50 in the lowest cost quartile compared with 18 in the highest cost quartile. In addition, IRFs with the lowest costs had a higher median occupancy rate (76 percent vs. 55 percent, respectively). These results suggest that low-cost IRFs benefit from economies of scale.
- Low-cost IRFs were disproportionately freestanding and for profit. Still, 35 percent of IRFs in the lowest cost quartile were hospital based and 24 percent were nonprofit. By contrast, in the highest cost quartile, 94 percent were hospital based and 71 percent were nonprofit.

Chart 8-16. Risk-adjusted quality indicators for IRFs held steady or improved slightly from 2015 to 2019

Measure	2015	2016	2017	2018	2019
All-condition hospitalizations within an IRF stay	7.9%	7.7%	7.9%	7.7%	7.8%
Successful discharge to community	64.6	64.6	64.8	65.1	65.5

Note: IRF (inpatient rehabilitation facility). The all-condition hospitalization measure captures all unplanned hospital admissions and readmissions and outpatient observation stays that occur during the stay. Successful discharge to the community includes beneficiaries discharged to the community (including those discharged to the same nursing home) who did not have an unplanned hospitalization or die in the 30 days after discharge. Both measures are uniformly defined and risk adjusted across the four post-acute care settings. Providers with at least 60 stays in the year (the minimum count to meet a reliability of 0.7) were included in calculating the average facility rate. High rates of hospitalizations within a stay indicate worse quality. High rates of successful discharge to the community indicate better quality.

Source: Analysis of Medicare claims data and Inpatient Rehabilitation Facility–Patient Assessment Instrument data from CMS.

- From 2015 through 2019, the two quality measures we examined were steady or improved.
- The national average rate of risk-adjusted all-condition hospitalizations within an IRF stay slightly declined from 7.9 percent in 2015 to 7.8 percent in 2019 (lower rates are better). The national average rate of risk-adjusted successful discharge to community improved slightly from 64.6 percent in 2015 to 65.5 percent in 2019.

Chart 8-17. Twenty-five MS–LTC–DRGs accounted for more than 70 percent of LTCH discharges in 2019

MS–LTC –DRG	Description	Discharges	Share of cases
189	Pulmonary edema and respiratory failure	18,650	20.5%
207	Respiratory system diagnosis with ventilator support 96+ hours	11,995	13.2
871	Septicemia without ventilator support 96+ hours with MCC	4,999	5.5
208	Respiratory system diagnosis with ventilator support <96 hours	2,464	2.7
166	Other respiratory system OR procedures with MCC	2,092	2.3
949	Aftercare with CC/MCC	1,983	2.2
981	Extensive OR procedure unrelated to principal diagnosis with MCC	1,788	1.9
177	Respiratory infections and inflammations with MCC	1,709	1.9
539	Osteomyelitis with MCC	1,630	1.8
291	Heart failure and shock with MCC	1,508	1.7
682	Renal failure with MCC	1,508	1.7
4	Tracheostomy with ventilator support 96+ hours or primary diagnosis except face, mouth, and neck without major OR	1,315	1.4
314	Other circulatory system diagnoses with MCC	1,268	1.4
592	Skin ulcers with MCC	1,181	1.3
559	Aftercare, musculoskeletal system and connective tissue with MCC	1,153	1.3
862	Postoperative and post-traumatic infections with MCC	1,132	1.2
919	Complications of treatment with MCC	1,112	1.2
853	Infectious and parasitic diseases with OR procedure with MCC	982	1.1
637	Diabetes with MCC	935	1.0
870	Septicemia with ventilator support 96+ hours	921	1.0
638	Diabetes with CC	860	0.9
56	Degenerative nervous system disorders with MCC	834	0.9
560	Aftercare, musculoskeletal system and connective tissue with CC	764	0.8
689	Kidney and urinary tract infections with MCC	727	0.8
193	Simple pneumonia and pleurisy with MCC	708	0.8
371	Major gastrointestinal disorders and peritoneal infections with MCC	708	0.8
	Top 25 MS–LTC–DRGs	64,926	71.2
	Total	91,147	100.0

Note: MS–LTC–DRG (Medicare severity long-term care diagnosis related group), LTCH (long-term care hospital), MCC (major complication or comorbidity), OR (operating room), CC (complication or comorbidity). MS–LTC–DRGs are the case-mix system for LTCHs. Shares for each MS–LTC–DRGs presented in the table are rounded, but the sum of the top 25 was calculated using unrounded values.

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 2019, the top 25 MS–LTC–DRGs accounted for over 71 percent of LTCH Medicare cases.
- Consistent with 2016 through 2018, the two most frequent diagnoses in LTCHs in 2019 were pulmonary edema and respiratory failure and a respiratory system diagnosis with ventilator support for more than 96 hours.
- Respiratory conditions continue to grow as a share of LTCH cases. More than 43 percent of all cases were respiratory conditions in 2019, an increase of 3 percentage points over 2018.

Chart 8-18. Total Medicare FFS LTCH cases decreased by over 10 percent, and cases meeting the LTCH-qualifying criteria decreased by 2 percent from 2016 and 2019

		2016	2017	2018	2019	Average annual change 2016–2019
Cases	All	125,586	116,424	102,288	91,147	–10.1%
	Meeting criteria	72,318	74,666	71,916	67,987	–2.0
	Share meeting criteria	58%	64%	70%	75%	8.6
Cases per 10,000 FFS beneficiaries	All	32.5	30.1	26.5	23.8	–9.8
	Meeting criteria	18.7	19.3	18.6	17.8	–1.7
Payment per case	All	\$40,656	\$38,253	\$40,105	\$41,448	0.6
	Meeting criteria	\$46,223	\$46,127	\$46,789	\$46,800	0.4
Length of stay (in days)	All	26.8	26.3	26.6	26.8	–0.1
	Meeting criteria	27.9	27.9	28.0	28.0	0.1

Note: FFS (fee-for-service), LTCH (long-term care hospital). “Meeting criteria” refers to Medicare cases that meet the criteria specified in the Pathway for SGR Reform Act of 2013 for payment under the LTCH prospective payment system. All counts are for stays covered by FFS Medicare and do not include those in private plans.

Source: MedPAC analysis of Medicare Provider Analysis and Review data from CMS and the annual report of the Boards of Trustees of the Medicare trust funds.

- Beginning in fiscal year 2016, only certain LTCH cases qualify for the higher standard LTCH prospective payment system (PPS) rate pursuant to changes made in the Pathway to SGR Reform Act of 2013. Cases that do not meet LTCH-qualifying criteria are paid a lower site-neutral rate—the lower of (1) an amount based on Medicare’s inpatient hospital PPS rate or (2) 100 percent of the cost of the case.
- The number of LTCH cases per 10,000 FFS beneficiaries declined by 9.8 percent between 2016 and 2019. The number of cases meeting the criteria for the LTCH PPS rate decreased by just 1.7 percent during the same period.
- Changes in payment per case from 2016 through 2019 reflect a lower payment rate for cases that did not meet the LTCH-qualifying criteria and offsetting increases in the share of cases that qualified for the standard LTCH PPS rate.
- The average length of stay for all LTCH cases and for cases meeting the criteria for the standard LTCH PPS rate have remained relatively stable since 2016.

Chart 8-19. The aggregate LTCH Medicare margin decreased in 2019

Type of LTCH	Share of discharges in 2019	Medicare margin				
		2015	2016	2017	2018	2019
All	100%	4.7%	3.9%	-2.2%	-0.5%	-1.6%
Nonprofit	14	-5.9	-5.7	-13.0	-11.7	-12.2
For profit	84	6.5	5.5	-0.3	1.3	0.4

Note: LTCH (long-term care hospital). Nonprofit and for-profit rows sum to 98 percent of stays because margins for government-owned facilities, which account for 2 percent of stays, are not shown.

Source: MedPAC analysis of cost report data from CMS.

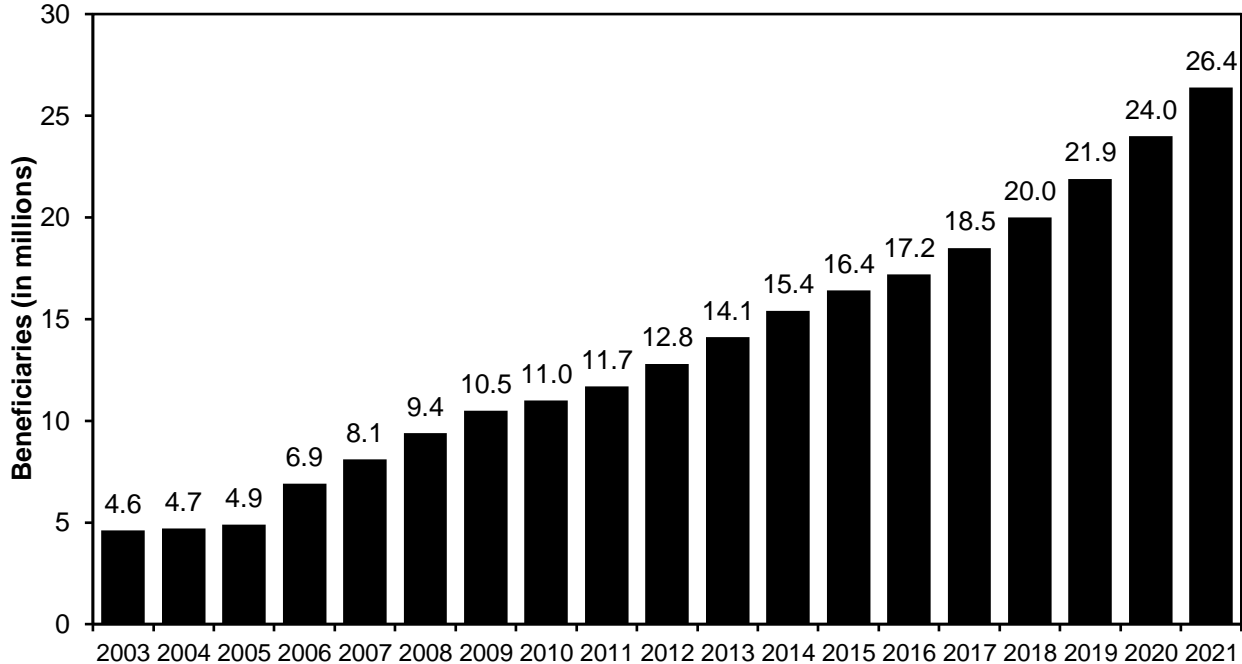
- In fiscal year 2016, CMS began implementing a dual payment-rate system under which LTCH cases not meeting criteria specified in law are paid a lower site-neutral rate—the lower of an amount based on (1) Medicare’s inpatient hospital prospective payment system rate or (2) 100 percent of the cost of the case. As a result, the aggregate Medicare margin fell to -2.2 percent in 2017. LTCH Medicare margins have since increased but remained negative.
- The aggregate Medicare margin for for-profit LTCHs (which accounted for 84 percent of all Medicare discharges in 2019) decreased from 6.5 percent in 2015 to 0.4 percent in 2019. The aggregate margin for nonprofit LTCHs decreased from -5.9 percent in 2015 to -12.2 percent in 2019.

SECTION

9

Medicare Advantage

Chart 9-1. Enrollment in MA plans, 2003–2021



Note: MA (Medicare Advantage).

Source: CMS Medicare managed care contract reports and monthly summary reports, February 2003–2021.

- Enrollment in MA plans that are paid on an at-risk capitated basis reached 26.4 million enrollees in February 2021. MA enrollment represents 46 percent of all 57.7 million Medicare beneficiaries eligible to enroll in an MA plan (beneficiaries enrolled in both Part A and Part B). Other private plans account for an additional 1 percent of all Medicare beneficiaries with both Part A and Part B coverage. (Other private plans consist of cost plans, plans under the Program of All-Inclusive Care for the Elderly (PACE), and Medicare–Medicaid plans participating in CMS’s financial alignment demonstration.)
- MA enrollment has grown steadily since 2003 (increasing nearly sixfold) and has grown particularly rapidly in recent years: In each of the last three years, MA enrollment has grown by 10 percent. The Medicare program paid MA plans about \$317 billion in 2020 to cover Part A and Part B services for MA enrollees (data not shown).

Chart 9-2. MA plans available to almost all Medicare beneficiaries, 2013–2021

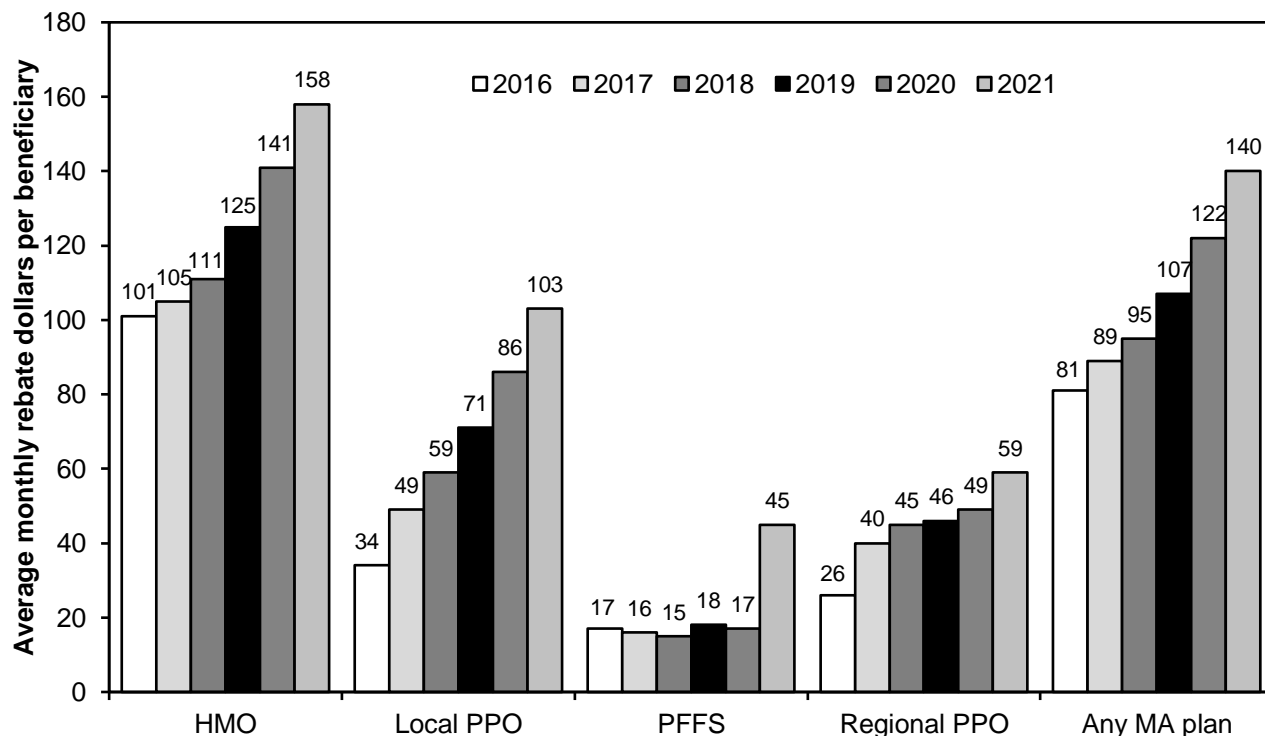
	Share of Medicare beneficiaries living in counties with plans available					
	CCPs			PFFS	Any MA plan	Average plan offerings per beneficiary
	HMO or local PPO (local CCP)	Regional PPO	Any CCP			
2013	95	71	99	59	100	19
2014	95	71	99	53	100	18
2015	95	70	98	47	99	17
2016	96	73	99	47	99	18
2017	95	74	98	45	99	18
2018	96	74	98	41	99	20
2019	97	74	98	38	99	23
2020	98	73	99	36	99	27
2021	98	72	99	34	99	32

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, 2013–2021.

- There are four types of MA plans, three of which are CCPs. Local CCPs include HMOs and local PPOs, 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 of local PPOs. CCPs accounted for 97 percent of Medicare private plan enrollees as of February 2021 (data not shown). Since 2011, PFFS plans are required to have networks in areas with two or more CCPs. In other areas, PFFS plans are not required to have networks, and enrollees are free to use any Medicare provider.
- Local CCPs are available to 98 percent of Medicare beneficiaries in 2021, and regional PPOs are available to 72 percent of beneficiaries. Since 2006, almost all Medicare beneficiaries have had MA plans available (data not shown); 99 percent have an MA plan available in 2021.
- The number of plans from which beneficiaries may choose in 2021 is higher than at any time during the years examined. In 2021, beneficiaries can choose from an average of 32 plans operating in their counties.

Chart 9-3. Average monthly rebate dollars, by plan type, 2016–2021



Note: HMO (health maintenance organization), PPO (preferred provider organization), PFFS (private fee-for-service), MA (Medicare Advantage). Employer group waiver and special needs plans are excluded.

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

- Perhaps the best summary measure of plan benefit value is the average rebate, which plans receive to provide additional benefits. Plans are awarded rebates for bidding under their benchmarks. The rebates must be returned to the plan members in the form of extra benefits. The extra benefits may be lower cost sharing, supplemental benefits, or lower premiums. The average rebate for all non-employer, non-special needs plans rose to a high of \$140 per month per beneficiary for 2021.
- HMOs have had, by far, the highest rebates because they tend to bid lower than other types of plans. Average rebates for HMOs have risen sharply over the past few years and are at a historical high of \$158 per month per beneficiary for 2021.
- For both local and regional PPOs, the rebates rose sharply after 2016. Rebates for local PPOs have tripled since 2016.
- While the availability of PFFS plans continues to decline, rebates for PFFS plans rose sharply in 2021—reflecting both higher benchmarks and lower bids relative to benchmarks among remaining PFFS plans. Overall rebates for PFFS plans are susceptible to greater year-to-year changes as the number of enrollees in these plans becomes smaller.

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

Plan type	Total enrollees (in thousands)					Percent change 2020–2021
	2017	2018	2019	2020	2021	
Local CCPs	16,920	18,463	20,502	22,704	25,325	12%
Regional PPOs	1,353	1,327	1,255	1,170	1,003	–14
PFFS	190	154	118	87	61	–30

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

Source: CMS health plan monthly summary reports, February 2017–2021.

- Enrollment in local CCPs grew by 12 percent over the past year. Enrollment in regional PPOs declined by 14 percent, and enrollment in PFFS plans dropped by 30 percent. Combined enrollment in the three types of plans grew by 10 percent from February 2020 to February 2021 (data not shown).

Chart 9-5. MA and cost plan enrollment by state and type of plan, 2021

State or territory	All MA-eligible beneficiaries (in thousands)	Distribution (in percent) of enrollees by plan type					Total
		HMO	Local PPO	Regional PPO	PFFS	Cost	
U.S. total	57,550	28%	16%	2%	0%	0%	46%
Alabama	985	26	28	1	0	0	54
Alaska	94	0	2	0	0	0	2
Arizona	1,267	39	10	1	0	0	49
Arkansas	601	19	8	7	1	0	36
California	5,782	47	4	0	0	0	51
Colorado	862	36	14	0	0	0	50
Connecticut	631	23	29	1	0	0	53
Delaware	202	11	13	0	0	0	24
Florida	4,434	35	15	4	0	0	54
Georgia	1,641	15	28	8	0	0	51
Hawaii	248	21	33	2	0	0	57
Idaho	330	27	16	0	0	0	43
Illinois	2,069	14	19	0	0	0	34
Indiana	1,200	17	24	2	0	0	43
Iowa	599	12	15	0	0	2	30
Kansas	507	8	17	1	1	0	27
Kentucky	873	20	24	2	0	1	46
Louisiana	827	40	8	1	0	0	50
Maine	324	27	21	2	0	0	50
Maryland	923	11	7	0	0	0	18
Massachusetts	1,229	18	10	1	0	0	29
Michigan	1,986	20	32	0	0	0	53
Minnesota	980	17	33	0	0	6	56
Mississippi	573	18	10	2	0	0	31
Missouri	1,161	27	17	3	0	0	47
Montana	222	10	14	0	0	0	25
Nebraska	328	14	10	0	1	2	26
Nevada	498	41	8	0	0	0	48
New Hampshire	280	12	15	1	0	0	28
New Jersey	1,466	16	23	0	0	0	39
New Mexico	396	25	21	0	0	0	46
New York	3,354	32	15	4	0	0	50
North Carolina	1,921	21	22	4	0	0	47
North Dakota	124	0	6	0	0	18	24
Ohio	2,209	29	19	1	0	0	49
Oklahoma	691	15	17	1	0	0	33
Oregon	826	34	19	0	0	0	53
Pennsylvania	2,553	30	20	0	0	0	51
Puerto Rico	653	92	2	0	0	0	94
Rhode Island	201	41	8	0	0	0	50
South Carolina	1,043	13	17	8	0	0	38
South Dakota	167	1	10	0	0	16	27
Tennessee	1,293	32	16	0	0	0	49
Texas	3,953	28	18	4	0	0	50
Utah	381	36	11	0	0	0	48
Vermont	141	7	9	4	0	0	21
Virgin Islands	18	0	28	0	0	0	28
Virginia	1,406	20	9	2	0	0	32
Washington	1,291	34	8	0	0	0	43
Washington, DC	78	11	19	0	0	0	30
West Virginia	414	5	35	1	1	4	45
Wisconsin	1,137	28	19	1	0	4	52
Wyoming	106	0	2	0	2	1	6

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. U.S. total includes beneficiaries in U.S. territories. Component percentages and U.S. total may not sum to totals due to rounding. In contrast with prior years, we report MA enrollment as a share of MA-eligible beneficiaries (Medicare beneficiaries with both Part A and Part B coverage). In prior years, we reported MA enrollment as a percentage of total Medicare beneficiaries.

Source: CMS enrollment and population data February 2021.

Chart 9-6. MA plan benchmarks, bids, and Medicare program payments relative to FFS spending, 2021

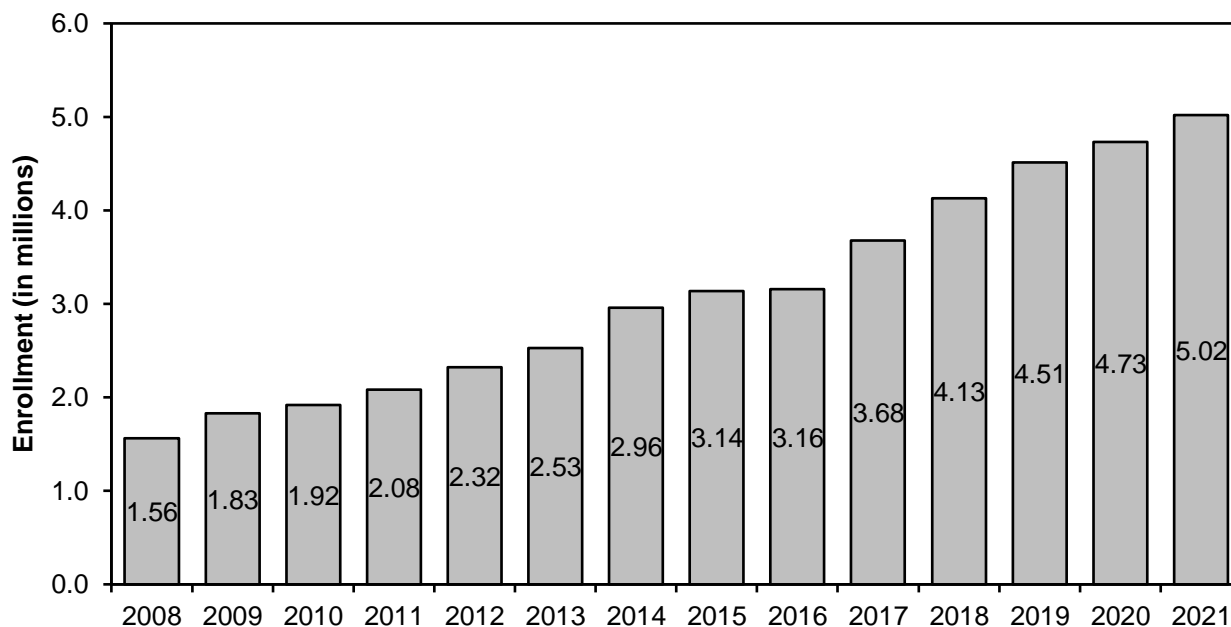
	All plans	HMOs	Local PPOs	Regional PPOs	PFFS
Benchmarks/FFS	108%	108%	109%	99%	107%
Bids/FFS	87	86	92	87	100
Payments/FFS	101	100	103	94	104

Note: MA (Medicare Advantage), FFS (fee-for-service), HMO (health maintenance organization), PPO (preferred provider organization), PFFS (private fee-for-service). Data exclude employer plans, which do not submit plan bids but receive payment based on the bids and benchmarks of nonemployer plans. All numbers in this table have been risk adjusted and reflect quality bonuses, but they have not been adjusted for coding intensity differences between MA and FFS that exceed the statutory minimum adjustment. Payments for all MA plans would average 104 percent of FFS spending if coding differences were fully reflected. The FFS spending denominator used in the table includes all Part A and Part B spending. MA payments relative to spending for FFS enrollees with both Part A and Part B would decrease by about 1 percentage point.

