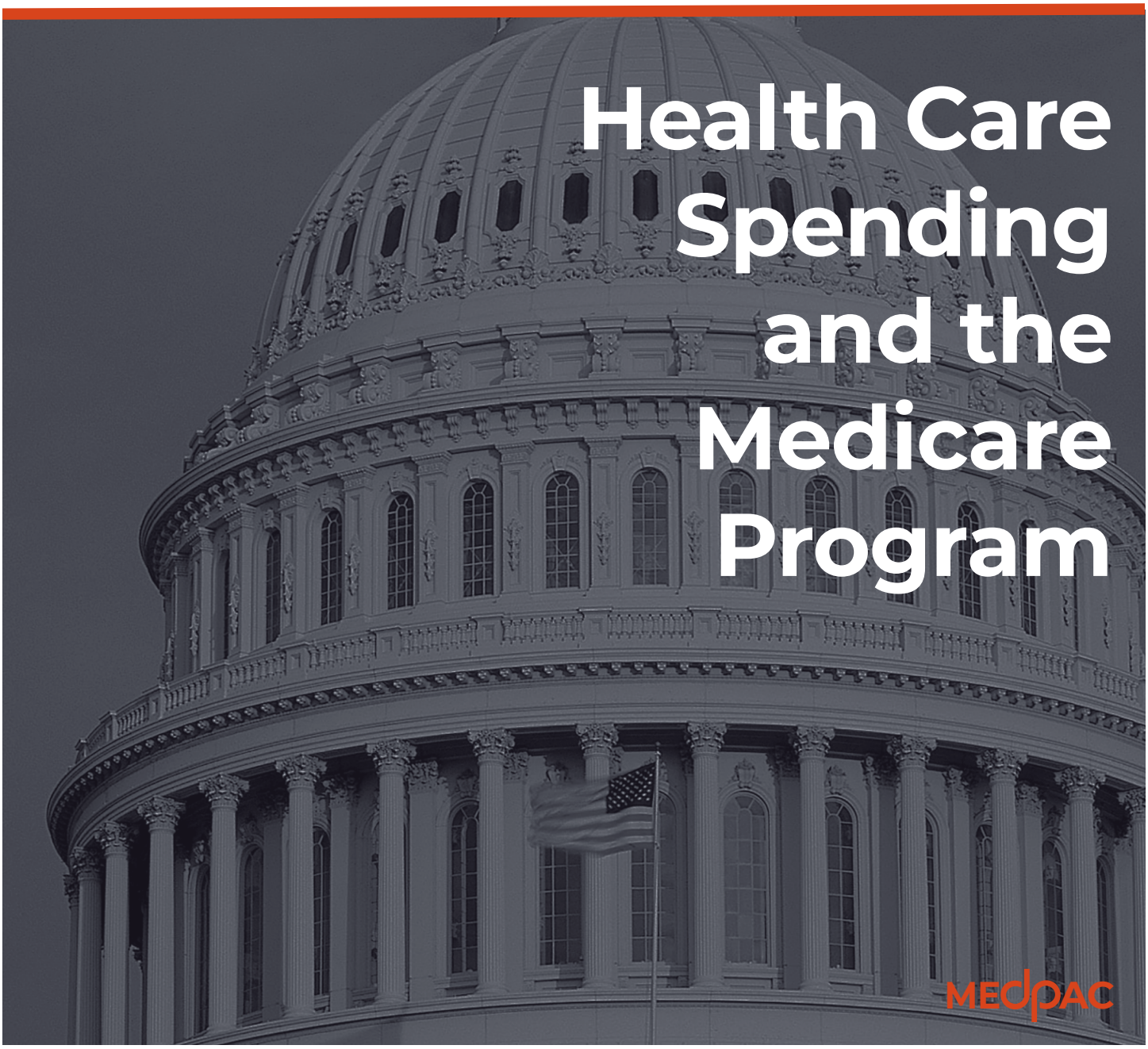
JULY 2023

A Data Book

Health Care Spending and the Medicare Program



MEDPAC

JULY 2023

A DATA BOOK

Health Care Spending and the Medicare Program

MEDPAC | Medicare Payment Advisory Commission

Introduction

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

MedPAC began producing its annual Data Book at the suggestion of congressional staff. Some of the information it contains is derived from MedPAC's March and June reports to the Congress; other information 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.

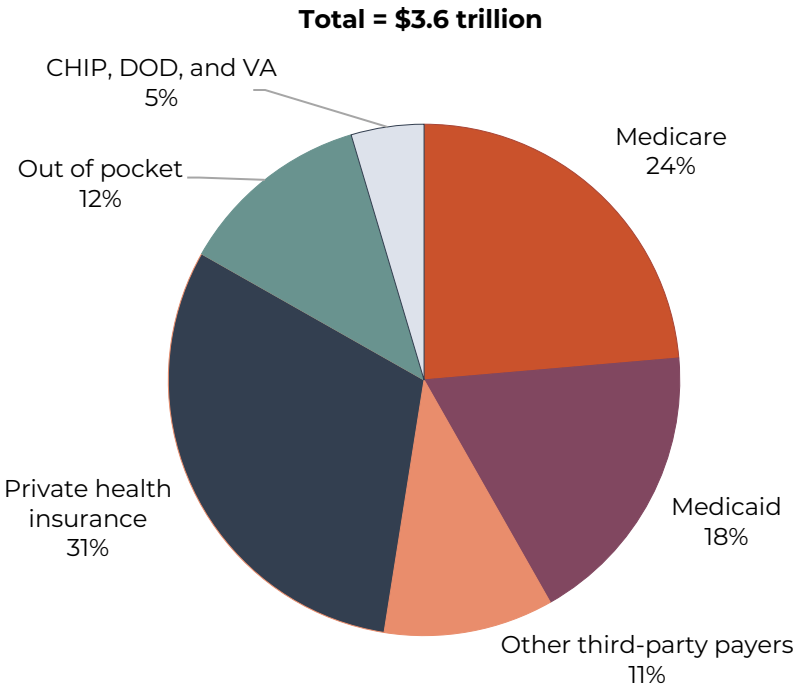
Table of contents

SECTION

1

National health care and Medicare spending

Chart 1-1 Medicare was the largest single purchaser of personal health care in the U.S., 2021



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 that comprises spending for all medical goods and services that are provided for the treatment of an individual. "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 "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 (including COVID-19 Paycheck Protection Program loans and the Provider Relief Fund), the Substance Abuse and Mental Health Services Administration, other state and local programs, and school health.

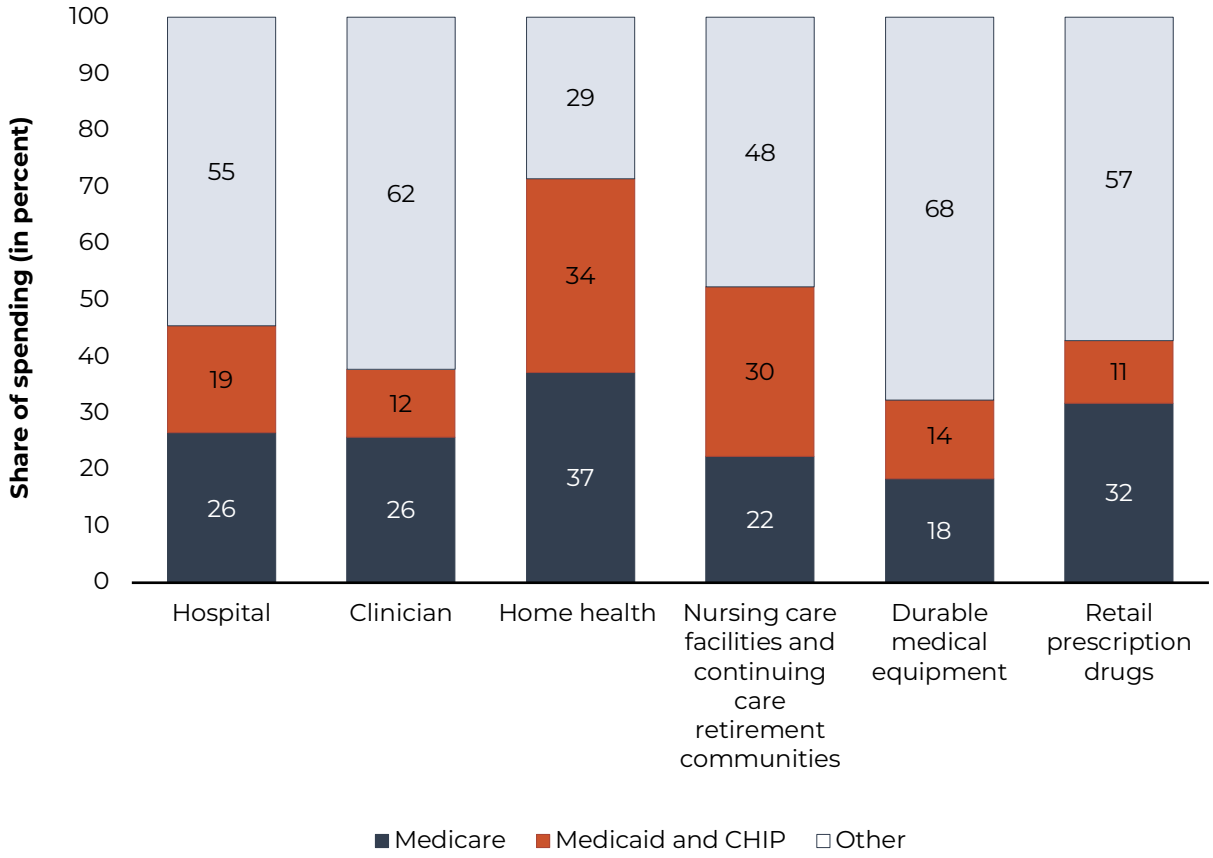
Source: CMS Office of the Actuary, Table 6: Personal Health Care Expenditures; Levels, Percent Change, and Percent Distribution, by Source of Funds: Selected Calendar Years 1970–2021, released December 2022, https://www.cms.gov/files/zip/nhe-tables.zip.

> 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 $3.6 trillion spent on personal health care in 2021, Medicare accounted for 24 percent, or $840 billion. This amount comprises spending on direct patient care and excludes administrative and business costs.

> Private health insurance plans financed 31 percent of total personal health care spending, and consumer out-of-pocket spending (not including premiums) amounted to 12 percent.

> In this chart, enrollees' premium contributions are included in the spending category of their insurance type.

Chart 1-2 **Medicare's share of national spending on personal health care varied by type of service, 2021**



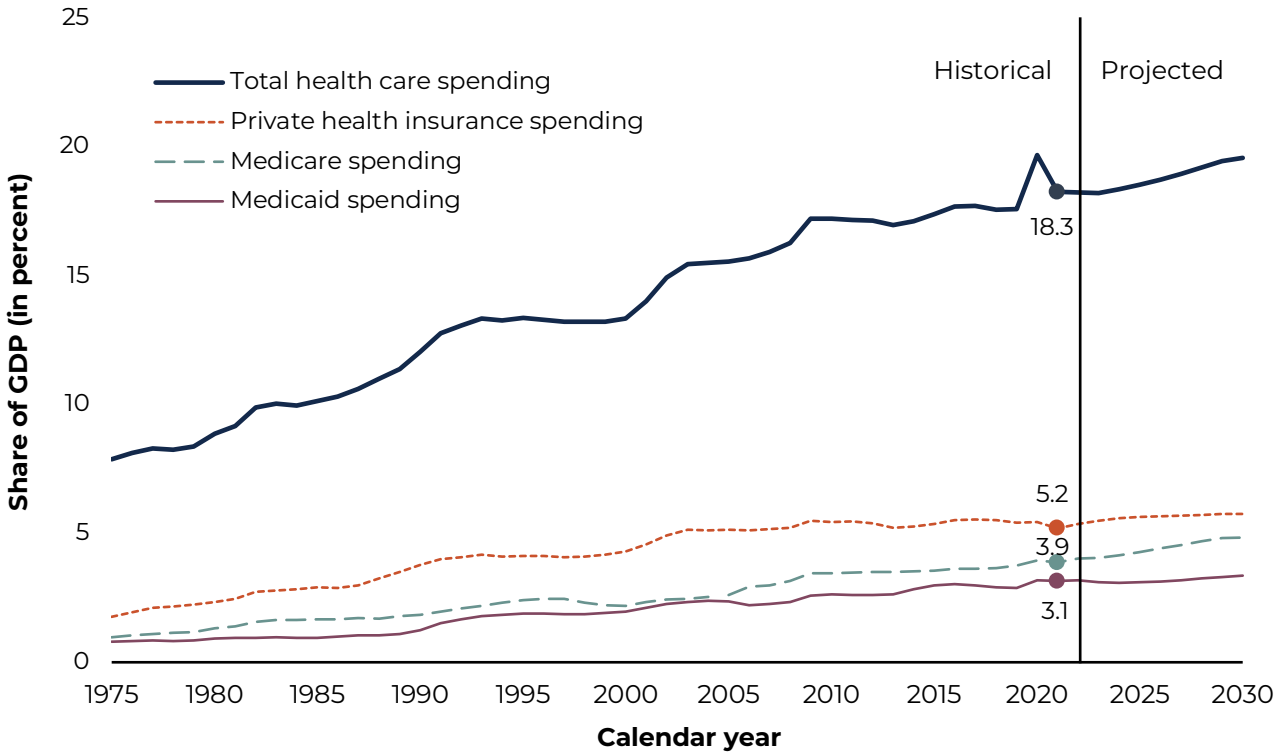
Note: CHIP (Children's Health Insurance Program). "Personal health care" is a subset of national health expenditures that comprises spending for all medical goods and services that are provided for the treatment of an individual. "Other" includes private health insurance, out-of-pocket spending, and 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 products.

Source: CMS Office of the Actuary, National Health Expenditures by type of service and source of funds: Calendar Years 1960 to 2021, released December 2022, https://www.cms.gov/files/zip/national-health-expenditures-type-service-and-source-funds-cy-1960-2021.zip.

> While Medicare's share of total personal health care spending was 24 percent in 2021 (see Chart 1-1), its share of spending by type of service varied, from 18 percent of spending on durable medical equipment to 37 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 grown as a share of the country's GDP



Note: GDP (gross domestic product). First projected year is 2022. Funds paid to health care providers through the Paycheck Protection Program and the Provider Relief Fund are counted in total health care spending but not counted in Medicare spending.

Source: MedPAC analysis of CMS's National Health Expenditure Data (projected data released April 2022 and historical data released December 2022), https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData.

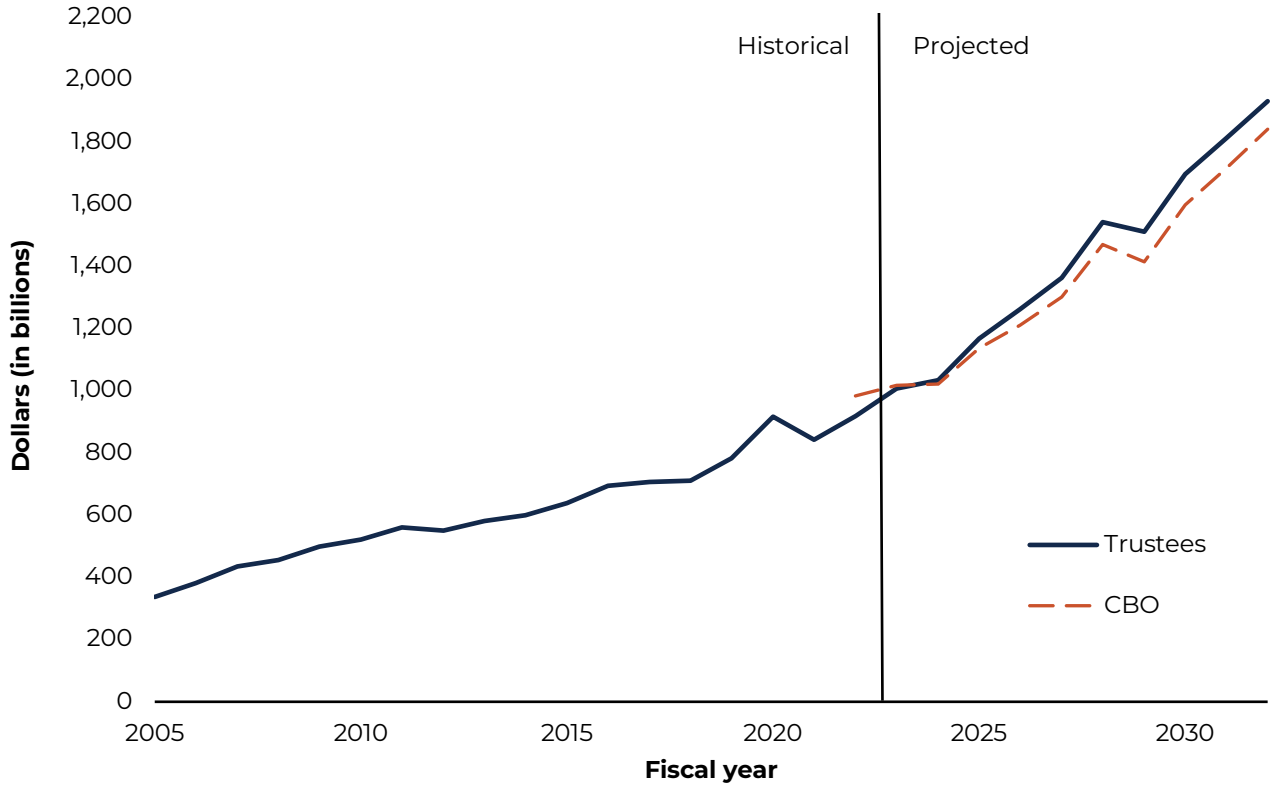
> In 2020, total health care spending increased sharply—reaching 19.7 percent of the country's GDP or $4.1 trillion—due to one-time spending by the federal government on COVID-19 pandemic relief funds for health care providers and public health activities at a time when the country's GDP was shrinking.

> In 2021, the federal government continued to distribute pandemic relief funds, but at much lower levels. Meanwhile, payers' spending on health care increased as patients resumed receiving health care, and GDP expanded rapidly. The net effect of these forces was a sharp decline in national health care spending as a share of GDP. At 18.3 percent, this was still a larger share of GDP than in 2019.

> Over time, Medicare spending has accounted for an increasing share of GDP. From 1 percent in 1975, it is projected to reach nearly 5 percent of GDP by 2030.

> One of the drivers of Medicare spending growth between now and 2030 is the continued aging of the baby-boom generation into the Medicare program. By 2030, all baby boomers will have reached Medicare's age of eligibility.

Chart 1-4 Medicare spending is expected to double in the next 10 years



Note: CBO (Congressional Budget Office). First projected year is 2023. The sharp increase in spending in 2020 includes $104 billion in Medicare Accelerated and Advance Payments paid to providers that year; these payments were expected to be recouped by the Medicare program in 2021 and 2022.

Source: 2023 annual report of the Boards of Trustees of the Medicare trust funds, Table V.H4; CBO's May 2023 baseline projections for the Medicare program, https://www.cbo.gov/system/files?file=2023-05/51302-2023-05-medicare.xlsx.

> Medicare spending doubled between 2008 and 2022, increasing from $455 billion to $918 billion.

> Medicare spending is expected to again double between 2022 and 2032, when the Trustees estimate it will reach $1.9 trillion. The Trustees expect Medicare spending to increase at an average annual rate of 7.5 percent over the next 10 years.

> The Medicare Trustees and CBO both estimate that Medicare spending will reach $1 trillion in 2023.

Chart 1-5 Factors contributing to Medicare's projected spending growth, 2023–2032 (after subtracting economy-wide inflation)

Medicare part	Average annual percent change in: Medicare prices (minus inflation)	Number of beneficiaries	Beneficiary demographic mix	Volume and intensity of services used	Medicare's projected spending (minus inflation)
Part A	–0.2%	1.9%	0.1%	1.8%	3.7%
Part B	–1.1	2.0	0.1	4.2	5.1
Part D	N/A*	2.4	–0.2	N/A*	2.5
Total	N/A*	N/A**	0.1	N/A*	4.2

Note: N/A (not available). Includes Medicare Advantage enrollees. "Medicare prices" reflects Medicare's annual updates to payment rates (not including inflation, as measured by the consumer price index), total factor productivity reductions, and any other reductions required by law or regulation. "Volume and intensity" is the residual after the other three factors shown in the table (growth in "Medicare prices," "number of beneficiaries," and "beneficiary demographic mix") are removed. The "Medicare's projected spending" column is the product of the other columns in the table. The "total" row is the sum of the other rows of the table, each weighted by their part's share of total Medicare spending in 2022 (as measured by shares of gross domestic product).
*Not available for Part D due to the current methodology used to incorporate the provisions of the Inflation Reduction Act of 2022.
**Not available because there is beneficiary overlap in enrollment in Part A, Part B, and Part D.

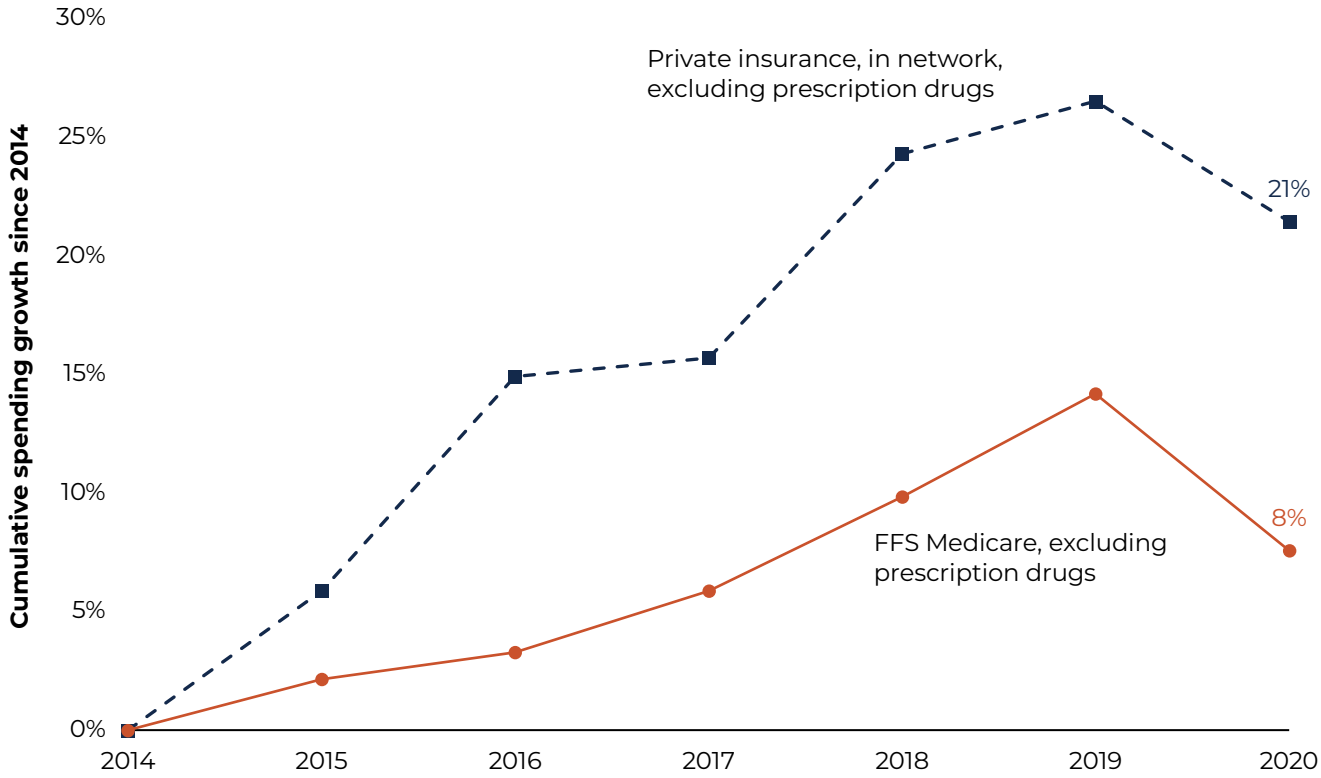
Source: MedPAC analysis of data from the 2023 annual report of the Boards of Trustees of the Medicare trust funds.

> Medicare's spending is projected to grow 4.2 percent per year, on average, between 2022 and 2031 (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 about 2 percent per year over this period) and growth in the volume and intensity of services delivered per beneficiary (expected to rise by 1.8 percent per year for Part A spending and by 4.2 percent per year for Part B spending).

> Unlike in the private health care sector, price growth is not expected to drive Medicare's increased spending because Medicare is able to administratively set prices for many health care providers.

Chart 1-6 Health care spending per enrollee has grown faster for the privately insured than for beneficiaries in traditional FFS Medicare, 2014–2020



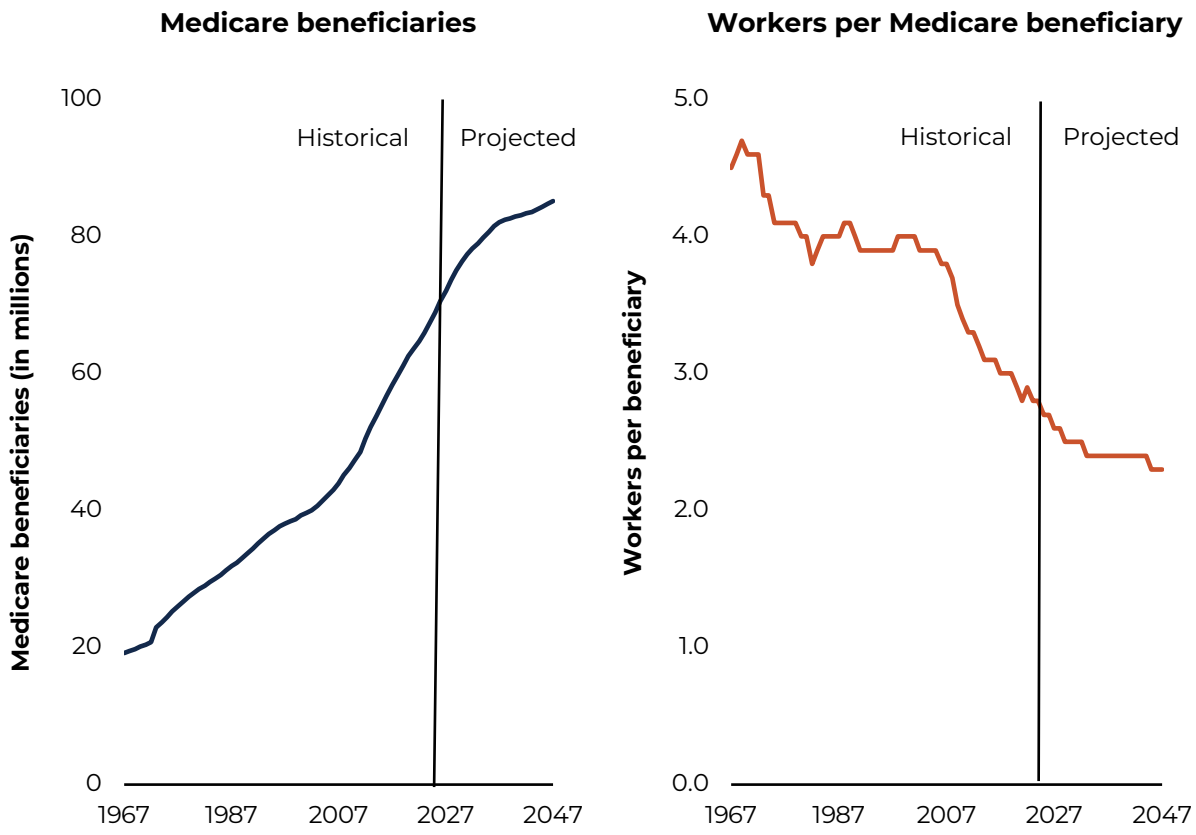
Note: FFS (fee-for-service). Spending in figure includes payments to providers from health insurers and patients (i.e., cost sharing) but not payments from other sources (e.g., workers' compensation or auto insurance). Spending on retail prescription drugs is not available for the privately insured, so it is excluded from both lines in this graph. Spending on out-of-network services for the privately insured is not available for that group and thus is 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 disabled individuals under the age of 65. 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 2020, total health care spending per enrollee (including cost sharing) grew 21 percent for people with private insurance, compared with 8 percent for beneficiaries with traditional FFS Medicare coverage.

> 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 in the market produced a majority of the market's hospital discharges (data not shown). Studies have found that prices paid by private payers tend to increase as provider consolidation increases.

Chart 1-7 The declining ratio of workers to Medicare beneficiaries threatens the Medicare program's financial stability



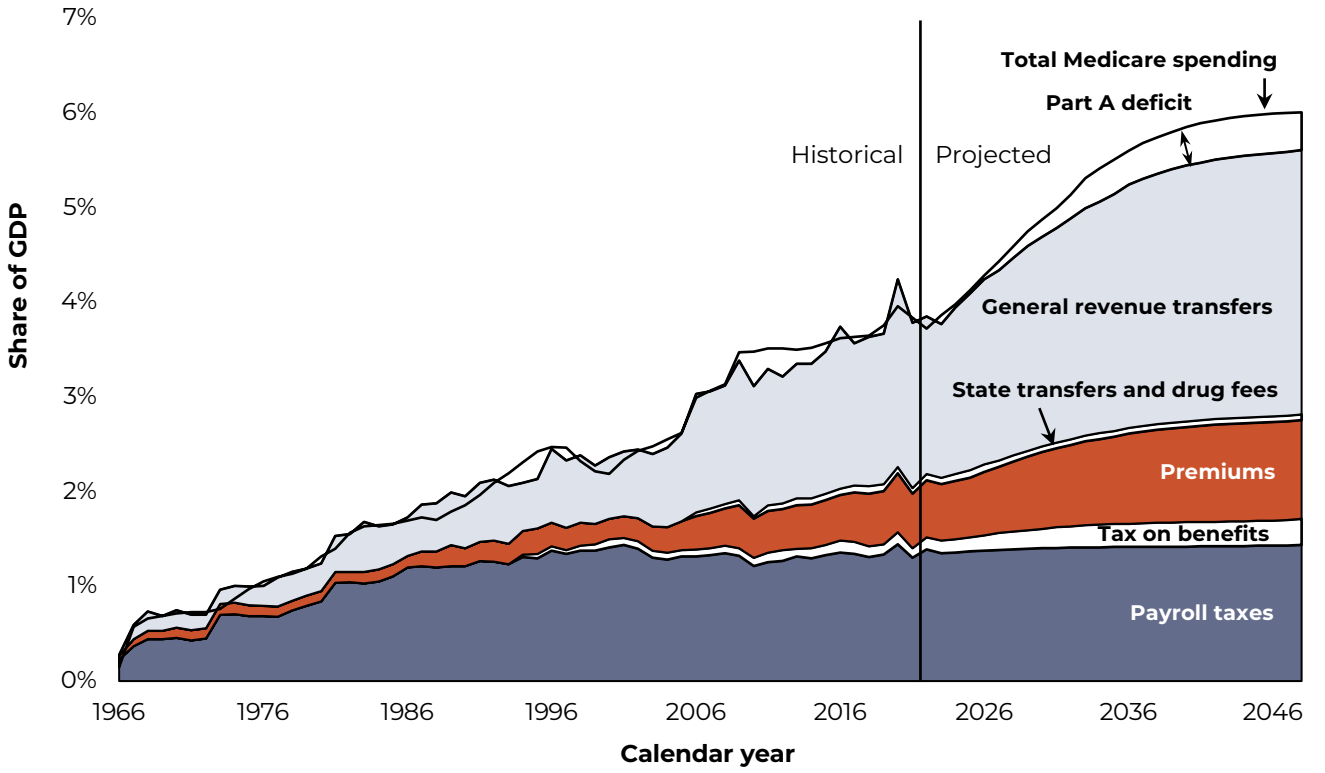
Note: "Beneficiaries" referenced in these graphs are beneficiaries covered by Medicare Part A (including beneficiaries in Medicare Advantage plans). More beneficiaries have Part A Hospital Insurance than Part B Supplemental Medical Insurance because Part A Hospital Insurance is usually available to fee-for-service (FFS) Medicare beneficiaries at no cost while FFS beneficiaries usually pay a premium for Part B Supplemental Medical Insurance. First projected year is 2023.

Source: 2023 annual report of the Boards of Trustees of the Medicare trust funds.

> As the baby-boom generation ages, enrollment in the Medicare program is surging. By 2029, all baby boomers will have reached the age of eligibility for the Medicare program, and 75 million beneficiaries are expected to have Medicare Part A Hospital Insurance—up from 65 million beneficiaries in 2022.

> While Medicare enrollment is rising, the number of workers per beneficiary is rapidly declining. This presents a financing challenge for Medicare because Part A Hospital Insurance is primarily financed by workers' Medicare payroll taxes. The number of workers per Medicare beneficiary with Part A Hospital Insurance has declined from 4.5 workers per Medicare beneficiary at the program's inception in 1967 to 2.9 workers per beneficiary in 2022 and is projected to fall to 2.5 workers per beneficiary by 2029.

Chart 1-8 General revenues are the largest source of Medicare funding



Note: GDP (gross domestic product). First projected year is 2023. Projections are based on the Trustees' intermediate set of assumptions. "Tax on benefits" refers to the portion of income taxes that higher-income individuals pay on Social Security benefits, which is designated for Medicare. "State transfers" refers to payments from the states to Medicare, required by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, for assuming primary responsibility for prescription drug spending. "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. Graph does not include interest earned on trust fund investments (which makes up 1 percent of the Hospital Insurance Trust Fund's income and is expected to decline in coming years as trust fund assets decline).

Source: 2023 annual report of the Boards of Trustees of the Medicare trust funds.

> Medicare spending accounted for 3.7 percent of GDP in 2022. By 2031, the Medicare Trustees project that Medicare's share of GDP will rise to 5.0 percent.

> In the early years of the Medicare program, Medicare payroll taxes deposited into the Hospital Insurance Trust Fund (which finances Part A) were the main source of funding for the Medicare 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 currently pay for nearly half of Medicare spending and are expected to continue to do so in future decades.

> As increasing amounts of general revenues have been devoted to Medicare, less general tax revenues have been available to invest in growing the economic output of the country or supporting other national priorities.

Chart 1-9 Higher Medicare payroll tax or lower Medicare Part A spending needed to maintain solvency of Medicare's Hospital Insurance Trust Fund

To maintain Hospital Insurance Trust Fund solvency for:	Increase 2.9% payroll tax to:	Or decrease Part A spending by:
25 years (2023–2047)	3.6%	15.6%

Note: Part A spending includes spending on inpatient hospital, skilled nursing facility, home health agency, and hospice services and includes spending for beneficiaries in fee-for-service Medicare and Medicare Advantage.

Source: MedPAC analysis of Table III.B8 in 2023 annual report of the Boards of Trustees of the Medicare trust funds.

> Medicare's Hospital Insurance Trust Fund helps pay for Part A services such as inpatient hospital stays, post-acute care provided by skilled nursing facilities, and hospice services. The trust fund is mainly financed through a dedicated payroll tax (i.e., a tax on wage earnings).

> In some years, such as 2022, payroll tax revenues exceed Part A spending—creating a surplus that causes the trust fund's account balance to increase. (For example, the Trustees report that in 2022, annual trust fund revenues equaled $397 billion, but Part A spending only amounted to $343 billion, thus yielding a surplus of $54 billion that year. This surplus increased the balance in the trust fund from $143 billion at the start of the year to $197 billion by the end of the year.)

> In other years, payroll tax revenues are less than Medicare Part A spending—creating a deficit that causes the trust fund's account balance to decline. Medicare's Trustees estimate that annual deficits in coming years will cause the Hospital Insurance Trust Fund's account balance to drop to zero dollars in 2031—which will leave Medicare with enough funds to cover only 89 percent of its incurred Part A costs that year. The Congressional Budget Office also tracks the trust fund's financial status and projects that it will take longer for the trust fund to become insolvent (sometime after its 10-year budget projection window, which runs through 2033).

> To keep the trust fund solvent over the next 25 years, the Medicare Trustees estimate that either the Medicare payroll tax would need to be increased immediately from its current rate of 2.9 percent to about 3.6 percent or Part A spending would need to be permanently reduced by 15.6 percent (about $62 billion in 2023). Alternatively, some combination of smaller tax increases and smaller spending reductions could be used to achieve solvency.

Chart 1-10 Medicare Part A and Part B benefits and cost sharing per FFS beneficiary, 2021

	Average benefit in 2021 (in dollars)	Average cost sharing in 2021 (in dollars)
Part A	$5,207	$396
Part B	6,757	1,621

Note: FFS (fee-for-service). "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 premiums.

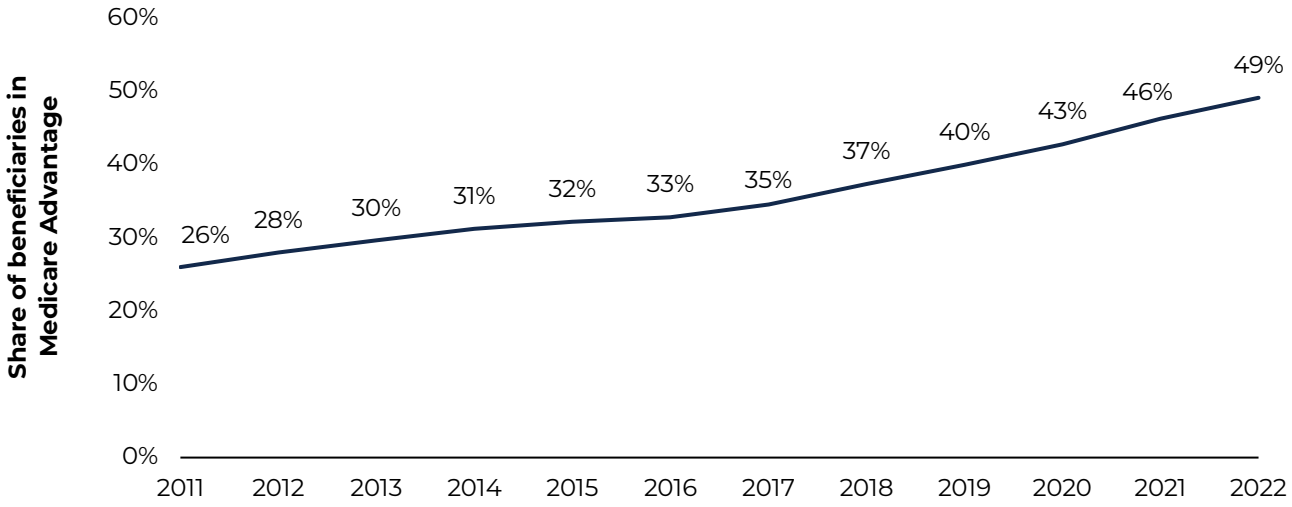
Source: CMS, Medicare Part A and Part B Summary Utilization, Program Payments, and Cost Sharing for All Original Medicare Beneficiaries, by Type of Coverage and Type of Service Calendar Years 2016-2021, https://data.cms.gov/summary-statistics-on-use-and-payments/medicare-service-type-reports/cms-program-statistics-medicare-part-a-part-b-all-types-of-service.

> In 2021, the Medicare program made $5,207 in Part A benefit payments and $6,757 in Part B benefit payments, on average, per FFS beneficiary.

> In 2021, FFS beneficiaries owed an average of $396 in cost sharing for Part A services (such as hospital fees) and $1,621 in cost sharing for Part B services (such as clinician services provided in any setting, including in hospitals). (Cost sharing does not include premiums.)

> To help cover cost-sharing obligations, 91 percent of non-institutionalized beneficiaries had coverage that supplemented or replaced the Medicare benefit package in 2020, such as Medicare Advantage, Medigap coverage, supplemental coverage through a former employer, or Medicaid (see Chart 3-1).

Chart 1-11 The share of Medicare beneficiaries enrolled in Medicare Advantage has grown rapidly

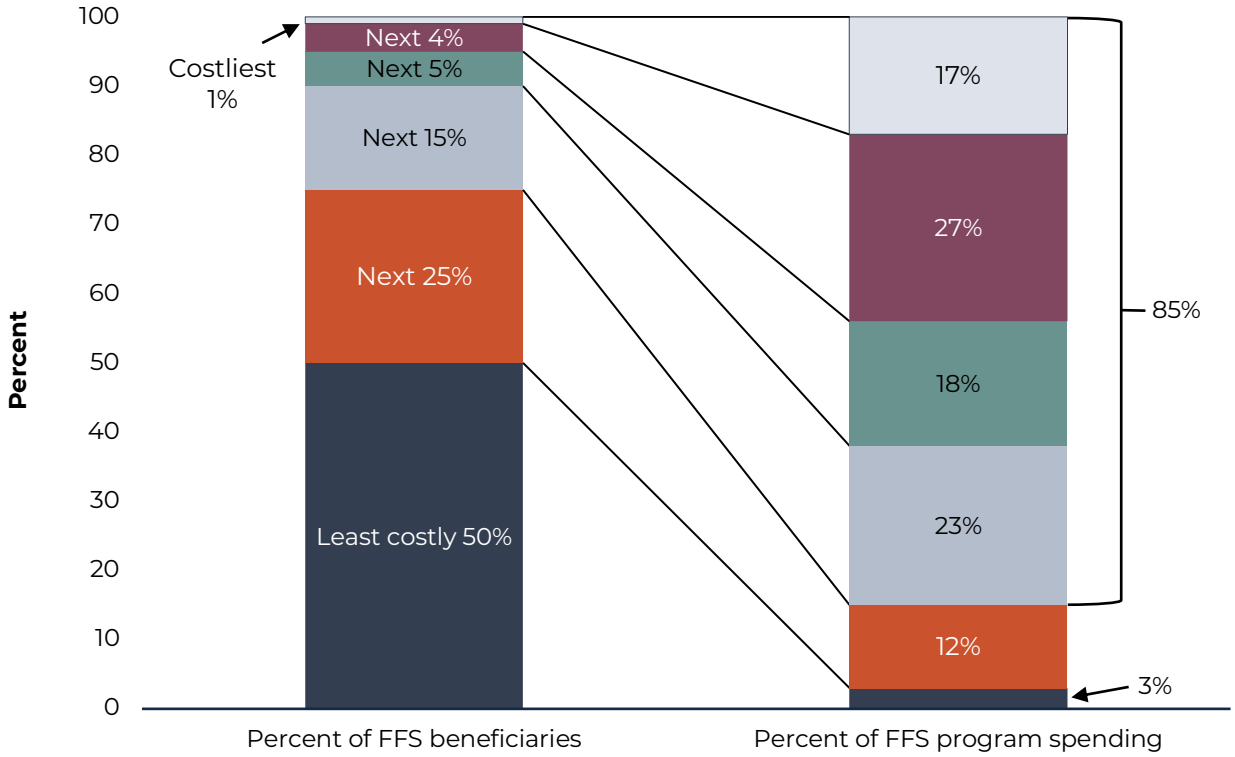


Note: Figure shows share of Medicare beneficiaries enrolled in Medicare Advantage plans, from the total number of beneficiaries with both Part A and Part B coverage. For detailed information on Medicare Advantage enrollment, see Section 9 of this report.

Source: MedPAC analysis of CMS enrollment files, July 2011–2022.

> The share of Medicare beneficiaries with both Part A and Part B coverage who chose to enroll in Medicare Advantage plans grew rapidly from 2011 to 2022—rising from 26 percent to 49 percent.

Chart 1-12 FFS program spending was highly concentrated in a small group of beneficiaries, 2020



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]). The Medicare Current Beneficiary Survey is collected from a sample of Medicare beneficiaries; year-to-year variation in some reported data is expected.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, 2020.

> Medicare FFS spending is concentrated among a small number of beneficiaries. In 2020, 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 44 percent of annual Medicare FFS spending. The costliest 25 percent of beneficiaries accounted for 85 percent of Medicare spending. The least costly 50 percent of beneficiaries accounted for only 3 percent of FFS spending.

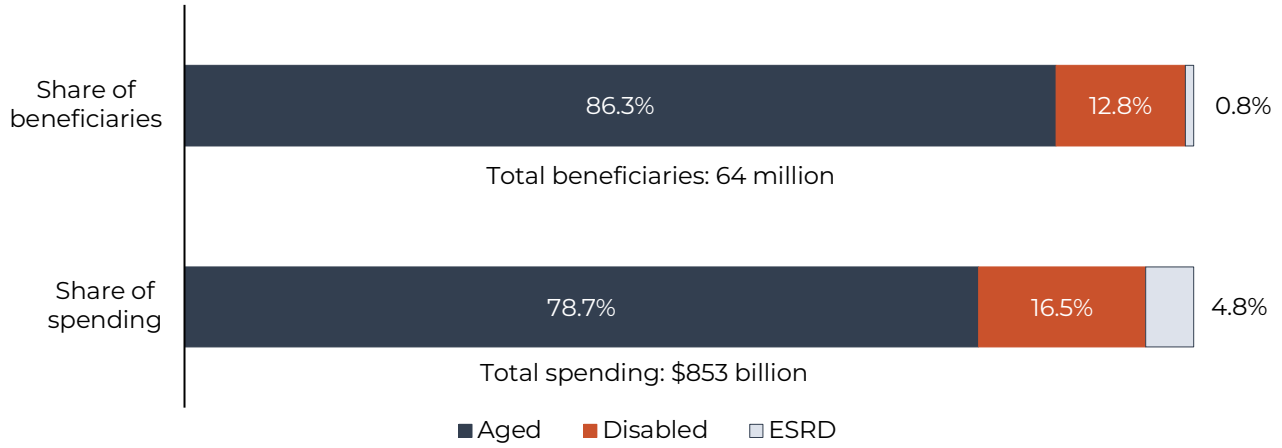
> Costly beneficiaries tend to be those who have multiple chronic conditions, are using inpatient hospital services, are dually eligible for Medicare and Medicaid, and are in the last year of life.

SECTION

2

Medicare beneficiary demographics

Chart 2-1 Aged beneficiaries accounted for the greatest share of the Medicare population and program spending, 2020



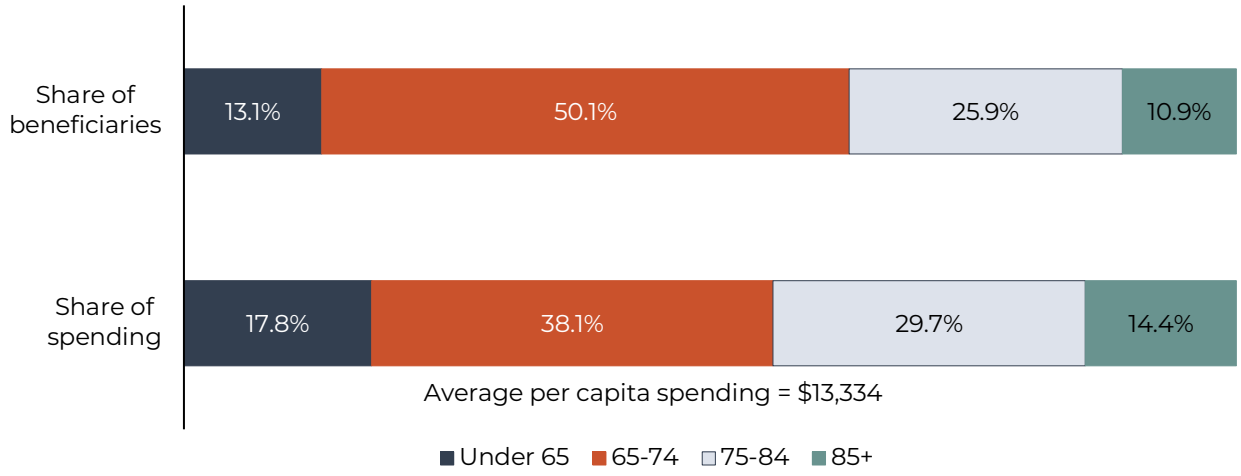
Note: ESRD (end-stage renal disease). The "aged" category includes beneficiaries ages 65 and older without ESRD. The "disabled" category includes beneficiaries under age 65 without ESRD. The "ESRD" category includes beneficiaries with ESRD, regardless of age. Results include fee-for-service, Medicare Advantage, community-dwelling, and institutionalized beneficiaries. The Medicare Current Beneficiary Survey is collected from a sample of Medicare beneficiaries; year-to-year variation in some 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 2020.

> In 2020, beneficiaries ages 65 and older without ESRD composed 86.3 percent of the beneficiary population and accounted for 78.7 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, 2020**



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

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost Supplement file 2020.

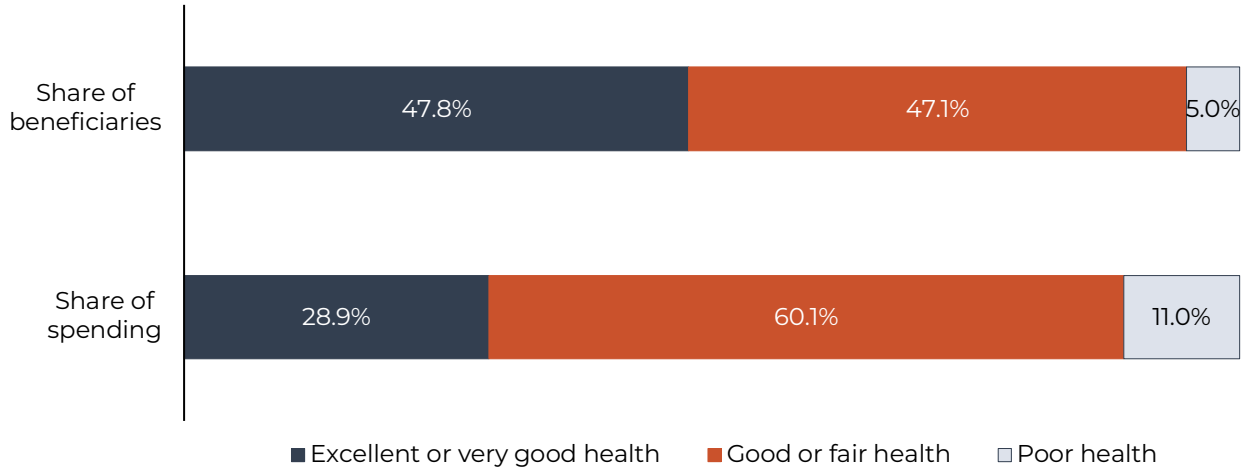
> Beneficiaries younger than 65 made up 13.1 percent of the beneficiary population in 2020 but accounted for 17.8 percent of Medicare spending.

> In 2020, average Medicare spending per beneficiary was $13,334.

> For the aged population (65 and older), per capita expenditures increase with age. In 2020, per capita expenditures were $10,145 for beneficiaries 65 to 74 years old, $15,262 for those 75 to 84 years old, and $17,626 for those 85 or older (data not shown).

> In 2020, per capita expenditures for Medicare beneficiaries under age 65 who were enrolled because of end-stage renal disease or disability were $18,153 (data not shown).

Chart 2-3 Beneficiaries who reported being in poor health accounted for a disproportionate share of Medicare spending, 2020



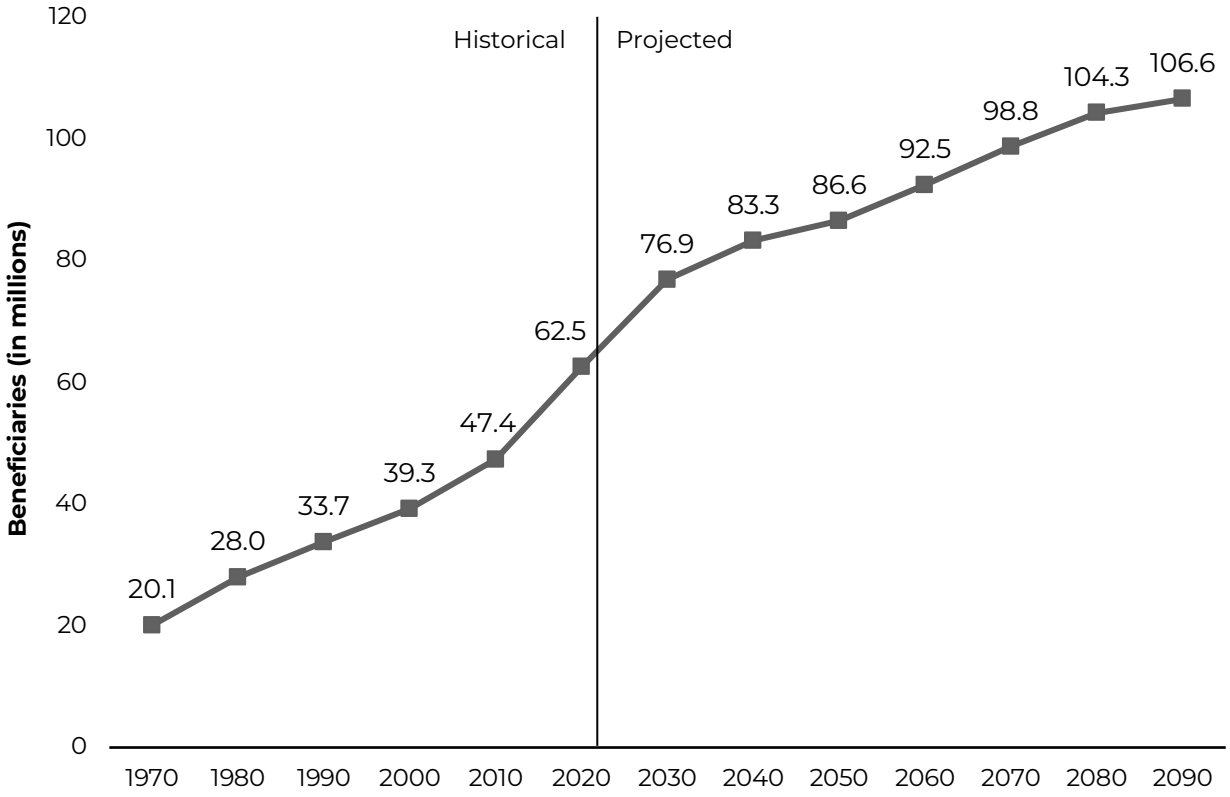
Note: Results include fee-for-service, Medicare Advantage, community-dwelling, and institutionalized beneficiaries. The Medicare Current Beneficiary Survey is collected from a sample of Medicare beneficiaries; year-to-year variation in some reported data is expected. Totals may not sum to 100 percent due to rounding. Beneficiaries who reported "other" are not included in the figure.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost Supplement file 2020.