Source: MedPAC analysis of plan bid data from CMS October 2020.

- Since 2006, plan bids have partly determined the Medicare payments that plans 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. Benchmarks for each county are set by means of a statutory formula based on percentages (ranging from 95 percent to 115 percent) of each county's per capita Medicare FFS spending. Plans with quality ratings of 4 or more stars may have their benchmarks raised by 10 percent in some counties.
- 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 it ranges from 50 percent to 70 percent. The plan must then return the rebate to its enrollees in the form of lower cost sharing, supplemental benefits, or lower premiums.
- We estimate that MA benchmarks average 108 percent of FFS spending when weighted by MA enrollment. The ratio varies by plan type, which draws enrollment from different geographic areas.
- Plans' enrollment-weighted bids average 87 percent of FFS spending in 2021. On average, each coordinated care plan type (HMO, local PPO, regional PPO) has demonstrated the ability to provide the same services for less than FFS in the areas where they bid.
- Plan bid data indicate that 2021 MA payments will be 101 percent of FFS spending, but this figure does not include employer plans and does not account for risk-coding differences between FFS and MA plans that have not been resolved through the coding intensity factor. We estimate that coding differences add 3 percentage points to payments relative to FFS.
- The ratio of payments relative to FFS spending varies by the type of MA plan. HMO and regional PPO payments are estimated to be 100 percent and 94 percent of FFS, respectively, while payments to local PPOs and PFFS plans average 103 percent and 104 percent of FFS, respectively.

Chart 9-7. Enrollment in employer group MA plans, 2008–2021

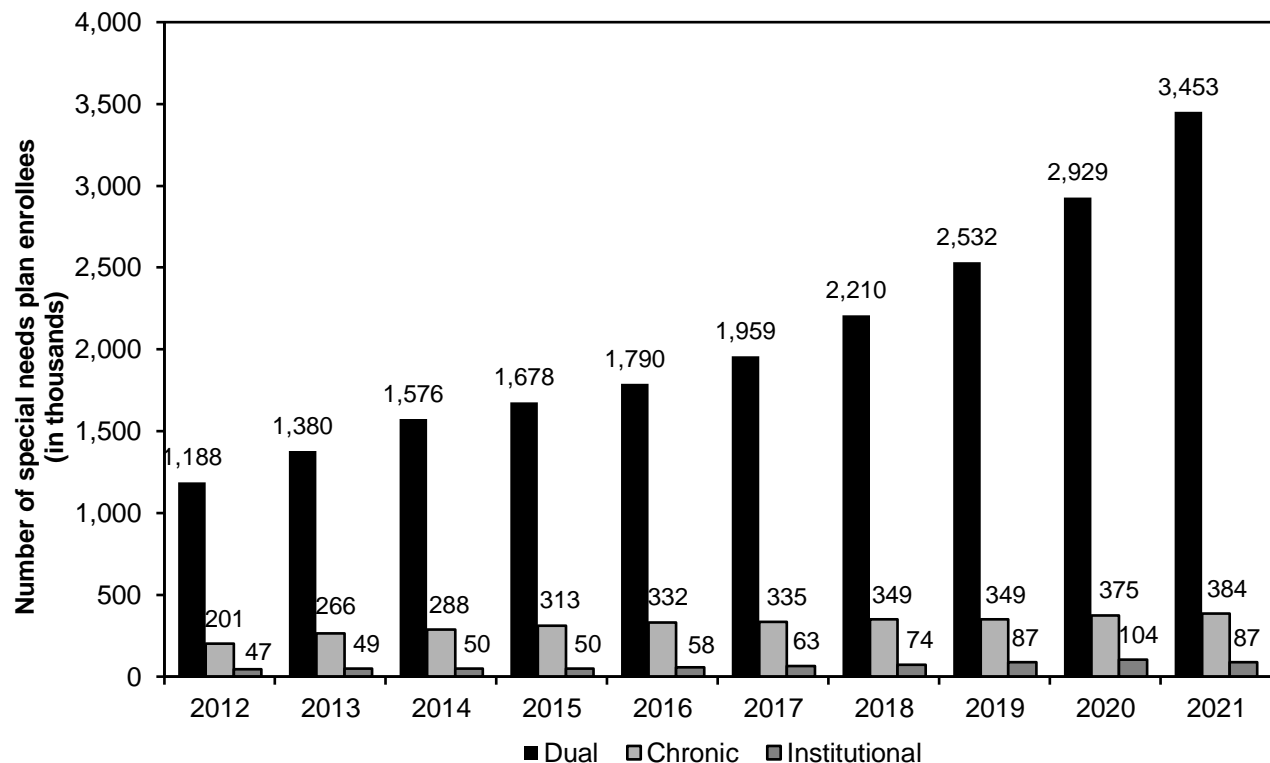


Note: MA (Medicare Advantage).

Source: CMS enrollment data, February 2008–2021.

- 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 2021, about 5.0 million enrollees were in employer group plans, or about 19 percent of all MA enrollees. Employer plan enrollment grew by 6 percent from 2020 and has more than doubled since 2012.

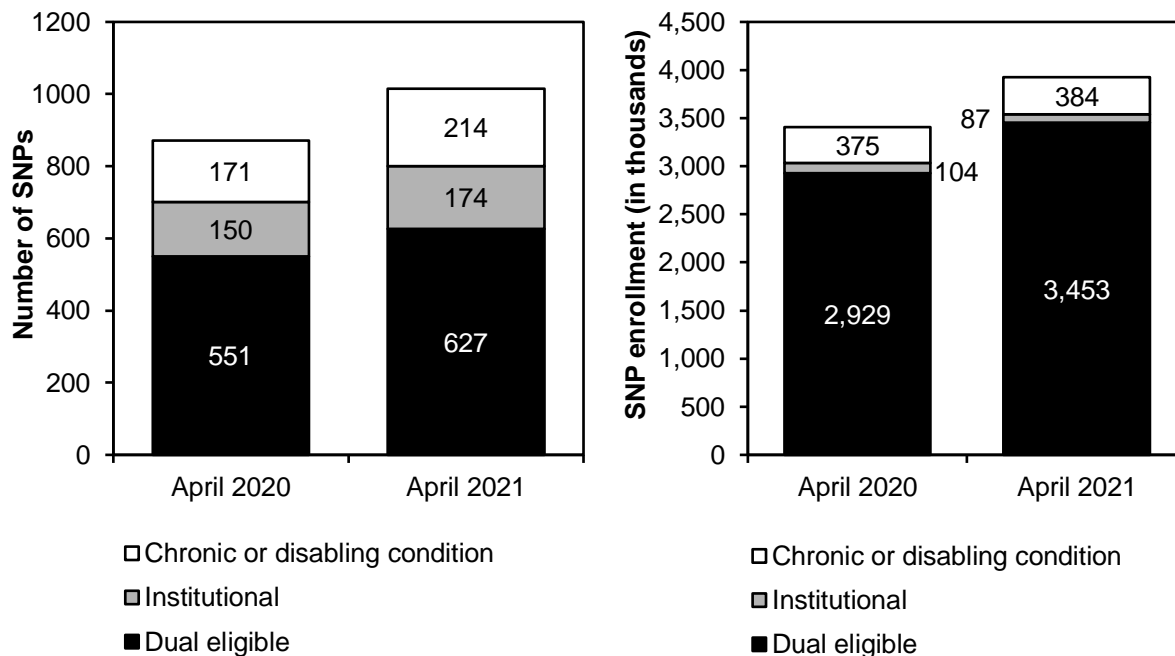
Chart 9-8. Number of special needs plan enrollees, 2012–2021



Source: CMS special needs plans comprehensive reports, April 2012–2021.

- The Congress created special needs plans (SNPs) as a new 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, but SNP authority was extended several times. The Bipartisan Budget Act of 2018 made SNPs permanent.
- 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 exceeds 3.4 million in 2021, more than doubling since 2014.
- Enrollment in chronic condition SNPs has grown at varying rates as plan requirements have changed, but it has generally risen annually since 2012.
- Enrollment in institutional SNPs declined in 2021, returning to its 2019 level.

Chart 9-9. Number of SNPs and SNP enrollment rose from 2020 to 2021



Note: SNP (special needs plan).

Source: CMS special needs plans comprehensive reports, April 2020 and 2021.

- The number of SNPs increased by 16 percent from April 2020 to April 2021. Dual-eligible SNPs increased by 14 percent, institutional SNPs increased by 16 percent, and the number of chronic condition SNPs increased by 25 percent.
- In 2021, most SNPs (62 percent) are for dual-eligible beneficiaries, while 17 percent are for beneficiaries who reside in institutions (or reside in the community but have a similar level of need), and 21 percent are for beneficiaries with chronic conditions.
- From April 2020 to April 2021, the number of SNP enrollees increased by 15 percent. Enrollment in SNPs for dual-eligible beneficiaries grew by 18 percent, enrollment in SNPs for institutionalized beneficiaries declined by 16 percent, and enrollment in SNPs for beneficiaries with certain chronic conditions grew by 2 percent. Enrollment in all SNPs has grown from 0.9 million in May 2007 (not shown) to 3.9 million in April 2021.
- The availability of SNPs varies by type of special needs population served (data not shown). In 2021, 92 percent of beneficiaries reside in areas where SNPs serve dual-eligible beneficiaries (up from 90 percent in 2020), 72 percent live where SNPs serve institutionalized beneficiaries (up from 67 percent in 2020), and 57 percent live where SNPs serve beneficiaries with chronic conditions (up from 52 percent in 2020).

Chart 9-10. The share of Medicare beneficiaries in private plans does not differ substantially in medically underserved areas compared with other areas, but is lower in rural areas, 2021

	MA-eligible population (in millions)	As percent of MA-eligible population	Share of MA-eligible population category in MA plans
All beneficiaries	57.5	100%	46%
County's medically underserved area designation			
Partial county	35.9	62	47
Entire county	10.3	18	45
No medically underserved areas	11.3	20	43
Urban influence code designation			
Metropolitan	47.2	82	48
Rural: Micropolitan	5.8	10	37
Rural: Adjacent to metropolitan	2.8	5	36
Rural: Not adjacent to metropolitan	1.7	3	29

Note: MA (Medicare Advantage). Beneficiaries in the Virgin Islands, Guam, American Samoa, the Northern Mariana Islands or in non-U.S. areas are excluded. MA plans consist of HMOs, local preferred provider organizations (PPOs), regional PPOs, private fee-for-service plans, and Medical Savings Account plans. In contrast with prior years, we report MA enrollment as a share of MA-eligible beneficiaries (Medicare beneficiaries with both Part A and Part B coverage). In prior years, we reported MA enrollment as a share of total Medicare beneficiaries. Medically underserved areas (MUAs) are designated by the Health Resources and Services Administration (HRSA) as partial counties (census tracts and county subdivisions) or entire counties that disproportionately have a combination of indicators such as a low number of primary care providers per 1,000 population, high infant mortality, high poverty, and a large elderly population. Urban influence codes (UICs) are designated by the Office of Management and Budget (OMB) by the population size of the metro area, and nonmetropolitan counties by the size of the largest city or town and proximity to metro and micropolitan areas (areas with a population of at least 10,000 people but fewer than 50,000). The UICs were last updated in 2013 and are updated every 10 years. Components may not sum to totals due to rounding.

Source: MedPAC analysis of HRSA MUAs, OMB UICs, and CMS enrollment data February 2021.

- In general, an MA plan's service area consists of one or more entire counties. (MA regional PPOs are required to cover entire regions, which consist of one or more states. In rare circumstances, MA "local" plans receive a waiver that allows them to serve only a portion of a county if the plan is able to prove that the demographic composition (e.g., income and race) of the portion of the county the plan intends to serve is not substantively different from the rest of the county.)
- We examined beneficiary access to MA plans and market share of MA plans by two geographic designations: MUAs and UICs.

(Chart continued next page)

Chart 9-10. The share of Medicare beneficiaries in private plans does not differ substantially in medically underserved areas compared with other areas, but is lower in rural areas, 2021 (continued)

- HRSA designates MUAs by census tract, county, or county subdivisions. HRSA designates MUAs based on a score of four combined indicators: (1) disproportionately low number of primary care providers per 1,000 people, (2) high infant mortality, (3) high poverty, and (4) a large elderly population. Part of a county may be designated as an MUA, the entire county may receive the designation, or the entire county may have no MUAs.
- The Office of Management and Budget UICs classify geographic areas as metropolitan, micropolitan, adjacent to metropolitan, and not adjacent to metropolitan; the latter three types of areas are considered rural. UICs distinguish metropolitan counties by the population size of their metro area and nonmetropolitan counties by the size of the largest city or town and proximity to metro and micropolitan areas (areas with a population of at least 10,000 people but fewer than 50,000). The UICs were last updated in 2013 and are updated every 10 years.
- Counties that have designated medically underserved areas (either partially or counties that are entirely composed of MUAs) have shares of MA enrollment similar to counties with no designated MUAs. The share of beneficiaries (with both Part A and Part B coverage) in MA plans is the highest in counties partially designated as MUAs (47 percent). The proportion of Medicare beneficiaries in MA plans located in counties that are designated entirely as MUAs (45 percent) is almost the same as counties that do not have any MUA designation (43 percent).
- Most (82 percent) of all 57.5 million Medicare beneficiaries eligible for MA enrollment live in metropolitan areas. The share of Medicare beneficiaries who live in metropolitan areas enrolled in MA plans (48 percent) is higher than the share of rural beneficiaries enrolled in MA plans.
- Nearly all Medicare beneficiaries in rural areas reside in a micropolitan county or a county that is adjacent to a metropolitan area. More than one-third of Medicare beneficiaries in these areas are enrolled in MA plans. From 2020 to 2021, MA enrollment in these rural areas grew faster compared with metropolitan areas (16 percent compared with 9 percent; data not shown).
- About 3 percent of Medicare beneficiaries reside in a rural county that is not adjacent to a metropolitan area. More than one-quarter (29 percent) of these beneficiaries are enrolled in MA plans. From 2020 to 2021, MA enrollment in these areas grew by 19 percent (data not shown).

Chart 9-11. MA enrollment patterns do not differ by medically underserved area designation but do vary based on urban influence designation, 2021

	MA population (in millions)	As a percent of MA population	Share of category			
			HMO	Local PPO	Regional PPO	Other MA plans
All Medicare private plan enrollees	26.4	100%	60%	36%	4%	<0.5%
County's medically underserved area designation						
Partial county	16.9	64	65	32	2	<0.5
Entire county	4.6	17	52	38	9	<0.5
No medically underserved areas	4.9	18	50	45	4	<0.5
Urban influence code designation						
Metropolitan	22.8	86	64	33	3	<0.5
Rural: Metropolitan	2.2	8	41	50	9	1
Rural: Adjacent to metropolitan	1.1	4	37	50	12	1
Rural: Not adjacent to metropolitan	0.5	2	32	55	12	2

Note: MA (Medicare Advantage), HMO (health maintenance organization), PPO (preferred provider organization). Beneficiaries in the Virgin Islands, Guam, American Samoa, and the Northern Mariana Islands or in non-U.S. areas are excluded. MA plans consist of HMOs, local PPOs, regional PPOs, private fee-for-service plans, and Medical Savings Account plans. In contrast with prior years, we report MA enrollment as a share of MA-eligible beneficiaries (Medicare beneficiaries with both Part A and Part B coverage). In prior years, we reported MA enrollment as a percentage of total Medicare beneficiaries. Medically underserved areas (MUAs) are designated by the Health Resources and Services Administration (HRSA) as partial counties (census tracts and county subdivisions) or entire counties that disproportionately have a combination of indicators such as a low number of primary care providers per 1,000 population, high infant mortality, high poverty, and a large elderly population. Urban influence codes (UICs) are designated by the Office of Management and Budget (OMB) by the population size of the metro area, and nonmetropolitan counties by the size of the largest city or town and proximity to metro and micropolitan areas (areas with a population of at least 10,000 people but fewer than 50,000). The UICs were last updated in 2013 and are updated every 10 years. Components may not sum to totals due to rounding.

Source: MedPAC analysis of HRSA MUAs, OMB UICs, and CMS enrollment and population data February 2021.

- Local coordinated care plans (HMOs and local PPOs), which represent 96 percent of private plan enrollees, may choose which individual counties to serve. Regional PPOs (4 percent of all MA enrollees) cover entire state-based regions.
- Enrollment by type of plan is not notably different among counties with different MUA designations. The proportion of enrollees in HMOs is similar for counties that are designated entirely as medically underserved areas (52 percent) compared with counties that do not have any medically underserved area designation (50 percent). The remainder of private plan enrollment in these areas is generally in either local or regional PPOs.
- HMOs account for the largest share of MA plan enrollment in metropolitan areas (64 percent), but PPOs account for the largest share of MA plan enrollment in rural areas (more than 60 percent combined between local PPOs and regional PPOs).

Chart 9-12. MA plans are available to nearly all beneficiaries in medically underserved and rural areas, 2021

	As a share of MA-eligible population	Share of Medicare beneficiaries living in counties with plans available in 2021					
		Any MA plan	CCPs				
			HMO	Local PPO	HMO or local PPO	Regional PPO	Any CCP
All MA-eligible beneficiaries	100%	99%	97%	95%	98%	74%	99%
County's medically underserved area designation							
Partial county	63	99	98	95	99	69	99
Entire county	18	99	92	94	96	83	99
No medically underserved areas	19	98	96	96	98	81	98
Urban influence code designation							
Metropolitan	82	>99.5	99	96	>99.5	73	>99.5
Rural: Micropolitan	10	97	89	91	94	77	96
Rural: Adjacent to metropolitan	5	97	89	91	95	83	96
Rural: Not adjacent to metropolitan	3	90	73	77	82	71	88

Note: MA (Medicare Advantage), CCP (coordinated care plan), HMO (health maintenance organization), PPO (preferred provider organization). These data do not include the Virgin Islands, Guam, American Samoa, the Northern Mariana Islands, non-U.S. areas, and they do not include MA plans that have restricted enrollment (special needs plans, employer-only plans). In contrast with prior years, we report MA enrollment as a share of MA-eligible beneficiaries (Medicare beneficiaries with both Part A and Part B coverage) rather than as a share of all Medicare beneficiaries. As a result, regional PPO availability slightly increased compared with using all Medicare beneficiaries as our denominator. Medically underserved areas (MUAs) are designated by the Health Resources and Services Administration (HRSA) as partial counties (census tracts and county subdivisions) or entire counties that disproportionately have a combination of indicators such as a low number of primary care providers per 1,000 population, high infant mortality, high poverty, and a large elderly population. Urban influence codes (UICs) are designated by the Office of Management and Budget (OMB) by the population size of the metro area, and nonmetropolitan counties by the size of the largest city or town and proximity to metro and micropolitan areas (areas with a population of at least 10,000 people but fewer than 50,000). The UICs were last updated in 2013 and are updated every 10 years.

Source: MedPAC analysis of HRSA MUAs, OMB UICs, and CMS enrollment and population data February 2021.

- We examined the availability of MA plans to all MA-eligible beneficiaries. Consistent with prior work, we exclude employer plans and special needs plans. Although about one-third of MA enrollees are in these excluded plans, their availability is restricted to certain populations. In addition, we do not include other private plans such as cost plans.
- MA plans are available to nearly all Medicare beneficiaries, irrespective of whether beneficiaries reside in a county with a designated medically underserved area. Among counties that are designated entirely as medically underserved areas, 99 percent of beneficiaries have access to an MA plan.
- Nearly all Medicare beneficiaries residing in metropolitan areas have access to an MA plan.
- Nearly all beneficiaries in rural counties have access to an MA plan. About 97 percent of beneficiaries in micropolitan counties or those adjacent to a metropolitan area have access to an MA plan. Among the 3 percent of Medicare beneficiaries residing in a rural county that is not adjacent to a metropolitan area, 90 percent have access to an MA plan.

Chart 9-13. Most Medicare beneficiaries have access to a considerable number of MA plans, but rural beneficiaries and beneficiaries in counties composed entirely of MUAs typically have fewer plans from which to choose, 2021

	As a share of MA-eligible population	Average plan offerings per beneficiary	Share of Medicare beneficiaries living in counties with an available zero-premium plan with drug coverage
All beneficiaries	100%	32	96%
County's medically underserved area designation			
Partial county	63	35	97
Entire county	18	22	94
No medically underserved areas	19	29	96
Urban influence code designation			
Metropolitan	82	34	98
Rural: Micropolitan	10	19	88
Rural: Adjacent to metropolitan	5	18	91
Rural: Not adjacent to metropolitan	3	13	76

Note: MA (Medicare Advantage), MUA (medically underserved area). These data do not include the Virgin Islands, Guam, American Samoa, the Northern Mariana Islands, non-U.S. areas, and MA plans that have restricted enrollment (special needs plans, employer-only plans). MUAs are designated by the Health Resources and Services Administration (HRSA) as partial counties (census tracts and county subdivisions) or entire counties that disproportionately have a combination of indicators such as a low number of primary care providers per 1,000 population, high infant mortality, high poverty, and a large elderly population. Urban influence codes (UICs) are designated by the Office of Management and Budget (OMB) by the population size of the metro area, and nonmetropolitan counties by the size of the largest city or town and proximity to metro and micropolitan areas (areas with a population of at least 10,000 people but fewer than 50,000). The UICs were last updated in 2013 and are updated every 10 years.

Source: MedPAC analysis of HRSA MUAs, OMB UICs, and CMS enrollment and population data February 2021.

- In 2021, the average beneficiary has 32 plans from which to choose in his or her county.
- On average, beneficiaries residing in counties that are designated entirely as medically underserved areas have fewer MA plans from which to choose, but still have an average of 22 plans available to them. About 94 percent of beneficiaries in these counties have a zero-premium plan with drug coverage available.
- On average, Medicare beneficiaries residing in metropolitan areas have more MA plans from which to choose (an average of 34 plan choices) compared with beneficiaries in rural areas. Nevertheless, the average beneficiary in micropolitan counties or those adjacent to a metropolitan area can choose among an average of 19 plans. Beneficiaries residing in rural counties that are not adjacent to a metropolitan area (3 percent of all beneficiaries) have 13 plans from which to choose, on average.
- At least one zero-premium plan with drug coverage is available to most beneficiaries (96 percent). Availability of these plans in rural areas is somewhat less prevalent than in metropolitan areas. In metropolitan areas, 98 percent of beneficiaries have access to a zero-premium plan. In comparison, about 90 percent of beneficiaries in micropolitan counties or those adjacent to a metropolitan area have access to a zero-premium plan. In rural counties that are not adjacent to a metropolitan area, 76 percent of beneficiaries have an available zero-premium plan.