> In 2020, most beneficiaries reported fair to excellent health. Only 5 percent reported poor health.

> Medicare spending is strongly associated with self-reported health status. In 2020, per capita expenditures were $7,763 for those who reported excellent or very good health, $16,405 for those who reported good or fair health, and $28,040 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.

Source: The annual report of the Boards of Trustees of the Medicare trust funds 2022.

> The total number of people enrolled in the Medicare program is projected to increase from about 63 million in 2020 to about 77 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, 2020

Characteristic	Share of the Medicare population	Characteristic	Share of the Medicare population
Total (58.6 million)	100%	Living arrangement	
		Institution	2
Sex		Alone	30
Male	45	With spouse	48
Female	55	Other	20
Race/ethnicity		Education	
White, non-Hispanic	75	No high school diploma	13
Black, non-Hispanic	10	High school diploma only	25
Hispanic	8	Some college or more	61
Other	7		
		Income status	
Age		Below poverty	13
<65	13	100–125% of poverty	6
65–74	49	125–200% of poverty	17
75–84	27	200–400% of poverty	26
85+	11	Over 400% of poverty	38
Health status		Supplemental insurance status	
Excellent or very good	48	Medicare only	10
Good or fair	46	Managed care	40
Poor	5	Employer-sponsored insurance	21
		Medigap	19
Residence		Medigap with employer-sponsored insurance	1
Urban	82	Medicaid	8
Rural	18	Other	1

Note: 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) as defined by the Office of Management and Budget. "Rural" indicates beneficiaries living outside MSAs. In 2020, "poverty" was defined as income of $12,413 for single individuals ages 65 and older and $15,659 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 collected from a sample of Medicare beneficiaries; year-to-year variation in some reported data is expected.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost Supplement file 2020.

> A majority of Medicare beneficiaries are female (55 percent) and White (75 percent).

> About one-fifth of beneficiaries live in rural areas.

> Thirty percent of the Medicare population lives alone.

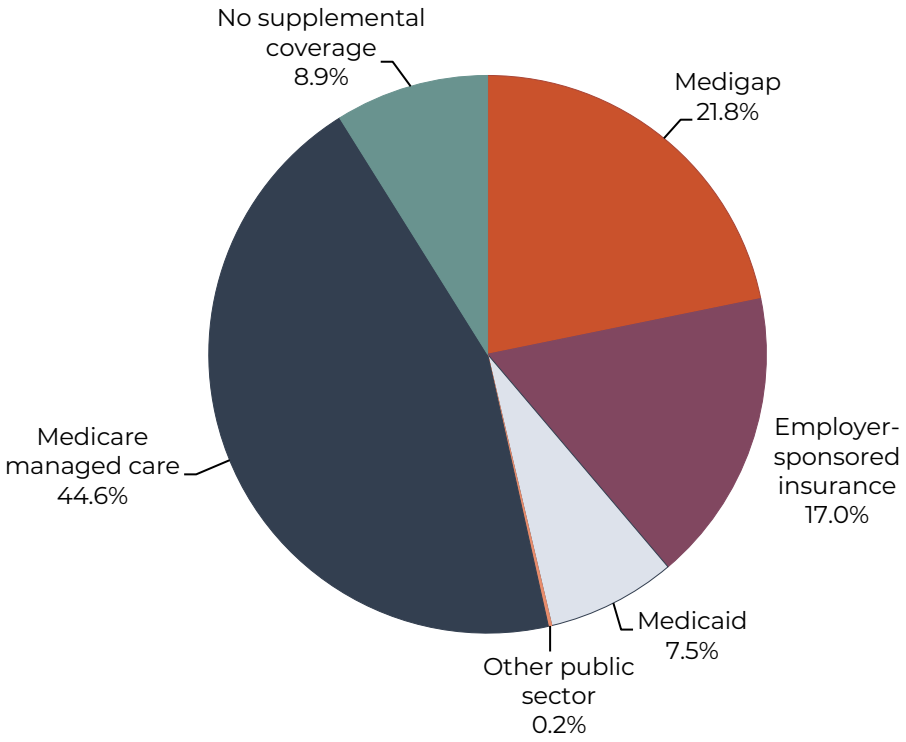
> Most Medicare beneficiaries have some source of supplemental insurance. Managed care plans are the most common source of supplemental coverage.

SECTION

3

Medicare beneficiary and other payer financial liability

Chart 3-1 Sources of supplemental coverage among noninstitutionalized Medicare beneficiaries, 2020



Note: We assigned beneficiaries to the supplemental coverage category in which they spent the most time in 2020. They could have had coverage in other categories during 2020. "Other public sector" includes federal and state programs not included in other categories. This analysis includes only beneficiaries not living in institutions such as nursing homes. It excludes beneficiaries who were not in Part A and Part B throughout their Medicare enrollment in 2020 or who had Medicare as a secondary payer. The Medicare Current Beneficiary Survey is collected from a sample of Medicare beneficiaries; year-to-year variation in some reported data is expected.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Survey file 2020.

> Most beneficiaries living in the community (the noninstitutionalized) have coverage that supplements or replaces the Medicare benefit package. In 2020, 91 percent of beneficiaries had supplemental coverage or participated in Medicare managed care.

> About 39 percent of beneficiaries had private sector supplemental coverage such as Medigap (about 22 percent) or employer-sponsored retiree coverage (about 17 percent).

> About 8 percent of beneficiaries had public sector supplemental coverage, primarily Medicaid.

> Forty-five percent of beneficiaries participated in Medicare managed care, which 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, 2020

	Number of beneficiaries (thousands)	Employer-sponsored insurance	Medigap insurance	Medicaid	Medicare managed care	Other public sector	Medicare only
All beneficiaries	51,610	17%	22%	8%	45%	0%	9%
Age							
<65	6,639	7	3	29	45	1	15
65–69	11,549	16	25	5	45	0	9
70–74	12,941	18	24	3	46	0	9
75–79	9,211	20	26	4	43	0	7
80–84	5,755	21	24	4	43	0	7
85+	5,515	21	23	5	44	0	7
Income-to-poverty ratio							
≤1.00	7,656	3	6	33	52	0	7
1.00 to 1.25	3,659	4	11	17	55	0	12
1.25 to 1.50	3,681	8	15	9	53	0	14
1.50 to 2.00	6,169	12	20	4	51	0	13
>2.00	30,445	24	28	0	39	0	8
Eligibility status							
Aged	44,722	19	24	4	45	0	8
Disabled	6,475	7	3	29	46	0	15
ESRD	414	12	19	28	21	6	15
Residence							
Urban	42,260	17	20	7	47	0	8
Rural	9,350	17	28	10	33	0	12
Sex							
Male	23,079	18	21	7	44	0	10
Female	28,531	16	22	8	45	0	8
Health status							
Excellent/ very good	25,339	19	26	3	43	0	8
Good/fair	23,356	16	18	10	46	0	9
Poor	2,6867	8	14	22	35	0	11

Note: ESRD (end-stage renal disease). We assigned beneficiaries to the supplemental coverage category in which they spent the most time in 2020. They could have had coverage in other categories during 2020. "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 defined by the Office of Management and Budget. "Rural" indicates beneficiaries living outside MSAs. Analysis excludes beneficiaries living in institutions such as nursing homes. Analysis also excludes beneficiaries who were not in Part A and Part B throughout their Medicare enrollment in 2020 or who had Medicare as a secondary payer. Within each supplemental coverage category, we excluded beneficiaries with missing values. Numbers in some rows do not sum to 100 percent because of rounding. The Medicare Current Beneficiary Survey is collected from a sample of Medicare beneficiaries; year-to-year variation in some reported data is expected.

Source: MedPAC analysis of Medicare Current Beneficiary Survey (MCBS), Survey file 2020.

> Beneficiaries most likely to have employer-sponsored supplemental coverage are those who are age 65 or older, have income above twice the poverty level, and report better than poor health.

> Medigap is most common among those who are age 65 or older, have income higher than 1.50 times the poverty level, are eligible because of age, are rural dwelling, and report excellent or very good health.

> Medicaid coverage is most common among those who are under age 65, have income lower than 1.25 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 65, have income between 1.00 and 2.00 times the poverty level, are eligible because of disability or ESRD, are rural dwelling, and report poor health.

Chart 3-3 Covered benefits and enrollment in standardized Medigap plans, 2021

	Medigap standardized plan type										
						High deductible					
Benefit	A	B	C*	D	F*	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)	94	150	395	123	5,290	182	4,812	64	31	2	1,367

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 for that benefit. 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 can no longer be sold. However, beneficiaries who purchased C plans or F plans before 2020 will be able to continue to purchase those plans.

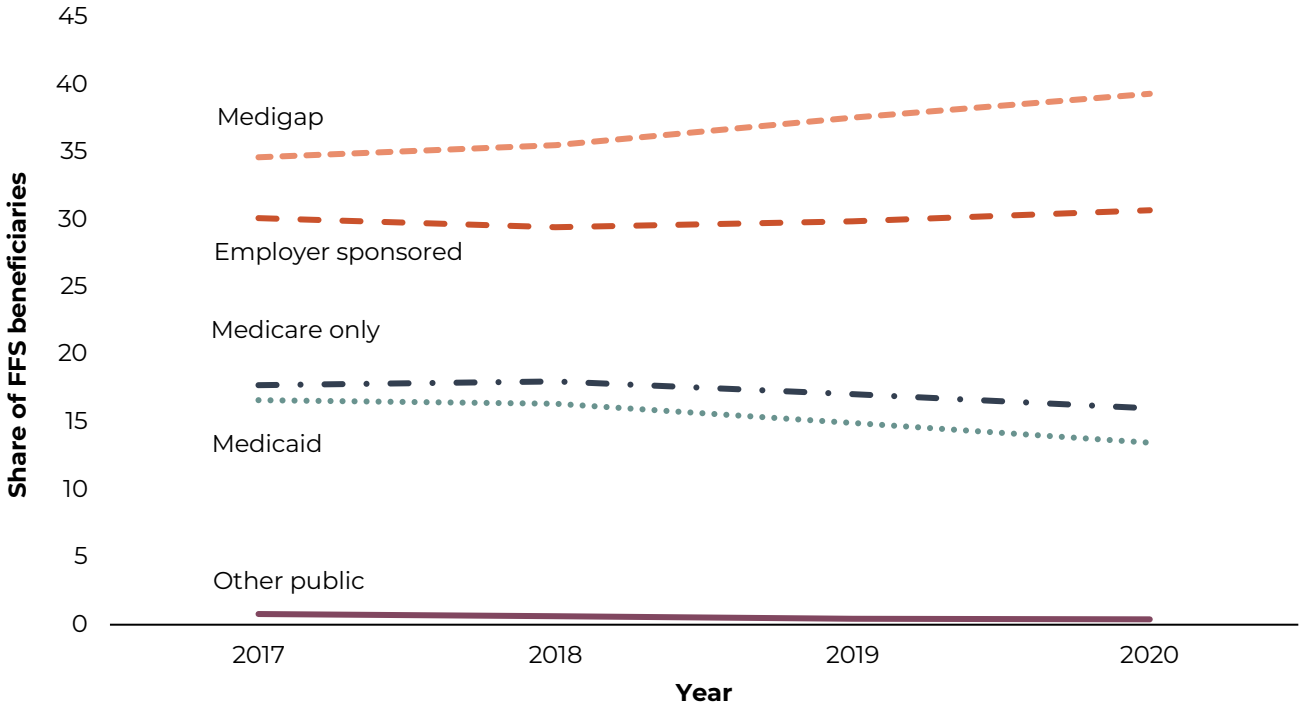
Source: MedPAC analysis of National Association of Insurance Commissioners data, 2022.

> 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 5.3 million enrollees. However, because the Congress was concerned about the overuse 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 2021, 13 million beneficiaries enrolled in Medigap plans (including those in Massachusetts, Minnesota, and Wisconsin). Chart 3-2 indicates that about 11 million beneficiaries had Medigap coverage (22 percent of the 51.6 million beneficiaries included in that chart). The difference in Medigap enrollment between Chart 3-2 and Chart 3-3 is due to a difference in populations evaluated (Chart 3-2 excludes institutionalized beneficiaries, while Chart 3-3 includes them) and different years evaluated (Chart 3-2 is based on 2020 while Chart 3-3 is based on 2021).

Chart 3-4 The share of FFS beneficiaries who had Medigap coverage increased while the share who had Medicaid or no supplemental coverage decreased, 2017–2020



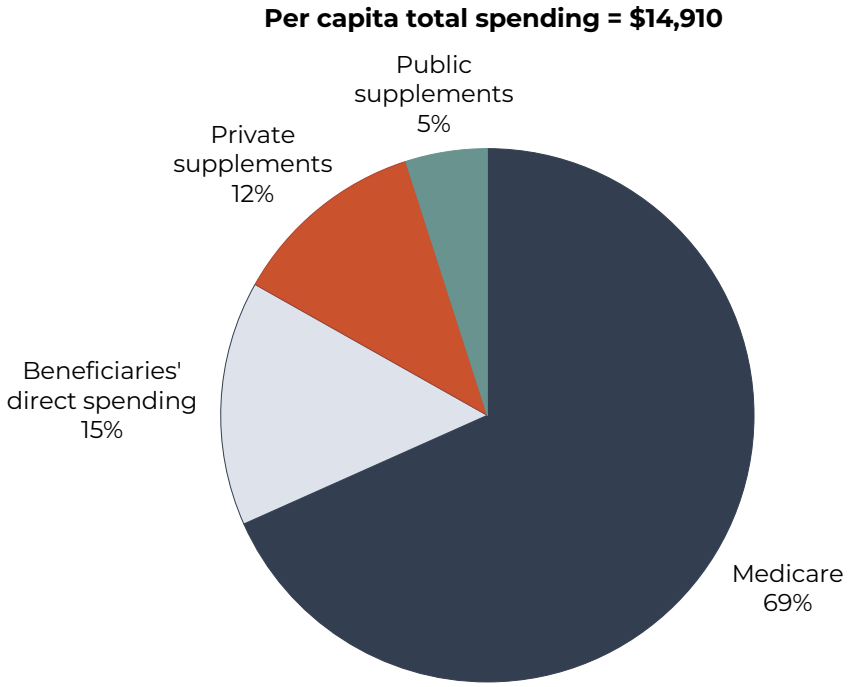
Note: FFS (fee-for-service). We assigned beneficiaries to the supplemental coverage category in which they spent the most time in 2020. They could have had coverage in other categories during 2020. "Other public" includes federal and state programs not included in other categories. This analysis includes only FFS beneficiaries not living in institutions such as nursing homes. It excludes beneficiaries who were not in Part A and Part B throughout their Medicare enrollment in 2020 or who had Medicare as a secondary payer. It also excludes beneficiaries in Medicare Advantage. The Medicare Current Beneficiary Survey is collected from a sample of Medicare beneficiaries; year-to-year variation in some reported data is expected.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Survey file 2020.

> From 2017 to 2020, the share of FFS beneficiaries who had Medigap supplement coverage rose from 35 percent to 39 percent. Over the same period, the share who had Medicaid coverage decreased from 17 percent to 13 percent, and the share who had no supplemental coverage dropped from 18 percent to 16 percent.

> These trends in FFS supplemental coverage could be due in part to beneficiaries with Medicaid coverage or no supplemental coverage opting to enroll in Medicare Advantage over FFS Medicare, while those who have Medigap coverage might choose to stay in FFS Medicare.

Chart 3-5 Total spending on health care services for noninstitutionalized FFS Medicare beneficiaries, by source of payment, 2020



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" includes Medicare cost sharing and spending on noncovered services, but not supplemental premiums. Analysis excludes those who are not in FFS Medicare and those living in institutions such as nursing homes. The Medicare Current Beneficiary Survey is collected from a sample of Medicare beneficiaries; year-to-year variation in some reported data is expected.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost Supplement file, 2020.

> Among FFS beneficiaries living in the community (rather than in an institution), 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 almost $15,000 in 2020. Medicare was the largest source of payment: It paid about 69 percent of the health care costs for FFS beneficiaries living in the community, an average of $10,210 per beneficiary.

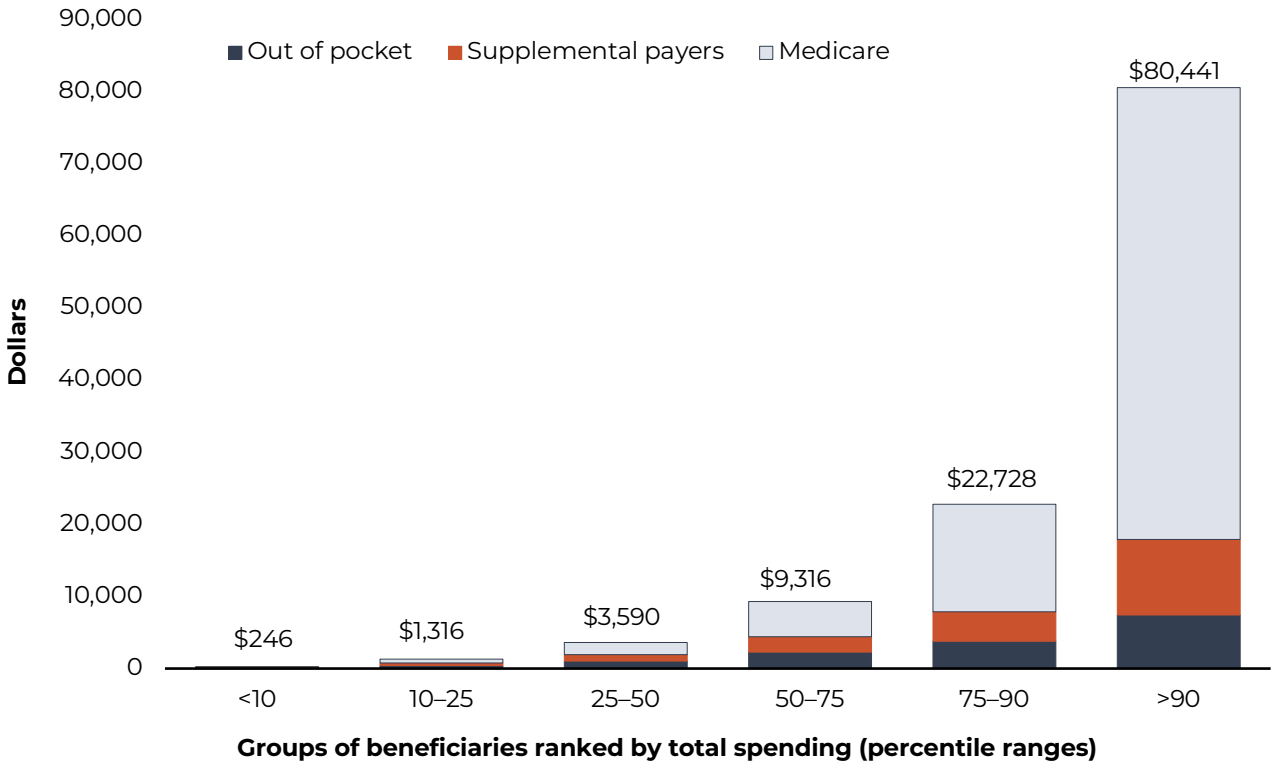
> Private sources of supplemental coverage—primarily employer-sponsored retiree coverage and Medigap—paid about 12 percent of beneficiaries' costs, an average of $1,758 per beneficiary.

> Beneficiaries paid about 15 percent of their health care costs (not including supplemental insurance premiums) out of pocket, an average of $2,218 per beneficiary.

> Public sources of supplemental coverage—primarily Medicaid—paid about 5 percent of beneficiaries' health care costs, an average of $723 per beneficiary.

> The aggregate per capital spending in this chart ($14,910) was lower than the aggregate spending in 2019 ($15,973) that we reported last year. The lower spending in 2020 reflects at least in part the lower service use that occurred during the early months of the coronavirus pandemic.

Chart 3-6 Distribution of per capita total spending on health care services among noninstitutionalized FFS beneficiaries, by source of payment, 2020



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. The Medicare Current Beneficiary Survey is collected from a sample of Medicare beneficiaries; year-to-year variation in some reported data is expected.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost Supplement file, 2020.

> Total spending on health care services varied dramatically among FFS beneficiaries living in the community in 2020. Per capita spending for the 10 percent of beneficiaries with the highest total spending averaged $80,441. Per capita spending for the 10 percent of beneficiaries with the lowest total spending averaged $246.

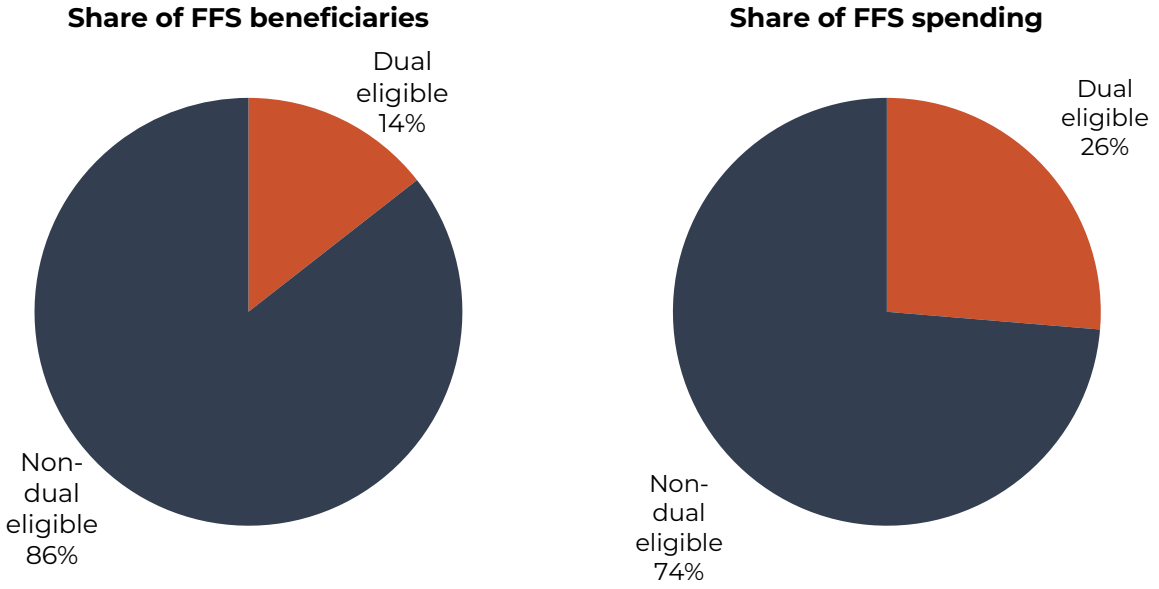
> Among FFS beneficiaries living in the community, Medicare paid a larger share and beneficiaries' out-of-pocket spending was a smaller share as total spending increased. For example, Medicare paid 69 percent of total spending for all beneficiaries, but paid 78 percent of total spending for the 10 percent of beneficiaries with the highest total spending (data not shown). Among all FFS beneficiaries living in the community, out-of-pocket spending amounted to 15 percent of total spending, but only 9 percent of total spending for the 10 percent of beneficiaries with the highest total spending (data not shown).

SECTION

4

Dual-eligible beneficiaries

Chart 4-1 Dual-eligible beneficiaries accounted for a disproportionate share of Medicare spending, 2020



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. 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 CMS's Medicare Current Beneficiary Survey, 2020.

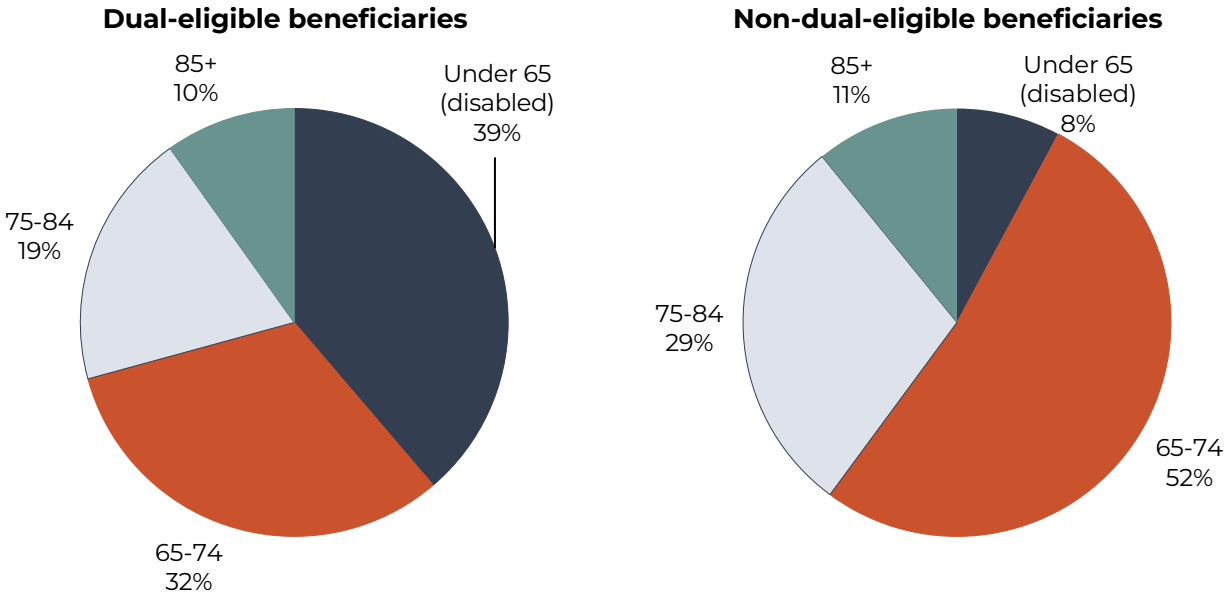
> Dual-eligible beneficiaries are those who qualify for both Medicare and Medicaid. Medicaid is a joint federal and state program designed to help people with low incomes obtain needed health care.

> Dual-eligible beneficiaries account for a disproportionate share of Medicare FFS expenditures. Although they were 14 percent of the Medicare FFS population in 2020, they represented 26 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 2020, $20,304 was spent per dual-eligible beneficiary, and $9,594 was spent per non-dual-eligible beneficiary (data not shown).

> In 2020, average total spending—which includes Medicare, Medicaid, supplemental insurance, and out-of-pocket spending across all payers—for dual-eligible beneficiaries was $32,030 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, 2020



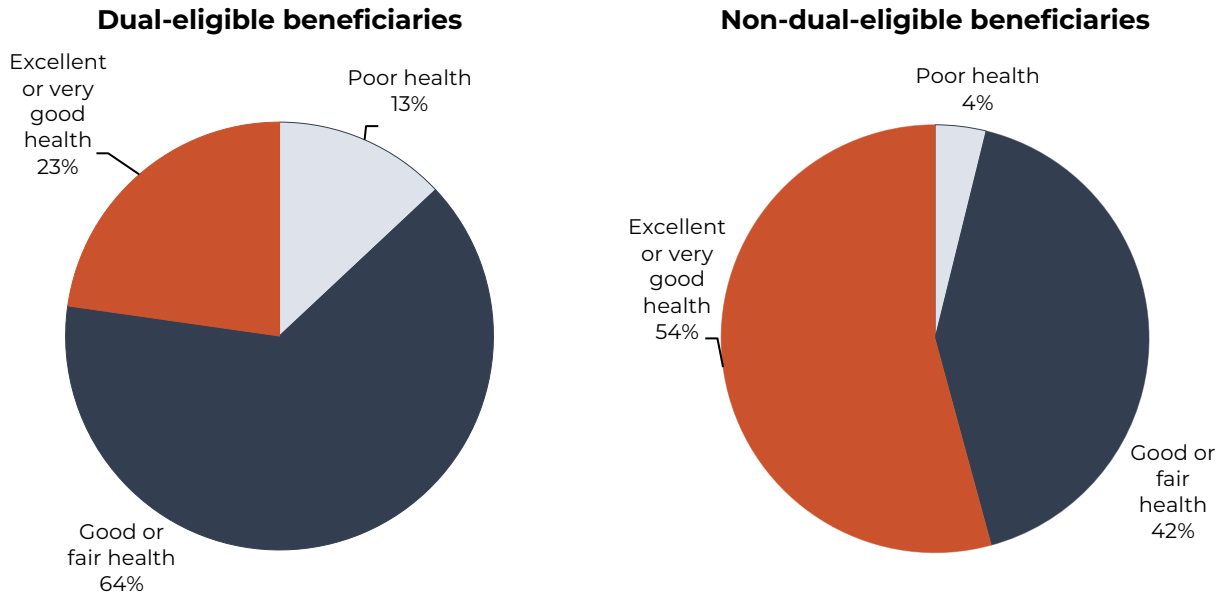
Note: Beneficiaries who are under age 65 generally qualify for Medicare because of disability. Once beneficiaries with disabilities reach age 65, they are counted as aged beneficiaries. "Dual-eligible beneficiaries" are defined as beneficiaries who were eligible for both Medicare and Medicaid for at least one month during the year. 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 CMS's Medicare Current Beneficiary Survey, 2020.

> 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 2020, 39 percent of dual-eligible beneficiaries were under age 65 with a disability compared with 8 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, 2020



Note: "Dual-eligible beneficiaries" are defined as beneficiaries who were eligible for both Medicare and Medicaid for at least one month during the year. 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 CMS's Medicare Current Beneficiary Survey, 2020.

> Dual-eligible beneficiaries are more likely than non-dual-eligible beneficiaries to report being in poor health. In 2020, 13 percent of dual-eligible beneficiaries reported being in poor health compared with 4 percent of non-dual-eligible beneficiaries.

> Over half of non-dual-eligible beneficiaries (54 percent) reported being in excellent or very good health in 2020. In comparison, less than one-quarter (23 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, 2020

Characteristics	Share of dual-eligible beneficiaries	Share of non-dual-eligible beneficiaries
Sex		
Male	38%	47%
Female	62	53
Race/ethnicity		
White, non-Hispanic	49	80
Black, non-Hispanic	22	8
Hispanic	20	6
Other	10	6
Limitations in ADLs		
No limitations in ADLs	52	77
Limitations in 1–2 ADLs	23	16
Limitations in 3–6 ADLs	25	7
Residence		
Urban	81	82
Rural	19	18
Living arrangement		
Institution	8	1
Alone	37	28
With spouse	15	55
With children, nonrelatives, others	40	16
Education		
No high school diploma	36	8
High school diploma only	33	24
Some college or more	32	68
Income status		
Below poverty	56	4
100–125% of poverty	20	3
125–200% of poverty	18	16
200–400% of poverty	5	30
Over 400% of poverty	1	46
Supplemental insurance status		
Medicare or Medicare/Medicaid only	42	12
Medicare managed care	51	39
Employer-sponsored insurance	1	26
Medigap	3	22
Medigap/employer	<1	1
Other*	2	1

Note: ADL (activity of daily living). "Dual-eligible beneficiaries" 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 2020, poverty was defined as annual income of $12,413 for people living alone and $15,659 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. The Medicare Current Beneficiary Survey is a point-in-time survey of a sample of beneficiaries. Year-to-year data variation is expected.
*Includes public programs such as the Department of Veterans Affairs and state-sponsored drug plans.

Source: MedPAC analysis of CMS's Medicare Current Beneficiary Survey, 2020.

> Dual-eligible beneficiaries qualify for Medicaid due in part to low incomes. In 2020, 56 percent of dual-eligible beneficiaries lived below the poverty threshold, and 94 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 Black 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, 2020

Service	Dual-eligible beneficiaries	Non-dual-eligible beneficiaries
Average FFS Medicare payment for all beneficiaries		
Total Medicare FFS payments	$20,304	$9,594
Inpatient hospital	4,446	2,602
Physician[a]	3,352	2,565
Outpatient hospital	3,123	1,778
Skilled nursing facility[b]	1,807	373
Hospice	527	196
Prescribed medication[c]	6,966	1,970
Share of FFS beneficiaries using service		
Share using any type of service	96.0%	84.3%
Inpatient hospital	18.7	11.8
Physician[a]	89.8	81.0
Outpatient hospital	71.0	59.4
Skilled nursing facility[b]	8.3	2.4
Hospice	3.8	1.9
Prescribed medication[c]	92.4	56.6

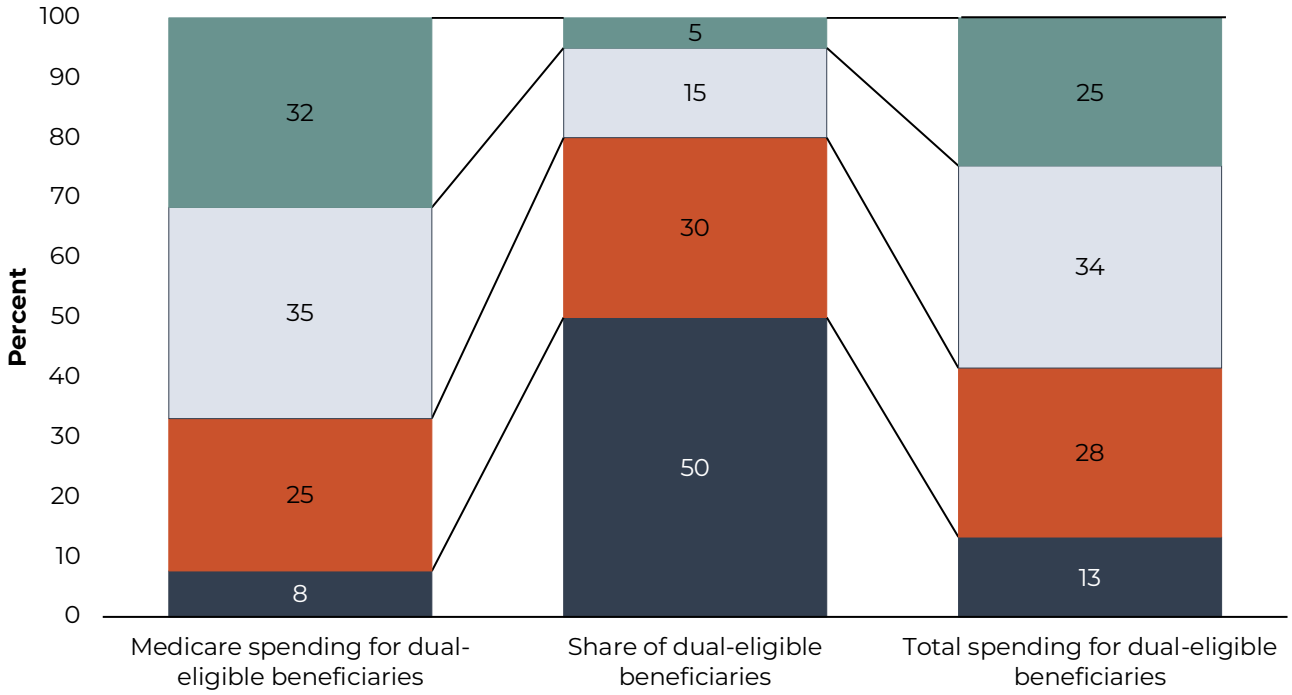
Note: FFS (fee-for-service). Data in this analysis are restricted to beneficiaries in FFS Medicare. "Dual-eligible beneficiaries" are defined as beneficiaries who were eligible for both Medicare and Medicaid for at least one month during the year. Spending totals derived from the Medicare Current Beneficiary Survey (MCBS) do not necessarily match estimates from CMS's Office of the Actuary. Total payments do not equal the sum of line items due to omitted "other" category. The MCBS is a point-in-time survey from a sample of Medicare beneficiaries. Year-to-year variation in reported data is expected. The 2020 MCBS does not have spending data for home health services, which in previous years accounted for about 3 percent to 4 percent of total Medicare FFS payments for both dual-eligible and non-dual-eligible beneficiaries.
[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.

Source: MedPAC analysis of CMS's Medicare Current Beneficiary Survey, 2020.

> In 2020, average per capita Medicare FFS spending for dual-eligible beneficiaries was more than twice that for non-dual-eligible beneficiaries—$20,304 compared with $9,594.

> 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, 2020



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. 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 CMS's Medicare Current Beneficiary Survey, 2020.

> 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 32 percent of Medicare spending and 25 percent of total spending on dual-eligible beneficiaries in 2020. In contrast, the least costly 50 percent of dual-eligible beneficiaries accounted for only 8 percent of Medicare FFS spending and 13 percent of total spending on dual-eligible beneficiaries.

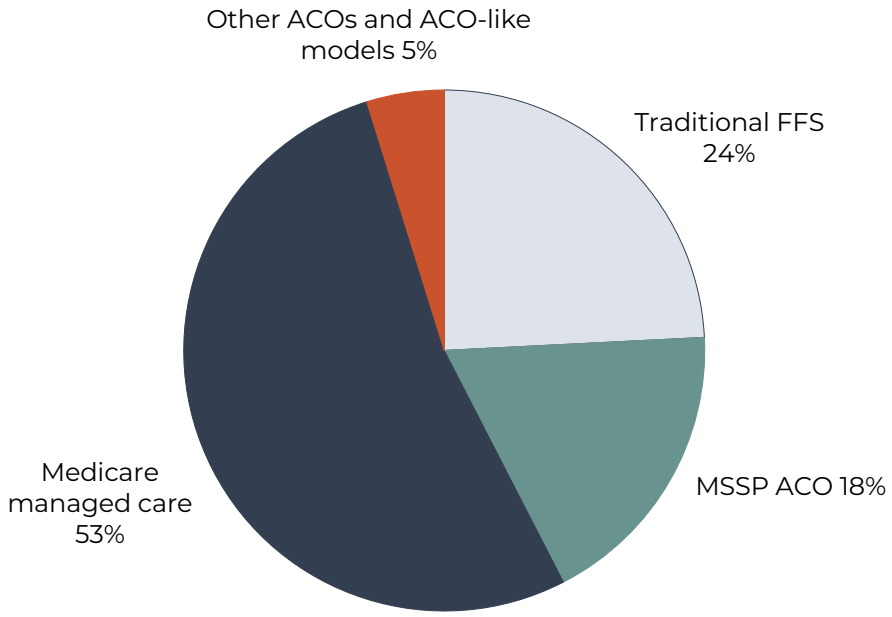
> On average, total spending (including Medicaid, Medigap, etc.) for dual-eligible beneficiaries in 2020 was about twice that for non-dual-eligible beneficiaries—$32,030 compared with $15,664, respectively (data not shown).

SECTION

5

Alternative payment models

Chart 5-1 Most Medicare beneficiaries are in managed care plans or are assigned to accountable care organizations, 2023



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 2023. 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 and Medicare–Medicaid demonstration plans. "Other ACOs and ACO-like models" include the ACO Realizing Equity, Access and Community Health (REACH) 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 2023 enrollment data, CMS Shared Savings Program January 2023 Fast Facts, CMS ACO REACH 2023 Fast Facts, and State of Vermont Green Mountain Care Board 2023 total cost of care annual report.

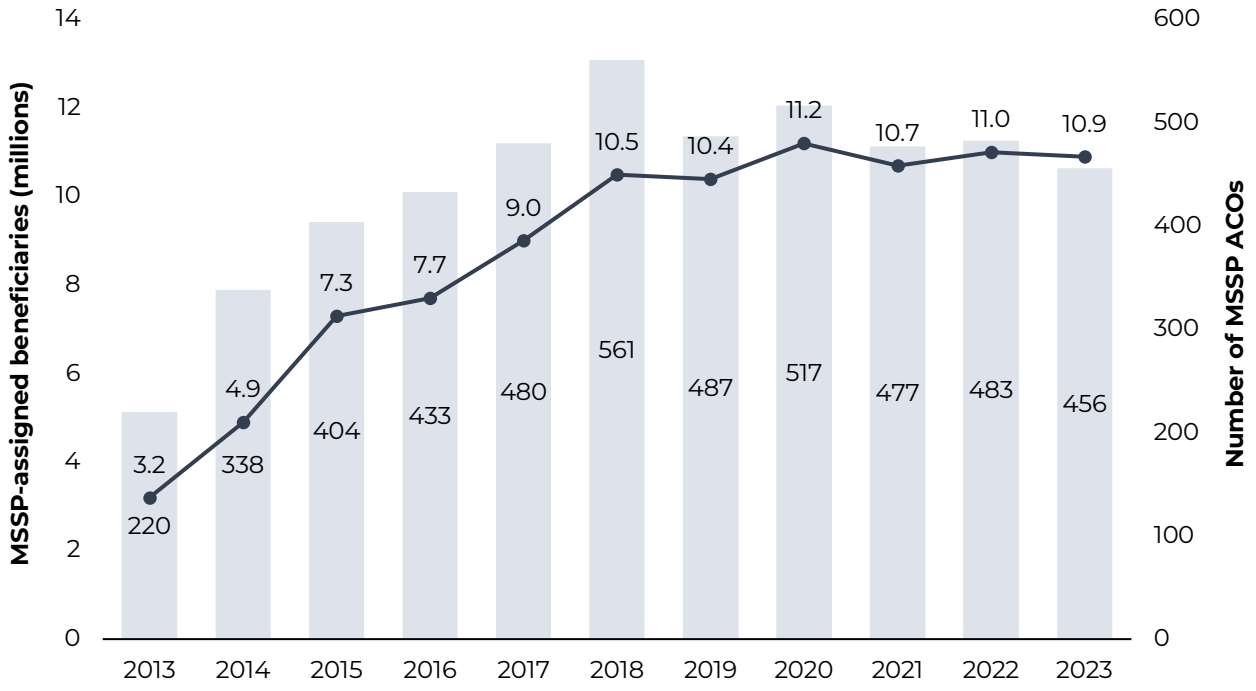
> Among the 59.8 million Medicare beneficiaries with both Part A and Part B coverage in 2023, approximately three-fourths (76 percent) are in Medicare managed care (Medicare Advantage or other private plans) or ACO models.

> 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 24 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 Primary Care First 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. Those ACOs and the beneficiaries assigned to them were therefore not in the program as of January 2019 and so are 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 (data not shown). 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 2023 Fast Facts.

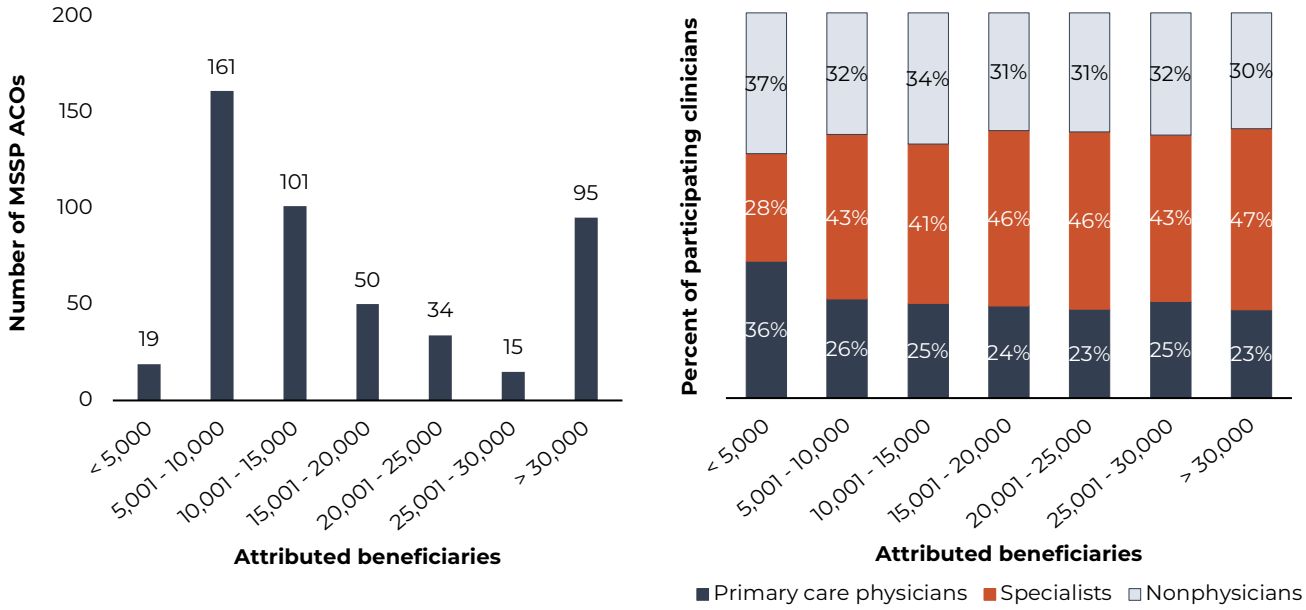
> The number of beneficiaries assigned to MSSP ACOs grew rapidly through 2018 but has leveled off in recent years. In 2023, 18 percent of beneficiaries enrolled in both Part A and Part B were assigned to an MSSP ACO (see Chart 5-1).

> The number of ACOs peaked at 561 in 2018 and then declined to 487 in 2019. In 2023, the number of ACOs declined to 456—the lowest level since 2016.

> CMS finalized changes to MSSP at the end of 2018 that included (1) requiring ACOs to transition toward greater levels of financial 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.

> While the number of assigned beneficiaries has leveled off in recent years, the number of beneficiaries per ACO continues to increase (data not shown).

Chart 5-3 Distribution of ACOs and types of providers participating in MSSP, by number of attributed beneficiaries, 2021



Note: ACO (accountable care organization), MSSP (Medicare Shared Savings Program). As of January 2021, there were 477 MSSP ACOs, but the chart includes only the 475 ACOs that did not drop out of the program prior to July 2021. "Nonphysician" clinicians include nurse practitioners, physician assistants, and clinical nurse specialists.

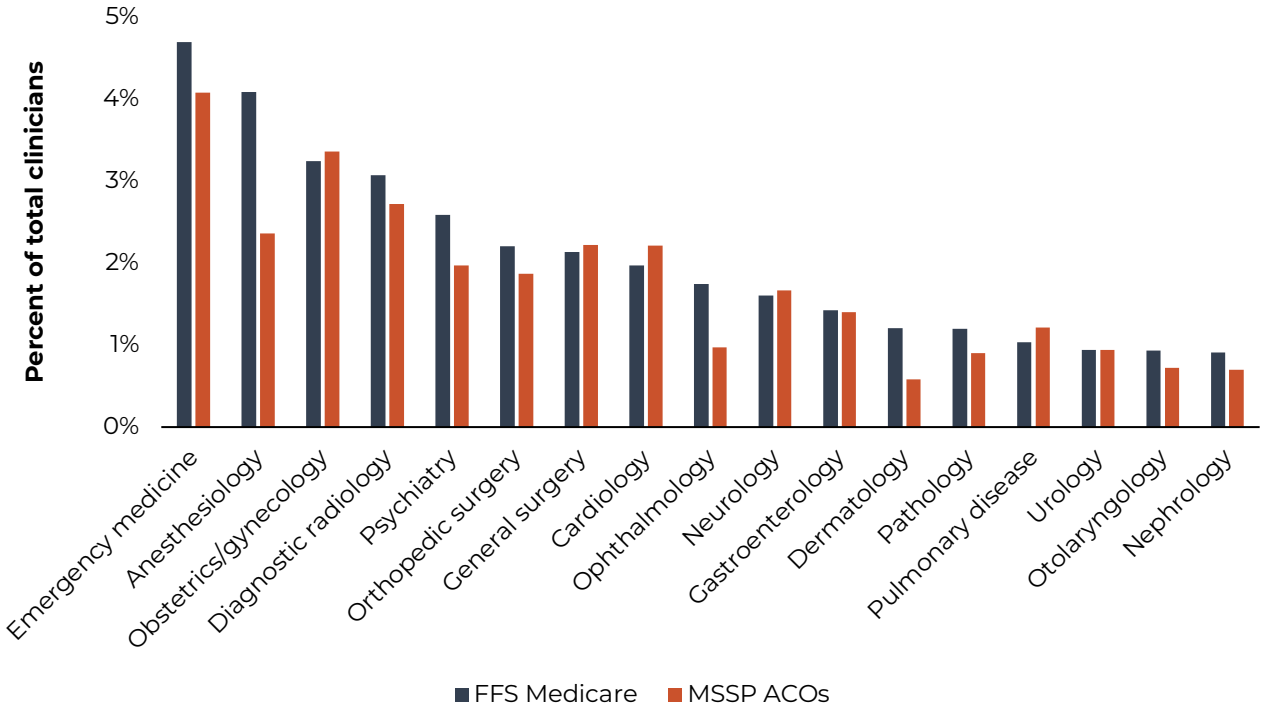
Source: Shared Savings Program Accountable Care Organizations public use files from CMS.

> Of 475 MSSP ACOs, more than half (59 percent) have 15,000 or fewer attributed beneficiaries. Twenty percent of MSSP ACOs have 30,000 or more attributed beneficiaries.

> MSSP ACOs usually have a combination of primary care physicians, specialists, and nonphysician practitioners; the mix of these practitioners is relatively similar across size categories. On average, 24 percent of clinicians participating in an MSSP ACO are primary care physicians, while 45 percent are specialists and 31 percent are nonphysician practitioners (data not shown).

> Primary care physicians comprise at least half of all participating clinicians in 51 (11 percent) MSSP ACOs, while specialists comprise more than half of all clinicians in 86 (18 percent) of MSSP ACOs (data not shown).

Chart 5-4 Participation by select specialists in MSSP ACOs, 2021



Note: MSSP (Medicare Shared Savings Program), ACO (accountable care organization), FFS (fee-for-service). The "FFS Medicare" category includes all physicians who treated at least one FFS beneficiary, including those who participate in an MSSP ACO. "Total clinicians" includes all physicians, nurse practitioners, physician assistants, and clinical nurse specialists. This chart focuses on non–primary care physician specialties.

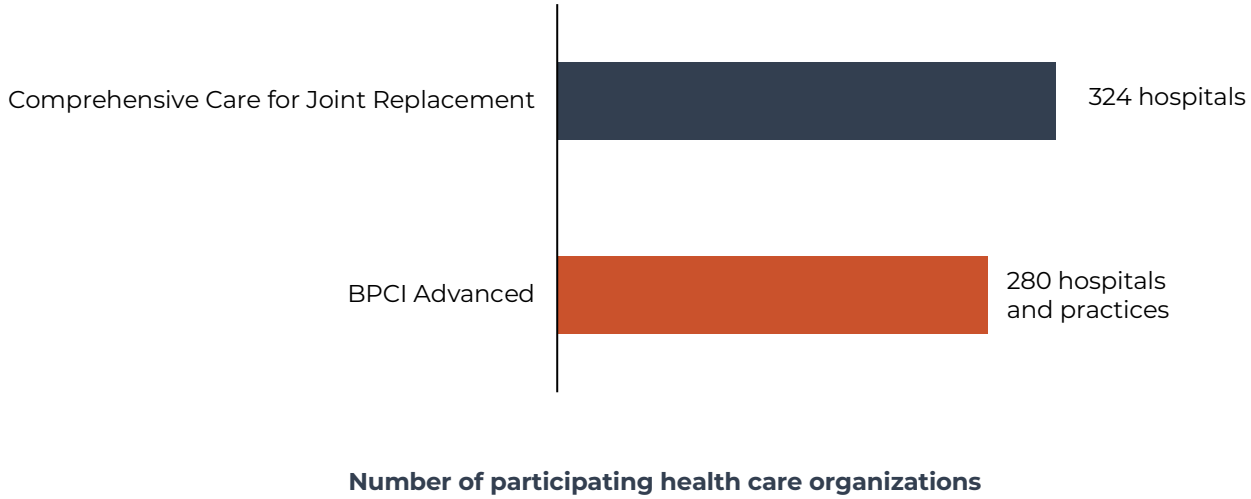
Source: Shared Savings Program Accountable Care Organizations public use files and research identifiable files from CMS; Carrier Standard Analytic File for 100 percent of Medicare beneficiaries from CMS.

> ACOs by design are oriented around primary care, but specialists can and do participate in these models. Most MSSP ACOs have a mix of physicians among various clinical specialties.

> Specialists' participation in ACOs relative to their share of all clinicians varies by specialty. For most specialties, the portion of physicians who participate in MSSP ACOs is similar to the portion of that specialty who participate in all of FFS Medicare.