Chart 9-14. Twenty most common condition categories among MA beneficiaries, as defined in the CMS–HCC model, 2019

Conditions (defined by HCC)	Share of beneficiaries with listed condition
Vascular disease	21.9%
Diabetes with chronic complications	21.7
COPD	15.0
Major depressive, bipolar, and paranoid disorders	14.3
CHF	13.0
Specified heart arrhythmias	12.2
Morbid obesity	10.3
Chronic kidney disease, moderate (stage 3)	8.9
Rheumatoid arthritis and inflammatory connective tissue disease	7.9
Diabetes without complications	6.9
Coagulation defects and other specified hematological disorders	6.5
Breast, prostate, colorectal, and other cancers and tumors	5.2
Substance abuse disorder, moderate/severe, or substance use with complications	5.1
Other significant endocrine and metabolic disorders	4.9
Angina pectoris	4.3
Acute renal failure	3.8
Cardio-respiratory failure and shock	3.0
Seizure disorders and convulsions	2.7
Ischemic or unspecified stroke	2.4
Septicemia, sepsis, systemic inflammatory response syndrome/shock	2.1

Note: MA (Medicare Advantage), CMS–HCC (CMS–hierarchical condition category), COPD (chronic obstructive pulmonary disease), CHF (congestive heart failure).

Source: MedPAC analysis of Medicare risk score files.

- 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.
- Vascular disease is the most common HCC, and over 28 percent of MA enrollees are in at least one of the two diabetes HCCs.

Chart 9-15. MA enrollment patterns, by age, Medicaid dual-eligible status, and ESRD status, June 2020

	All MA eligible		FFS		MA		MA enrollment as a share of all MA-eligible category
	Enrollment, in millions	Share of total	Enrollment, in millions	Share of total	Enrollment, in millions	Share of total	
Total	55.4	100%	31.8	100%	23.7	100%	43%
Aged (65 or older)	47.7	86	27.2	86	20.5	87	43
Under 65	7.7	14	4.5	14	3.2	13	41
Non-dual eligible	45.1	81	26.3	83	18.9	80	42
Aged (65 or older)	41.5	75	24.2	76	17.3	73	42
Under 65	3.6	7	2.0	6	1.6	7	44
Full dual eligibility	7.1	13	4.2	13	2.9	12	40
Aged (65 or older)	4.2	8	2.3	7	1.9	8	45
Under 65	2.9	5	1.9	6	1.0	4	33
Partial dual eligibility	3.2	6	1.3	4	1.9	8	60
Aged (65 or older)	2.0	4	0.7	2	1.3	5	64
Under 65	1.2	2	0.6	2	0.6	3	53
Enrollment subcategories, all ages							
ESRD	0.5	1	0.4	1	0.1	<0.5	23
Beneficiaries with partial dual eligibility							
QMB only	1.6	3	0.7	2	0.9	4	58
SLMB only	1.0	2	0.4	1	0.6	3	61
QI	0.6	1	0.2	1	0.4	1	62

Note: MA (Medicare Advantage), ESRD (end-stage renal disease), FFS (fee-for-service), QMB (qualified Medicare beneficiary), SLMB (specified low-income beneficiary), QI (qualified individual). Data exclude cost plans, plans under the Program of All-Inclusive Care for the Elderly, and Medicare–Medicaid Plans participating in CMS’s financial alignment demonstration. MA-eligible beneficiaries are Medicare beneficiaries with both Part A and Part B coverage. Dual-eligible beneficiaries are eligible for Medicare and Medicaid. Data exclude Puerto Rico because enrollment data undercount dual-eligible categories. As of June 2020, Puerto Rico had nearly 600,000 Medicare beneficiaries enrolled in MA plans, and 276,000 were enrolled in dual-eligible special needs plans. Figures may not sum to totals due to rounding.

Source: MedPAC analysis of 2020 common Medicare environment files.

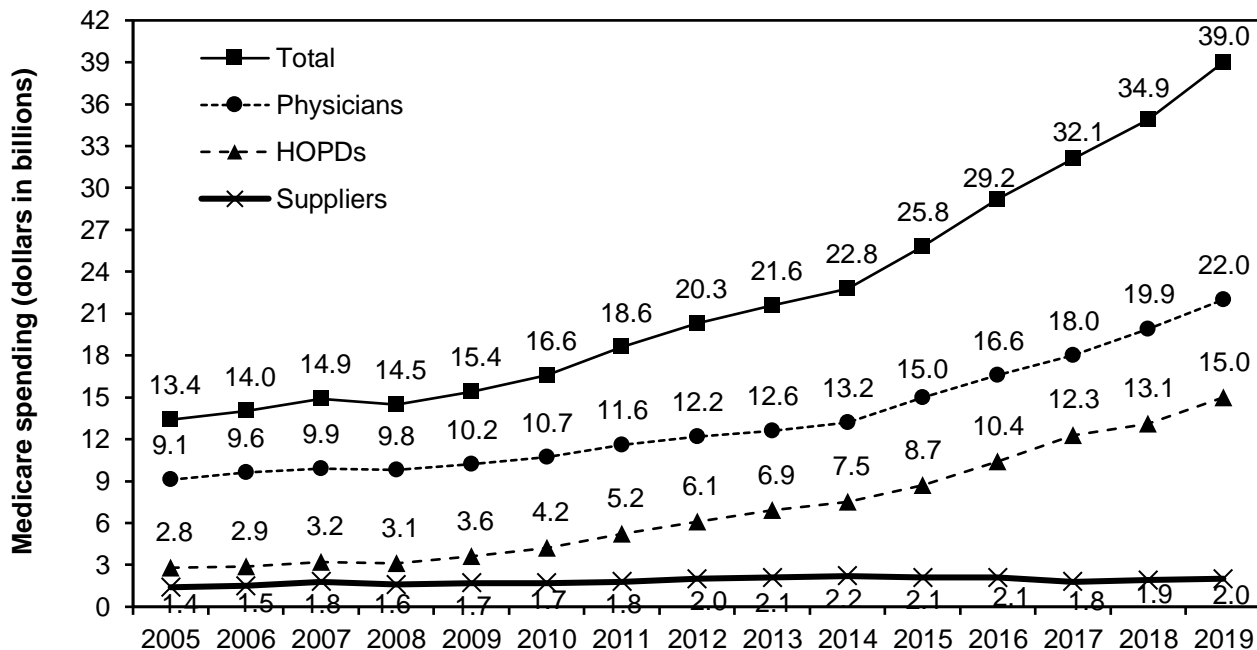
- Medicare beneficiaries with Medicaid benefits who have full dual eligibility—that is, those who have coverage for their Medicare out-of-pocket costs (premiums and cost sharing) as well as coverage for services such as long-term care services and supports—are less likely to enroll in MA plans than beneficiaries with “partial” dual eligibility. Fully dual-eligible beneficiaries are those with coverage through state Medicaid programs including certain QMBs (i.e., QMB-Plus) and certain SLMBs (i.e., SLMB-Plus) who also have Medicaid coverage for services. Beneficiaries with partial dual eligibility (such as QIs or SLMBs) have coverage for Medicare premiums or premiums and Medicare cost sharing (as QMBs).
- Medicare plan enrollment among the dually eligible continues to increase. In 2020, 40 percent of full duals were in MA plans (up from 36 percent in 2019; data not shown), and 60 percent of partial dual-eligible beneficiaries were in MA plans (up from 53 percent in 2019; data not shown). QI beneficiaries have the highest rates of MA enrollment among partial duals (62 percent).
- A substantial share of the dually eligible (40 percent; data not shown) are under the age of 65 and entitled to Medicare on the basis of disability or ESRD. Beneficiaries under age 65 who are fully dual eligible are far less likely than aged fully dual-eligible beneficiaries to enroll in MA (33 percent vs. 45 percent, respectively). As a result, a similar share of MA enrollees is fully dual-eligible compared with FFS enrollees (13 percent vs. 12 percent, respectively).
- Before 2021, individuals with ESRD were largely prohibited from joining an MA plan during open enrollment, although they could remain in their current plan or join an ESRD chronic condition special needs plan. Therefore, ESRD beneficiaries had relatively low rates of plan enrollment in 2020 (23 percent).

SECTION

10

Prescription drugs

Chart 10-1. Medicare spending for Part B drugs furnished by physicians, hospital outpatient departments, and suppliers, 2005–2019



Note: HOPD (hospital outpatient department). Data include Part B–covered drugs furnished by several provider types, including physicians, suppliers, and hospital outpatient departments, and exclude those furnished by critical access hospitals, Maryland hospitals, and dialysis facilities. “Medicare spending” includes program payments and beneficiary cost sharing. Data reflect all Part B drugs whether they were paid based on the average sales price or another payment formula. Data exclude blood and blood products (other than clotting factor). Components may not sum to totals due to rounding.

Source: MedPAC and Acumen LLC analysis of Medicare claims data.

- The Medicare program and beneficiaries spent about \$39 billion on Part B drugs furnished by physicians, HOPDs, and suppliers in 2019, an increase of about 11.6 percent from 2018.
- Since 2005, Medicare pays for most Part B drugs at a rate of the average sales price plus 6 percent (ASP + 6 percent). Between 2005 and 2019, total spending grew at an average annual rate of 8.0 percent. Spending growth was slower from 2005 to 2009 (about 3.7 percent per year on average) and more rapid from 2009 to 2019 (about 9.7 percent per year on average).
- Eligible hospitals that participate in the 340B drug discount program receive substantial discounts on outpatient drugs, including those covered by Medicare Part B. Beginning 2018, Medicare reduced the payment rate for certain Part B drugs furnished by 340B hospitals to ASP – 22.5 percent. The 340B policy reduced 2019 Medicare Part B spending on drugs in outpatient hospitals by about \$2.2 billion (compared with what 2019 payments would have been in the absence of the policy).

(Chart continued next page)

Chart 10-1. Medicare spending for Part B drugs furnished by physicians, hospital outpatient departments, and suppliers, 2005–2019 (continued)

- Of total 2019 Part B drug spending, physicians accounted for 56 percent (\$22 billion), HOPDs accounted for 38 percent (\$15 billion), and suppliers accounted for 5 percent (\$2 billion).
- Overall, from 2009 to 2019, Part B drug spending has grown more rapidly for HOPDs than for physicians and suppliers—at average annual rates of about 15 percent, 8 percent, and 2 percent, respectively.
- Not included in these data are critical access hospitals and Maryland hospitals, which are not paid under the ASP system, and end-stage renal disease facilities, which are paid for most Part B drugs through the dialysis bundled payment rate. Medicare and beneficiaries spent approximately \$1.0 billion in critical access hospitals and \$0.4 billion in Maryland hospitals for Part B drugs in 2019. Also in 2019, Medicare spent \$1.3 billion for calcimimetics in dialysis facilities through a transitional drug add-on payment adjustment to the bundled dialysis payment rate.

Chart 10-2. Change in Medicare payments and utilization for separately payable Part B drugs, 2009–2019

	2009	2019	Average annual growth 2009–2019
Total payments: Separately payable Part B drugs (in billions)	\$11.9*	\$37.1*	12.1%
Total payments: All Part B drugs excluding vaccines (in billions)	\$11.7	\$35.8	11.9
Number of beneficiaries using a Part B drug (in millions)	2.6	4.1	4.6
Average total payments per beneficiary who used a Part B drug	\$4,420	\$8,639	6.9
Average number of Part B drugs per beneficiary	1.39	1.36	–0.2
Average annual payment per Part B drug per beneficiary	\$3,182	\$6,343	7.1
Total payments: All Part B vaccines (in billions)	\$0.2	\$1.3	19.5
Number of beneficiaries using a Part B vaccine (in millions)	13.4	16.5	2.1
Average total payments per beneficiary who used a Part B vaccine	\$16	\$78	17.0
Average number of Part B vaccines per beneficiary	1.08	1.18	0.9
Average annual payment per Part B vaccine per beneficiary	\$15	\$66	16.0

Note: This analysis includes Part B drugs paid based on the average sales price as well as the small group of Part B drugs that are paid based on the average wholesale price or reasonable cost or that are contractor priced. “Vaccines” refers to three Part B–covered preventive vaccines: influenza, pneumococcal, and hepatitis B. Data include Part B drugs furnished by physicians, hospitals paid under the outpatient prospective payment system, and suppliers and exclude data for critical access hospitals, Maryland hospitals, and dialysis facilities. Yearly figures presented in the table are rounded; the average annual growth rate was calculated using unrounded data.

*For purposes of this analysis, spending on separately payable Part B drugs excludes any drug that was bundled in 2009 or 2019 (i.e., drugs that were packaged under the outpatient prospective payment system in 2009 or 2019 were excluded from both years of the analysis, regardless of the setting where the drug was administered), drugs billed under not-otherwise-classified billing codes, and blood and blood products (other than clotting factor). Without those exclusions, Part B drug spending was \$15.4 billion in 2009 and \$39.0 billion in 2019, as shown in Chart 10-1.

Source: MedPAC analysis of Medicare claims data for physicians, hospital outpatient departments, and suppliers.

- Total payments by the Medicare program and beneficiaries for separately payable Part B drugs increased 12.1 percent per year, on average, between 2009 and 2019.
- Medicare spending on separately payable Part B drugs excluding Part B–covered preventive vaccines grew at a similar rate (11.9 percent per year) between 2009 and 2019.
- Price growth accounted for just over half of the growth in separately payable Part B drug spending (excluding vaccines) between 2009 and 2019. During that period, the average annual payment per drug increased on average by 7.1 percent per year, which reflects increases in the prices of existing drugs and changes in the mix of drugs, including the adoption of new, higher priced drugs. Growth in the average payment per drug would have been even higher if not for the reduction in Medicare’s payment rate for certain Part B drugs provided by 340B hospitals beginning in 2018.

(Chart continued next page)

Chart 10-2. Change in Medicare payments and utilization for separately payable Part B drugs, 2009–2019 (continued)

- Growth in the number of beneficiaries using nonvaccine Part B drugs (about 4.6 percent per year on average) also contributed to increased spending. The number of Part B drugs received per user declined slightly from about 1.39 in 2009 to 1.36 in 2019, which modestly offset spending growth.
- In 2019, Medicare Part B covered three preventive vaccines: influenza, pneumococcal, and—for beneficiaries at high or medium risk—hepatitis B. Spending on the three preventive vaccines furnished by physicians, hospital outpatient departments, and pharmacy suppliers was \$702 million for influenza, \$572 million for pneumococcal, and \$7 million for hepatitis B (data not shown). (Not included in these data are vaccines furnished in other settings such as end-stage renal disease facilities. With other settings included, 2019 vaccine spending was \$729 million on influenza, \$593 million on pneumococcal, and \$39 million on hepatitis B vaccines.)
- Although vaccines are a relatively small share of overall spending on separately payable Part B drugs, vaccine spending grew rapidly, at an average rate of about 19.5 percent per year, between 2009 and 2019.
- The largest driver of increased vaccine spending was price growth, as the average payment per vaccine grew at an average rate of 16.0 percent per year between 2009 and 2019. Substantial price growth occurred for both pneumococcal and influenza vaccines between 2009 and 2019, with the average payment per vaccine increasing from \$36 to \$154 for pneumococcal vaccines and from \$12 to \$44 for influenza vaccines over this period (data not shown). The growth in the average payment per vaccine largely reflects higher launch prices for new vaccines (e.g., Prevnar-13 for pneumococcal disease and Fluzone High Dose, Flud, and Flublok for influenza). Price growth over time among existing products (e.g., new vaccines after launch and certain older products) also contributed to this increase.

Chart 10-3. Top 10 Part B drugs paid based on ASP, by type of provider, 2018 and 2019

	Dollars (in millions)					
	Total Part B drug spending		Physician and supplier Part B drug spending		HOPD Part B drug spending	
	2018	2019	2018	2019	2018	2019
Eylea	\$2,577	\$2,915	\$2,435	\$2,763	\$142	\$152
Keytruda	1,812	2,676	764	1,145	1,048	1,531
Opdivo	1,718	1,784	827	815	891	970
Rituxan	1,701	1,744	866	865	835	879
Prolia/Xgeva	1,420	1,608	909	1,020	511	588
Lucentis	1,217	1,268	1,186	1,238	30	30
Neulasta	1,373	1,170	640	527	733	642
Avastin	1,013	1,037	503	489	511	548
Orencia	801	922	589	696	213	226
Remicade	1,154	912	745	611	409	301
Total spending, top 10 drugs	\$14,785	\$16,037	\$9,463	\$10,168	\$5,323	\$5,869
Total spending, all Part B drugs	\$34,944	\$39,014	\$21,824	\$24,017	\$13,120	\$14,997

Note: ASP (average sales price), HOPD (hospital outpatient department). The 10 drugs shown in the chart reflect the Part B drug billing codes paid under the ASP methodology with the highest Medicare expenditures in 2019. Data for 2018 are shown for comparison. Data include Part B-covered drugs furnished by several provider types, including physicians, suppliers, and hospital outpatient departments, but exclude those furnished by critical access hospitals, Maryland hospitals, and dialysis facilities. "Drug spending" includes Medicare program payments and beneficiary cost sharing. "Total spending, all Part B drugs" reflects all products, whether paid based on ASP or another method. Data exclude blood and blood products (other than clotting factor). Components may not sum to totals due to rounding.

Source: MedPAC and Acumen LLC analysis of Medicare claims data.

- Part B drugs are billed under more than 800 billing codes, but spending is concentrated. Medicare spending (including cost sharing) on the top 10 drugs paid under the ASP system totaled about \$16 billion in 2019, about 41 percent of all Part B drug spending that year.
- Since 2016, all of the top 10 Part B drugs have been biologics. In 2019, among the top 10 drugs are a number of products used to treat cancer or its side effects (Keytruda, Opdivo, Rituxan, Prolia/Xgeva, Neulasta, Avastin). Drugs used to treat age-related macular degeneration (Eylea, Lucentis, Avastin) and rheumatoid arthritis (Rituxan, Orencia, Remicade) are also in the top 10.
- Medicare spending on immune globulin (for which there are several products billed through separate billing codes) amounted to about \$1.6 billion in 2019 (data not shown).

Chart 10-4. Growth in ASP for the 20 highest expenditure Part B drugs, 2005–2021

Part B drug	Total Medicare payments in 2019 (in billions)	Average annual ASP growth				Earliest year of ASP data if not 2005
		2005–2015	2015–2020	2020–2021	2005–2021	
Eylea	\$2.9	0.0%*	–0.7%	–2.5%	–0.8%*	2013
Keytruda	2.7	N/A	2.4*	0.8	2.1*	2016
Opdivo	1.8	N/A	2.6*	1.3	2.4*	2016
Rituxan	1.7	5.1	5.4	–3.3	4.6	
Prolia/Xgeva	1.6	0.6*	5.6	4.3	3.8*	2012
Lucentis	1.3	–0.4*	–2.6	–7.0	–1.7*	2008
Neulasta	1.2	4.4	4.0	–27.6	1.9	
Avastin	1.0	1.8	3.5	–6.8	1.7	
Orencia	0.9	7.4*	10.6	3.7	8.3*	2007
Remicade	0.9	3.4	–5.0	–21.7	–1.0	
Herceptin	0.8	4.8	4.6	–7.5	3.9	
Darzalex	0.8	N/A	4.8*	3.7	4.5*	2017
Ocrevus	0.6	N/A	0.3*	–0.2	0.1*	2018
Soliris	0.5	2.5	1.8	–0.1	2.1*	2008
Alimta	0.5	4.1	3.1	3.4	3.8	
Tecentriq	0.5	N/A	1.4*	0.4	1.0*	2018
Imfinzi	0.4	N/A	N/A	1.9	1.9*	2020
Cimzia	0.4	10.6*	5.9	–0.3	7.4*	2010
Sandostatin LAR	0.4	5.3	7.5	–0.2	5.6	
Velcade	0.4	5.1	–0.7	–0.4	2.9	
Consumer price index for urban consumers		2.1	2.0	1.4	2.0	

Note: ASP (average sales price), N/A (not applicable). Growth rates for ASP are calculated from first quarter to first quarter of each year. "Medicare payments" includes Medicare program payments and beneficiary cost sharing for these drugs furnished by physicians, suppliers, and hospital outpatient departments, but excludes those furnished by critical access hospitals, Maryland hospitals, and dialysis facilities. Vaccines for which Medicare pays 95 percent of the average wholesale price are also excluded from this table. See Chart 10-2 and associated bullets for information on vaccine price growth.
*Indicates that ASP payment rates for a specific product were not available for the full period listed and the average annual growth rate was calculated based on the earliest year that a first-quarter payment rate was available.

Source: MedPAC analysis of CMS ASP pricing files and consumer price index for all urban consumers data from the Bureau of Labor Statistics and MedPAC and Acumen LLC analysis of Medicare claims data.

- Over the period from 2005 to 2021, 17 out of 20 of the top Part B drugs have experienced net price increases, with 12 of these products' ASPs increasing faster than the consumer price index for urban consumers on average over the period.

(Chart continued next page)

Chart 10-4. Growth in ASP for the 20 highest expenditure Part B drugs, 2005–2021 (continued)

- In the most recent year, more products in the top 20 experienced a price decrease than a price increase. ASP decreased for 12 products and increased for 8 products between the first quarters of 2020 and 2021. Compared with the average annual rate of price growth over the prior 5-year period, between first quarter 2020 and 2021, the ASP for 17 of the top 20 products grew at a slower rate or declined by more than they had in the previous period.
- Biosimilar competition may account for the decreases in ASP between 2020 and 2021 for some originator biologics; Rituxan, Neulasta, Remicade, Avastin, and Herceptin have all faced biosimilar entry since 2019 or earlier. For these five products, the recent price declines have begun to reverse a long period of rising prices, with average price growth over the last 16 years ranging from –1.0 percent per year for Remicade to 4.6 percent per year for Rituxan.

Chart 10-5. Trends in Medicare Part B payment rates for originator biologics and their biosimilar products

	First biosimilar entry	Percent change in originator biologics' ASP since biosimilar entry (through 2021 Q1)	Biosimilars' payment rate as a percent of originator biologic's payment rate (2021 Q1)	Biosimilar market share (2020 Q3)
Neupogen and biosimilars	2015 Q3	-6%	44%–56%	77%
Remicade and biosimilars	2016 Q4	-46%	94%–115%	16%
Neulasta and biosimilars	2018 Q3	-35%	97%–116%	27%
Procrit/Epogen and biosimilars	2018 Q4	-28%	97%	47%
Avastin and biosimilars	2019 Q3	-8%	75%–79%	41%
Herceptin and biosimilars	2019 Q3	-8%	74%–90%	40%
Rituxan and biosimilars	2019 Q4	-4%	74%–75%	24%

Note: ASP (average sales price), Q1 (first quarter), Q3 (third quarter), Q4 (fourth quarter) An originator biologic is a drug product derived from a living organism. A biosimilar product is a follow-on product that is approved by the Food and Drug Administration (FDA) based on the product being highly similar to the originator biologic. The biosimilars included in the analysis are Zarxio, Nivestym, and Granix for originator Neupogen; Inflectra, Renflexis, and Avsola for originator Remicade; Fulphila, Udenyca, and Ziextenzo for originator Neulasta; Retacrit for originator Procrit/Epogen; Mvasi and Zirabev for originator Avastin, Ontruzant, Herzuma, Ogivri, Trazimera, and Kanjinti for originator Herceptin; and Truxima and Ruxience for originator Rituxan. Although Granix is not a biosimilar in the U.S. (because it was approved under the standard FDA approval process for new biologics), we include it here because it was approved as a biosimilar to Neupogen in Europe and it functions as a competitor to Neupogen in the U.S. market. First biosimilar entry date reflects the earliest market date for a product approved by the FDA as a biosimilar to the originator biologic.

Source: MedPAC analysis of payment rates from CMS's ASP pricing files and product market date information from CMS's database on drug products in the Medicaid Drug Rebate Program and Acumen LLC analysis of Medicare claims data.