> Among some specialties, the portion of ACO participants is higher or lower than FFS Medicare as a whole. For example, cardiologists comprise about 2 percent of all clinicians participating in FFS Medicare, but a larger share of clinicians participating in ACOs. By contrast, specialties such as anesthesiology, ophthalmology, and dermatology are underrepresented in ACOs relative to their share of all FFS clinicians.

Chart 5-5 Comprehensive Care for Joint Replacement is Medicare's largest episode-based payment model, 2023



Note: BPCI (Bundled Payments for Care Improvement).

Source: Comprehensive Care for Joint Replacement website (https://innovation.cms.gov/innovation-models/cjr); information on BPCI Advanced participants is from CMS's Where Innovation Is Happening website (https://innovation.cms.gov/innovation-models/bpci-advanced).

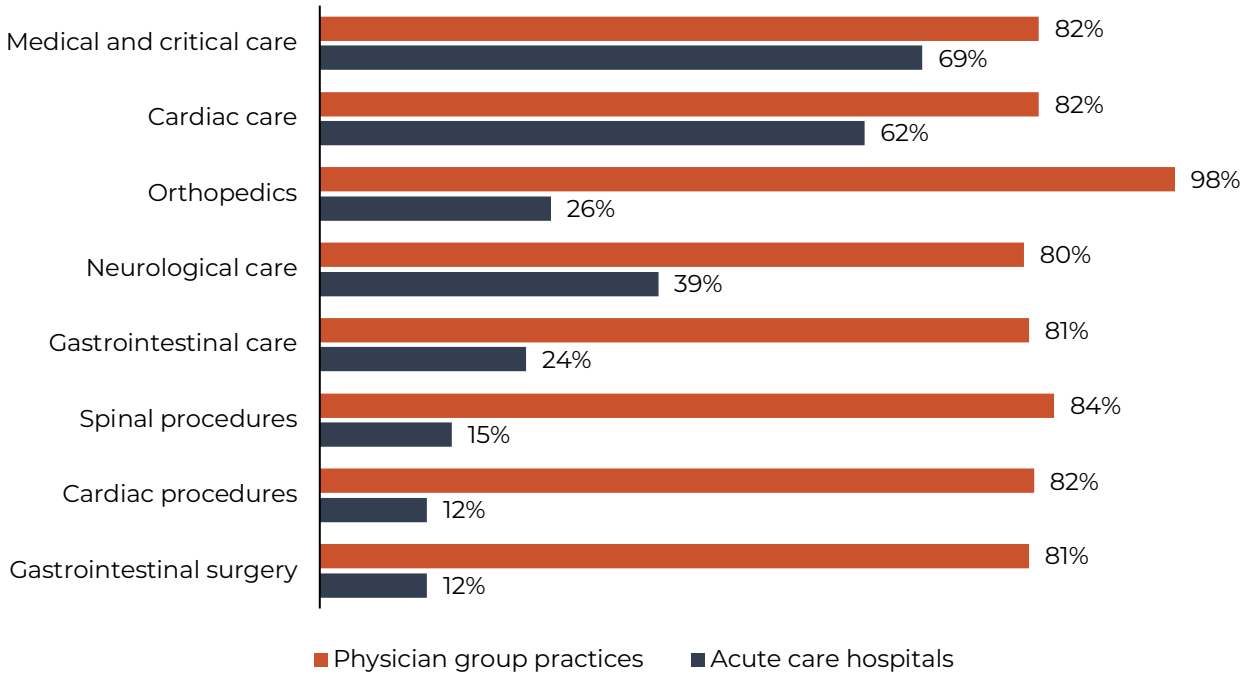
> Episode-based payment models give health care providers a spending target for most types of care provided during a clinical episode (e.g., six months of chemotherapy or an inpatient admission or outpatient procedure plus most other care provided in the subsequent 90 days). If total spending is less 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 is the Comprehensive Care for Joint Replacement Model, with 324 participating hospitals.

> Participation in the BPCI Advanced Model shrank from 831 acute care hospitals and physician group practices in 2022 to 280 in 2023. Challenges faced by providers during the coronavirus pandemic and rule changes that can make it more difficult to achieve shared savings have been cited as factors in the sharp decline in participation in the voluntary BPCI Advanced model.

> Another episode-based payment model, the Oncology Care Model, began in 2016 and ended in 2022. The voluntary model established spending targets for certain cancer treatment episodes involving chemotherapy. Preliminary assessments of the model indicate that it did not generate net savings to the Medicare program and did not significantly change measures of quality.

Chart 5-6 Share of BPCI Advanced episode initiators accepting responsibility for each clinical episode group, 2023



Note: BPCI (Bundled Payments for Care Improvement). BPCI Advanced participants can accept episode-based payments for multiple clinical-episode service-line groups. The denominators for each group are 174 physician group practice and 106 acute care hospital episode initiators in 2023.

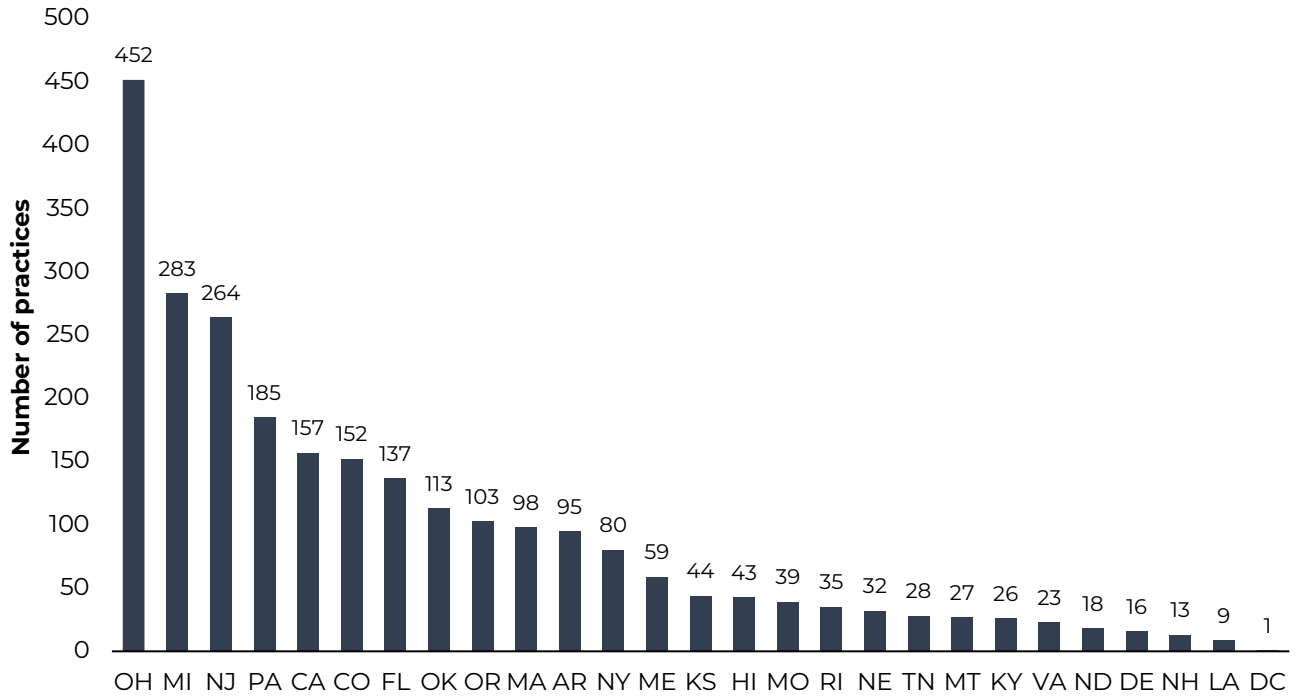
Source: List of clinical-episode service-line groups each BPCI Advanced participating episode initiator agreed to take financial responsibility for in Model Year 6 (2023) downloaded from CMS's BPCI Advanced webpage (https://innovation.cms.gov/innovation-models/bpci-advanced).

> BPCI Advanced covers dozens of types of inpatient and outpatient clinical episodes, which 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). Participating hospitals and physician practices select the service-line groups for which they will be financially responsible under the model.

> More than 80 percent of physician practices initiate episodes in all of the service-line groups. Among participating hospitals, there is much more variation. Nearly 70 percent of hospitals initiate episodes within the medical and critical care service-line group, while only 12 percent of hospitals opt to initiate episodes under the gastrointestinal surgery service-line group.

> Just over 50 percent of all BPCI Advanced episode initiators accept episode-based payments for more than four of the eight clinical-episode service-line groups. Eighteen percent accept episode-based payments for only one clinical-episode service-line group (data not shown).

Chart 5-7 Almost 2,500 practices are testing the Primary Care First model, 2023



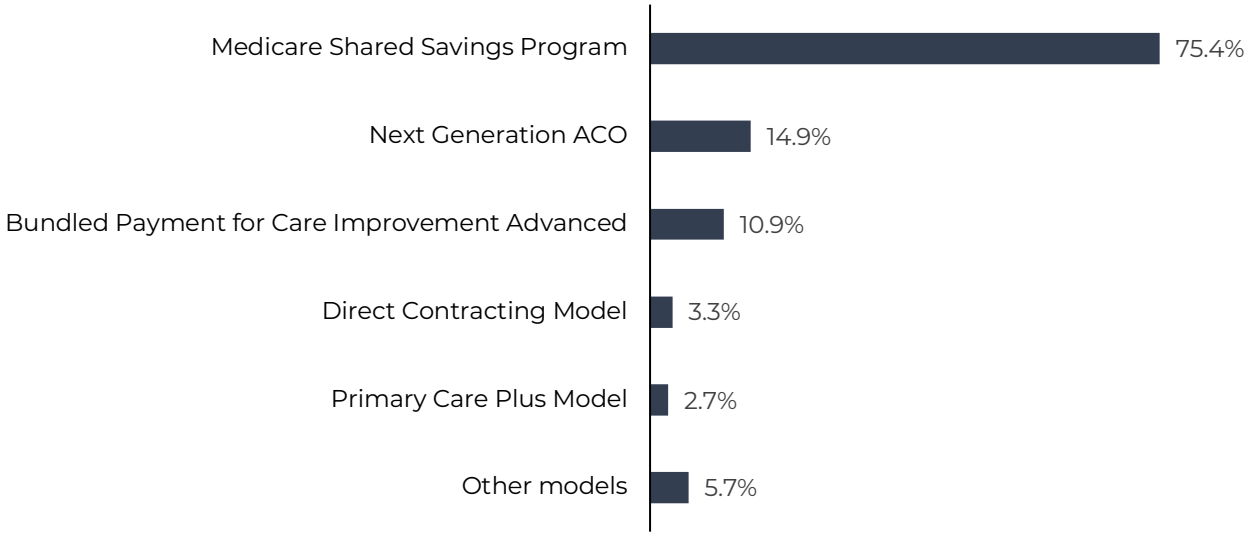
Note: Primary Care First is an advanced alternative payment model that CMS began testing with the first cohort in 2021 and the second cohort in 2022. Primary Care First is a multipayer model, with some Medicaid and private insurers voluntarily paying similar fees for their enrollees.

Source: CMS's list of Primary Care First practices (https://innovation.cms.gov/innovation-models/primary-care-first-model-options).

> CMS's Primary Care First is an advanced alternative payment model that has about 2,500 participating practices in 26 states and the District of Columbia. The model aims to strengthen primary care by testing alternative ways of paying 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, plus a flat primary care visit fee instead of fee-for-service payments for certain primary care services. These payments are subject to adjustments determined by each practice's performance on specified quality and utilization measures.

Chart 5-8 About 75 percent of the clinicians who qualified for a 5 percent A–APM bonus in 2023 were in the Medicare Shared Savings Program



Note: A–APM (advanced alternative payment model), ACO (accountable care organization). Clinicians' 2021 A–APM participation determines their 2023 bonuses. Shares do not sum to 100 percent because clinicians can participate in more than one A–APM simultaneously. To qualify for the A–APM bonus in 2023, 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 2021. 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, Comprehensive ESRD (End-Stage Renal Disease) Care Model, Primary Care First Model, and Vermont ACO 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 2023 based on clinicians' 2021 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 2025, A–APM bonuses for qualifying clinicians will equal 3.5 percent of professional service payments.

> In 2023, nearly 271,000 clinicians nationwide qualified for the A–APM bonus (based on 2021 A–APM participation) out of about 1.3 million who billed the Medicare physician fee schedule. About 90 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 2022, 37 percent were specialists, 24 percent were primary care physicians, and 39 percent were nonphysician practitioners such as nurse practitioners or physician assistants (data not shown).

SECTION

6

Acute inpatient services

General acute care hospitals
Inpatient psychiatric facilities

Chart 6-1 Most general acute care hospitals and inpatient stays paid by FFS Medicare under IPPS, 2021

	Hospitals		Inpatient stays			
			All payer		FFS Medicare	
Hospital group	Number (in thousands)	Share of total	Number (in millions)	Share of total	Number (in millions)	Share of total
All general acute	4.5	100	29.3	100	7.3	100
IPPS	3.1	67	27.6	94	6.9	94
Location						
Metropolitan (urban)	2.3	51	25.6	87	6.2	85
Rural micropolitan	0.5	11	1.7	6	0.6	8
Other rural	0.2	5	0.3	1	0.1	1
Ownership						
For profit	0.7	16	4.5	16	1.1	15
Nonprofit	1.9	41	19.4	66	5.1	67
Government	0.5	10	3.7	12	0.8	11
DSH and teaching						
Both	1.1	25	18.0	62	4.2	58
DSH only	1.5	32	7.8	27	2.1	29
Teaching only	0.1	2	0.8	3	0.2	3
Neither	0.4	8	0.9	3	0.3	4
Critical access	1.3	29	0.5	2	0.2	3
Maryland	<0.1	1	0.5	2	0.2	2

Note: FFS (fee-for-service), IPPS (inpatient prospective payment systems), DSH (disproportionate share hospital). Data are for general acute care hospitals in the U.S. that had a cost report with a midpoint in fiscal year 2021 and was complete as of our analysis. "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.

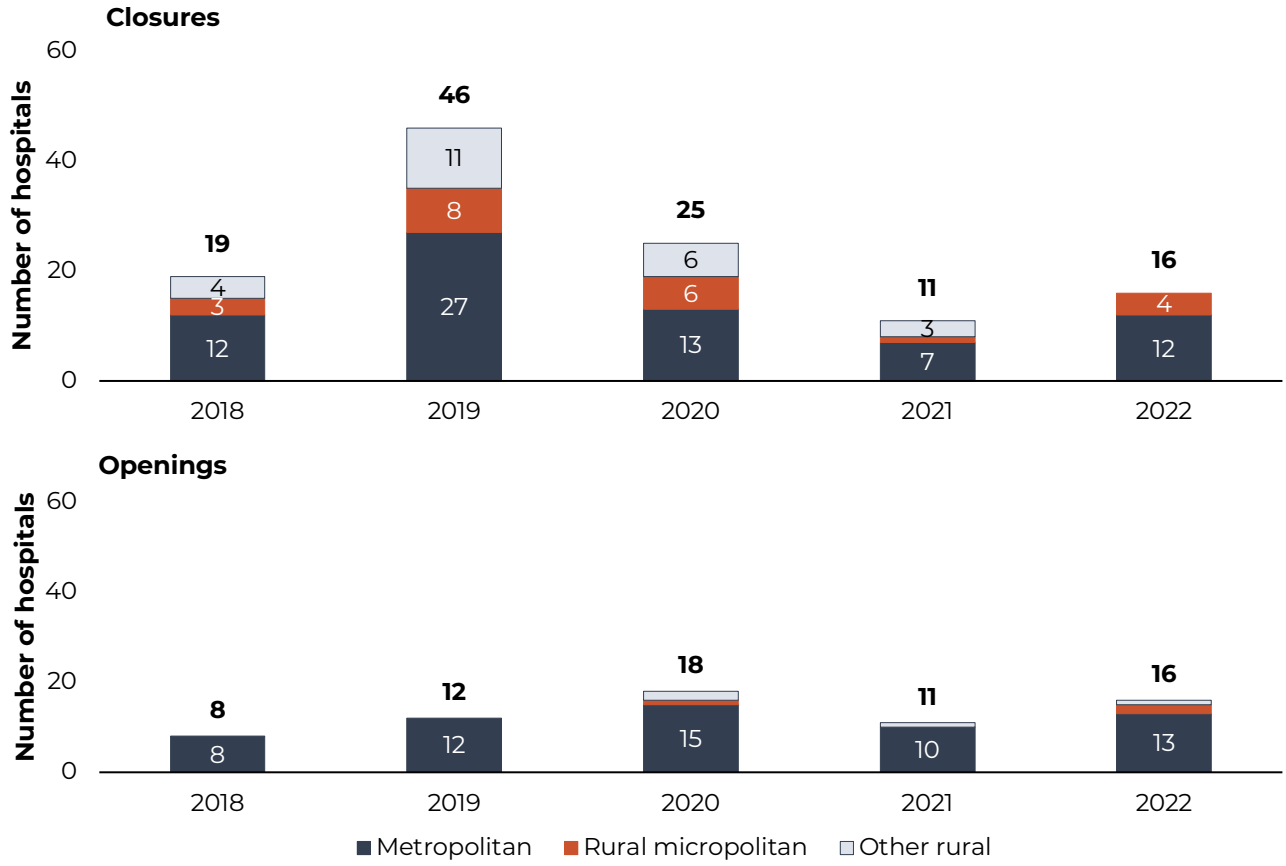
Source: MedPAC analysis of hospital cost report data from CMS and Census data on metropolitan and micropolitan areas.

> In 2021, there were approximately 4,500 general acute care hospitals, at which there were 29.3 million inpatient stays. A quarter of these stays (7.3 million) were for FFS Medicare beneficiaries.

> For about two-thirds of general acute care hospitals, FFS Medicare pays for inpatient stays under Medicare's IPPS. Nearly all (94 percent) inpatient stays and FFS Medicare stays were at IPPS hospitals; further, the vast majority of all FFS Medicare stays were at urban IPPS hospitals.

> Nearly 30 percent of general acute care hospitals are designated critical access hospitals (CAHs), which are hospitals with fewer than 25 beds that FFS Medicare pays on a cost basis. However, only 2 percent of all inpatient stays and 3 percent of FFS Medicare inpatient stays were at CAHs. FFS Medicare patients accounted for over 40 percent of all CAH inpatient stays.

Chart 6-2 Supply of general acute care hospitals was steady in fiscal years 2021 and 2022



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 period. Data are for general acute care hospitals in the U.S. paid under the inpatient prospective payment systems, 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 figures pertain to fiscal years.

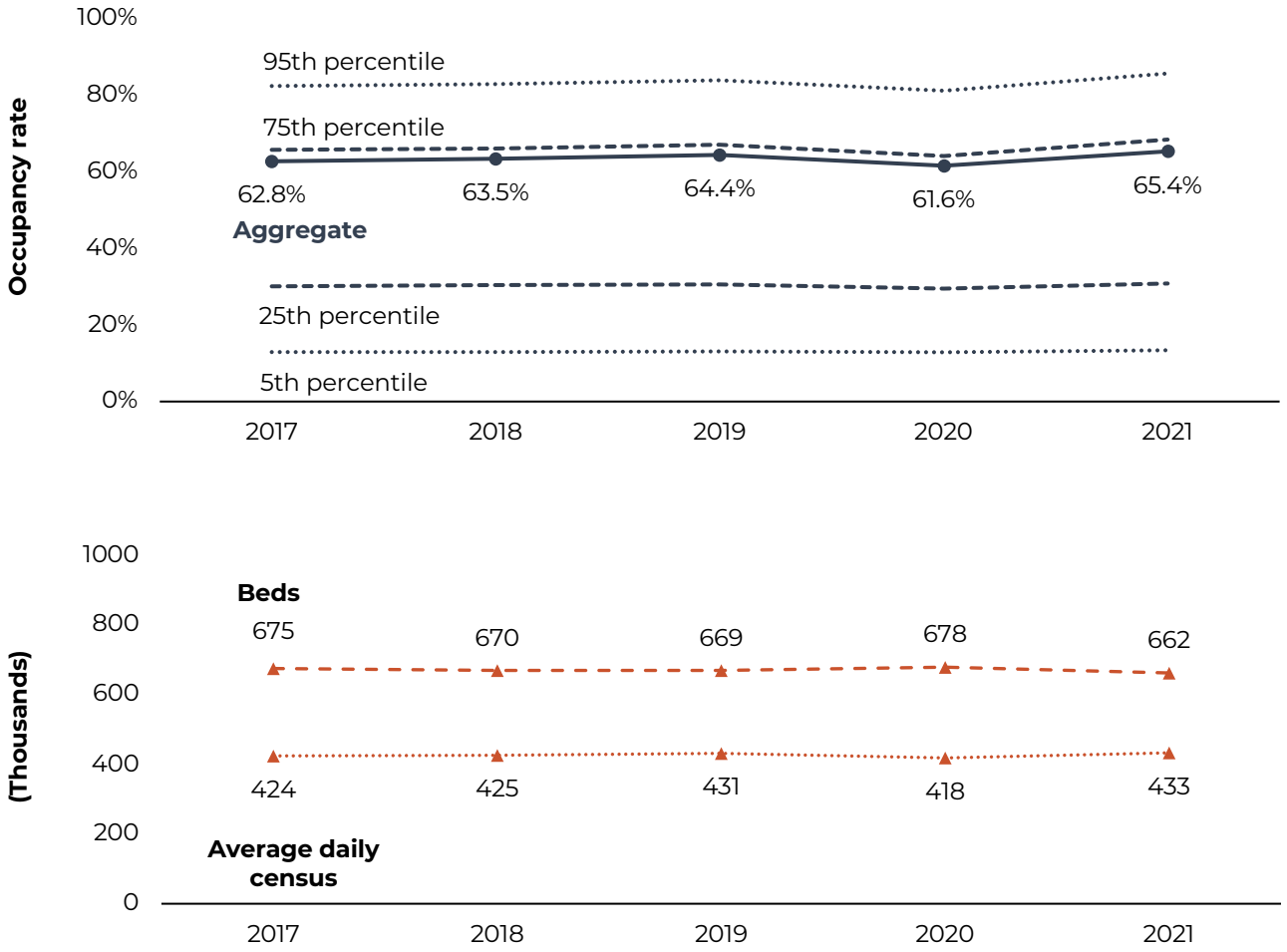
Source: MedPAC analysis of the CMS Provider of Services file, Census data on metropolitan and micropolitan areas, internet searches, and personal communication with the Department of Health and Human Services Office of Rural Health Policy.

> In both fiscal years 2021 and 2022, the number of general acute care hospitals that closed was the same as the number that opened: 11 in 2021 and 16 in 2022. The number of closures was substantially below the levels in 2019 (46) and 2020 (25) and comparable with the number in 2018. In contrast, the number of openings has been steadier, ranging from 8 to 18 over the 2018 through 2022 period.

> Among the 16 hospital closures in 2022, 12 were in metropolitan counties and 4 were in rural micropolitan counties.

> Nearly all of the hospital openings from 2018 to 2022 were in metropolitan counties.

Chart 6-3 General acute care hospitals continued to have excess inpatient capacity in aggregate, but some hospitals neared capacity



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, which may be higher than staffed bed days. "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 general acute care hospitals in the U.S. that had a cost report with a midpoint in the specified fiscal year and was complete as of our analysis. Occupancy rates may vary slightly from calculations of components due to rounding.

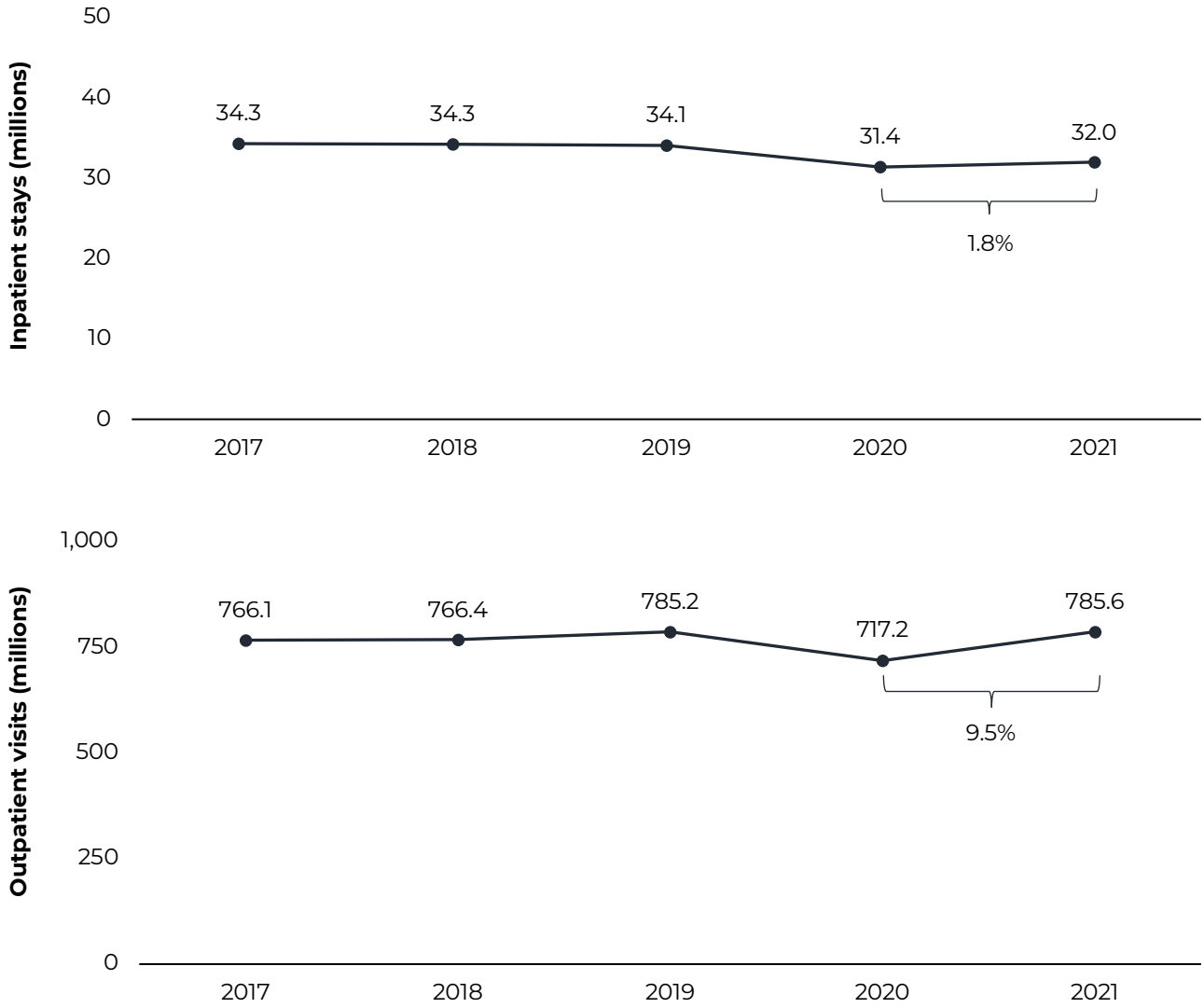
Source: MedPAC analysis of hospital cost report data from CMS.

> General acute care hospitals continued to have excess capacity in aggregate, with about 65 percent of all beds occupied during fiscal year 2021, slightly higher than in previous years. However, inpatient capacity continued to vary substantially across hospitals, with some reaching near capacity while others had substantial excess capacity.

> The increased aggregate occupancy rate in 2021 resulted from a decrease in beds and increase in average daily census.

> These charts are averages over the year; some hospitals faced capacity and staffing constraints at times (data not shown).

Chart 6-4 All-payer inpatient stays partially rebounded in 2021 and hospital outpatient visits fully rebounded to prepandemic levels



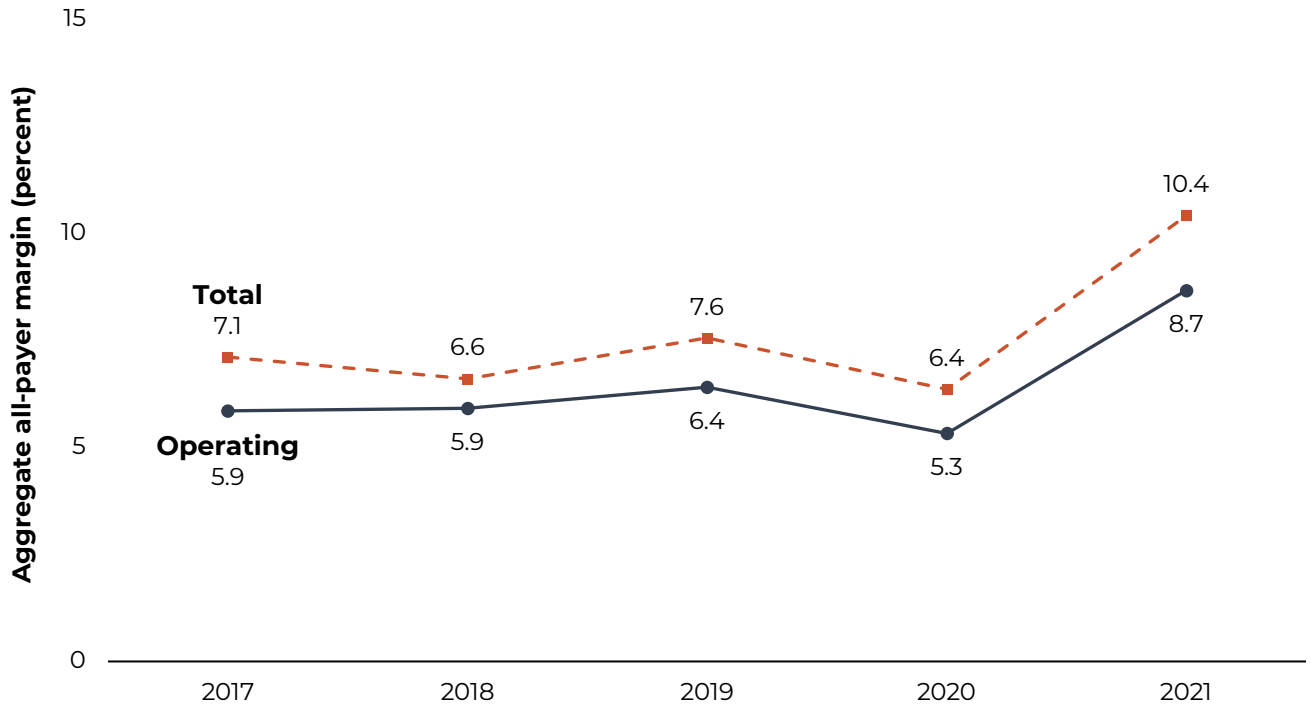
Note: "Outpatient visits" includes all clinic visits, referred visits, observation services, outpatient surgeries, and emergency department visits, regardless of the number of diagnostic and/or therapeutic treatments the patient received during the visit. Data are for community hospitals (nonfederal short-term general and specialty hospitals), estimated from those who responded to the American Hospital Association survey and reflect each hospital's own fiscal year. Given that not all hospitals are reporting the same 12-month period, the 2020 and 2021 data reflect varying numbers of months of COVID-19 impacts.

Source: MedPAC analysis of Hospital Statistics data from the American Hospital Association.

> In 2020, all-payer inpatient stays and hospital outpatient visits declined, reflecting delayed and forgone care during the COVID-19 public health emergency.

> In contrast, in 2021, all-payer inpatient stays and hospital outpatient visits had divergent trends, with inpatient stays partially rebounding and outpatient visits fully rebounding to prepandemic levels.

Chart 6-5 IPPS hospitals' all-payer margins reached record highs in 2021 with the support of federal relief funds



Note: IPPS (inpatient prospective payment systems). Hospitals' margin is calculated as aggregate payments minus aggregate allowable costs, divided by aggregate payments. "All-payer" margin includes payments from all payers and, in 2020 and 2021, reported federal relief funds. "Total margin" includes investments; "operating" margin excludes revenue from investments and contributions. Data are for IPPS hospitals that had a cost report with a midpoint in the specified fiscal year and was complete as of our analysis. Given that not all hospitals are reporting the same 12-month period, the 2020 and 2021 data reflect varying numbers of months of COVID-19 impacts.

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). The all-payer total margin includes investment income, while the operating margin excludes revenue from investments and contributions. In 2020 and 2021, these measures include reported federal relief funds to support hospitals during the COVID-19 public health emergency.

> IPPS hospitals' all-payer total and operating margins remained strong in 2020 with the support of over $34 billion in reported federal relief funds, and reached record highs in 2021 when including the over $17 billion in reported relief funds. The 2021 operating margin excluding relief funds was 7.2 percent, also a record high (data not shown).

> Overall, the federal relief funds that IPPS hospitals received in 2021 more than offset the additional coronavirus pandemic–related expenses that were not covered by the higher patient revenues associated with COVID-19. Rather, the increase in the operating margin of over 3 percentage points resulted from hospitals' operating revenues growing more than their costs: Operating revenue increased over 11 percent, while costs increased by only about 7 percent (data not shown).

Chart 6-6 IPPS hospitals' all-payer operating margins continued to vary across hospital groups in 2021, including all-time high among for-profit hospitals

	All-payer operating margin						
				2020		2021	
Hospital group	2017	2018	2019	With relief funds	Without relief funds	With relief funds	Without relief funds
IPPS	5.9%	5.9%	6.4%	5.3%	1.9%	8.7%	7.2%
Location							
Metropolitan (urban)	6.0	6.1	6.6	5.3	2.0	8.6	7.3
Rural micropolitan	4.9	3.9	5.2	6.2	1.9	9.2	6.8
Other rural	2.1	0.2	0.7	3.4	–1.5	7.6	3.0
Ownership							
For profit	10.5	11.4	12.2	12.6	10.4	15.1	13.9
Nonprofit	5.9	5.5	6.1	4.7	1.2	8.2	6.8
DSH and teaching							
Both	5.7	5.8	6.2	4.8	1.4	8.4	6.9
DSH only	5.5	5.6	6.3	6.2	2.8	8.9	7.3
Teaching only	8.8	8.7	7.7	6.0	4.1	7.7	6.7
Neither	9.0	9.1	10.1	8.4	6.0	13.5	11.8
CAH	2.3	1.7	2.4	5.0	0.4	10.8	6.0

Note: IPPS (inpatient prospective payment systems), DSH (disproportionate share hospital), CAH (critical access hospital). "Relief funds" refers to Provider Relief Fund payments and Paycheck Protection Program forgiven loans recorded on hospitals' cost reports. Hospitals' margin is calculated as aggregate payments minus aggregate allowable costs, divided by aggregate payments. "All-payer operating margin" includes payments from all payers, excluding revenue from investments and contributions and, for 2020 and 2021, is reported with and without reported federal relief funds. 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." Data are for IPPS hospitals that had a cost report with a midpoint in the specified fiscal year and was complete as of our analysis. Given that not all hospitals are reporting the same 12-month period, the 2020 and 2021 data reflect varying numbers of months of COVID-19 impacts.

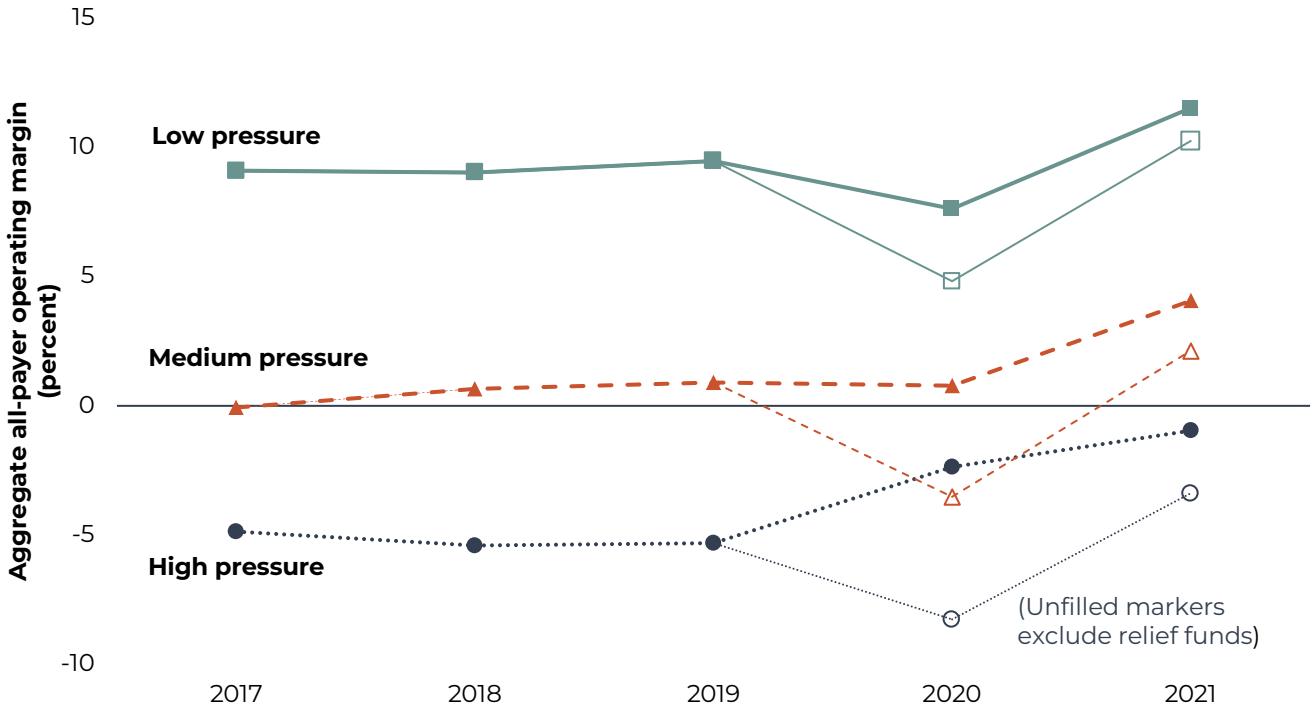
Source: MedPAC analysis of hospital cost report data from CMS and Census data on metropolitan and micropolitan areas.

> Within IPPS hospitals' aggregate all-payer operating margin, there continued to be significant variation: The 2021 operating margin ranged from 0.8 percent to 14.9 percent among the middle half of IPPS hospitals (data not shown).

> While there was variation within each group of hospitals, in aggregate, the operating margin continued to be higher among for-profit hospitals and those that were neither teaching hospitals nor receiving disproportionate share payments. In contrast, the operating margin continued to be lower among hospitals in rural nonmicropolitan areas. However, rural hospitals received targeted federal relief funds, so the difference in the all-payer operating margin between rural and urban hospitals was smaller than it was prior to the pandemic.

> Critical access hospitals' all-payer operating margin also reached a record high in 2021.

Chart 6-7 IPPS hospitals' all-payer operating margin continued to be higher in 2021 for those under low financial pressure, but the spread narrowed due to targeted federal relief funds



Note: IPPS (inpatient prospective payment systems). "Relief funds" refers to Provider Relief Fund payments and Paycheck Protection Program forgiven loans recorded on hospitals' cost reports. Hospitals' margin is calculated as aggregate payments minus aggregate allowable costs, divided by aggregate payments. "All-payer operating margin" includes payments from all payers, excluding revenue from investments and contributions and, for 2020 and 2021, is reported with and without reported federal relief funds. "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. "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. "Medium-pressure" hospitals are those that fit into neither the high- nor the low-pressure categories. Data are for IPPS hospitals that had a cost report with a midpoint in the specified fiscal year and was complete as of our analysis. Given that not all hospitals are reporting the same 12-month period, the 2020 and 2021 data reflect varying numbers of months of COVID-19 impacts.

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

> By definition, IPPS hospitals' all-payer operating margin continued to vary depending on their level of financial pressure. In 2021, IPPS hospitals under low financial pressure—defined as those with a median non-Medicare profit margin of greater than 5 percent and growth in net worth—had an all-payer operating margin of 11.5 percent, significantly higher than the margin among hospitals under more financial pressure. (In contrast, the aggregate Medicare margin is lower among IPPS hospitals under low financial pressure, see Chart 6-9.)

> While this variation held in 2020 and 2021, IPPS hospitals under high financial pressure disproportionately benefited from federal relief funds, decreasing the spread in the operating margin between hospitals under low and high financial pressure.

Chart 6-8 IPPS hospitals' Medicare margin rose above prepandemic levels in 2021 and continued to vary across hospital groups

	Medicare margin						
				2020		2021	
Hospital group	2017	2018	2019	With relief funds	Without relief funds	With relief funds	Without relief funds
IPPS	–9.9%	–9.3%	–8.5%	–8.2%	–12.3%	–6.2%	–8.2%
Location							
Metropolitan (urban)	–10.1	–9.5	–8.8	–8.7	–12.8	–6.6	–8.5
Rural micropolitan	–8.3	–7.1	–6.1	–3.7	–8.5	–2.6	–5.8
Other rural	–5.6	–5.2	–2.5	1.6	–4.0	4.9	–0.8
Ownership							
For profit	–2.2	–0.3	1.3	4.3	1.6	5.3	3.7
Nonprofit	–11.1	–10.6	–10.0	–10.3	–14.8	–8.2	–10.2
DSH and teaching							
Both	–8.7	–8.4	–7.8	–7.7	–11.8	–5.8	–7.8
DSH only	–11.2	–10.3	–9.1	–7.9	–12.2	–5.7	–8.0
Teaching only	–14.3	–12.0	–11.7	–14.4	–16.9	–11.0	–12.5
Neither	–17.2	–15.3	–14.3	–13.9	–17.0	–10.8	–13.3
CAH	–1.7	–1.7	–1.7	3.8	–1.0	6.3	0.1

Note: IPPS (inpatient prospective payment systems), DSH (disproportionate share hospital), CAH (critical access hospital). "Relief funds" refers to Provider Relief Fund payments and Paycheck Protection Program forgiven loans recorded on hospitals' cost reports, with the Medicare share calculated using fee-for-service Medicare's share of 2019 all-payer operating revenue. Hospitals' "Medicare margin" is calculated as aggregate Medicare payments minus aggregate allowable Medicare costs, divided by aggregate payments. Payments and costs include multiple hospital service lines (including inpatient, outpatient, swing bed, skilled nursing, rehabilitation, psychiatric, and home health services) as well as direct graduate medical education and uncompensated care payments. 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." Data are for IPPS hospitals or CAHs that had a cost report with a midpoint in the specified fiscal year and was complete as of our analysis. Given that not all hospitals are reporting the same 12-month period, the 2020 and 2021 data reflect varying numbers of months of COVID-19 impacts.

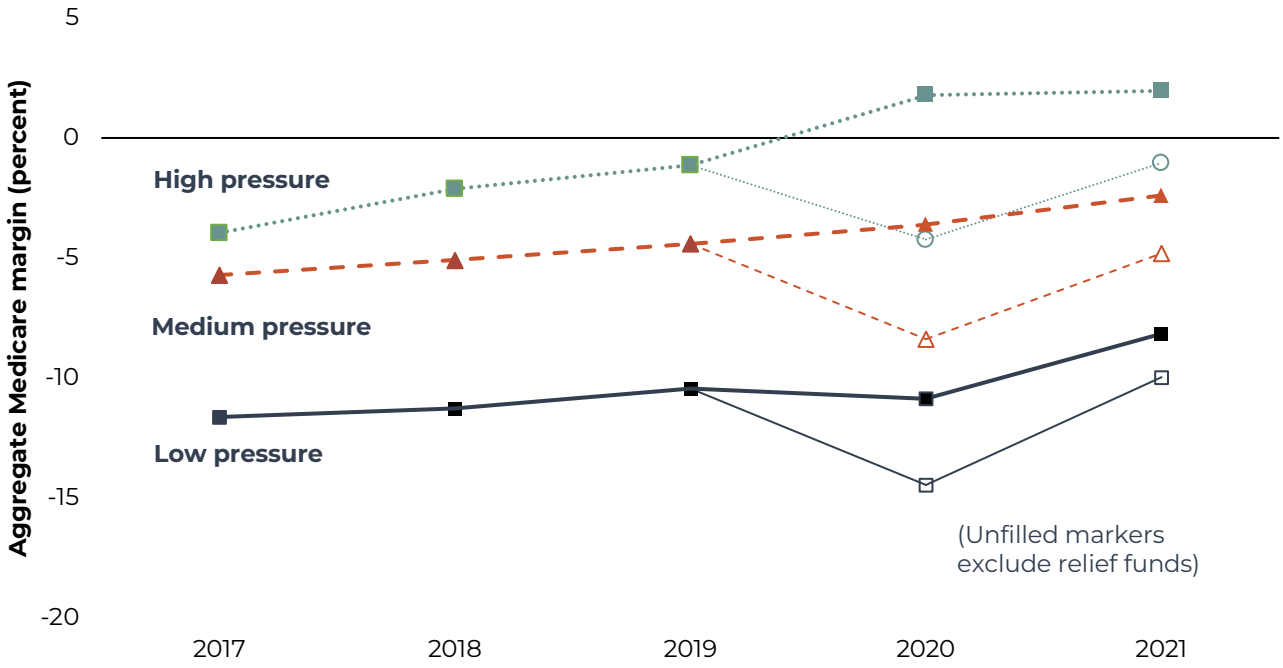
Source: MedPAC analysis of hospital cost report data from CMS and Census data on metropolitan and micropolitan areas.

> Hospitals' Medicare margin reflects the relationship between hospitals' Medicare fee-for-service (FFS) 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).

> In 2021, IPPS hospitals' aggregate Medicare margin remained negative but increased above prepandemic levels, even before including any federal relief funds.

> While there was variation within each group of IPPS hospitals, in aggregate, the Medicare margin continued to be higher—and positive—at for-profit hospitals (even before including any federal relief funds) and higher at hospitals in small rural communities.

Chart 6-9 IPPS hospitals' Medicare margin continued to be higher in 2021 for those under high financial pressure



Note: IPPS (inpatient prospective payment systems). "Relief funds" refers to Provider Relief Fund payments and Paycheck Protection Program forgiven loans recorded on hospitals' cost reports. Hospitals' "Medicare margin" is calculated as aggregate Medicare payments minus aggregate allowable Medicare costs, divided by aggregate payments. Payments and costs include multiple hospital service lines (including inpatient, outpatient, swing bed, skilled nursing, rehabilitation, psychiatric, and home health services) as well as direct graduate medical education and uncompensated care 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. Data are for IPPS hospitals that had a cost report with a midpoint in the specified fiscal year and was complete as of our analysis. Given that not all hospitals are reporting the same 12-month period, the 2020 and 2021 data reflect varying numbers of months of COVID-19 impacts.

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

> IPPS hospitals' Medicare margin continued to vary depending on their level of financial pressure. IPPS hospitals under the highest financial 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 Medicare margin than hospitals under less financial pressure. (In contrast, IPPS hospitals under higher financial pressure have a lower all-payer operating margin; see Chart 6-7.)

> IPPS hospitals under high financial pressure disproportionately benefited from federal relief funds, causing their 2020 and 2021 Medicare margins including relief funds to become positive.

Chart 6-10 Financial pressure led to lower hospital costs per inpatient stay, 2021

	Level of financial pressure, 2016–2020		
	High pressure (non-Medicare margin ≤ 1%)	Medium pressure	Low pressure (non-Medicare margin > 5%)
Number of hospitals	609	335	1,701
Financial characteristics, 2021 (medians)			
Non-Medicare margin (private, Medicaid, uninsured)	2%	7%	17%
Standardized cost per Medicare inpatient stay (as a share of the national median)	0.96	0.98	1.01
Nonprofit hospitals	*0.99*	*1.00*	*1.04*
For-profit hospitals	*0.89*	*0.89*	*0.90*
Annual growth in cost per Medicare inpatient stay, 2018–2021	8%	7%	7%
Medicare margin (before federal relief funds)	0%	–4%	–7%
Patient characteristics, 2021 (medians)			
Total hospital discharges	3,249	6,284	7,615
Medicare share of inpatient days	57%	59%	58%
Medicaid share of inpatient days	23%	26%	23%
Medicare case-mix index	1.64	1.73	1.81

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 hospitals paid under the inpatient prospective payment systems with over 500 discharges that had complete cost reports as of the time of our analysis. "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. The share of Medicare and Medicaid inpatient days includes fee-for-service days and managed care days. Most inpatient days are now either Medicaid or Medicare.

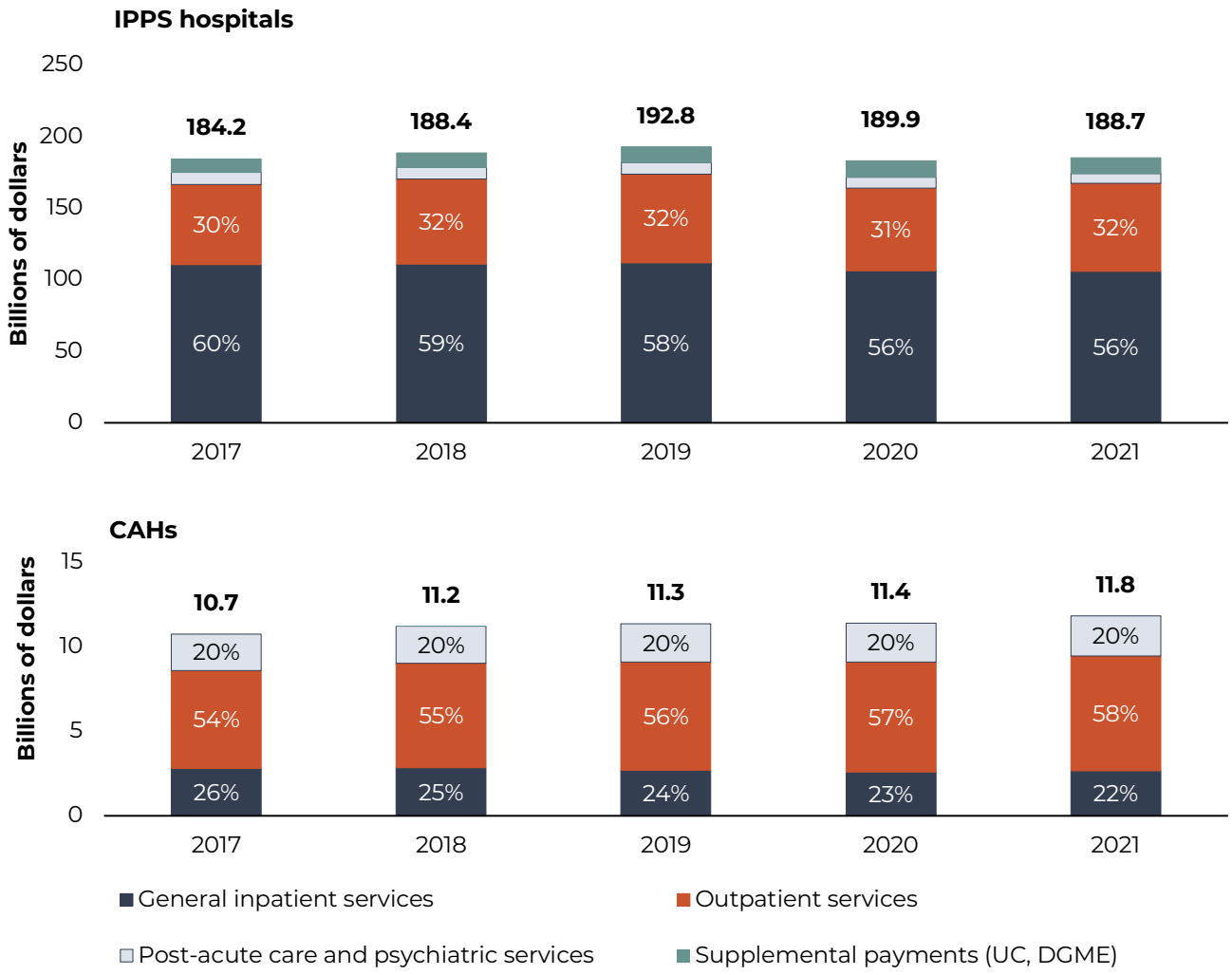
Source: MedPAC analysis of hospital cost report data and claims files from CMS.

> In 2021, hospitals under high financial pressure had standardized costs per Medicare inpatient stay that were 96 percent of the national median. For-profit hospitals tended to constrain their costs more than nonprofit hospitals. The median for-profit hospital had costs that were 90 percent of the median even when they were not under financial pressure.

> Hospitals under high financial pressure are more likely to have lower patient volume (a median of 3,249 discharges in 2021 compared with 7,615 for hospitals under low pressure) and lower case mix (1.64 in 2021 compared with 1.81 for hospitals under low pressure). There was little difference between hospitals under high and low financial pressure in Medicare and Medicaid shares.

> Cost per stay grew rapidly in 2020 due to the pandemic's effect on costs, volume, and case mix. One limitation of this analysis is that it measures only hospital inpatient costs.

Chart 6-11 FFS Medicare payments for inpatient services continued to be the largest component of payments to IPPS hospitals but not to CAHs, 2017–2021



Note: FFS (fee-for-service), IPPS (inpatient prospective payment systems), CAH (critical access hospital), UC (uncompensated care), DGME (direct graduate medical education). The 2020 and 2021 payment amounts do not include Medicare's share of Provider Relief Fund payments or Paycheck Protection Program forgiven loans provided as part of the public health emergency. Data are for IPPS hospitals or CAHs that had a cost report with a midpoint in the specified fiscal year and was complete as of our analysis.