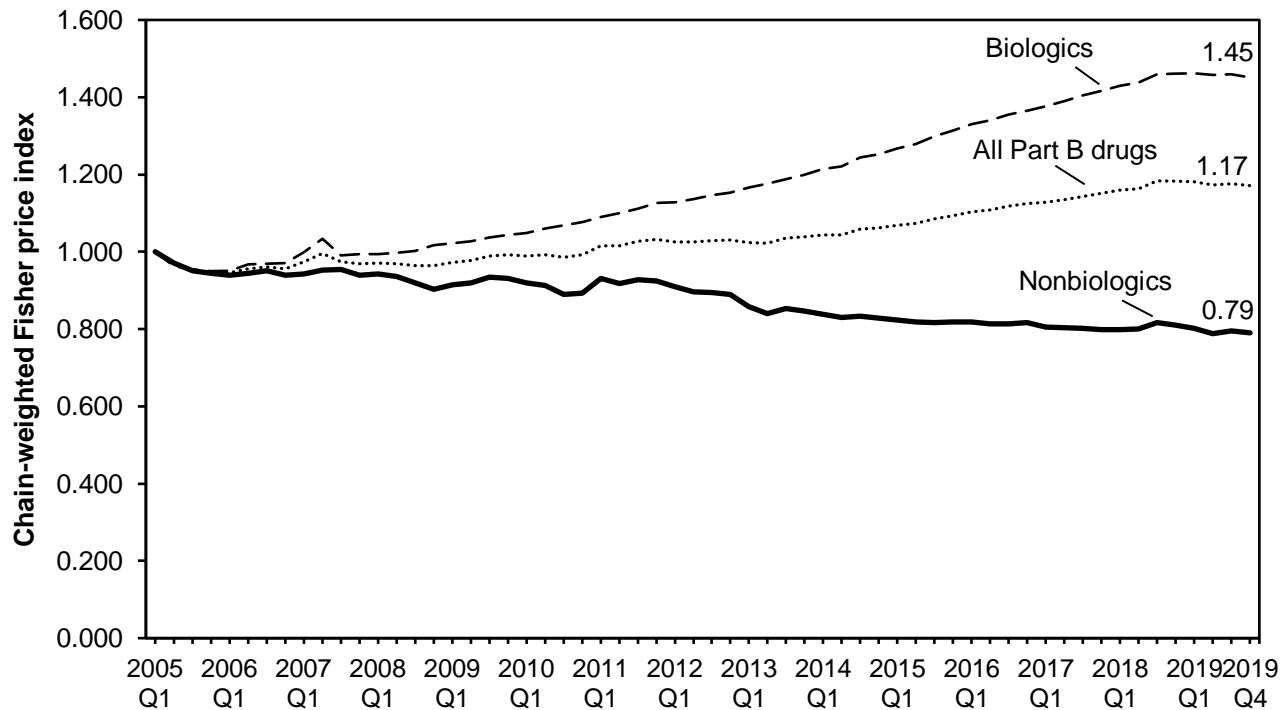
- Under Part B, Medicare pays for an originator biologic at 106 percent of its own ASP. For biosimilars, Medicare pays 100 percent of the biosimilar's ASP plus 6 percent of the originator product's ASP. During the first two to three quarters when a biosimilar is new to the market, ASP data are unavailable and Medicare pays a rate of wholesale acquisition cost (WAC) plus 3 percent.
- Medicare payment rates for biosimilars are generally lower than those of the corresponding originator biologics because biosimilars generally have lower prices (as measured by ASP) than originator biologics. The extent to which originator biologics have lowered their prices in response to biosimilar entry and the extent to which market share has shifted to biosimilars varies by product.

(Chart continued next page)

Chart 10-5. Trends in Medicare Part B payment rates for originator biologics and their biosimilar products (continued)

- Neupogen, the originator biologic that has faced biosimilar competition for the longest period (since the third quarter of 2015), has reduced its price, as measured by ASP, only modestly (6 percent) since biosimilar entry. As of first quarter 2021, biosimilars' payment rates were roughly 50 percent lower than the originator's payment rate. Biosimilars accounted for over three quarters of market share as of the third quarter of 2020.
- The originator Remicade's price has declined substantially (46 percent) since biosimilar entry in the fourth quarter of 2016. As of the first quarter of 2021, Medicare's payment rates for Remicade and its biosimilars are relatively close, with two biosimilars' payment rates ranging from 94 percent to 96 percent of Remicade's payment rate. A third biosimilar that launched in the third quarter of 2020 was paid about 115 percent Remicade's payment that quarter. Remicade has continued to retain most of the market share, with biosimilars accounting for 16 percent of utilization as of the third quarter of 2020.
- The originator Neulasta has reduced its price by 35 percent since biosimilar entry in the third quarter of 2018. As of the first quarter of 2021, Medicare's payment rates for Neulasta and its biosimilars are in a relatively close range. The biosimilars' payment rates range from 97 percent to 116 percent of the Neulasta's payment rate. Biosimilars accounted for 27 percent of utilization as of the third quarter of 2020.
- The price of the originators Procrit/Epogen has fallen 28 percent since biosimilar entry in the fourth quarter of 2018. Medicare's payment rate for the biosimilar is slightly lower (3 percent) than for the originators, as of the first quarter of 2021. Biosimilars accounted for nearly half of utilization as of the third quarter of 2020.
- The originator Avastin has reduced its price 8 percent since biosimilar entry in the third quarter of 2019. As of the first quarter 2021, Medicare's payment rates for the biosimilars are 21 percent to 25 percent below the originator's payment rate. In the first two years of biosimilar availability, their use has grown, accounting for 41 percent of utilization as of the third quarter of 2020.
- The originator Herceptin's price has declined 8 percent since biosimilar entry in the third quarter of 2019. Medicare's first quarter 2021 payment rates for the biosimilars ranged from 10 percent to 26 percent below the originator's payment rate. As of the third quarter of 2020, Herceptin faced the largest number of biosimilar competitors (five) of any originator biologic, and the biosimilars' market share was 40 percent.
- Originator Rituxan's price has fallen slightly (4 percent) since biosimilar entry in the fourth quarter of 2019. Medicare's payment rates for biosimilars are roughly 25 percent below the originator's payment rate. Biosimilars' market share reached 24 percent in the third quarter of 2020.

Chart 10-6. Price indexes for Medicare Part B drugs, 2005–2019



Note: Q1 (first quarter), Q4 (fourth quarter). The Part B price indexes reflect growth in the average sales price of Part B–covered drugs over time, measured for individual drugs at the level of the Healthcare Common Procedure Coding System billing code. These measures of price growth reflect growth in the price of individual products but do not reflect changes in price due to the introduction of new products or changes in the mix of products used. The Part B price index for biologics in this chart and in Chart 10-26 are different due to the different periods of analysis.

Source: Acumen LLC analysis for MedPAC.

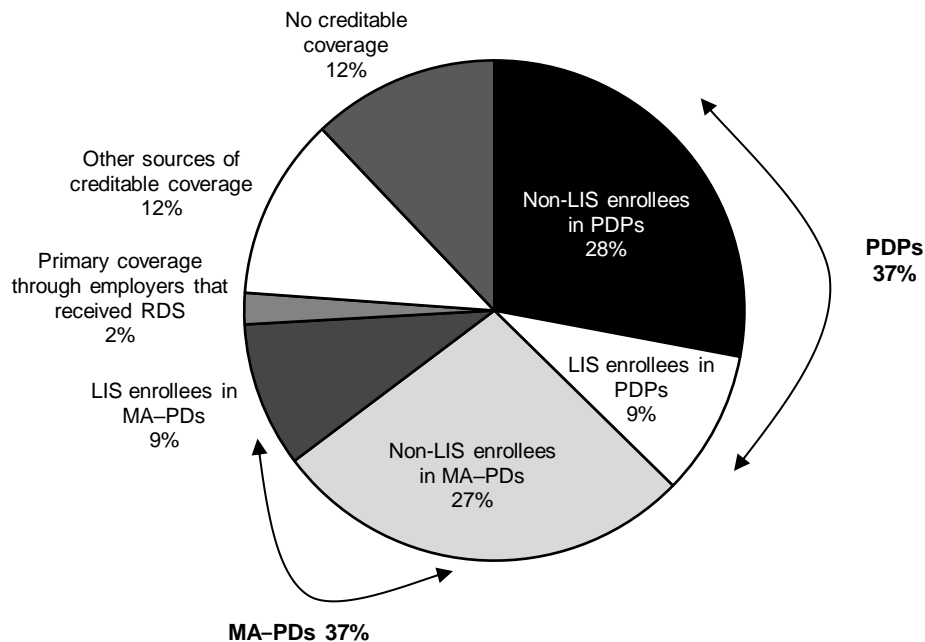
- The Part B price indexes reflect growth in the average sales price (ASP) at the individual product level and do not reflect changes in price that occur as a result of changes in the mix of drugs used or the introduction of new, higher priced drugs.
- Measured by the change in the ASP of individual Part B–covered drugs, the prices of Part B–covered drugs rose by an average of about 17 percent cumulatively between 2005 and 2019 (an index of 1.17).
- Underlying this overall trend in the price index are different patterns by type of product. Between 2005 and 2019, the price index for Part B–covered biologics increased by 45 percent, while the price index for nonbiologics declined by 21 percent.

(Chart continued next page)

Chart 10-6. Price indexes for Medicare Part B drugs, 2005–2019 (continued)

- Since 2005, growth in biologics' prices has driven growth in the Part B drug price index. However, recently, between the third quarter of 2018 and the fourth quarter of 2019, the biologics' price index declined about 0.6 percent, due largely to price declines among products with biosimilar competition. The decline in the biologics' price index, coupled with the continued decline in the nonbiologics' price index, resulted in about a 1.1 percent decline in the overall Part B drug price index between the third quarter of 2018 and the fourth quarter of 2019.
- The nonbiologic group includes single-source drugs and drugs with generic competition. The more than decade-long downward price trend for nonbiologics in part reflects patent expiration and generic entry for some of these products. It also reflects the design of the ASP payment system, which spurs price competition among generics and their associated brand-name products by assigning these products to a single billing code and paying them the same average rate.

Chart 10-7. In 2021, approximately 88 percent of Medicare beneficiaries are enrolled in Part D plans or have other sources of creditable drug coverage



Note: LIS (low-income [drug] subsidy), PDP (prescription drug plan), MA-PD (Medicare Advantage–Prescription Drug [plan]), RDS (retiree drug subsidy). “Creditable coverage” means the value of drug benefits is equal to or greater than that of the basic Part D benefit. Enrollment is as of April 13, 2021. Components may not sum to totals due to rounding.

Source: MedPAC analysis of PDP and MA-PD enrollment data and LIS enrollment data from CMS, Medicare enrollment projections from the 2020 Medicare Trustees’ report, and analysis of the 2018 Medicare denominator file.

- In 2021, approximately 88 percent of Medicare beneficiaries are enrolled in Part D plans, have prescription drug coverage through employer-sponsored plans that receive Medicare’s RDS, or have other sources of drug coverage that are equal to or greater than the average value of Part D’s defined standard benefit (called “creditable coverage”). Twelve percent of Medicare beneficiaries have no drug coverage or coverage that is less generous.
- In 2021, nearly three-quarters of Medicare beneficiaries receive prescription drug benefits through Part D plans: 37 percent in stand-alone PDPs and 37 percent in MA-PDs.
- About 18 percent of Medicare beneficiaries receive Part D’s LIS in 2021. Of all LIS beneficiaries, half of them (9 percent of all Medicare beneficiaries) are enrolled in stand-alone PDPs, and the other half are in MA-PDs.
- Non-LIS enrollees in stand-alone PDPs account for 28 percent of all Medicare beneficiaries. Another 27 percent of Medicare beneficiaries are enrolled in MA-PDs and do not receive low-income subsidies.

(Chart continued next page)

Chart 10-7. In 2021, approximately 88 percent of Medicare beneficiaries are enrolled in Part D plans or have other sources of creditable drug coverage (continued)

- Employer and union health plans continue to be important sources of drug coverage for Medicare beneficiaries. In 2021, 11 percent of Medicare beneficiaries are in Part D plans (including PDPs and MA-PDs) set up by employers or unions for their retirees (data not shown). Under these employer group waiver plans (EGWPs), Medicare is the primary payer for basic drug benefits, and typically the employer offers wrap-around coverage. Separately, Medicare trustees estimate that 2 percent of Medicare beneficiaries are in plans offered by employers that receive Medicare's RDS. (If an employer remains the primary payer of creditable drug coverage for its retirees, 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.) Additionally, approximately 12 percent of Medicare beneficiaries have creditable drug coverage from sources other than Part D, much (but not all) of which is related to past employment, for example, through the Federal Employees Health Benefits Program, TRICARE, and employers that do not sponsor an EGWP or receive the RDS.

Chart 10-8. Changes in parameters of the Part D defined standard benefit over time

	2006	2019	2020	2021	Cumulative change 2006–2021
Deductible	\$250.00	\$415.00	\$435.00	\$445.00	78%
Initial coverage limit	2,250.00	3,820.00	4,020.00	4,130.00	84%
Annual out-of-pocket threshold	3,600.00	5,100.00	6,350.00	6,550.00	82%
Total covered drug spending at annual out-of-pocket threshold					
Enrollees eligible for manufacturers' coverage-gap discount	5,100.00	8,139.54	9,719.38	10,048.39	97%
Other enrollees	5,100.00	7,653.75	9,038.75	9,313.75	83%
Cost sharing above the annual out-of-pocket threshold is the greater of 5% coinsurance or these amounts:					
Copay for generic/preferred multisource drugs	2.00	3.40	3.60	3.70	85%
Copay for other prescription drugs	5.00	8.50	8.95	9.20	84%

Note: Under Part D's defined standard benefit, the enrollee pays the deductible and then 25 percent of covered drug spending (75 percent is 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 (OOP) threshold. Beginning in 2011, certain enrollees pay reduced cost sharing in the coverage gap because manufacturers of brand-name drugs must provide a discount. Criteria to be eligible for the coverage-gap discount exclude most enrollees who receive Part D's low-income subsidy as well as enrollees in qualified retiree drug plans. For 2011 and later years, the amount of total covered drug spending at the annual OOP threshold depended on the mix of brand-name and generic drugs filled during the coverage gap. The amounts shown are for individuals who have no source of supplemental coverage with the average mix of brand and generic spending. Cost sharing paid by most sources of supplemental coverage does not count toward this threshold. Above the OOP limit, the enrollee pays 5 percent coinsurance or the respective copay shown above, whichever is greater.

Source: CMS Office of the Actuary.

- The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 specified a defined standard benefit structure for Part D. In 2021, the standard benefit has a \$445 deductible, 25 percent coinsurance on covered drugs until the enrollee reaches \$4,130 in total covered drug spending, and then a coverage gap until OOP spending reaches the annual threshold. (The total dollar amount of drug spending at which a beneficiary reaches the OOP threshold varies from person to person, depending on the mix of brand-name and generic prescriptions filled. CMS estimates that in 2021, a person who does not receive Part D's low-income subsidy and has no supplemental coverage would, on average, reach the threshold at about \$10,048 in total drug spending.) Before 2011, enrollees were responsible for paying the full discounted price of drugs filled during the coverage gap. Subsequently, certain enrollees pay reduced cost sharing for drugs filled in the coverage gap because manufacturers of brand-name drugs must provide a discount. In 2021, the cost sharing for drugs filled during the gap phase is about 25 percent for brand-name drugs and generics. Enrollees with drug spending that exceeds the annual threshold pay the greater of \$3.70 to \$9.20 or 5 percent coinsurance per prescription.

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Chart 10-8. Changes in parameters of the Part D defined standard benefit over time (continued)

- Most 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 enrolled in Part D, with cumulative changes of 78 percent to 97 percent between 2006 and 2021. The out-of-pocket threshold for 2020 was much higher than that for 2019 because the 2019 amount was restrained by a provision in law that limited increases between 2014 and 2019. In 2020, the OOP threshold reverted to what it otherwise would have been had CMS increased it by the same factor as other benefit parameters—that is, annual growth in Part D spending per enrollee. The effects of this increase on beneficiaries were somewhat muted by the fact that manufacturers provide a 70 percent discount on brand-name drugs in the coverage-gap phase, which counts as beneficiary spending toward the threshold.
- 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 sponsoring organizations 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. Defined standard benefit plans and plans that are actuarially equivalent to the defined standard benefit are both known as “basic benefits.”
- Once a sponsoring organization offers one plan with basic benefits within a prescription drug plan region, it may also offer plans with enhanced benefits—basic and supplemental coverage combined.
- Under the Bipartisan Budget Act of 2018, manufacturers of brand-name drugs must provide a 70 percent discount in the coverage gap, enrollees pay 25 percent cost sharing, and plan sponsors are responsible for covering only 5 percent of the cost of brand-name drugs.

Chart 10-9. Characteristics of stand-alone Medicare PDPs

	2020				2021			
	Plans		Enrollees as of February 2020		Plans		Enrollees as of February 2021	
	Number	Percent	Number (in millions)	Percent	Number	Percent	Number (in millions)	Percent
Total	948	100%	20.5	100%	996	100%	19.7	100%
Type of organization								
National	716	76	18.8	92	764	77	18.0	91
Other	232	24	1.7	8	232	23	1.7	9
Type of benefit								
Defined standard	0	0	0.0	0	1	<0.5	0.0	0
Actuarially equivalent	382	40	11.3	55	377	38	9.8	50
Enhanced	566	60	9.2	45	618	62	10.0	50
Type of deductible								
Zero	133	14	3.0	15	139	14	2.7	14
Reduced	161	17	5.0	25	192	19	4.5	23
Defined standard*	654	69	12.4	61	665	67	12.5	63
Some formulary tiers not subject to a deductible								
Some	504	53	11.5	56	587	59	12.0	61
None	444	47	9.0	44	409	41	7.7	39

Note: PDP (prescription drug plan). The PDPs and enrollment described here exclude employer-only plans and plans offered in U.S. territories. "National" data reflect the total number of plans for organizations with at least 1 PDP in each of the 34 PDP regions. "Actuarially equivalent" includes both actuarially equivalent standard and basic alternative benefits. "Enhanced" refers to plans with basic plus supplemental coverage. Components may not sum to totals due to rounding. *The defined standard benefit's deductible was \$435 in 2020 and is \$445 in 2021.

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

- Plan sponsors are offering 996 stand-alone PDPs in 2021 compared with 948 in 2020—an increase of more than 5 percent. Total enrollment in PDPs declined by 3.8 percent to 19.7 million beneficiaries in 2021 from 20.5 million in 2020.
- In 2021, 77 percent of all PDPs are offered by sponsoring organizations that have at least 1 PDP in each of the 34 PDP regions (shown as "national" organizations in the table). Plans offered by those national sponsors account for 91 percent of all PDP enrollment.
- For 2021, 62 percent of PDP offerings include enhanced benefits (basic plus supplemental coverage), a small increase over the share in 2020. In 2021, the share of PDPs with actuarially equivalent benefits (having the same average value as the defined standard benefit but with alternative benefit designs) declined slightly to 38 percent. Enhanced plans and actuarially equivalent plans have nearly equal shares of PDP enrollees (50 percent each).
- In 2021, 67 percent of PDPs use the same \$445 deductible as in Part D's defined standard benefit, compared with 69 percent in 2020. Only 14 percent of PDP enrollees are in plans with no deductible. Also in 2021, 59 percent of all PDPs designate certain formulary tiers that are not subject to the deductible. If, for example, a PDP used such a designation for preferred generic drugs, an enrollee would pay just the plan's cost sharing for that tier rather than the full cost of the prescription up to the amount of the deductible. In 2021, 61 percent of PDP enrollees were in such plans, up from 56 percent in 2020.

Chart 10-10. Characteristics of MA–PDs

	2020				2021			
	Plans		Enrollees as of February 2020		Plans		Enrollees as of February 2021	
	Number	Percent	Number (in millions)	Percent	Number	Percent	Number (in millions)	Percent
Totals	2,799	100%	15.3	100%	3,133	100%	16.9	100%
Type of organization								
Local HMO	1,848	66	10.6	69	2,007	64	11.3	67
Local PPO	891	32	4.0	26	1,072	34	4.9	29
PFFS	26	1	0.1	0	21	1	0.0	0
Regional PPO	34	1	0.7	4	33	1	0.6	3
Type of benefit								
Defined standard	43	2	0.1	<0.5	31	1	0.1	1
Actuarially equivalent	81	3	0.2	2	66	2	0.1	1
Enhanced	2,675	96	15.0	98	3,036	97	16.6	99
Type of deductible								
Zero	1,349	48	7.4	49	1,582	50	9.1	54
Reduced	1,244	44	7.3	48	1,317	42	7.2	43
Defined standard*	206	7	0.5	4	234	7	0.5	3
Some formulary tiers not subject to a deductible								
Some	1,386	50	7.7	50	1,497	48	7.6	45
None	1,413	50	7.6	50	1,636	52	9.2	55

Note: MA–PD (Medicare Advantage–Prescription Drug [plan]), HMO (health maintenance organization), PPO (preferred provider organization), PFFS (private fee-for-service). The MA–PDs and enrollment described here exclude employer-only plans, plans offered in U.S. territories, 1876 cost plans, special needs plans, demonstrations, and Part B–only plans. Components may not sum to totals due to rounding. “Actuarially equivalent” includes both actuarially equivalent standard and basic alternative benefits. “Enhanced” refers to plans with basic plus supplemental coverage.
*The defined standard benefit’s deductible was \$435 in 2020 and is \$445 in 2021.

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

- There are 12 percent more MA–PDs in 2021 than in 2020. Sponsors are offering 3,133 MA–PDs in 2021 compared with 2,799 the year before. Enrollment in MA–PDs grew from 15.3 million in 2020 to 16.9 million in 2021 (10 percent).
- Between 2020 and 2021, the number of drug plans offered by HMOs grew from 1,848 to 2,007; HMO drug plans remain the dominant type of MA–PD, making up 64 percent of all offerings. Over the same period, the number of drug plans offered by local PPOs also increased from 891 plans to 1,072 plans.
- A much larger share of MA–PDs than stand-alone prescription drug plans (PDPs) offer enhanced benefits. In 2021, 97 percent of MA–PDs have enhanced benefits compared with 62 percent of all PDPs (see Chart 10-9). In 2021, enhanced MA–PDs attracted 99 percent of total MA–PD enrollment.
- Fifty percent of MA–PDs have no deductible in 2021, and those plans attracted 54 percent of all MA–PD enrollees.
- In 2021, 48 percent of MA–PDs designate certain cost-sharing tiers of their formularies that are not subject to a deductible. Those plans account for 45 percent of MA–PD enrollment.

Chart 10-11. Change in average Part D premiums, 2017–2021

	Average monthly premium weighted by enrollment					Cumulative change in weighted average premium, 2017–2021
	2017	2018	2019	2020	2021	
All plans	\$32	\$32	\$29	\$27	\$26	–17%
Basic plans	30	30	32	30	32	4
Enhanced plans						
Basic benefits	27	26	22	20	18	–35
Supplemental benefits	<u>6</u>	<u>7</u>	<u>6</u>	<u>6</u>	<u>6</u>	6
Total premium	33	33	28	26	24	–27
All basic coverage	29	28	25	23	22	–23
PDPs	41	41	40	38	38	–6
Basic plans	31	31	32	30	32	2
Enhanced plans						
Basic benefits	43	42	35	33	29	–33
Supplemental benefits	<u>11</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>16</u>	42
Total premium	54	57	50	48	45	–17
All basic coverage	36	35	33	31	30	–16
MA–PDs, including SNPs	19	18	16	15	15	–23
Basic plans	26	28	28	26	31	16
Enhanced plans						
Basic benefits	16	15	13	12	12	–25
Supplemental benefits	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	–29
Total premium	18	17	14	13	13	–27
All basic coverage	18	17	15	14	14	–21
MA–PD buy-down of basic premium	16	16	16	15	19	20
MA–PD buy-down of supplemental benefits	15	16	17	20	21	45
Base beneficiary premium	35.63	35.02	33.19	32.74	33.06	–7

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), SNP (special needs plan). All calculations exclude employer-only groups and plans offered in U.S. territories. In addition, MA–PDs exclude Part B–only plans, demonstrations, and 1876 cost plans. The MA–PD data reflect the portion of Medicare Advantage plans’ total monthly premium attributable to Part D benefits for plans that offer Part D coverage, as well as Part C rebate dollars that were used to offset Part D premium costs. The fact that average premiums for enhanced MA–PDs are lower than for basic MA–PDs could reflect several factors such as changes in enrollment among plan sponsors and counties of operation and differences in the average health status of plan enrollees. Cumulative changes were calculated from unrounded data. Components may not sum to totals due to rounding.

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

(Chart continued next page)

Chart 10-11. Change in average Part D premiums, 2017–2021 (continued)

- Part D enrollees can select between plans with basic or enhanced benefits (the latter combine basic and supplemental coverage). Medicare aims to subsidize 74.5 percent of the average cost of basic benefits; enrollees pay premiums for the remaining 25.5 percent and all of the cost of any supplemental benefits. (For more about how plan premiums are determined, see Part D *Payment Basics* at http://www.medpac.gov/docs/default-source/payment-basics/medpac_payment_basics_20_partd_final_sec.pdf?sfvrsn=0.)
- The overall average premium paid by enrollees for any type of Part D coverage declined from \$27 per month in 2020 to \$26 per month in 2021. Over the period from 2017 to 2021, year-to-year changes in average premiums have varied by type of benefit (basic vs. enhanced) and type of plan (PDP vs. MA–PD); the changes have not necessarily corresponded to changes observed in the base beneficiary premium.
- Across all basic plans and the basic portion of enhanced plans, the average premium for basic benefits fell from \$29 in 2017 to \$22 per month in 2021, a cumulative decline of 23 percent. This decline occurred despite very rapid growth in spending for Part D's catastrophic phase of the benefit (data not shown). In the catastrophic phase, Medicare subsidizes 80 percent of enrollees' drug spending. (For more information about Medicare's Part D spending, see Chapter 14 of the Commission's March 2021 report to the Congress at http://www.medpac.gov/docs/default-source/reports/mar21_medpac_report_ch13_sec.pdf?sfvrsn=0.)
- Over the five-year period, the average enrollee premium for basic coverage in PDPs ranged between a low of \$30 in 2020 and a high of \$32 per month in 2021. Between 2017 and 2021, the average premium increased by a cumulative 2 percent. Among enhanced plans offered by PDPs, the average enrollee premium has ranged from \$45 in 2021 to \$57 in 2018. Over the five-year period, the average premium decreased by a cumulative 17 percent. Of the \$45 average premium in 2021 among enhanced PDPs, \$29 was for basic benefits and \$16 was for supplemental benefits. The portion of enhanced premiums attributable to supplemental benefits has grown, while the portion for basic benefits has declined.
- The average Part D premium paid by beneficiaries enrolled in MA–PDs with basic coverage ranged between a low of \$26 in 2020 and a high of \$31 per month in 2021. From 2017 to 2021, the average premium increased by a cumulative 16 percent. The average premium paid by beneficiaries enrolled in MA–PDs offering enhanced coverage has decreased from \$18 in 2017 to \$13 in 2021, a cumulative 27 percent decrease. MA–PD sponsors typically use a portion of Medicare's Part C (Medicare Advantage) payments to “buy down” the premiums that plan enrollees would otherwise have to pay for Part D basic premiums and supplemental benefits. Because of those Part C payment “rebates,” in 2021, MA–PD enrollees avoided having to pay \$19 per month in basic premiums and an additional \$21 per month for supplemental coverage, on average.

Chart 10-12. More premium-free PDPs for LIS enrollees in 2021

PDP region	State(s)	Number of PDPs			Number of PDPs that have zero premium for LIS enrollees		
		2020	2021	Difference	2020	2021	Difference
1	ME, NH	26	28	2	6	7	1
2	CT, MA, RI, VT	25	27	2	7	8	1
3	NY	27	28	1	9	7	2
4	NJ	28	30	2	8	7	-1
5	DC, DE, MD	27	27	0	10	9	-1
6	PA, WV	31	33	2	10	10	0
7	VA	29	30	1	7	7	0
8	NC	28	31	3	9	9	0
9	SC	28	29	1	5	5	0
10	GA	28	32	4	6	8	2
11	FL	27	28	1	4	5	1
12	AL, TN	30	32	2	7	8	1
13	MI	30	29	-1	9	9	0
14	OH	28	30	2	2	5	3
15	IN, KY	28	30	2	7	8	1
16	WI	30	31	1	9	9	0
17	IL	28	31	3	8	10	2
18	MO	28	29	1	5	6	1
19	AR	27	31	4	6	7	1
20	MS	25	27	2	7	7	0
21	LA	26	26	0	9	8	-1
22	TX	30	35	5	5	8	3
23	OK	29	30	1	8	9	1
24	KS	28	29	1	6	7	1
25	IA, MN, MT, ND, NE, SD, WY	29	28	-1	8	7	-1
26	NM	26	27	1	7	7	0
27	CO	26	27	1	7	8	1
28	AZ	31	32	1	12	10	-2
29	NV	28	29	1	5	7	2
30	OR, WA	28	29	1	8	9	1
31	ID, UT	28	28	0	8	9	1
32	CA	32	32	0	8	7	-1
33	HI	25	26	1	5	5	0
34	AK	24	25	1	7	7	0
	Total	948	996	48	244	259	15

Note: PDP (prescription drug plan), LIS (low-income [drug] subsidy).

Source: MedPAC based on 2020 and 2021 Part D plan report file provided by CMS.

- The total number of stand-alone PDPs increased by 5 percent, from 948 in 2020 to 996 in 2021. The median number of plans offered in PDP regions increased to 29 plans from 28 in 2020 (data not shown). In 2021, Alaska has the fewest stand-alone PDPs, with 25, and Region 22 (Texas) had the most, with 35.
- In 2021, 259 PDPs qualify as premium free to LIS enrollees. At least five premium-free PDPs are available in any given region.

Chart 10-13. In 2021, about one in two listed drugs are subject to some utilization management

	PDP enrollees	MA–PD enrollees
5-tier formulary structure ^a (in percent)	100% ^b	99%
Drugs on formulary as % of all Part D drugs ^c	72%	78%
Median cost-sharing amounts		
Tier 1: generic drugs	\$0	\$1
Tier 2: other generic drugs	5	10
Tier 3: preferred brand-name drugs	40	47
Tier 4: nonpreferred drugs	40%	100
Tier 5: specialty-tier drugs	25%	33%
Drugs with utilization management requirement (in percent)		
Prior authorization	28%	26%
Step therapy	1	1
Quantity limits	37	36
Any utilization management	51	48

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–PDs 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 being prescribed other drugs in the same therapeutic category. “Quantity limits” means that plans limit the number of doses of a drug available to the enrollee in a given time period. Generic drugs placed on Tier 1 are “preferred” (i.e., lowest cost sharing) relative to generic drugs placed on higher tiers, including Tier 2.

^a Includes formularies with an additional (sixth) tier used for certain types of drugs, such as over-the-counter medications.

^b Less than 1 percent of enrollees were in a plan that did not use a tiered formulary structure.

^c Number of all Part D drugs is based on the counts of unique chemical entities listed on CMS’s formulary reference file for 2021 benefit year.

Source: MedPAC analysis of formularies submitted to CMS.

- Most Part D enrollees choose plans that have a five-tier structure: two generic, one preferred brand-name tier, and one nonpreferred drug tier (which may include both brand-name and generic drugs), plus a specialty tier. In 2021, nearly all enrollees are enrolled in plans with this five-tier structure, including plans with an additional (sixth) tier for certain types of drugs, such as over-the-counter medications.
- The number of drugs listed on a plan’s formulary affects a beneficiary’s access to medications. In 2021, on average, PDP enrollees have access to 72 percent of all Part D covered drug products compared with 78 percent among MA–PD enrollees.

(Chart continued next page)

Chart 10-13. In 2021, about one in two listed drugs are subject to some utilization management, 2021 (continued)

- For enrollees in PDPs with a five-tier structure, the median copay in 2021 is \$0 for a generic drug on a lower tier and \$5 for other generic drugs. The median copay is \$40 for a preferred brand-name drug and 40 percent coinsurance for a nonpreferred drug. For MA–PD enrollees, in 2021, the median copays for generic drugs are \$1 and \$10 for the two generic tiers, respectively. The median copay is \$47 for a preferred brand and \$100 for a nonpreferred drug. (About 14 percent of MA–PDs use 45 percent coinsurance for nonpreferred drugs.) Both PDPs and MA–PDs use coinsurance for specialty-tier drugs (25 percent and 33 percent, respectively).
- In addition to the number of drugs listed on a plan’s formulary, plans’ processes for nonformulary exceptions and use of utilization management tools—prior authorization (preapproval for coverage), quantity limits (limitations on the number of doses of a particular drug covered in a given period), and step therapy requirements (enrollees being required to try specified drugs before being prescribed other drugs in the same therapeutic category)—can affect access to certain drugs.
- In 2021, the use of some form of utilization management, on average, increased to 51 percent of drugs listed on a plan’s formulary in stand-alone PDPs and 48 percent in MA–PDs. Part D plans typically use quantity limits or prior authorization to manage enrollees’ prescription drug use.
- Among the drugs listed on plan formularies, on average, the share that requires prior authorization in 2021 increased for both stand-alone PDPs and MA–PDs (to 28 percent and 26 percent, respectively). The share with quantity limits increased for both types of plans. In 2021, on average, quantity limits apply to 37 percent and 36 percent of drugs listed on formularies of stand-alone PDPs and MA–PDs, respectively. The share of drugs listed on plan formularies that require the use of step therapy remains very low for both stand-alone PDPs and MA–PDs.

Chart 10-14. Characteristics of Part D enrollees, 2019

	All Medicare	Part D	Plan type		Subsidy status	
			PDP	MA-PD	LIS	Non-LIS
Beneficiaries ^a (in millions)	65.4	48.4	27.2	21.2	14.1	34.2
Percent of all Medicare	100%	74%	42%	32%	22%	52%
Gender						
Male	46%	43%	43%	43%	41%	44%
Female	54	57	57	57	59	56
Race/ethnicity^b						
White, non-Hispanic	74	73	78	66	53	81
African American, non-Hispanic	10	11	9	13	20	7
Hispanic	9	10	6	15	17	7
Asian	3	4	3	4	6	2
Other	3	3	3	2	3	3
Age (years)^c						
<65	14	14	15	14	36	5
65–69	24	22	22	22	18	24
70–74	23	23	23	24	15	27
75–79	16	17	16	17	11	19
80+	23	23	24	22	20	25

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

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

^b Because we did not have race and ethnicity information for 2019 that was adjusted for undercounting Hispanic population, the figures shown are distributions based on 2018 data.

^c Age as of July 2019.

Source: MedPAC analysis of the common Medicare environment file from CMS.

- In 2019, 48.4 million Medicare beneficiaries (74 percent) were enrolled in Part D at some point in the year. About 27 million were in stand-alone PDPs, and the remaining 21 million were in MA-PDs. Just over 14 million enrollees received Part D's LIS.
- Demographic characteristics of Part D enrollees are generally similar to the overall Medicare population, with the exception of gender (Part D enrollees are more likely to be female). MA-PD enrollees are more likely to be Hispanic or African American compared with PDP enrollees; LIS enrollees are more likely to be female, minority, and disabled beneficiaries under age 65 compared with non-LIS enrollees.

Chart 10-15. Part D enrollment trends, 2007–2019

	2007	2010	2014	2019	Average annual growth rate		
					2007–2010	2010–2014	2014–2019
Part D enrollment (in millions)*							
Total	26.1	29.7	40.0	48.4	4.4%	7.7%	3.9%
Employer group waiver plans	2.0	2.6	7.0	7.5	9.2	27.4	1.5
By plan type							
PDP	18.3	18.9	25.1	27.2	1.1	7.3	1.6
MA–PD	7.8	10.6	14.9	21.2	10.9	8.9	7.2
By subsidy status							
LIS	10.4	11.3	12.8	14.1	2.7	3.1	2.0
Non-LIS	15.7	18.4	27.2	34.2	5.5	10.2	4.7
By age (years) ^b							
<65	5.5	6.3	7.8	6.8	4.7	5.5	–2.5
65–69	5.4	6.6	9.5	10.8	6.5	9.9	2.5
70–79	8.8	9.9	13.9	19.5	3.8	8.9	7.0
80+	6.4	7.1	8.8	11.3	3.2	5.7	5.1
Part D enrollment (in percent)							
Total	100%	100%	100%	100%			
Employer group waiver plans	8	9	17	15			
By plan type							
PDP	70	64	63	56			
MA–PD	30	36	37	44			
By subsidy status							
LIS	40	38	32	29			
Non-LIS	60	62	68	71			
By age (years)**							
<65	21	21	19	14			
65–69	21	22	24	22			
70–79	34	33	35	40			
80+	25	24	22	23			

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), LIS (low-income [drug] subsidy). A beneficiary was 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 during the year, that individual was classified into the type of plan with the greater number of months of enrollment. Components may not sum to totals due to rounding. Average annual growth rate is calculated on unrounded numbers.

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

**Age as of July of the respective year. Changes in the distribution of enrollment by age for 2019 are largely due to the changes in the data source.

Source: MedPAC analysis of common Medicare environment file from CMS.

- Part D enrollment grew faster between 2010 and 2014 (average annual growth rate (AAGR) of 7.7 percent) than between 2007 and 2010 (AAGR of 4.4 percent) or between 2014 and 2019 (AAGR of 3.9 percent). The faster enrollment growth between 2010 and 2014 largely reflects the growth in enrollment in Part D plans operated by employers for their retirees (employer group waiver plans, or EGWPs). Enrollment in EGWPs grew from 2.6 million to 7.0 million (AAGR of 27.4 percent) during this period.

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Chart 10-15. Part D enrollment trends, 2007–2019 (continued)

- The number of enrollees receiving the LIS grew modestly between 2007 and 2019, with an AAGR of between 2 percent (from 2014 to 2019) and 3.1 percent (from 2010 to 2014). During the same period, the number of non-LIS enrollees grew faster than LIS enrollees, with an AAGR of 10.2 percent between 2010 and 2014 and an AAGR of 4.7 percent or greater before 2010 and after 2014. Faster enrollment growth among non-LIS enrollees is partly attributable to the recent growth in EGWPs that shifted beneficiaries into Part D plans from employer plans that had previously received Medicare’s retiree drug subsidy (RDS) (see Chart 10-7 for information on the RDS).
- Between 2014 and 2019, the largest growth in enrollment was observed for beneficiaries ages 70 to 79 (7 percent annually, on average), reflecting the aging of the baby-boom cohort.
- While MA–PD enrollment growth decelerated in recent years from the nearly 11 percent AAGR observed between 2007 and 2010, enrollment in MA–PDs continued to exceed that of PDPs between 2014 and 2019 (AAGR of 7.2 percent and 1.6 percent, respectively).

Chart 10-16. Part D enrollment by region, 2019

PDP region	State(s)	Share of Medicare enrollment		Share of Part D enrollment*			
		Part D*	EGWP	Plan type		Subsidy status	
				PDP	MA-PD	LIS	Non-LIS
1	ME, NH	72%	9%	67%	33%	31%	69%
2	CT, MA, RI, VT	78	15	64	36	33	67
3	NY	79	19	52	48	37	63
4	NJ	75	17	76	24	24	76
5	DE, DC, MD	65	15	83	17	31	69
6	PA, WV	78	14	54	46	27	73
7	VA	66	9	71	29	27	73
8	NC	76	12	54	46	29	71
9	SC	74	13	62	38	29	71
10	GA	74	12	49	51	34	66
11	FL	78	7	43	57	29	71
12	AL, TN	75	9	48	52	33	67
13	MI	80	26	68	32	25	75
14	OH	80	13	56	44	25	75
15	IN, KY	77	12	65	35	29	71
16	WI	74	9	54	46	23	77
17	IL	75	12	68	32	28	72
18	MO	77	9	57	43	26	74
19	AR	72	3	66	34	36	64
20	MS	73	3	75	25	43	57
21	LA	77	10	52	48	39	61
22	TX	74	11	56	44	31	69
23	OK	69	9	72	28	30	70
24	KS	73	4	78	22	22	78
25	IA, MN, MT, NE, ND, SD, WY	76	6	69	31	21	79
26	NM	73	13	52	48	38	62
27	CO	74	10	53	47	23	77
28	AZ	75	8	48	52	27	73
29	NV	71	6	49	51	25	75
30	OR, WA	70	7	49	51	26	74
31	ID, UT	72	7	53	47	21	79
32	CA	79	13	47	53	34	66
33	HI	72	25	37	63	26	74
34	AK	66	27	99	1	33	67
	Mean	74	11	56	44	29	71
	Minimum	65	3	37	1	21	57
	Maximum	80	27	99	63	43	79

Note: PDP (prescription drug plan), EGWP (employer group waiver plans), MA-PD (Medicare Advantage-Prescription Drug [plan]), LIS (low-income [drug] subsidy). Definition of regions is based on PDP regions used in Part D.
*Includes enrollment in Part D plans operated for EGWPs.

Source: MedPAC analysis of Medicare Part D denominator and common Medicare environment files from CMS.

- Among Part D regions in 2019, all regions had 65 percent or more of all Medicare beneficiaries enrolled in Part D. In some regions with lower than average enrollment in Part D (Region 5 and Region 7), many beneficiaries likely received their drug coverage through the Federal Employees Health Benefits Program.
- Since 2010, many employers have switched from operating retiree drug subsidy (RDS)–eligible employer plans to sponsoring Part D plans for their retirees (EGWPs). In 2019, 11 percent of Medicare beneficiaries were enrolled in EGWPs compared with 5 percent or less before 2010 (see Chart 10-7 for information on the RDS).

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Chart 10-16. Part D enrollment by region, 2019 (continued)

- Before 2019, beneficiaries in Alaska were less likely to enroll in Part D because alternative employer-sponsored drug coverage was more widely available: The share of Medicare beneficiaries enrolled in employer-sponsored plans that received the RDS was 26 percent, compared with an average of 2 percent nationwide. In 2019, those beneficiaries were moved to Part D as employers switched from operating RDS-eligible plans to operating EGWPs.
- The share of Medicare beneficiaries in EGWPs varied from 3 percent in Region 19 (AR) and Region 20 (MS) to 25 percent or more in Region 13 (MI), Region 33 (HI), and Region 34 (AK).
- Wide variation was seen in the shares of Part D beneficiaries who enrolled in PDPs and MA–PDs across PDP regions. The pattern of MA–PD enrollment is generally consistent with availability of and enrollment in Medicare Advantage plans.
- The share of Part D enrollees receiving the LIS ranged from 21 percent in Region 25 (IA, MN, MT, NE, ND, SD, and WY) and Region 31 (ID and UT) to 43 percent in Region 20 (MS).

Chart 10-17. Components of Part D spending growth

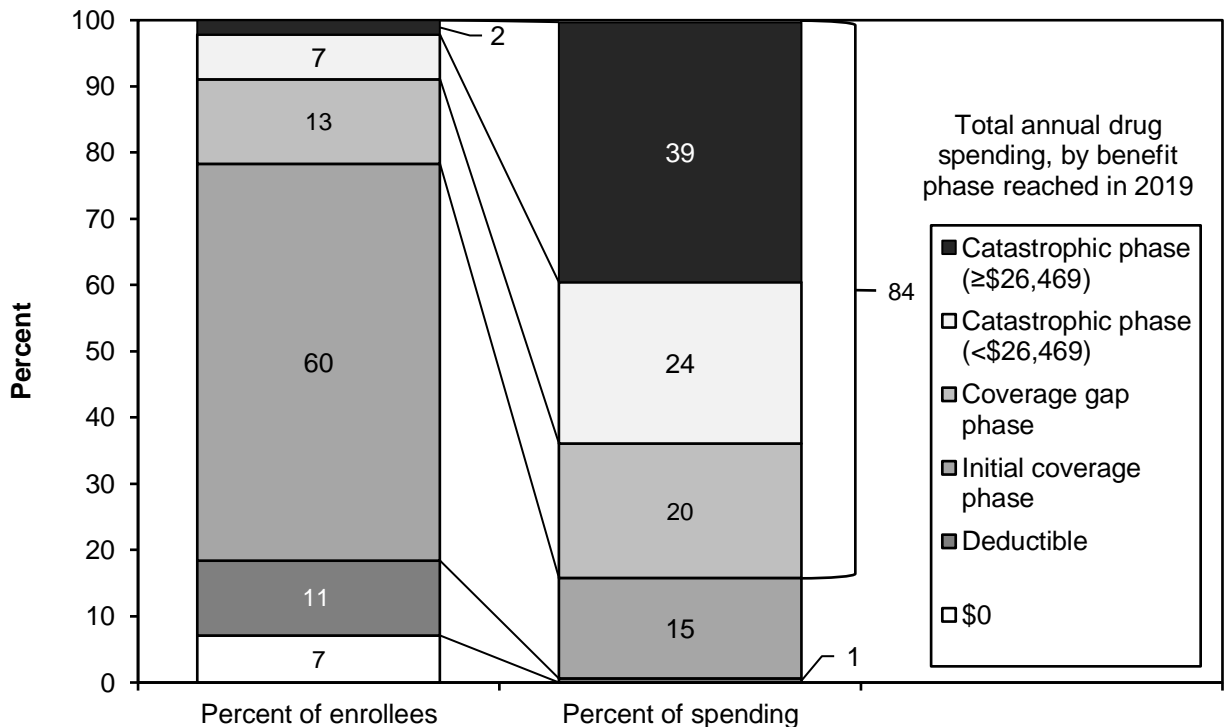
	2009	2019	Average annual growth 2009–2019
Total gross spending (in billions)	\$73.7	\$183.1	9.5%
High-cost beneficiaries	29.2	116.6	14.9%
Lower cost beneficiaries	44.6	66.5	4.1%
Number of beneficiaries using a Part D drug (in millions)	26.5	45.1	5.4%
High-cost beneficiaries	2.4	4.3	6.2%
Lower cost beneficiaries	24.1	40.8	5.4%
Amount per beneficiary who used Part D drugs			
Gross drug spending per year	\$2,781	\$4,062	3.9%
Average price per 30-day prescription	\$55	\$72	2.7%
Number of 30-day prescriptions	50.4	56.3	1.1%
Amount per high-cost beneficiary who used Part D drugs			
Gross drug spending per year	\$12,294	\$26,983	8.2%
Average price per 30-day prescription	\$110	\$236	7.9%
Number of 30-day prescriptions	111.4	114.4	0.3%
Amount per lower cost beneficiary who used Part D drugs			
Gross drug spending per year	\$1,846	\$1,632	–1.2%
Average price per 30-day prescription	\$42	\$33	–2.4%
Number of 30-day prescriptions	44.5	50.1	1.2%

Note: “High-cost beneficiaries” refers to individuals who incurred spending high enough to reach the catastrophic phase of the benefit. “Gross spending” reflects payments to pharmacies from all payers, including beneficiary cost sharing, but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. Changes in the average price per prescription reflect both price inflation and changes in the mix of drugs used. Components may not sum to totals due to rounding.