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

> For IPPS hospitals, general inpatient services continued to be the largest component of FFS Medicare payments; however, the share for inpatient payments has been slowly declining from 60 percent in 2017 to 56 percent in 2021.

> For CAHs, outpatient services continued to be the largest component of FFS Medicare payments, and the share has been slowly increasing, from 54 percent in 2017 to 58 percent in 2021.

Chart 6-12 About 15 percent of IPPS payments in 2021 were from adjustments and additional payments

Hospital group	Share of IPPS payments for FFS Medicare inpatient services					
	Base PPS	Low income (DSH)	Teaching (IME)	Outliers	Rural and/or isolated	Quality
All IPPS	83.7%	3.2%	6.8%	4.7%	1.4%	–0.8%
Location						
Metropolitan (urban)	83.8	3.3	7.2	4.9	0.7	–0.8
Micropolitan	83.1	2.3	2.3	2.5	9.2	–0.5
Other rural	78.7	2.2	0.6	1.7	15.8	–0.6
Ownership						
For profit	88.9	3.5	3.9	2.8	1.1	–1.1
Nonprofit	84.0	3.0	6.7	4.6	1.3	–0.7
Government	76.4	3.9	10.5	7.1	2.2	–1.0
DSH and teaching						
Both	80.7	3.6	9.9	5.3	0.6	–0.9
DSH only	89.8	3.1	0.0	3.4	3.2	–0.7
Teaching only	87.1	0.1*	6.7	4.6	1.2	–0.4
Neither	91.7	0.1*	0.0	3.2	4.1	–0.5
Rural and/or isolated						
Sole community	78.7	2.2	2.6	3.8	12.1	–0.5
Medicare dependent	78.7	1.4	1.6	2.0	15.6	–0.6
Low volume	77.7	1.9	0.4	2.2	16.6	–0.3

Note: IPPS (inpatient prospective payment systems), FFS (fee-for-service), DSH (disproportionate share hospital), IME (indirect medical education). Payments are shares of IPPS payments for FFS Medicare inpatient services and exclude uncompensated care payments. "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 IPPS payments, 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." 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. Data are for IPPS hospitals that had a cost report with a midpoint in the specified fiscal year and was complete as of the time of our analysis.
*The DSH group is defined by receiving inpatient operating DSH payments, while the 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.

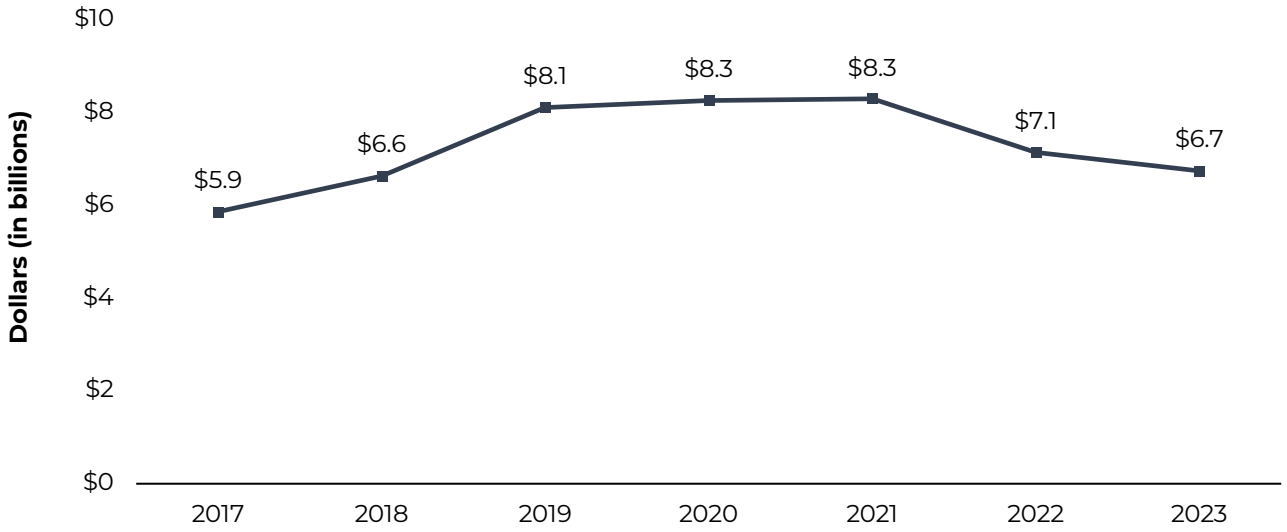
Source: MedPAC analysis of hospital cost report data from CMS and Census data on metropolitan and micropolitan areas.

> In 2021, base payments accounted for about 84 percent of IPPS payments to hospitals for inpatient services provided to FFS Medicare beneficiaries. The remaining approximately 15 percent were from IPPS adjustments to the base rates and additional payments, such as low-income and teaching adjustments, outlier payments, rural and/or isolated payments, and quality payments.

> The IPPS adjustments and additional payments are targeted to specific groups of hospitals. For example, the additional payments to Medicare-dependent and low-volume hospitals accounted for over 15 percent of those hospitals' IPPS payments.

> IPPS hospitals also receive payments from Medicare that are not for the provision of inpatient services to FFS Medicare beneficiaries, such as uncompensated care and direct graduate medical education payments, or otherwise paid outside of the IPPS, such as organ acquisition (data not shown).

Chart 6-13 Medicare's uncompensated care payments to IPPS hospitals rose in 2019 through 2021 then fell in 2022 and 2023



Note: IPPS (inpatient prospective payment systems). "Uncompensated care payments" are postsequestration; the 2 percent sequestration of Medicare payments was suspended in May 2020 and reinstated in spring 2022.

Source: MedPAC analysis of IPPS final rules published by CMS.

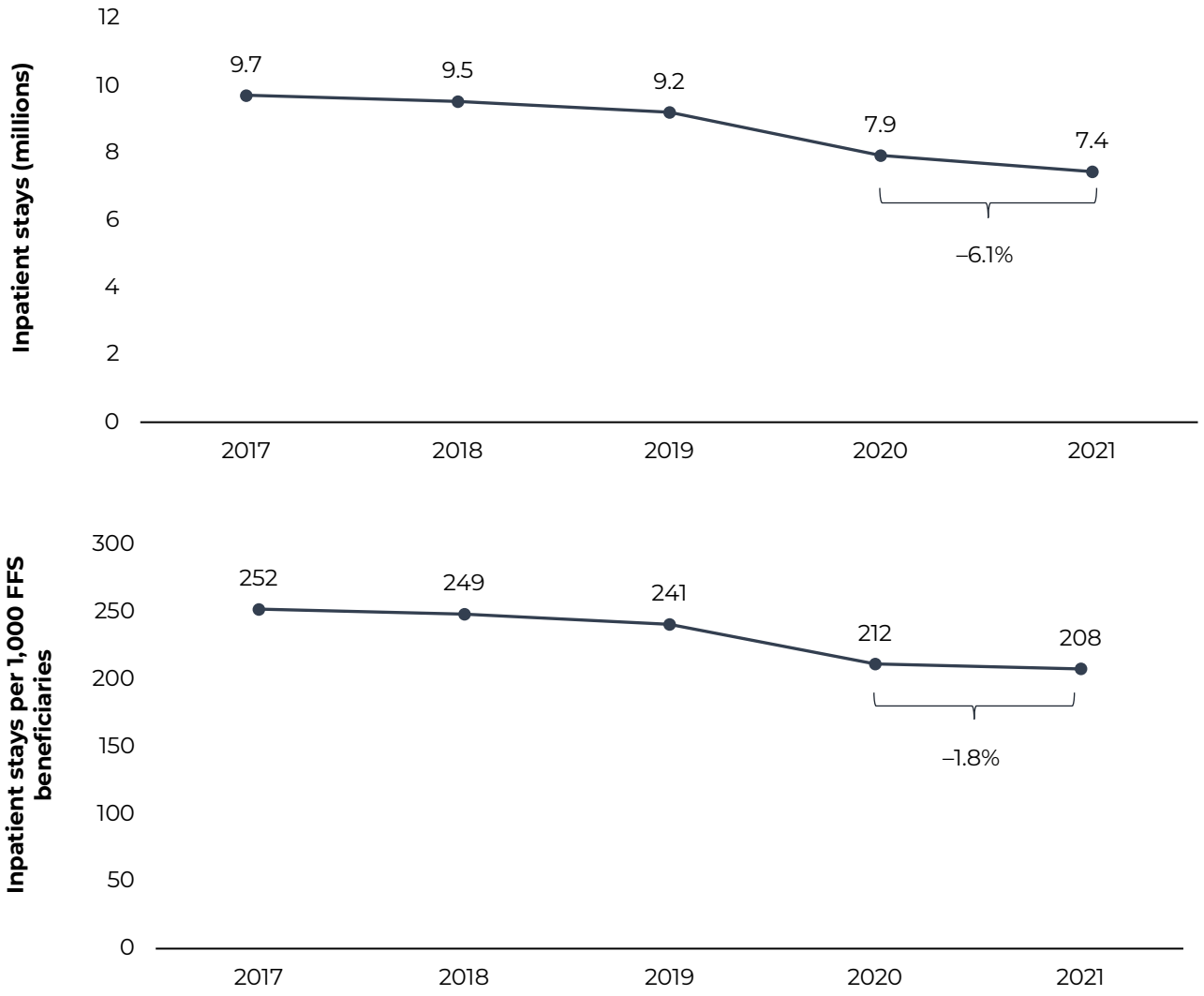
> In addition to IPPS payments for fee-for-service Medicare beneficiaries' inpatient stays, the Medicare program makes uncompensated care payments to IPPS hospitals to help cover their costs of treating uninsured patients. When the rate of uninsured individuals increases and hospitals have greater losses on uncompensated care, the Medicare program makes higher uncompensated care payments to hospitals.

> Under current law, aggregate uncompensated care payments for a fiscal year are set prospectively as the product of two estimates for the upcoming payment year: 75 percent of the operating disproportionate share (DSH) payments under prior law and the uninsured rate as a percentage of the rate in 2013. This amount is subject to sequestration (when the sequester is in effect).

> In 2019 through 2021, uncompensated care payments rose to slightly over $8 billion dollars. In 2021, estimated DSH payments decreased about 9 percent while uninsured rates increased by slightly less. However, as sequestration was suspended for all of 2021 but only part of 2020, the net effect was a minimal change in Medicare's uncompensated care payments to IPPS hospitals.

> However, uncompensated care payments fell nearly 14 percent in 2022 to $7.1 billion dollars, followed by an over 5 percent decline in 2023 to $6.7 billion. These declines stemmed from decreases in estimated DSH payments and in the national uninsured rate, as well as the reinstatement of the 2 percent sequestration on Medicare payments.

Chart 6-14 FFS Medicare inpatient stays and stays per capita declined in 2021



Note: FFS (fee-for-service). Data are for FFS Medicare beneficiaries' stays at hospitals paid under the inpatient prospective payment systems, critical access hospitals, and acute care hospitals in Maryland and U.S. territories. The number of inpatient stays per 1,000 FFS Part A beneficiaries can change from what was previously published when CMS updates its estimates of FFS enrollment.

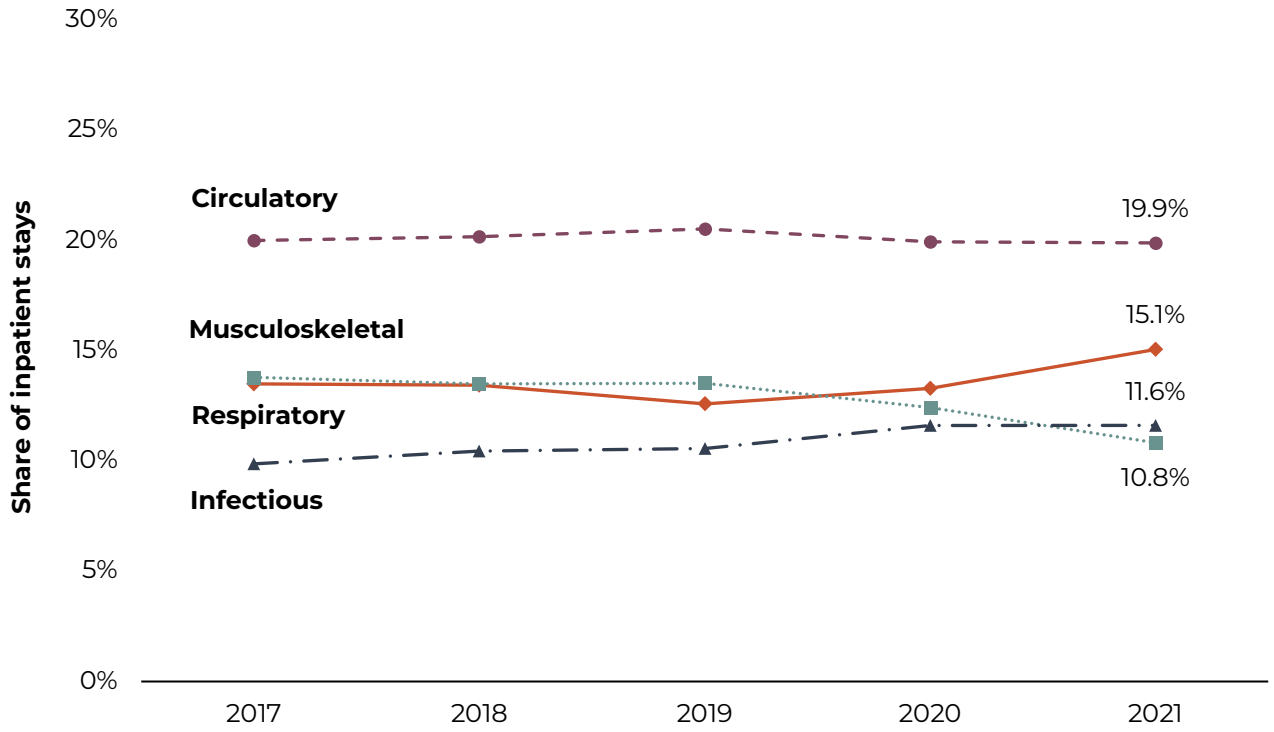
Source: MedPAC analysis of Medicare Provider Analysis and Review data from CMS and reports of the Boards of Trustees of the Medicare trust funds.

> From 2020 to 2021, the number of inpatient stays by FFS Medicare beneficiaries at general acute care hospitals declined by 6.1 percent to 7.4 million stays. Controlling for the number of FFS beneficiaries, the number of inpatient stays declined by 1.8 percent, to 208 stays per 1,000 FFS beneficiaries. In contrast, the number of all-payer inpatient stays per capita increased 1.8 percent (see Chart 6-4).

> The decline in FFS Medicare inpatient stays was larger than the decline in stays per capita, as the number of FFS Medicare beneficiaries continued to decline (FFS enrollment data not shown).

> Inpatient stays per beneficiary were relatively steady throughout 2021, at a level similar to the end of fiscal year 2020 (data not shown).

Chart 6-15 Four major diagnostic categories accounted for over half of all FFS Medicare inpatient stays, but distribution changed during the public health emergency



Note: FFS (fee-for-service). Data are for FFS Medicare beneficiaries' stays at hospitals paid under the inpatient prospective payment systems, critical access hospitals, and acute care hospitals in Maryland and U.S. territories.

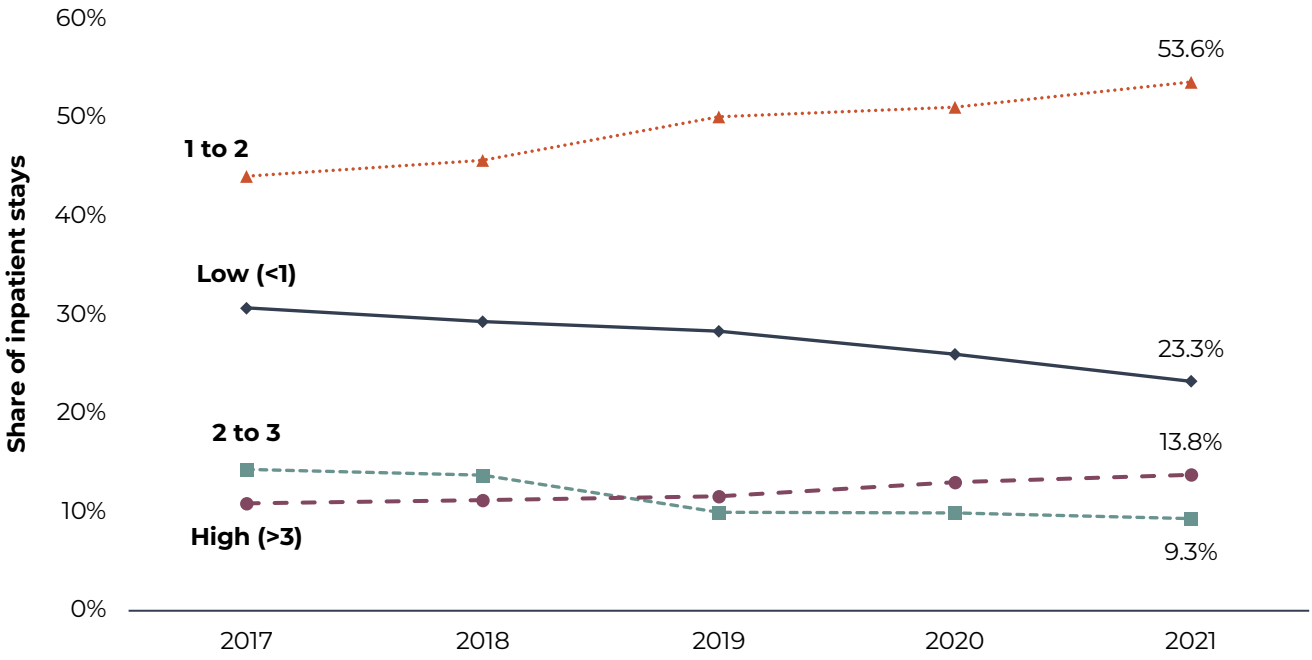
Source: MedPAC analysis of Medicare Provider Analysis and Review data from CMS.

> In each year from 2017 through 2021, over half of all FFS Medicare inpatient stays at general 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 is diseases of the circulatory system, such as heart failure and cardiac arrhythmia, accounting for about 20 percent of FFS Medicare inpatient stays in each year from 2016 through 2021.

> The share for the other three most common major diagnostic categories changed during the COVID-19 public health emergency (PHE). The share of FFS Medicare stays for respiratory diseases increased markedly to over 15 percent, reflecting the rise in COVID-19 stays, and the share for infectious diseases continued to increase. In contrast, the share of musculoskeletal conditions declined to under 11 percent due to delays in nonemergency stays, such as those for hip and knee replacements, during the PHE.

Chart 6-16 The lowest resource-intensive cases make up a declining share of FFS Medicare inpatient stays



Note: FFS (fee-for-service). Data are for FFS Medicare beneficiaries' stays at hospitals paid under the inpatient prospective payment systems (IPPS), critical access hospitals, and acute care hospitals in Maryland and U.S. territories. Components may not sum to 100 percent due to rounding.

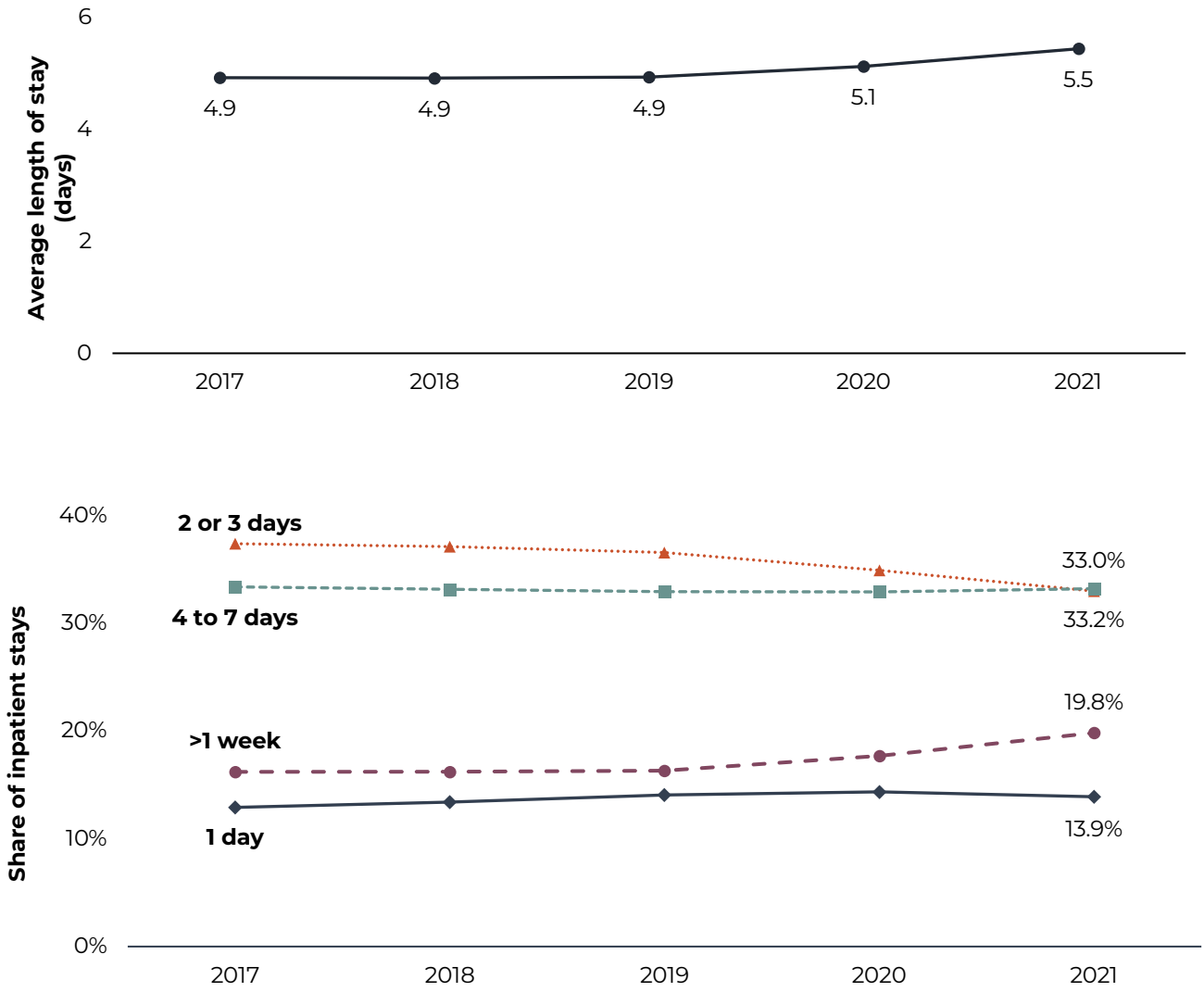
Source: MedPAC analysis of Medicare Provider Analysis and Review data and IPPS final rules published by CMS.

> IPPS payments are adjusted using a Medicare severity–diagnosis related group (MS–DRG) weight, which reflects CMS's estimate of the relative average resource intensity (i.e., costs) of that type of stay.

> The share of inpatient stays with a weight of less than 1 had been declining for multiple years, as these less resource-intensive conditions can increasingly be treated in hospital outpatient settings. However, this decline accelerated during the public health emergency, falling to about 23 percent of stays in 2021. (In 2021, the most common FFS Medicare inpatient stays with a weight of less than 1 were those for gastrointestinal hemorrhage, esophagitis without major complications or comorbidities (MCCs), and kidney and urinary tract infections without MCCs.)

> In contrast, the share of inpatient stays with a weight of greater than 3 accelerated its increase, reaching nearly 14 percent in 2021. (In 2021, the most common FFS inpatient stays with a weight of greater than 3 were stays for infectious diseases with operating room procedures and MCCs, septicemia or severe sepsis with mechanical ventilation for more than 96 hours, and percutaneous cardiovascular procedures with drug-eluting stents and MCCs.)

Chart 6-17 Average length of FFS Medicare inpatient stays increased during public health emergency, driven by increase in share of inpatient stays longer than one week



Note: FFS (fee-for-service). Data are for FFS Medicare beneficiaries' stays at hospitals paid under the inpatient prospective payment systems, critical access hospitals, and acute care hospitals in Maryland and U.S. territories. Components may not sum to 100 percent due to rounding.

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

> FFS Medicare beneficiaries' average length of stay at general acute care hospitals increased from 4.9 days prior to the public health emergency to 5.5 days in 2021.

> The increase in average length of stay during the COVID-19 public health emergency was driven by the increase in share of FFS Medicare beneficiaries' inpatient stays that were longer than 1 week, which increased from about 16 percent in 2017 through 2019 to about 18 percent in 2020 and 20 percent in 2021.

> In contrast, the share of FFS inpatient stays that were two or three days declined, which likely in part reflects the waiver during the public health emergency of the three-day stay requirement for skilled nursing facilities.

Chart 6-18 The number of Medicare-certified inpatient psychiatric facilities declined in 2021, though freestanding for-profit facilities grew over the same time, 2017–2021

						Average annual change	
Type of IPF	2017	2018	2019	2020	2021	2017–2020	2020–2021
All	1,610	1,580	1,540	1,530	1,480	–1.6%	–3.3%
Share of all							
Urban	78%	78%	79%	79%	80%	0.4	1.2
Rural	21	20	19	19	19	–1.8	–4.3
Hospital-based units	68	67	65	64	63	–1.6	–2.9
Nonprofit	41	41	40	39	39	–1.7	–1.5
For profit	15	14	14	14	13	–2.2	–3.5
Government	12	12	12	12	11	–0.4	–7.1
Freestanding	32	33	35	36	37	3.2	5.3
Nonprofit	5	5	5	5	5	0.7	–0.9
For profit	18	19	20	21	22	4.8	7.3
Government	10	10	10	10	11	1.2	4.0

Note: IPF (inpatient psychiatric facility). Data are from facilities that submitted valid Medicare cost reports and had at least one Medicare IPF prospective payment system stay in the given fiscal year. IPF counts are rounded to the 10s' place. "Average annual change" represents the change in the number of all IPFs in the first row and represents changes in shares of IPFs by type for all other rows. Components and annual changes may not match totals due to rounding.

Source: MedPAC analysis of Medicare Provider of Analysis and Review, Medicare hospital cost reports, and the Provider of Services data from CMS.

> Medicare beneficiaries experiencing an acute mental health or alcohol- or drug-related crisis can be treated in specialty IPFs that provide 24-hour care in a structured, intensive, and secure setting.