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

- Between 2009 and 2019, gross spending on drugs under the Part D program grew by an annual average rate of 9.5 percent. The annual growth in spending was considerably higher (14.9 percent) among high-cost beneficiaries (individuals who incurred spending high enough to reach the catastrophic phase of the benefit) compared with 4.1 percent for lower cost beneficiaries.
- During the 2009 through 2019 period, the number of beneficiaries who used Part D drugs grew by an annual average rate of 5.4 percent. The number of high-cost beneficiaries grew more rapidly (6.2 percent) compared with lower cost beneficiaries (5.4 percent).
- The average price per 30-day prescription covered under Part D rose from \$55 in 2009 to \$72 in 2019. Overall, growth in price per prescription accounted for more than two-thirds (2.7 percentage points) of the 3.9 percent average annual growth in spending per beneficiary among beneficiaries who used Part D drugs.
- The average annual growth rate in overall spending per beneficiary reflects two distinct patterns of price and spending growth, one for high-cost beneficiaries and another for lower cost beneficiaries. Among high-cost beneficiaries, annual growth in prices (7.9 percent) accounted for nearly all of the spending growth (8.2 percent) during this period. In contrast, among lower cost beneficiaries, the average annual decrease in prices (–2.4 percent) resulted in an overall decrease in spending (–1.2 percent annually), despite an increase in the number of prescriptions filled during the same period.

Chart 10-18. The majority of Part D spending was incurred by just over one-fifth of all Part D enrollees, 2019



Note: "Spending" (gross) reflects payments from all payers, including beneficiaries (cost sharing) but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. In 2019, the defined standard basic benefit included a \$415 deductible and 25 percent coinsurance until the enrollee reached \$3,820 in total covered drug spending. An individual with an average mix of drugs who did not receive Part D's low-income subsidy and who had no other supplemental coverage would have reached the catastrophic phase of the benefit at about \$8,140 in total drug spending. In 2019, among those who reached the catastrophic phase of the benefit, an enrollee at the 75th percentile of the distribution had drug spending totaling \$26,469. 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 2019, about 22 percent of Part D enrollees had annual spending exceeding the initial coverage limit (ICL) (typically set at \$3,820 in gross drug spending). For spending exceeding the ICL until they reached the catastrophic phase of the benefit (at about \$8,140 in gross drug spending under the defined standard benefit for beneficiaries not receiving Part D's low-income subsidy (LIS)), enrollees were responsible for a coinsurance 25 percent or greater. (For LIS enrollees, Part D's LIS paid the difference between the 100 percent coinsurance and the applicable maximum copay amounts of no more than \$8.50.) These beneficiaries accounted for 84 percent of total Part D spending.
- Spending on prescription drugs has become more concentrated over time. The costliest 9 percent of beneficiaries, those with drug spending above the catastrophic threshold, accounted for about 64 percent of total Part D spending. Before 2011, the costliest 8 percent of beneficiaries accounted for 40 percent or less of total Part D spending (data not shown). Just 2 percent of Part D enrollees with the highest spending (annual spending at or above \$26,469) accounted for 39 percent of total Part D spending. In comparison, for Medicare Part A and Part B spending, Medicare fee-for-service spending accounted for by the costliest 5 percent of beneficiaries was 43 percent in 2018 (data not shown; see Chart 1-14).
- While the majority (65 percent) of beneficiaries with the highest spending continues to be those who receive the LIS, those who do not receive the LIS are increasingly reaching the catastrophic phase of the benefit (data not shown; see Chart 10-19).

Chart 10-19. Characteristics of Part D enrollees, by benefit phase reached, 2019

	Annual drug spending		
	Below initial coverage limit	Coverage-gap phase	Catastrophic phase
Sex			
Male	43%	43%	43%
Female	57	57	57
Age (years)			
<65	12	14	32
65–69	24	17	18
70–74	24	22	19
75–80	17	19	14
80+	23	29	18
LIS status*			
LIS	25	32	65
Non-LIS	75	68	35
Plan type**			
PDP	55	60	62
MA–PD	45	40	38

Note: LIS (low-income [drug] subsidy), PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). “Spending” (gross) reflects payments from all payers, including beneficiaries (cost sharing) but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. In 2019, the defined standard basic benefit included a \$415 deductible and 25 percent coinsurance until the enrollee reached \$3,820 in total covered drug spending, and then a coverage gap until out-of-pocket (OOP) spending reached the annual OOP threshold of \$5,100. (The total dollar amount of drug spending at which a beneficiary reaches the OOP threshold varies from person to person, depending on the mix of brand-name and generic prescriptions filled. CMS estimated that in 2019, a person who did not receive Part D’s LIS and had no supplemental coverage would, on average, have reached the threshold at about \$8,140 in total drug spending.) A small number of beneficiaries were excluded from the analysis because of missing data. Components may not sum to 100 due to rounding.

*A beneficiary was 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 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 common Medicare environment file from CMS.

- In 2019, Part D enrollees who reached the catastrophic phase of the benefit were more likely to be disabled and under age 65, and receiving the LIS compared with Part D enrollees with annual spending below the catastrophic threshold.
- While LIS enrollees are more likely to reach the catastrophic phase of the benefit, their share has been declining, from more than 80 percent in 2010 and earlier years (data not shown) to 65 percent in 2019. This decline reflects more rapid growth in enrollment of individuals who do not receive the LIS as well as the growth in average prices of drugs taken by those individuals.
- Part D enrollees who reached the catastrophic phase of the benefit were more likely to be enrolled in stand-alone PDPs (62 percent) compared with enrollees whose spending was below the initial coverage limit (55 percent) or enrollees in the coverage gap who did not reach the catastrophic threshold (60 percent). Some of this difference likely reflects the facts that LIS enrollees are more costly on average and were more likely to be in PDPs in 2019.

Chart 10-20. Part D spending and use per enrollee, 2019

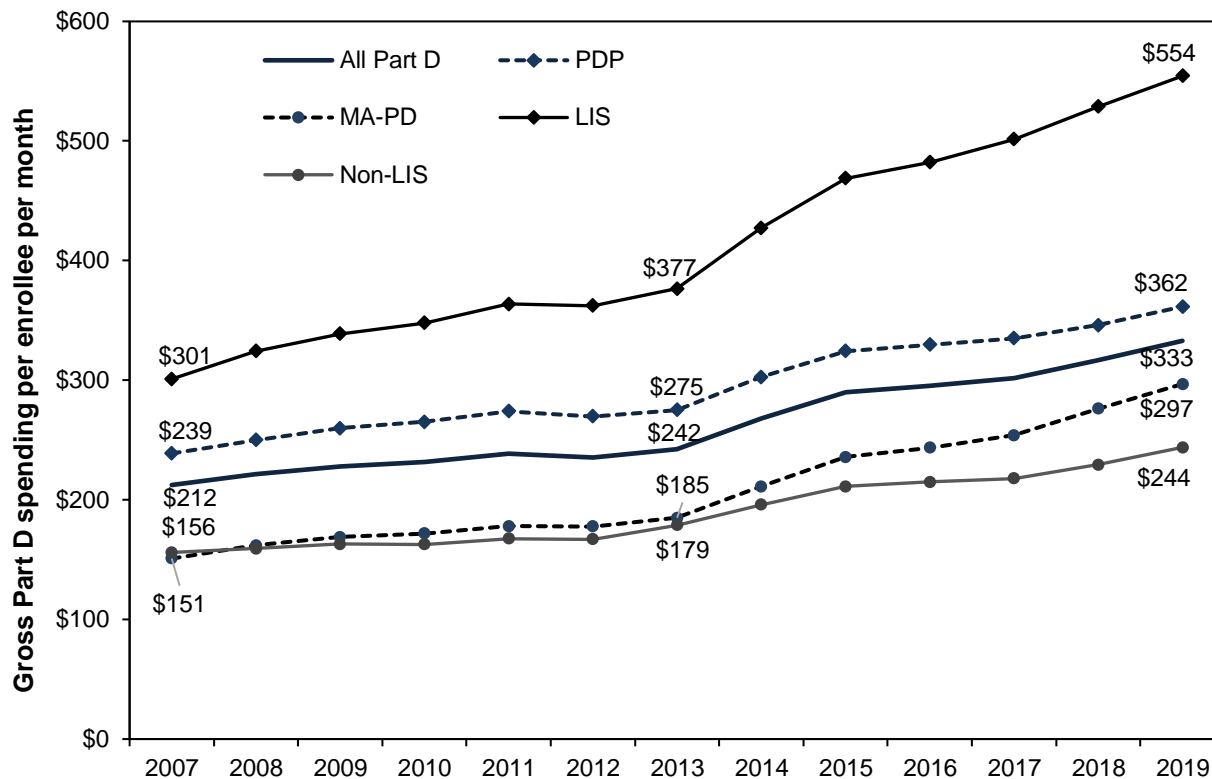
	Part D	Plan type		LIS status	
		PDP	MA-PD	LIS	Non-LIS
Total gross spending (billions)*	\$183.1	\$111.0	\$72.1	\$87.5	\$95.6
Total number of prescriptions (millions)	2,538	1,429	1,108	897	1,640
Average spending per prescription	\$72	\$78	\$65	\$97	\$58
Per enrollee per month					
Total spending	\$333	\$362	\$297	\$554	\$244
OOP spending	31	36	26	5	42
Manufacturer gap discount	18	21	15	N/A	26
Plan liability	223	239	204	384	158
Low-income cost-sharing subsidy	47	50	43	164	N/A
Other**	13	16	9	<1	18
Number of prescriptions	4.6	4.7	4.6	5.7	4.2

Note: PDP (prescription drug plan), MA-PD (Medicare Advantage-Prescription Drug [plan]), LIS (low-income [drug] subsidy), OOP (out-of-pocket), N/A (not applicable). "Total gross spending" reflects payments from all payers, including beneficiaries (cost sharing) but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. 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. "Plan liability" includes plan payments for drugs covered by both basic and supplemental (enhanced) benefits. In addition to the major categories shown in the chart, total spending includes amounts paid by other relatively minor payers such as group health plans, workers' compensation, and charities. "Number of prescriptions" is standardized to a 30-day supply. Components may not sum to totals due to rounding.
 **"Total gross spending" includes slightly over \$10 billion in manufacturer discounts for brand-name drugs and biologics filled by non-LIS enrollees during the coverage gap.
 ***"Other" amount includes payments by patient assistance organizations and third-party payers other than Part D plans that reduce the patient cost-sharing liability.

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

- In 2019, gross spending on drugs for the Part D program totaled \$183.1 billion, with more than 60 percent (\$111 billion) accounted for by Medicare beneficiaries enrolled in stand-alone PDPs. Part D enrollees receiving the LIS accounted for about 48 percent (\$87.5 billion) of the total. Manufacturer discounts for brand-name drugs filled by non-LIS enrollees while they were in the coverage gap accounted for 5.5 percent of the total, or 10.5 percent of the gross spending by non-LIS enrollees (up from 4.1 percent and 8 percent, respectively, in 2018; data not shown).
- The number of prescriptions filled by Part D enrollees totaled over 2.5 billion, with 56 percent (over 1.4 billion) accounted for by PDP enrollees. The 29 percent of enrollees who received the LIS accounted for about 35 percent (897 million) of the total number of prescriptions filled.
- In 2019, Part D enrollees filled 4.6 prescriptions at \$333 per month on average, an increase from \$317 per month (for 4.6 prescriptions) in 2018 (2018 data not shown). The average monthly plan liability for PDP enrollees (\$239) was considerably higher than that of MA-PD enrollees (\$204). The average monthly OOP spending was smaller for MA-PD enrollees than PDP enrollees (\$36 vs. \$26, respectively). The average monthly low-income cost-sharing subsidy among PDP enrollees (\$50) continues to exceed that for MA-PD enrollees (\$43), although that difference has been decreasing as an increasing share of LIS beneficiaries have enrolled in MA-PDs.
- Average monthly spending per LIS enrollee (\$554) was more than double that of a non-LIS enrollee (\$244), and the average number of prescriptions filled per month by an LIS enrollee was 5.7 compared with 4.2 for a non-LIS enrollee. LIS enrollees had much lower monthly OOP spending, on average, than non-LIS enrollees (\$5 vs. \$42, respectively). Part D's LIS pays for most of the cost sharing for LIS enrollees, averaging \$164 per month in 2019.

Chart 10-21. Trends in Part D spending and use per enrollee per month, 2007–2019



Note: PDP (prescription drug plan), LIS (low-income [drug] subsidy), MA–PD (Medicare Advantage–Prescription Drug [plan]). “Spending” (gross) reflects payments from all payers, including beneficiaries (cost sharing) but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. 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. Figures are sensitive to the method used to classify PDE records to each plan type and LIS status.

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

- Between 2007 and 2019, average per capita spending per month for Part D–covered drugs grew from \$212 to \$333, an average growth rate of 3.8 percent annually, or about 57 percent cumulatively. The rate of growth in average per capita spending more than doubled after 2013, in part reflecting the introduction of new hepatitis C treatments in 2014 and other new expensive therapies in subsequent years.
- Between 2007 and 2019, monthly per capita spending for LIS enrollees grew faster than that for non-LIS enrollees, increasing from \$301 to \$554 (a cumulative growth of 84 percent) compared with an increase from \$156 to \$244 for non-LIS enrollees (a cumulative growth of 56 percent). The number of prescriptions filled by both LIS and non-LIS enrollees grew by just under 2 percent annually during this period (data not shown).
- The growth in monthly per capita drug spending among MA–PD enrollees exceeded that of PDP enrollees during the 2007 to 2019 period (annual average growth of 5.8 percent and 3.5 percent, respectively). The average per capita spending for MA–PD enrollees continued to be lower than that of PDP enrollees (by \$65 per month in 2019); however, that difference has been declining since 2014.

Chart 10-22. Top 15 therapeutic classes of drugs covered under Part D, by spending and volume, 2019

Top 15 therapeutic classes by spending			Top 15 therapeutic classes by volume		
	Dollars			Prescriptions	
	Billions	Percent		Millions	Percent
Diabetic therapy	\$30.7	16.8%	Antihyperlipidemics	273.6	10.8%
Asthma/COPD therapy agents	13.3	7.3	Antihypertensive therapy agents	260.1	10.3
Anticoagulants	12.4	6.8	Diabetic therapy	173.6	6.8
Antineoplastics (enzyme inhibitors)	11.5	6.3	Antidepressants	160.3	6.3
Antivirals	9.3	5.1	Beta-adrenergic blockers	155.6	6.1
Analgesics (anti-inflammatory/antipyretic, non-narcotic)	8.8	4.8	Peptic ulcer therapy	128.9	5.1
Antipsychotics	6.6	3.6	Diuretics	121.9	4.8
Antineoplastics (immunomodulators)	5.9	3.2	Calcium channel blockers	117.4	4.6
Anticonvulsants	5.7	3.1	Thyroid therapy	100.8	4.0
Antihypertensive therapy agents	5.5	3.0	Anticonvulsants	98.1	3.9
Antihyperlipidemics	4.7	2.5	Asthma/COPD therapy agents	74.0	2.9
Antineoplastics (hormone antagonists)	3.2	1.8	Analgesics (narcotic)	67.0	2.6
Analgesics (narcotic)	2.8	1.5	Antibacterial agents	59.2	2.3
Antidepressants	2.8	1.5	Prostatic hypertrophy agents	52.1	2.1
Urinary incontinence treatment agents	2.5	1.4	Anticoagulants	48.5	1.9
Subtotal, top 15 classes	125.6	68.6	Subtotal, top 15 classes	1,891.2	74.5
Total, all classes	183.1	100.0	Total, all classes	2,537.1	100.0

Note: COPD (chronic obstructive pulmonary disease). "Spending" (gross) reflects payments from all payers, including beneficiaries (cost sharing) but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. "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. Components may not sum to totals due to rounding.

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

- In 2019, the top 15 therapeutic classes by spending accounted for more than two-thirds of the \$183.1 billion spent on prescription drugs covered by Part D plans. The top 15 therapeutic classes by volume accounted for nearly three-quarters of the over 2.5 billion prescriptions dispensed in 2019.
- While many of the same therapeutic classes on the top-15 list appear year after year, the ranking has changed from time to time. For example, market entries of new hepatitis C therapies more than tripled Part D spending on antivirals between 2013 and 2015 (data not shown). In 2019, antivirals accounted for \$9.3 billion, down from \$11.7 billion in 2016 (2016 data not shown). The growth in spending for drugs to treat cancer resulted in three classes of antineoplastic therapies (enzyme inhibitors, immunomodulators, and hormone antagonists) appearing on the top-15 list for the first time in 2018, compared with just one class between 2012 and 2014 and none before 2012 (data not shown). In 2019, these three classes of antineoplastics accounted for about \$21 billion, or 11.2 percent of spending for the top 15 therapeutic classes.

(Chart continued next page)

Chart 10-22. Top 15 therapeutic classes of drugs covered under Part D, by spending and volume, 2019 (continued)

- Spending on drugs to treat diabetes has grown at a double-digit rate since 2007 (data not shown). In 2019, spending on diabetic therapy totaled \$30.7 billion, an increase of about 15 percent from \$26.8 billion in 2018 (2018 data not shown). The number of prescriptions filled for diabetic therapy totaled 173.6 million, an increase of about 6 percent from 163.9 million in 2018.
- Eight therapeutic classes are among the top 15 in both spending and volume. Diabetic therapy dominates the list by spending, accounting for almost 17 percent of total spending and nearly a quarter of spending for the top 15 therapeutic classes, followed by asthma/COPD therapy agents. Cardiovascular agents (antihyperlipidemics, antihypertensive therapy agents, beta-adrenergic blockers, diuretics, and calcium channel blockers) dominate the list by volume, accounting for about 37 percent of all prescriptions and nearly 50 percent of the prescriptions in the top 15 therapeutic classes.

Chart 10-23. Part D patterns of prescribing by provider type, 2018

	Part D	Provider type		
		Primary care*	Specialty/ others	NP/PA/ CNS
Number of individual prescribers (thousands)	1,205	251	683	271
Share of all individual prescribers		21%	57%	23%
Average beneficiary count	161	264	126	151
Average per beneficiary				
Gross spending	\$780	\$947	\$775	\$645
Number of prescriptions	5.8	10.9	4.0	5.4
Top 1 percent of prescribers based on number of prescriptions filled per beneficiary				
Number of individual prescribers	9,531	6,415	1,802	1,314
Share of top 1 percent of prescribers		67%	19%	14%
Total gross spending (billions)	\$9.4	\$7.1	\$1.5	\$0.8
Share of provider type's total gross spending	6%	12%	2%	3%
Total number of prescriptions (millions)	129	104	16	9
Share of provider type's total prescriptions filled	9%	13%	4%	4%
Average per beneficiary				
Gross spending	\$4,028	\$3,428	\$5,521	\$4,910
Number of prescriptions	42	43	42	41

Note: NP (nurse practitioner), PA (physician assistant), CNS (clinical nurse specialist). "Gross spending" reflects payments from all payers, including beneficiaries (cost sharing) but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. "Number of prescriptions" is a count of prescription drug events and is not adjusted for the size (number of days' supply) of the prescriptions. As such, these figures are not comparable with the prescription counts shown in Chart 10-17, Chart 10-20, and Chart 10-22. Components may not sum to totals due to rounding.

*The definition of "primary care" used here includes practitioners who have a primary Medicare specialty designation of family practice, internal medicine, pediatrics, or geriatrics.

Source: MedPAC analysis of Medicare Part D prescriber-level public use file from CMS.

- In 2018, over 1.2 million individual providers wrote prescriptions for Medicare beneficiaries that were filled under Part D. Of those, about 21 percent were primary care providers, 57 percent were specialty or other types of providers, and 23 percent were NPs, PAs, or CNSs in primary and specialty care. While historically, NPs and PAs have been concentrated in primary care, more recent patterns suggest that they are increasingly practicing in specialty fields.
- The average count of Medicare beneficiaries was higher among primary care providers compared with specialty and other types of providers and with NPs, PAs, and CNSs—264 beneficiaries versus 126 beneficiaries and 151 beneficiaries, respectively.

(Chart continued next page)

Chart 10-23. Part D patterns of prescribing by provider type, 2018 (continued)

- On a per beneficiary basis, average gross spending for Part D prescriptions was much higher for prescriptions written by primary care providers (\$947) compared with the average for specialty and other providers (\$775) and for NPs, PAs, and CNSs (\$645). Primary care providers also wrote more prescriptions per beneficiary, on average: 10.9 compared with 4.0 for specialty and other providers and 5.4 for NPs, PAs, and CNSs.
- More than 9,500 prescribers were among the top 1 percent of all prescribers, as ranked by the average number of Part D prescriptions filled per beneficiary in 2018. The top prescribers were much more likely than all providers to be practicing in primary care: 67 percent were primary care providers, 19 percent were specialty and other providers, and 14 percent were NPs, PAs, and CNSs.
- The top 1 percent of prescribers accounted for 6 percent of total gross spending and 9 percent of all prescriptions filled. Among primary care prescribers who were within the top 1 percent, results were more concentrated: They accounted for 12 percent of gross prescription spending and 13 percent of all prescriptions written by primary care providers.
- Among the prescriptions that were written by prescribers in the top 1 percent of all prescribers in 2018, per beneficiary Part D spending averaged \$4,028 for 42 prescriptions filled.

Chart 10-24. Part D patterns of prescribing for selected specialties, 2018

	Number of individual Part D prescribers (thousands)	Share of all Part D prescribers (percent)	Average per beneficiary	
			Gross spending (in dollars)	Number of prescriptions
All Part D	1,204.9	100%	\$780	5.8
All specialty/others	683.0	57	775	4.0
Selected specialties:				
Psychiatry	25.3	4	1,327	13.1
Cardiology	19.8	3	839	7.9
Ophthalmology	19.8	3	476	4.0
Psychiatry & neurology	14.4	2	1,255	11.0
Neurology	14.1	2	3,148	7.2
Gastroenterology	13.9	2	1,486	3.5
Urology	10.8	2	479	3.8
Pulmonary disease	9.5	1	3,357	6.7
Nephrology	8.8	1	1,209	7.8
Hematology & oncology	8.5	1	9,376	6.0
Endocrinology	6.1	1	2,640	7.9
Infectious disease	5.5	1	6,728	8.6
Rheumatology	4.8	1	3,717	7.6
Medical oncology	3.2	<0.5	8,571	5.6

Note: "Gross spending" reflects payments from all payers, including beneficiaries (cost sharing) but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. "Number of prescriptions" is a count of prescription drug events and is not adjusted for the size (number of days' supply) of the prescriptions. As such, they are not comparable with the prescription counts shown in Chart 10-17, Chart 10-20, and Chart 10-22.

Source: MedPAC analysis of Medicare Part D prescriber-level public use file from CMS.

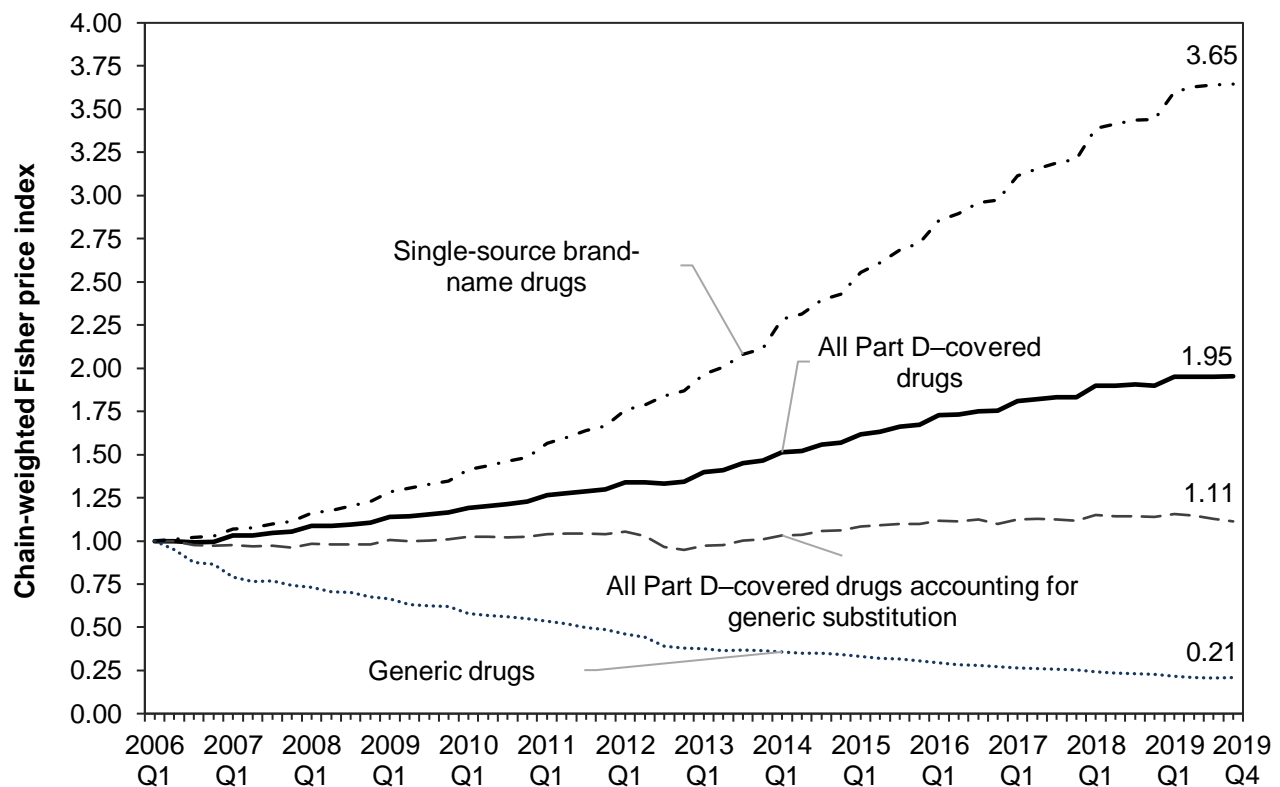
- Of specialty care prescribers, psychiatrists were among the most numerous, making up 4 percent of all Part D prescribers in 2018. Cardiologists, ophthalmologists, psychiatrists/neurologists, neurologists, gastroenterologists, and urologists each made up another 2 percent to 3 percent of Part D prescribers.
- Psychiatrists wrote an average of 13.1 prescriptions per beneficiary, with an average of \$1,327 in gross spending per patient. Those averages were higher than the overall Part D averages of 5.8 prescriptions and \$780 in average gross spending per beneficiary. Other specialties with comparatively high average gross spending per beneficiary include psychiatry/neurology, neurology, gastroenterology, pulmonary disease, nephrology, hematology/oncology, endocrinology, infectious disease, rheumatology, and medical oncology.

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Chart 10-24. Part D patterns of prescribing for selected specialties, 2018 (continued)

- Other specialties such as ophthalmology and urology had lower average gross spending per beneficiary. Cardiologists had average gross spending per beneficiary slightly higher than that of all Part D specialty prescribers (\$839 vs. \$775 respectively) but wrote an average of 7.9 prescriptions per beneficiary—considerably more than the average of 4.0 per beneficiary for all Part D specialty prescribers.

Chart 10-25. Price growth for Part D–covered drugs, 2006–2019

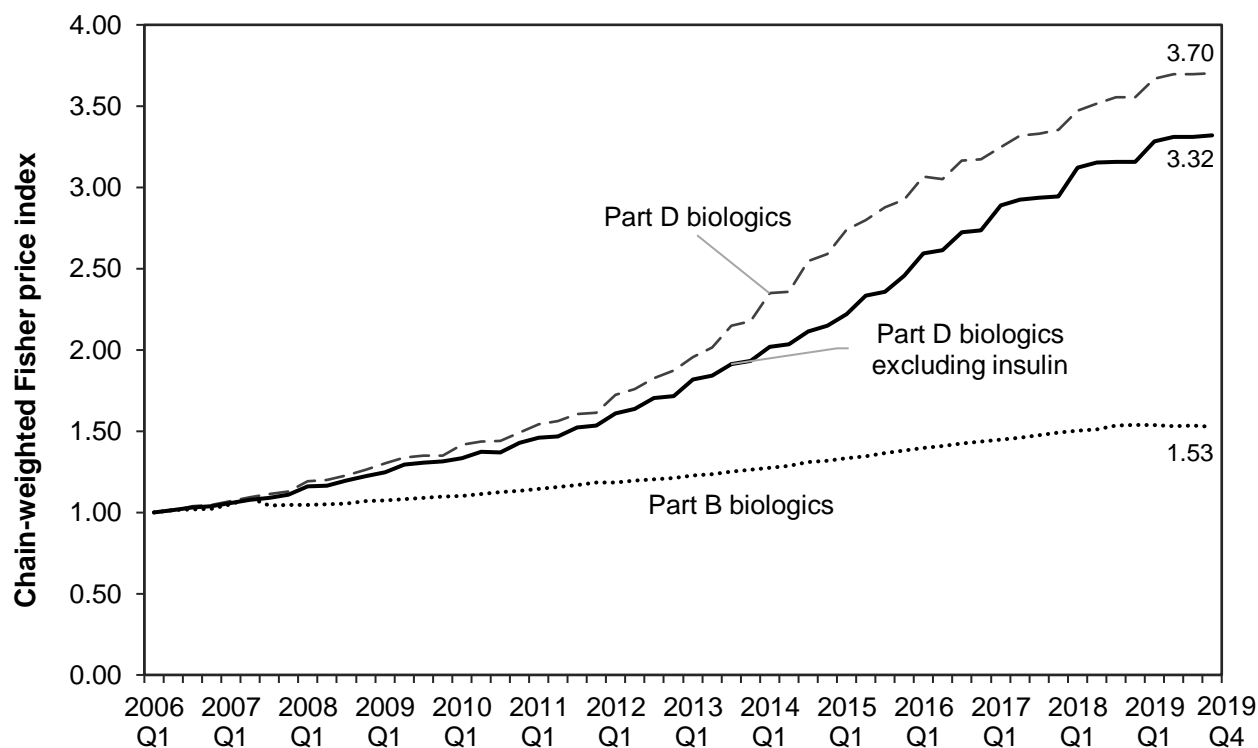


Note: Q1 (first quarter), Q4 (fourth quarter). Part D indexes reflect total amounts paid to pharmacies and do not reflect retrospective rebates or discounts from manufacturers and pharmacies. These measures of price growth reflect growth in the price of individual products but do not reflect changes in price due to the introduction of new products or to changes in the mix of products used.

Source: Acumen LLC analysis for MedPAC.

- Measured by individual national drug codes, prices of drugs and biologics covered under Part D rose 95 percent cumulatively between 2006 and 2019 (an index of 1.95). (Prices reflect total amounts paid to pharmacies and do not reflect retrospective rebates or discounts from manufacturers and pharmacies.)
- As measured by a price index that takes generic substitution into account, Part D prices decreased by 2.1 percent between December of 2018 and December of 2019, reversing the inflationary trend that began after 2012. As a result, cumulative increase in prices at the end of 2019 were lower (11 percent, or an index of 1.11) compared with cumulative increase in prices at the end of 2018 (14 percent, or an index of 1.14). New and increased generic competition for selected therapeutic classes, such as anticonvulsants, antineoplastics, and drugs for multiple sclerosis, played a key role in the decline in the overall Part D prices in 2019.
- Overall, between 2006 and 2019, prices of generic drugs covered under Part D decreased to 21 percent of the average price observed at the beginning of 2006. In comparison, prices of single-source, brand-name drugs (drugs with no generic substitutes) grew by a cumulative 265 percent (an index of 3.65) during the same period.

Chart 10-26. Comparison of price growth for Part B and Part D biologics, 2006–2019



Note: Q1 (first quarter), Q4 (fourth quarter). Part D indexes reflect total amounts paid to pharmacies and do not reflect retrospective rebates or discounts from manufacturers and pharmacies. The Part B index reflects growth in the average sales price of Part B–covered biologics over time, measured for individual biologics at the Healthcare Common Procedure Coding System billing code level. These measures of price growth reflect growth in the price of individual products but do not reflect changes in price due to the introduction of new products or the changes in the mix of products used. The Part B price index for biologics in this chart and in Chart 10-6 are different due to the different periods of analysis.

Source: Acumen LLC analysis for MedPAC.

- Measured by the change in the average sales price of individual Part B–covered biologics, the prices of Part B–covered biologics rose by an average of 53 percent cumulatively between 2006 and 2019 (an index of 1.53). Measured by individual national drug codes, prices of biologics covered under Part D rose 270 percent cumulatively during the same period (an index of 3.70). (Prices reflect total amounts paid to pharmacies and do not reflect retrospective rebates or discounts from manufacturers and pharmacies).
- The price index for Part B biologics, which had increased for more than a decade, declined 0.6 percent between third quarter 2019 and fourth quarter 2019, largely due to price declines among products with biosimilar competition. (See Chart 10-5 for more information on biosimilars.)
- Prices of noninsulin biologics covered under Part D grew less rapidly (by an average of 232 percent cumulatively, an index of 3.32) compared with the growth in prices of all Part D biologics during the same period.

(Chart continued next page)

Chart 10-26. Comparison of price growth for Part B and Part D biologics, 2006–2019 (continued)

- These measures of price growth reflect growth in price at the individual product level and do not reflect changes in price that occur as a result of shifts in the mix of biologics used or the introduction of new, higher priced biologics.
- Currently, biologics that may be covered under either Part B or Part D are limited to a subset of drugs within therapeutic classes such as therapies to treat inflammatory conditions (e.g., rheumatoid arthritis) and certain types of cancer.

SECTION

11

Other services

Dialysis

Hospice

Clinical laboratory

Chart 11-1. Number of dialysis facilities is growing, and most facilities are for profit and freestanding

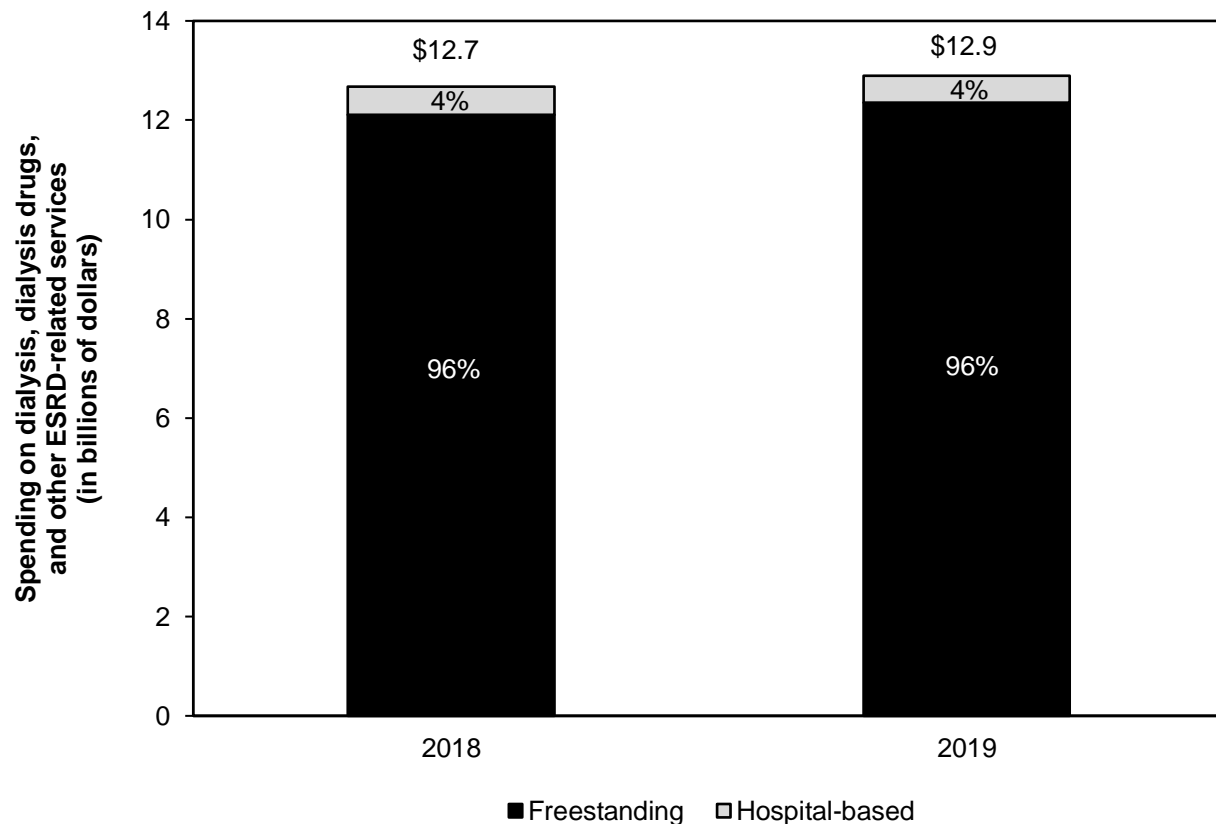
	2019	Average annual percent change	
		2014–2019	2018–2019
Total number of:			
Dialysis facilities	7,657	4%	3%
Hemodialysis stations	134,159	4	3
Mean number of hemodialysis stations per facility			
	18	–0.1	0.1
<u>Share of total facilities</u>			
Hospital based	5%	–3	–1
Freestanding	95	3	3
Urban	83	4	3
Rural, micropolitan	10	2	1
Rural, adjacent to urban	4	2	2
Rural, not adjacent to urban	2	1	–2
Frontier	0.4	1	0
For profit	89	4	3
Nonprofit	11	–1	–0.1

Note: “Nonprofit” includes facilities designated as either nonprofit or government. “Average annual percent change” is based on comparing 2014, 2018, and 2019 end-of-year files. Components may not sum to totals due to rounding.

Source: Compiled by MedPAC from the institutional outpatient claims files and the Dialysis Compare files from CMS.

- Between 2014 and 2019, the number of facilities increased, on average, 4 percent per year. The average size of a facility has remained relatively constant, averaging nearly 18 dialysis treatment stations per facility.
- Since 2014, facilities’ capacity to provide care—as measured by hemodialysis treatment stations—grew 4 percent annually on average. Capacity at urban facilities grew by 4 percent per year, while capacity at rural facilities grew at a rate of 2 percent per year.
- Since 2014, the number of freestanding and for-profit facilities increased, while hospital-based facilities decreased. Freestanding facilities increased by 3 percent per year to nearly 7,270 facilities while for-profit facilities increased by 4 percent per year to nearly 6,800 facilities.

Chart 11-2. Medicare spending for outpatient dialysis services furnished by freestanding and hospital-based dialysis facilities, 2018 and 2019



Note: ESRD (end-stage renal disease).

Source: Compiled by MedPAC from the institutional outpatient claims files from CMS.

- In 2019, total spending for dialysis, dialysis drugs, and ESRD-related clinical laboratory tests was \$12.9 billion. Medicare paid all facilities under a prospective payment system (PPS) that includes in the payment bundle certain dialysis drugs and ESRD-related clinical laboratory tests that were separately paid before 2011.
- Between 2018 and 2019, total ESRD expenditures increased by 2 percent. Ten percent of total spending in 2019 consisted of payments for two calcimimetics paid under the ESRD PPS's transitional drug add-on payment adjustment; this policy pays providers according to the number of units of a drug and the drug's average sales price.
- Freestanding dialysis facilities treated most dialysis beneficiaries and accounted for 96 percent of expenditures in 2018 and 2019.

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

	2008		2014		2018	
	Patients (thousands)	Percent	Patients (thousands)	Percent	Patients (thousands)	Percent
Total	550.8	100%	689.1	100%	785.9	100%
Dialysis	386.8	70	488.5	71	556.0	71
In-center hemodialysis	351.6	64	430.5	62	485.1	62
Home hemodialysis*	4.4	0.8	8.5	1	10.4	1
Peritoneal dialysis*	29.1	5	47.2	7	58.6	7
Unknown	1.7	0.3	2.2	0.3	2.0	0.2
Functioning graft and kidney transplant	164.0	30	200.7	29	229.9	29

Note: ESRD (end-stage renal disease). Totals may not equal sum of components due to rounding. Data include both Medicare (fee-for-service and Medicare Advantage) and non-Medicare patients. The “functioning graft and kidney transplant” category includes patients who have a functioning graft at the start of the year in question (i.e., 2008, 2014, or 2018), or who receive a transplant during the year in question.
*Home dialysis methods.

Source: Compiled by MedPAC from the U.S. Renal Data System.

- People with ESRD require either dialysis or a kidney transplant to maintain life. The total number of ESRD patients increased by nearly 4 percent annually between 2008 and 2018.
- 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 cleansed by using the lining of his or her abdomen as a filter. Peritoneal dialysis is the most common form of home dialysis.
- Most people with ESRD undergo hemodialysis administered in a dialysis facility three times a week. Between 2008 and 2018, the total number of in-center hemodialysis patients grew by 3 percent annually, while the total number of peritoneal dialysis patients increased by about 7 percent annually. Although a smaller proportion of all dialysis patients undergo home hemodialysis, the number of these patients grew 9 percent per year during this period.
- Patients with functioning grafts have had a successful kidney transplant. Patients undergoing a kidney transplant may receive either a living kidney or a cadaveric kidney donation. In 2018, 29 percent of transplanted kidneys were from living donors and the remainder were from cadaver donors (data not shown).

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

	Share of total in 2018	Average annual percent change 2013–2018
Total (N = 785,883)	100%	3%
Age (years)		
0–17	1	2
18–44	14	1
45–64	43	3
65–79	33	5
80+	9	4
Sex		
Male	58	4
Female	42	3
Race/ethnicity		
White	62	4
Black	30	2
Native American	1	2
Asian American	7	6
Hispanic	18	5
Non-Hispanic	80	3
Unknown	2	1
Underlying cause of ESRD		
Diabetes	39	4
Hypertension	26	4
Glomerulonephritis	15	2
Other causes	20	3

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. Data include both Medicare (fee-for-service and Medicare Advantage) and non-Medicare patients.

Source: Compiled by MedPAC from the U.S. Renal Data System.

- Among patients with ESRD, nearly 42 percent are over age 65. About 62 percent are White.
- Diabetes is the most common cause of renal failure.
- The number of patients with ESRD increased by 3 percent annually between 2013 and 2018. Among the fastest growing groups are patients between the ages of 65 and 79 and patients of Asian and Hispanic origins.

Chart 11-5. Characteristics of Medicare fee-for-service dialysis patients, 2019

	Share of all FFS dialysis patients
Age (years)	
Under 45	10%
45–64	37
65–74	28
75–84	18
85+	6
Sex	
Male	56
Female	44
Race	
White	47
Black	35
All other	18
Residence	
Urban county	83
Rural county, micropolitan	10
Rural county, adjacent to urban	5
Rural county, not adjacent to urban	2
Frontier county	1
Prescription drug coverage status	
Enrolled in Part D plan or other source of creditable drug coverage	89*
LIS	58
Dually eligible for Medicare and Medicaid	52

Note: FFS (fee-for-service), 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 fewer 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.
*Part D enrollment data for 2018.

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

- Compared with all Medicare patients, FFS dialysis patients are disproportionately younger and Black (see Chart 2-5).
- In 2019, about 17 percent of FFS dialysis patients resided in a rural county.
- More than half of all dialysis patients were dually eligible for Medicare and Medicaid services.
- In 2018, nearly 90 percent of FFS dialysis patients were enrolled in Part D plans or had other sources of creditable drug coverage.

Chart 11-6. Aggregate margins varied by type of freestanding dialysis facility, 2019

Type of facility	Share of freestanding dialysis treatments	Aggregate margin
All facilities	100%	8.4%
Urban	88	9.0
Rural	12	5.0
Treatment volume (quintile)		
Lowest	7	-14.4
Second	13	-1.4
Third	18	6.4
Fourth	24	10.4
Highest	39	15.2

Note: Margins include payments and costs for dialysis services commonly provided under treatment, including injectable drugs and laboratory tests that were separately paid before 2011. Totals may not sum to 100 percent due to rounding. The Commission's longstanding approach to calculating the Medicare end-stage renal disease (ESRD) prospective payment system (PPS) margin uses only Medicare-allowable costs for ESRD services. Such an approach is consistent with the methods we use to calculate the Medicare margin for other fee-for-service sectors. Our ESRD margin analysis relies on the cost data that freestanding dialysis facilities report on the cost reports that they submit to CMS. In 2019, there was an anomalous increase in non-ESRD drug costs compared with prior years. Consistent with our longstanding approach, non-ESRD drug costs are not included in the Commission's analysis of ESRD PPS costs incurred by freestanding dialysis facilities or in our calculation of the ESRD PPS margin.

Source: Compiled by MedPAC from 2019 cost reports and the 2019 institutional outpatient file from CMS.

- For 2019, the aggregate Medicare margin for dialysis-related services, including ESRD-related drugs and laboratory tests that were separately paid before 2011, was 8.4 percent.
- Between 2018 and 2019, the aggregate Medicare margin increased (from 2.1 percent to 8.4 percent) due to the profitability of the drugs paid under the transitional drug add-on payment adjustment (TDAPA) policy. Excluding the payments and costs of the drugs paid under the TDAPA (calcimimetics), we estimate that the 2019 aggregate Medicare margin would have been about 0.5 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 facilities versus rural facilities. Urban facilities are larger on average than rural facilities with respect to the number of dialysis treatment stations and Medicare treatments provided. Some rural facilities have benefited from the ESRD prospective payment system's low-volume adjustment.

Chart 11-7. Dialysis quality of care: Some measures show progress, others need improvement, 2013–2018

Outcome measure	2013	2017	2018
Share of in-center hemodialysis patients:			
Receiving adequate dialysis	97%	98%	98%
Dialyzed with an AV fistula	62	N/A*	66
Share of peritoneal dialysis patients receiving adequate dialysis	91	93	92
Share of all dialysis patients managing anemia			
Mean hemoglobin <10 g/dL	26	28	29
Mean hemoglobin 10 to <12 g/dL	69	67	66
Mean hemoglobin ≥12 g/dL	5	5	5
Share of all dialysis patients wait-listed for a kidney	17.5	14.1	13.5
Renal transplant rate per 100 patient years	3.5	3.5	3.6
Annual mortality rate per 100 patient years**	16.9	16.6	16.4
Total hospital admissions per patient year**	1.8	1.7	1.7
Hospital days per patient year**	11.5	11.3	11.3

Note: AV (arteriovenous), g/dL (grams per deciliter [of blood]). The rate per patient year is calculated by dividing the total number of events by the fraction of the year that patients were followed. Data on dialysis adequacy, anemia management, and fistula utilization represent the share of patients meeting CMS's clinical performance measures. The U.S. Renal Data System (USRDS) adjusts hospitalization and mortality measures by age, gender, race, and primary diagnosis of end-stage renal disease.

*Data on 2017 AV fistula use not available from USRDS.

**Lower values suggest higher quality.

Source: All measures except for share of patients receiving adequate dialysis and anemia management compiled by MedPAC using data from the USRDS. Measure of share of patients receiving adequate dialysis and anemia management compiled by MedPAC using data from CMS's 100 percent institutional outpatient files.

- Quality of dialysis care is mixed. Performance has improved on some measures, but performance on others remains unchanged or has declined.
- Between 2013 and 2018, overall adjusted mortality rates decreased from 16.9 percent to 16.4 percent. During this period, the proportion of hemodialysis patients receiving adequate dialysis remained high, and rates of hospitalization have held steady.
- All hemodialysis patients require vascular access—the site on the patient's body where blood is removed and returned during dialysis. Use of arteriovenous fistulas, considered the best type of vascular access, has modestly increased from 62 percent to 66 percent of hemodialysis patients between 2013 and 2018.
- Other measures suggest that improvements in dialysis quality are still needed. We look at access to kidney transplantation because it is widely believed to be the best treatment option for individuals with end-stage renal disease. Between 2013 and 2018, the share of dialysis patients accepted on the kidney transplant waiting list declined from 17.5 to 13.5, and the renal transplant rate per 100 dialysis-patient years remained relatively constant at 3.6.

Chart 11-8. Hospice spending and use increased in 2019

	2010	2018	2019	Average annual change, 2010–2018	Change, 2018–2019
Medicare payments (in billions)	\$12.9	\$19.2	\$20.9	5.1%	8.5%
Beneficiaries in hospice (in millions)	1.15	1.55	1.61	3.8%	3.7%
Number of hospice days for all hospice beneficiaries (in millions)	81.6	113.5	121.8	4.2%	7.3%
Average length of stay among decedents (in days)	87.0	90.3	92.6	0.5%	2.5%
Median length of stay among decedents (in days)	18	18	18	0 days	0 days

Note: Lifetime length of stay is calculated for decedents who were using 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 or her lifetime. Total spending, number of hospice users, number of hospice days, and average length of stay displayed in the table are rounded; the percentage change for number of users and total spending is calculated using unrounded data. The length-of-stay estimates in this table may differ from those published in prior data books because this analysis uses the data from the Common Medicare Enrollment file instead of the denominator file (which was used in past years) and because we have made some refinements to our methodology (e.g., beneficiaries residing in U.S. territories are included in this table, whereas they were not in prior reports).

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

- Total Medicare payments to hospices were about \$20.9 billion in 2019, about 8.5 percent higher than the prior year.
- The number of Medicare beneficiaries receiving hospice services, total number of days of hospice care, and average length of stay continued to grow in 2019.

Chart 11-9. Hospice use increased across beneficiary groups from 2010 to 2019

	Share of decedents using hospice			Average annual percentage point change 2010–2018	Percentage point change 2018–2019
	2010	2018	2019		
All	43.8%	50.6%	51.6%	0.9	1.0%
FFS beneficiaries	42.8	49.7	50.7	0.9	1.0
MA beneficiaries	47.2	52.3	53.2	0.6	0.9
Dual eligible	41.5	47.5	49.2	0.8	1.7
Non-dual eligible	44.5	51.5	52.3	0.9	0.8
Age (years)					
<65	25.7	28.8	29.4	0.4	0.6
65–84	42.1	46.5	47.3	0.6	0.8
85+	50.2	61.1	62.7	1.4	1.6
Race/ethnicity					
White	45.5	52.7	53.8	0.9	1.1
Non-White	33.9	40.0	40.9	0.8	0.9
Gender					
Male	40.1	45.9	46.7	0.7	0.8
Female	47.0	55.0	56.1	1.0	1.2
Residence					
Urban county	45.6	51.8	52.7	0.8	0.9
Rural county, micropolitan	39.2	48.2	49.7	1.1	1.5
Rural county, adjacent to urban	39.0	47.9	49.5	1.1	1.5
Rural county, nonadjacent to urban	33.8	42.4	43.8	1.2	1.4
Frontier county	29.2	35.3	36.2	1.1	1.6

Note: FFS (fee-for-service), MA (Medicare Advantage). Beneficiary location reflects the beneficiary's county of residence in one of four categories (urban, micropolitan, rural adjacent to urban, or rural nonadjacent to urban) based on an aggregation of the Urban Influence Codes (UICs). This chart uses the 2013 UIC definition. The frontier category is defined as population density equal to or less than six people per square mile and overlaps with the beneficiary county of residence categories. Yearly figures presented in the table are rounded, but figures in the percentage point change columns were calculated using unrounded data. The estimates in this table may differ from those published in prior data books because this analysis uses the data from the Common Medicare Enrollment file instead of the denominator file (which was used in past years) and because we have made some refinements to our methodology (e.g., beneficiaries residing in U.S. territories are included in this table, whereas they were not in prior reports).

Source: MedPAC analysis of data from the Common Medicare Enrollment file and hospice claims data from CMS.

- Hospice use grew across beneficiary groups in 2019, 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 not dual eligible, who were MA enrollees, older, White, female, or living in an urban area were more likely to use hospice than their respective counterparts.

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

	2010	2017	2018	2019
All hospices	3,498	4,488	4,639	4,840
For profit	1,958	3,101	3,233	3,437
Nonprofit	1,316	1,226	1,246	1,248
Government	224	161	159	150
Freestanding	2,401	3,525	3,699	3,932
Hospital based	609	470	454	433
Home health based	465	471	464	456
SNF based	23	22	22	19
Urban	2,485	3,603	3,760	3,952
Rural	950	879	872	859

Note: SNF (skilled nursing facility). Numbers may not sum to totals because of missing data for a small number of providers. The rural and urban definitions in this chart are based on updated definitions of the core-based statistical areas (which rely on data from the 2010 census).

Source: MedPAC analysis of Medicare cost reports, Provider of Services file, and the standard analytic file of hospice claims from CMS.

- There were 4,840 Medicare-participating hospices in 2019. About 71 percent of them were for-profit hospices.
- The number of Medicare-participating hospices grew by about 200 providers between 2018 and 2019 and has increased about 38 percent since 2010. For-profit hospices accounted for almost all of the net growth in providers between 2018 and 2019.
- Growth in the number of providers has occurred predominantly among freestanding providers. Between 2010 and 2019, the number of hospital-based providers declined substantially while the number of home health–based providers has oscillated over the period and declined in the last few years. The number of SNF-based providers is small and has changed little over the years. (A hospice’s status as freestanding versus hospital based, home health based, or SNF based reflects the type of cost report submitted by the provider and does not necessarily reflect the location of care.)
- The number of hospices located in rural areas has declined in the last several years, decreasing about 2 percent between 2017 and 2019. The number of providers located in rural areas is not necessarily an indicator of access to care. The share of rural decedents using hospice has been increasing since 2010 (see Chart 11-9).

Chart 11-11. Hospice cases by diagnosis, 2019

Diagnosis	Share of total cases
Cancer	25%
Alzheimer's, nervous system disorders, organic psychosis	24
Circulatory, except heart failure	21
Heart failure	9
Other	6
Respiratory disease	6
Chronic airway obstruction, NOS	5
Genitourinary disease	2
Digestive disease	2
All	100

Note: NOS (not otherwise specified). Cases include all patients who received hospice care in 2019, not just decedents. "Diagnosis" reflects primary diagnosis on the beneficiary's last hospice claim in 2019.

Source: MedPAC analysis of 100 percent hospice claims standard analytic file from CMS and the Medicare Beneficiary Database.

- In 2019, the most common primary diagnoses among Medicare hospice patients were cancer (25 percent), neurological conditions (Alzheimer's disease, nervous system disorders, and organic psychosis) (24 percent of cases), circulatory conditions other than heart failure (21 percent), and heart failure (9 percent).

Chart 11-12. Hospice average length of stay among decedents increased slightly in 2019

Year	Average length of stay (in days)	Percentiles of length of stay (in days)				
		10th	25th	50th	75th	90th
2010	87.0	3	6	18	78	242
2017	89.3	2	5	18	80	251
2018	90.3	2	5	18	82	255
2019	92.6	2	5	18	85	266

Note: Lifetime length of stay is calculated for decedents who were using 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 or her lifetime. The length-of-stay estimates in this table may differ from those published in prior data books because this analysis uses the data from the Common Medicare Enrollment file instead of the denominator file (which was used in past years) and because we have made some refinements to our methodology (e.g., beneficiaries residing in U.S. territories are included in this table, whereas they were not in prior reports).

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

- Average length of stay among decedents was 92.6 days in 2019, an increase from 2018 of about two days.
- There is wide variation in hospice length of stay. In 2019, hospice length of stay among decedents ranged from 2 days at the 10th percentile to 266 days at the 90th percentile.
- Between 2010 and 2019, growth in average length of stay among decedents has largely been the result of increases in length of stay for patients with the longest stays. Length of stay grew from 78 days to 85 days at the 75th percentile and from 242 days to 266 days at the 90th percentile.
- Short stays in hospice have changed little since 2000. For example, among decedents, median length of stay was 18 days in 2019 and 2010. Hospice length of stay at the 25th percentile was 5 days in 2019 and 6 days in 2010.

Chart 11-13. Hospice length of stay among decedents, by beneficiary and hospice characteristics, 2019

	Average length of stay (in days)	Length-of-stay percentiles (in days)		
		10th	50th	90th
Beneficiary				
Diagnosis				
Cancer	52	3	17	129
Neurological	155	4	40	459
Heart/circulatory	99	2	18	297
COPD	124	2	30	362
Other	57	2	8	158
Site of service				
Home	95	4	27	257
Nursing facility	109	3	22	324
Assisted living facility	161	5	56	457
Hospice				
For profit	112	3	24	332
Nonprofit	71	2	14	195
Freestanding	95	2	19	275
Home health based	72	2	15	199
Hospital based	59	2	12	163

Note: COPD (chronic obstructive pulmonary disease). Length of stay is calculated for Medicare beneficiaries who died in 2019 and used hospice that year and reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during his or her lifetime. This year, we made some refinements to our methodology (e.g., beneficiaries residing in U.S. territories are included in this table, whereas they were not in prior reports), which makes the numbers not fully comparable with those in past reports. The location categories reflect where the beneficiary spent the largest share of his or her days while enrolled in hospice. "Diagnosis" reflects primary diagnosis on the beneficiary's last hospice claim.

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 (i.e., at the 90th percentile). Length of stay varies much less for patients with shorter stays (i.e., at the 10th or 50th percentile).
- Beneficiaries with neurological conditions and COPD have the longest stays, while beneficiaries with cancer have the shortest stays, on average.
- Beneficiaries who receive hospice services in assisted living facilities have longer stays on average than beneficiaries who receive care at home or in a nursing facility.
- For-profit and freestanding hospices have longer average lengths of stay than nonprofit and provider-based (home health-based and hospital-based) hospices.

Chart 11-14. More than half of Medicare hospice spending in 2019 was for patients with stays exceeding 180 days

	Medicare hospice spending, 2019 (in billions)
All hospice users in 2019	\$20.9
Beneficiaries with LOS > 180 days	12.3
Days 1–180	4.1
Days 181–365	3.8
Days 366+	4.3
Beneficiaries with LOS ≤ 180 days	8.6

Note: LOS (length of stay). LOS reflects the beneficiary's lifetime LOS as of the end of 2019 (or at the time of death or discharge in 2019 if the beneficiary was not enrolled in hospice at the end of 2019). All spending reflected in the chart occurred only in 2019. Break-out groups do not sum to total because of rounding.

Source: MedPAC analysis of 100 percent hospice claims standard analytical file and an Acumen LLC data file on hospice lifetime length of stay (which is based on an analysis of historic claims data).

- In 2019, Medicare hospice spending on patients with stays exceeding 180 days was about \$12.3 billion, nearly 60 percent of all Medicare hospice spending that year.
- About \$4.3 billion, or about 20 percent, of Medicare hospice spending in 2019 was on hospice care for patients who had already received at least one year of hospice.

Chart 11-15. Hospice aggregate Medicare margins, 2014–2018

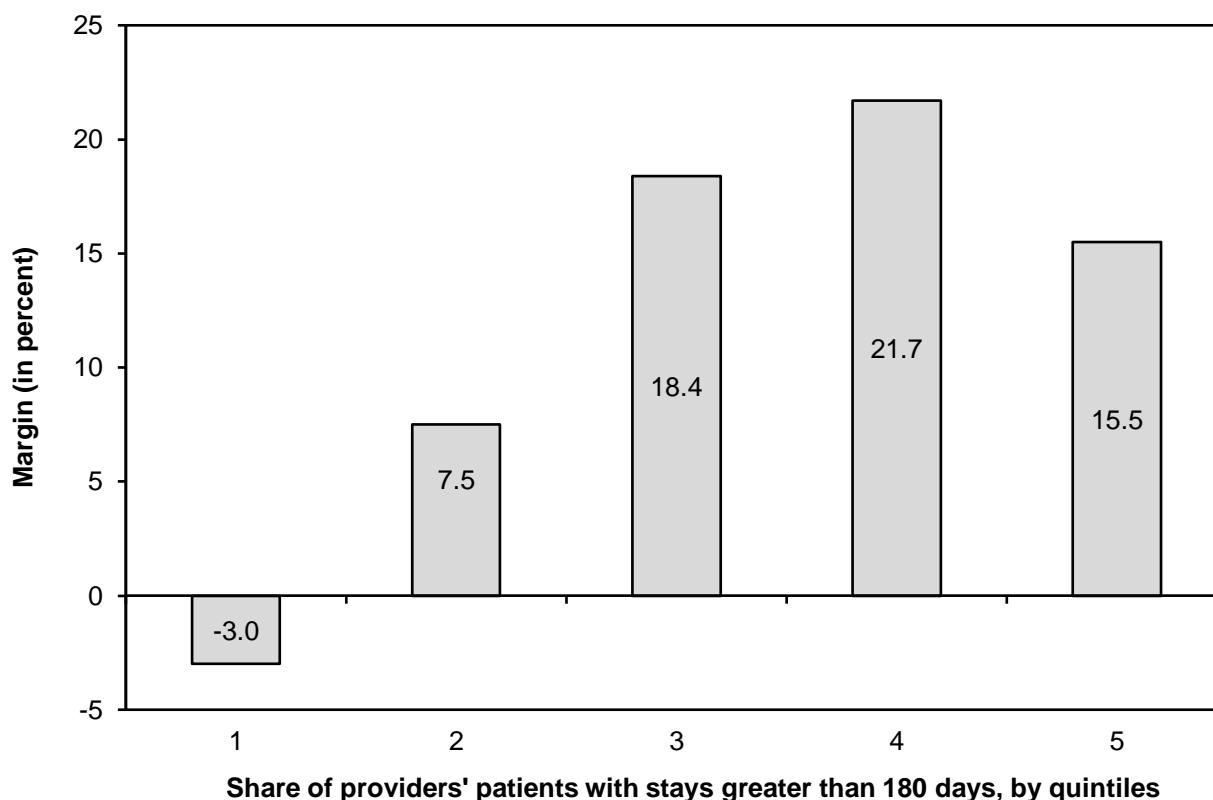
	Share of hospices (2018)	Medicare margin				
		2014	2015	2016	2017	2018
All	100%	8.2%	9.9%	10.9%	12.5%	12.4%
Freestanding	80	11.6	13.8	14.0	15.3	15.1
Home health based	10	3.5	3.3	6.2	8.1	8.4
Hospital based	10	-20.8	-23.8	-16.7	-13.8	-16.5
For profit	70	15.3	17.7	17.9	20.0	19.0
Nonprofit	27	-0.4	0.1	2.2	2.5	3.8
Government	3	N/A	N/A	N/A	N/A	N/A
Urban	81	8.7	10.4	11.4	12.9	12.6
Rural	19	3.3	4.8	6.3	8.9	10.3
Below cap	83.7	8.4	9.9	10.7	12.6	12.5
Above cap	16.3	6.0	9.8	12.6	12.1	10.1
Above cap (including cap overpayments)	16.3	18.8	21.4	20.2	21.9	21.8

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.

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 12.4 percent in 2018, similar to 12.5 percent in 2017.
- In 2018, freestanding hospices had higher margins (15.1 percent) than home health–based (8.4 percent) and hospital-based hospices (–16.5 percent).
- The 2018 margin among for-profit hospices was high at 19.0 percent. Nonprofit hospices as a group had a margin of 3.8 percent in 2018, but the subset of nonprofit hospices that were freestanding had a higher margin, 7.6 percent (latter figure not shown in chart).
- The aggregate 2018 margin was slightly higher for urban hospices (12.6 percent) than rural hospices (10.3 percent).
- Hospices that exceeded the cap (Medicare’s aggregate average per beneficiary payment limit) had a 2018 margin of about 22 percent before the return of the cap overpayments.

Chart 11-16. Medicare margins were higher among hospices with more long stays, 2018



Note: Margins exclude overpayments to hospices that exceeded the cap on the average annual Medicare payment per beneficiary. Margins are calculated based on Medicare-allowable, reimbursable costs. For hospice providers in the lowest (first) quintile, the share of stays greater than 180 days was less than 12.4 percent; it was between 12.4 percent and 20.0 percent in the second quintile; it was between 20.0 percent and 26.7 percent in the third quintile; it was between 26.7 percent and 34.9 percent in the fourth quintile; and it was greater than 34.9 percent in the highest (fifth) quintile.

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 has provided an incentive for longer lengths of stay.
- Hospices with more patients who had stays greater than 180 days generally had higher margins in 2018. Hospices in the lowest length-of-stay quintile had a margin of -3.0 percent compared with a 21.7 percent margin for hospices in the second highest length-of-stay quintile.
- Margins were somewhat lower in the highest length-of-stay quintile (15.5 percent) compared with the second highest quintile (21.7 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 about 22 percent before the return of overpayments (see Chart 11-15).

Chart 11-17. Hospices that exceeded Medicare’s annual payment cap, 2014–2018

	2014	2015	2016	2017	2018
Share of hospices exceeding the cap	12.1%	12.3%	12.7%	14.0%	16.3%
Average payments over the cap per hospice exceeding the cap (in thousands)	\$370	\$316	\$295	\$273	\$334
Payments over the cap as a share of overall Medicare hospice spending in cap year	1.2%	1.0%	1.0%	1.0%	1.3%

Note: The aggregate cap statistics reflect the Commission’s estimates and may differ from the CMS claims processing contractors. Spending in cap year 2017 reflects an 11-month period from November 1, 2016, to September 30, 2017. For years before 2017, the cap year was defined as the period beginning November 1 and ending October 31 of the following year. Beginning 2018, the cap year is aligned with the federal fiscal year (October 1 to September 30 of the following year).

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 or MedPAC estimates.

- The share of hospices exceeding the aggregate cap was 16.3 percent in 2018, up from 14.0 percent in 2017.
- On average, above-cap hospices exceeded the cap by about \$334,000 per provider in 2018, up from about \$273,000 per provider in 2017.
- Medicare payments over the cap represented 1.3 percent of total Medicare hospice spending in 2018.

Chart 11-18. Hospice live-discharge rates, 2017–2019

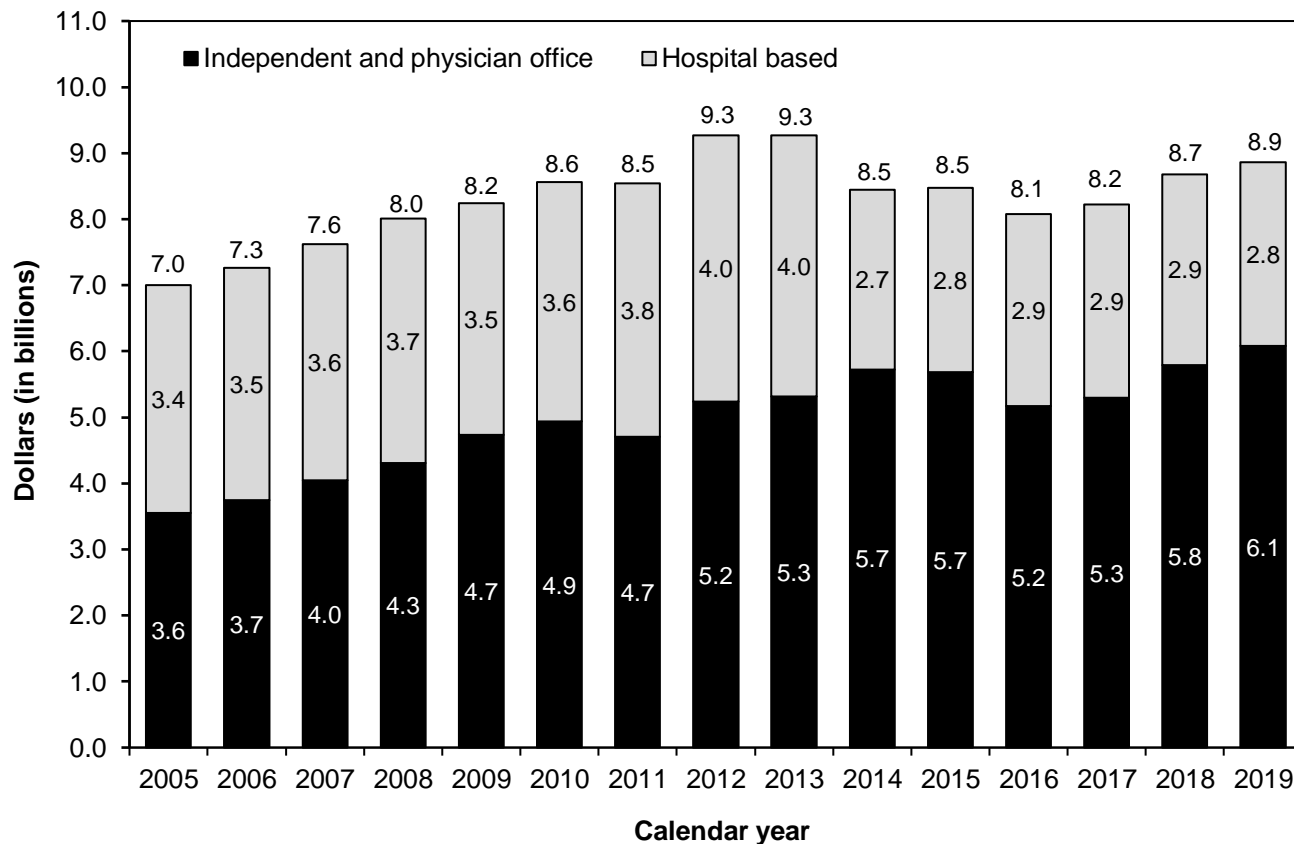
	2017	2018	2019
Live discharge as a share of all discharges, by reason for live discharge			
All live discharges	16.7%	17.0%	17.4%
No longer terminally ill	6.5	6.3	6.5
Beneficiary revocation	6.4	6.6	6.5
Transfer hospice providers	2.1	2.2	2.3
Move out of service area	1.4	1.6	1.7
Discharge for cause	0.3	0.3	0.3
Providers' overall rate of live discharge as a share of all discharges, by percentile (for providers with more than 30 discharges)			
10th percentile	8.5	8.5	8.6
25th percentile	12.2	12.0	12.3
50th percentile	18.1	17.9	18.9
75th percentile	27.1	27.8	29.5
90th percentile	41.4	42.5	46.6

Note: Percentages may not sum to totals due to rounding. "All discharges" includes patients discharged alive or deceased.

Source: MedPAC analysis of the 100 percent hospice claims standard analytical file, Medicare hospice cost reports, and Medicare Provider of Services file from CMS.

- In 2019, the overall live-discharge rate was 17.4 percent and has been on a slight upward trend since 2017.
- The most common reasons for live discharge were the beneficiary no longer being terminally ill and the beneficiary revoking the hospice benefit, each accounting for 6.5 percent of all discharges in 2019. Less frequent reasons for live discharges included a beneficiary transferring hospice providers, a beneficiary moving out of the service area, and a beneficiary being discharged for cause.
- Among providers with more than 30 discharges, 10 percent of providers had live-discharge rates in excess of 46 percent in 2019.
- Small hospices as a group have substantially higher live-discharge rates than larger hospices. In 2019, the aggregate live-discharge rate was 45 percent for hospices with 30 or fewer discharges (data not shown).

Chart 11-19. Medicare spending for clinical laboratory services, 2005–2019



Note: Spending is for services paid under the clinical laboratory fee schedule. Hospital-based services are furnished in labs owned or operated by hospitals. The components of each bar may not sum to the total at the top of each bar due to rounding. The spending data include only program payments; there is no beneficiary cost sharing for clinical lab services.

Source: The annual report of the Boards of Trustees of the Medicare trust funds, 2015 and 2020.

- Medicare spending for clinical laboratory services in all settings grew by an average of 3.6 percent per year between 2005 and 2013.
- From 2013 to 2014, Medicare spending for lab services declined by about 9 percent because, beginning in 2014, many lab tests provided in hospital outpatient departments are no longer paid separately under the clinical lab fee schedule. Instead, many of these tests are packaged with their associated visits or procedures under the hospital outpatient prospective payment system.
- Medicare spending for lab services decreased by an average of 0.9 percent per year from 2014 to 2017.
- Beginning in 2018, clinical laboratory fee schedule payment rates are based on private sector rates. From 2017 to 2019, Medicare spending for lab services grew by an average of 3.8 percent per year.



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