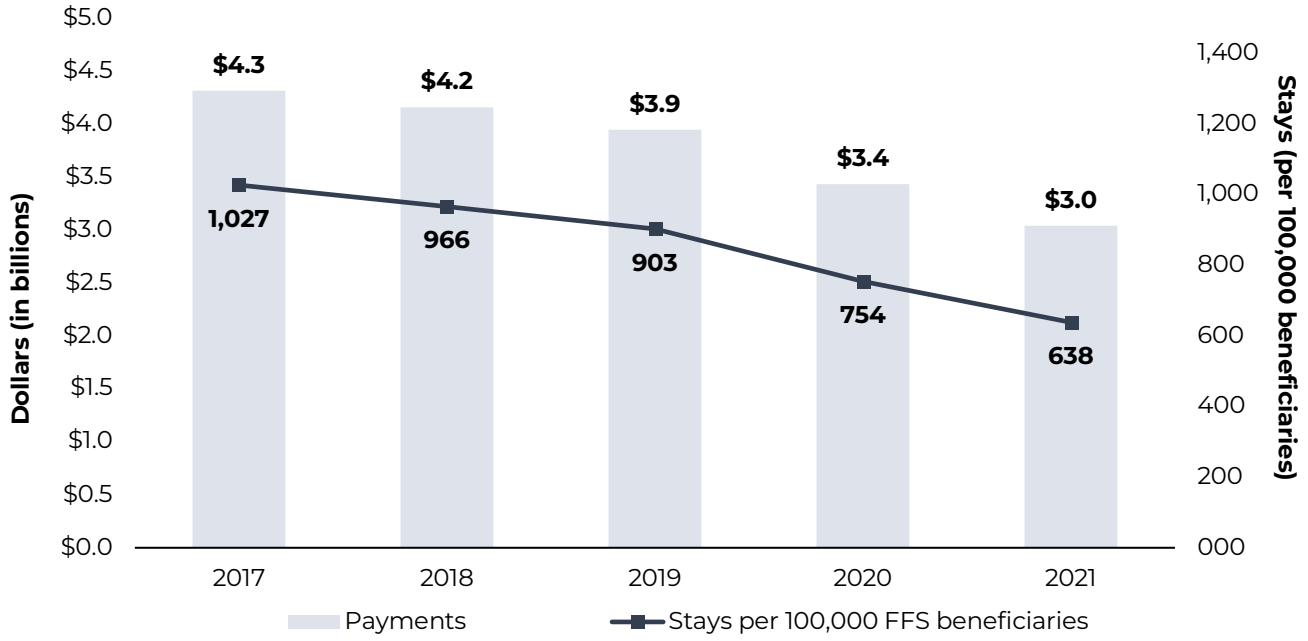
> From 2017 to 2020, the number of IPFs nationwide decreased by nearly 2 percent each year, from 1,610 to 1,530. From 2020 to 2021, the decline in the number of IPFs was over 3 percent.

> Most IPFs are located in urban areas (80 percent). The share of IPFs in urban and rural areas remained mostly steady, with a slight shift in the share of IPFs toward urban areas since 2017.

> Most IPFs (63 percent in 2021) are hospital-based units; however, from 2017 to 2021, the share of freestanding IPFs grew by approximately 4 percent annually while the share of hospital-based IPFs decreased.

> About 20 percent of IPFs are freestanding and for profit, and the share of freestanding for-profit IPFs has been increasing over time by more than 5 percent annually in the past five years.

Chart 6-19 Inpatient psychiatric facility PPS stays and payments continued to decline in FY 2021



Note: PPS (prospective payment system), FY (fiscal year), FFS (fee-for-service). The 2020 and 2021 payment amounts do not include Medicare's share of Provider Relief Fund payments or Paycheck Protection Program forgiven loans provided as part of the public health emergency.

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

> The Medicare FFS program pays for inpatient psychiatric facility (IPF) services under the IPF PPS.

> From 2017 to 2019, inpatient stays in IPFs decreased by 6 percent per year, on average, declining from 1,027 stays to 903 per 100,000 Medicare FFS beneficiaries. Total (Medicare FFS plus beneficiary) payments for IPF PPS services decreased from $4.3 billion to $3.9 billion—equivalent to a 5 percent annual decrease.

> From 2019 to 2020, the decline in the number of IPF stays per capita accelerated, falling 17 percent to 754 stays per capita, while total payments for IPF stays declined 13 percent. The accelerated decline in IPF use is likely related to avoidance or deferral of stays during the COVID-19 pandemic. However, the accelerated pace of decline continued in 2021, with the number of IPF stays per capita falling 15 percent, even as the decline in acute care hospital stays under the IPPS slowed to 1.8 percent (see Chart 6-14). Some observers have suggested that IPFs faced staffing challenges in 2021 that may have limited bed capacity.

Chart 6-20 Growing share of Medicare FFS beneficiaries' stays at IPFs were for schizophrenia, 2019–2021

				Annual change	
Psychiatric MS–DRG grouping	2019	2020	2021	2019–2020	2020–2021
Psychosis	73.4%	74.4%	74.8%	1.3%	0.6%
Mood disorders	38.6	37.5	36.9	–2.8	–1.8
Schizophrenia and other non-mood psychotic disorders	34.8	36.9	37.9	5.9	2.9
Organic disturbances	7.0	6.9	6.8	–1.8	–1.5
Alcohol/drug dependency	6.4	6.2	6.2	–2.6	–0.6
Neurosis	4.5	4.2	3.9	–7.6	–6.2
Nervous system disorder	5.9	5.4	5.3	–8.7	–1.0
Other psychiatric	1.8	1.9	2.0	7.4	3.4
Other nonpsychiatric	1.0	1.0	1.0	4.8	–2.9
Total	100.0	100.0	100.0		

Note: FFS (fee-for-service), IPF (inpatient psychiatric facility), MS–DRG (Medicare severity–diagnosis related group). Totals may not sum to 100 percent due to rounding. Data represent FFS beneficiaries with an IPF stay ending in each respective fiscal year. Psychiatric MS–DRG groupings are categorized as the following: mood disorders (885 and International Classification of Diseases, 10th Revision (ICD-10) diagnosis codes F30–F39); schizophrenia, schizotypal, delusion, and other non-mood psychotic disorders (885 and ICD-10 diagnosis codes F20–F29); organic disturbances and mental retardation (884); alcohol/drug abuse or dependency with and without rehabilitation and with and without major complication or comorbidity (MCC) (894, 895, 896, 897); neurosis with and without depressive (881, 882); degenerative nervous system disorders with and without MCC (056, 057); other psychiatric MS–DRGs (880, 883, 896, 876, 887); other nonpsychiatric MS–DRGs (all others).

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

> Medicare FFS patients in IPFs are generally assigned 1 of 17 psychiatric MS–DRGs. However, the MS–DRG system does not differentiate well among Medicare beneficiaries in IPFs; in 2021, nearly 75 percent of cases were assigned to the psychosis MS–DRG.

> The psychosis MS–DRG is a broad category including patients with principal diagnoses of mood disorders (such as bipolar disorder and major depression) and non-mood psychotic disorders (such as schizophrenia). Between 2019 and 2020, corresponding with the start of the COVID-19 pandemic, the share of patients with non-mood psychotic disorders increased by nearly 6 percent. The increase continued in 2021, by nearly 3 percent compared with the prior year. In contrast, the share of patients with mood disorders decreased between 2019 and 2021. Given that the number of overall IPF stays decreased substantially during this time, it is likely that patients with certain diagnoses (such as schizophrenia) were less able to avoid or defer IPF use.

Chart 6-21 Medicare FFS beneficiaries using IPFs tended to be disabled, under age 65, low income, and non-White, FY 2021

Characteristic	Share of all IPF users	Share of IPF users with more than one IPF stay in 2021	Share of all FFS beneficiaries
All	100%	26%	—
Current eligibility status and demographics			
Aged	46	31	88
Disabled	54	69	12
ESRD	0.1	0.0	0.2
Female	49	45	53
Male	51	55	47
<45	25	35	3
45–64	30	34	9
65–79	32	24	67
80+	14	7	21
Non-Hispanic White	72	68	78
Black	16	19	9
Asian/Pacific Islander	2	2	3
Hispanic	6	7	6
American Indian/Alaska native	1	1	1
Other or unknown	3	4	3
Urban	80	83	80
Rural	20	17	20
Dual eligible or LIS during year			
No	35	24	83
Yes	65	76	17

Note: FFS (fee-for-service), IPF (inpatient psychiatric facility), FY (fiscal year), ESRD (end-stage renal disease), LIS (low-income subsidy). Components may not sum to totals due to rounding.

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

> Of Medicare FFS beneficiaries who had at least one IPF stay in 2021, 54 percent qualified for Medicare because of a disability, compared with 12 percent across all FFS beneficiaries. Beneficiaries who used IPF care also tended to be younger and poorer.

> Twenty-six percent of Medicare FFS beneficiaries who used an IPF in 2021 had more than one IPF stay during the year. These beneficiaries were even more likely than all IPF users to be disabled (often because of a psychiatric diagnosis), under age 65, low income, and non-White.

> The shares and patterns were similar for beneficiaries using IPFs in 2020.

SECTION

7

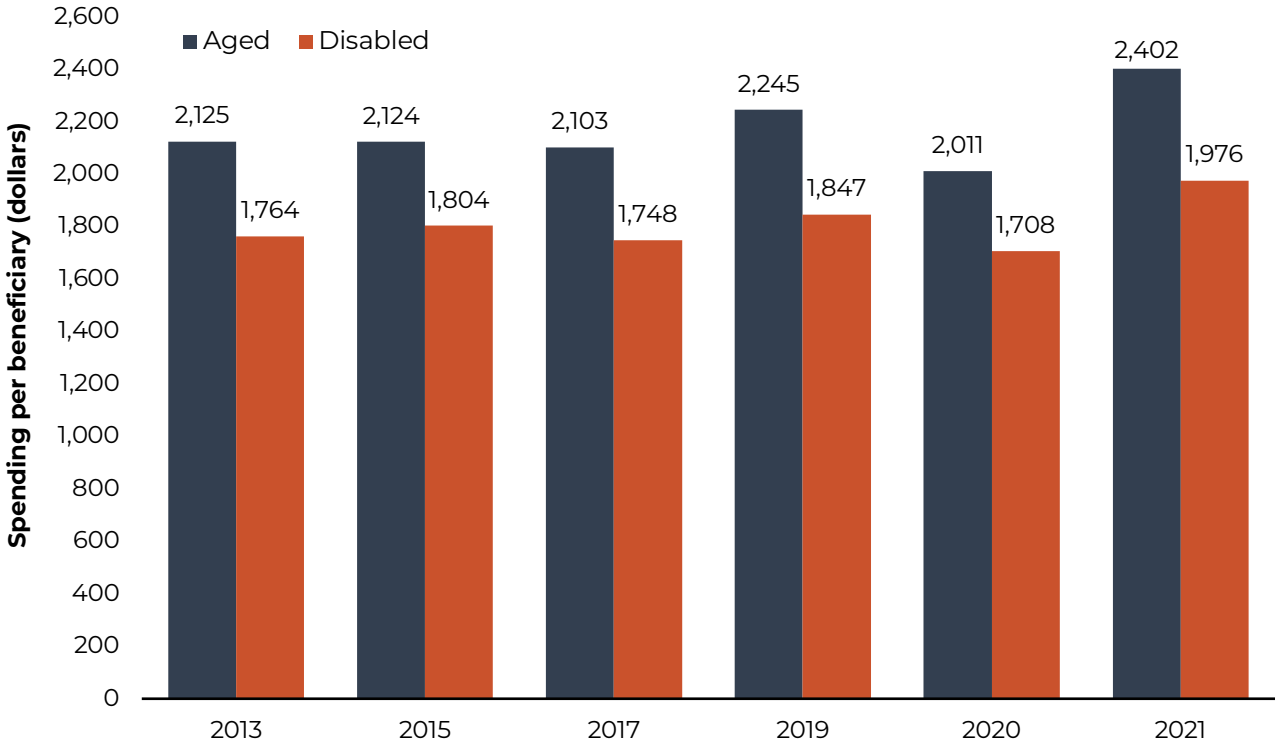
Ambulatory care

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 physician fee schedule, 2013–2021



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 ages 65 and over are included in the "aged" category.

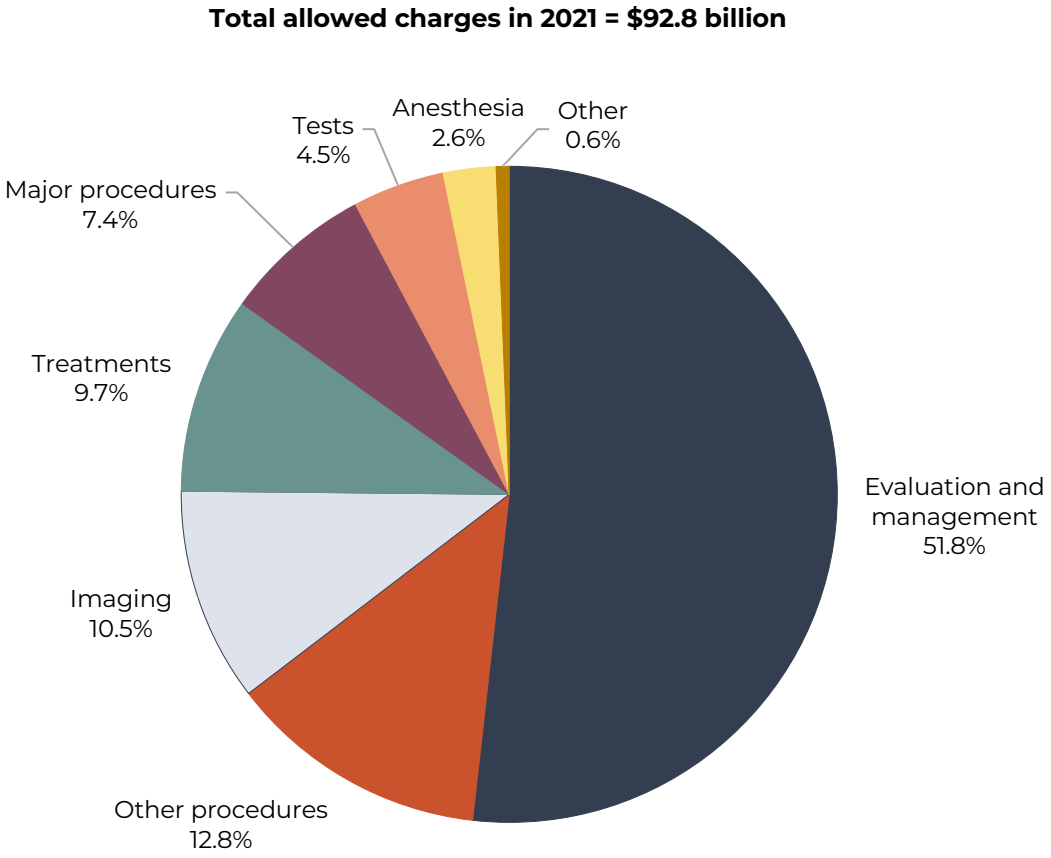
Source: The annual report of the Boards of Trustees of the Medicare trust funds 2022.

> The physician fee schedule includes a broad range of services such as office visits, surgical procedures, and diagnostic and therapeutic services. Total fee schedule spending (excluding beneficiary cost sharing) was $73.6 billion in 2021 (data not shown).

> Spending per fee-for-service beneficiary for fee schedule services remained largely stable between 2013 and 2017, then increased in 2019. Spending per fee-for-service beneficiary declined in 2020 due to the effects of the coronavirus pandemic and then rebounded between 2020 and 2021. From 2013 to 2021, spending per beneficiary (for both aged beneficiaries and those with disabilities) increased by a cumulative rate of 14 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 2021, for example, per capita spending for beneficiaries with disabilities was $1,976 compared with $2,402 for aged beneficiaries. Spending per capita grew at nearly the same rate for aged beneficiaries and beneficiaries with disabilities between 2013 and 2021.

Chart 7-2 Physician fee schedule–allowed charges by type of service, 2021



Note: Components may not sum to 100 percent due to rounding. This chart shows "other procedures" and "treatments" as separate categories; previously published versions of this chart had combined them.

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

> In 2021, allowed charges for physician fee schedule services totaled $92.8 billion. "Allowed charges" includes both program spending and beneficiary cost sharing.

> In 2021, more than 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).

> The treatments category includes physical therapy, cancer treatments, and dialysis. The two procedure categories include various eye, cardiovascular, skin, and vascular procedures. The distinction between major procedures and other procedures is determined by the size of the payment rate for each procedure and whether it is typically furnished in an inpatient setting.

Chart 7-3 Total encounters per FFS beneficiary was higher in 2021 compared with 2016, and the mix of clinicians furnishing them changed

Specialty category	Encounters per beneficiary				Percent change in encounters per beneficiary		
					Average annual		Cumulative
	2016	2019	2020	2021	2016–2019	2019–2021	2016–2021
Total (all clinicians)	21.4	22.3	19.8	21.6	1.3%	–2.8%	1.0%
Primary care physicians	3.8	3.5	3.1	3.2	–2.6	–9.3	–16.1
Specialists	12.7	12.9	11.4	12.3	0.4	–4.7	–3.7
APRNs/PAs	1.8	2.5	2.4	2.7	11.0	11.0	51.7
Other practitioners	3.1	3.4	2.9	3.5	3.4	1.1	11.9

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 the national provider identifiers of the clinicians who billed for the service. Components 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 2022 annual report of the Boards of Trustees of the Medicare trust funds.

> An "encounter" is a measure of beneficiary interaction 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.

> After rising over the 2016 to 2019 period, the overall number of encounters per beneficiary fell 2.8 percent from 2019 to 2021 due to the coronavirus pandemic.

> Encounters with specialist physicians accounted for the majority of all encounters. These encounters increased by an average of 0.4 percent per year between 2016 and 2019, but fell by 4.7 percent from 2019 to 2021.

> Encounters with APRNs and PAs grew rapidly from 2016 to 2021 (51.7 percent), and encounters with primary care physicians declined substantially (–16.1 percent). 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 The number of clinicians billing Medicare's physician fee schedule increased, and the mix of clinicians changed, 2016–2021

	Number (in thousands)					Number per 1,000 beneficiaries				
	Physicians					Physicians				
Year	Primary care specialties	Other specialties	APRNs and PAs	Other practitioners	Total	Primary care specialties	Other specialties	APRNs and PAs	Other practitioners	Total
2016	142	446	198	162	948	2.7	8.6	3.8	3.1	18.2
2017	141	454	218	168	981	2.6	8.5	4.1	3.1	18.4
2018	140	461	237	174	1,012	2.6	8.4	4.3	3.2	18.5
2019	139	467	258	180	1,045	2.5	8.3	4.6	3.2	18.7
2020	136	467	268	172	1,044	2.4	8.1	4.7	3.0	18.2
2021	135	471	286	180	1,073	2.3	8.1	4.9	3.1	18.4

Note: APRN (advanced practice registered nurse), PA (physician assistant). "Primary care specialties" includes family medicine, internal medicine, pediatric medicine, and geriatric medicine, with an adjustment to exclude hospitalists. Hospitalists are counted in "other specialties." "Other practitioners" includes clinicians such as physical therapists, psychologists, social workers, and podiatrists. The number of clinicians shown in this table includes only those with a caseload of more than 15 beneficiaries in the year. Beneficiary counts used to calculate clinicians per 1,000 beneficiaries include beneficiaries enrolled in traditional Medicare Part B and those in Medicare Advantage, based on the assumption that clinicians generally furnish services to beneficiaries in both programs. Numbers exclude nonperson providers, such as clinical laboratories and independent diagnostic testing facilities.

Source: MedPAC analysis of Medicare claims data for 100 percent of beneficiaries and 2022 annual report of the Boards of Trustees of the Medicare trust funds.

> From 2016 to 2019, the total number of clinicians billing the fee schedule grew in absolute terms and relative to the size of the overall Medicare population. In 2020, the overall number of clinicians shrank slightly, likely due to the effects of the coronavirus pandemic, but rebounded in 2021.

> The total number of clinicians per 1,000 beneficiaries increased from 18.2 to 18.7 over the 2016 to 2019 period before falling to 18.2 in 2020. Although the ratio of clinicians to Medicare beneficiaries decreased in 2020, probably due to the pandemic, the effect on the overall supply of clinicians was relatively small. The fact that the ratio grew to 18.4 in 2021 suggests that the reduction in 2020 was temporary.

> Over the 2016 to 2021 period, the number of primary care physicians billing the fee schedule slowly declined—yielding a net loss of about 7,000 primary care physicians by 2021. Over the same five-year period, the number of APRNs and PAs billing the fee schedule grew rapidly from about 198,000 to 286,000. The number of specialist physicians and other practitioners, such as physical therapists and podiatrists, who billed the fee schedule increased at a steady pace.

Chart 7-5 In MedPAC's 2022 survey, Medicare beneficiaries were less likely to have to wait for appointments than privately insured individuals

Survey question	Medicare (ages 65 and older)	Private insurance (ages 50–64)
Unwanted delay in getting an appointment: Among those who needed an appointment in the past 12 months, "How often did you have to wait longer than you wanted to get a doctor's appointment?"		
For routine care		
Never	55%*	40%*
Sometimes	32*	40*
Usually	8*	12*
Always	4*	8*
For illness or injury		
Never	67*	58*
Sometimes	26	29
Usually	4*	8*
Always	3*	5*

Note: Components may not sum to 100 percent because of rounding and because the table does not show the share of respondents who said they didn't know or who refused to answer. Sample sizes for each group (Medicare and private insurance) are approximately 4,000 each year. Sample sizes for individual questions varied. Survey includes beneficiaries enrolled in fee-for-service Medicare or Medicare Advantage and excludes beneficiaries under the age of 65. Survey results from 2022 may not be directly comparable to prior years' survey results due to changes in our survey methodology in 2022.
*Statistically significant difference between the Medicare and private insurance groups in the given year (at a 95 percent confidence level).

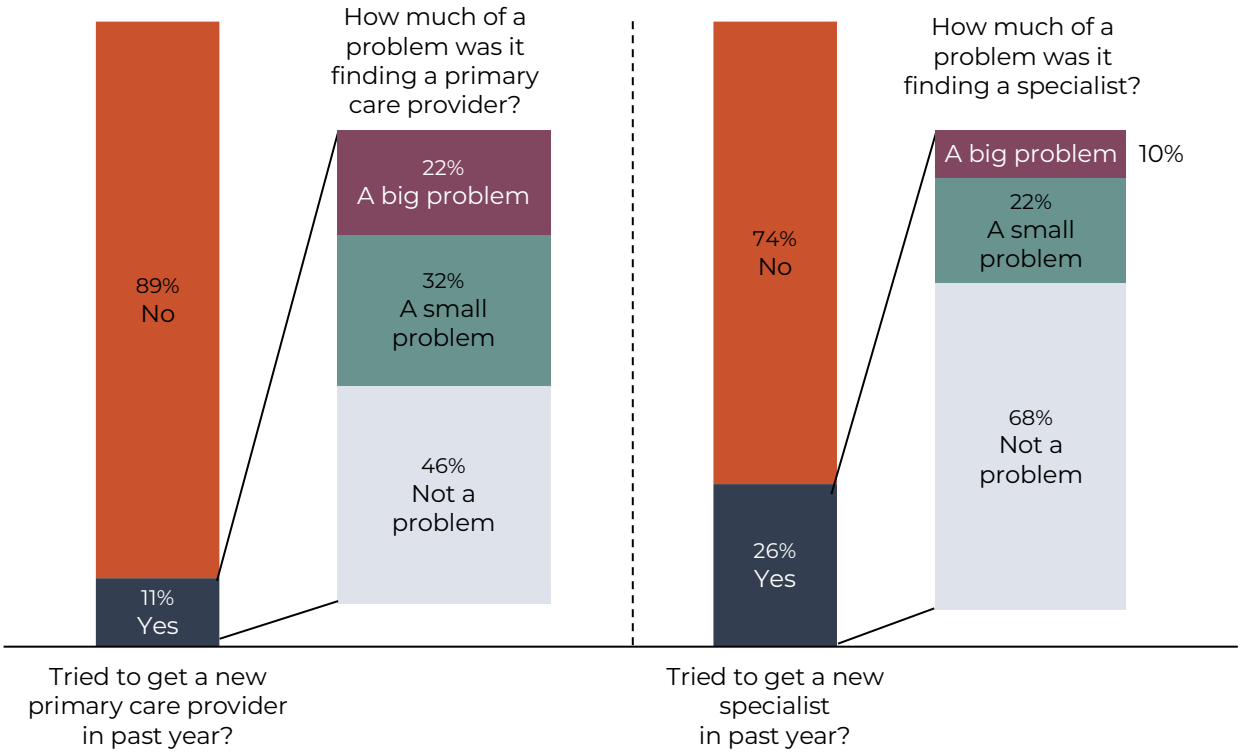
Source: MedPAC's annual access-to-care survey conducted in August 2022.

> Most Medicare beneficiaries have one or more doctor appointments in a given year. Their ability to schedule timely appointments is one indicator of access to care that we examine in our annual survey.

> In 2022, our survey found that aged Medicare beneficiaries were much less likely than privately insured individuals to report having to wait longer than they wanted to get a doctor's appointment. Slightly more than half of aged Medicare beneficiaries reported never waiting longer than they wanted to for a routine appointment, compared with 40 percent of individuals with private insurance.

> Both Medicare beneficiaries and privately insured individuals reported experiencing more waits for routine care appointments than for illness or injury appointments.

Chart 7-6 Medicare beneficiaries had more problems finding a new primary care provider than a new specialist, 2022



Note: Components may not sum to 100 percent because the figure does not show the share of respondents who said they didn't know or who refused to answer. Overall sample size for Medicare beneficiaries was approximately 4,000. Survey includes beneficiaries enrolled in fee-for-service Medicare or Medicare Advantage and excludes beneficiaries under the age of 65.

Source: MedPAC's annual access-to-care survey conducted in August 2022.

> In 2022, 11 percent of Medicare beneficiaries reported looking for a new primary care provider. The most common reason beneficiaries gave for looking (not shown) was that their primary care provider had retired or stopped practicing, which was reported by about half of the beneficiaries who were looking (equivalent to 5 percent of all Medicare beneficiaries); about a third of beneficiaries who looked for a new primary care provider did so because they wanted to change providers (equivalent to 3 percent of all Medicare beneficiaries).

> In 2022, among Medicare beneficiaries looking for a new clinician, beneficiaries were more likely to report problems finding a new primary care provider than a new specialist.

> Of the 11 percent of Medicare beneficiaries who looked for a new primary care provider, 22 percent reported a "big problem" finding a new one, and another 32 percent reported a "small problem" finding a new one. Although this finding means that only 6 percent of all Medicare beneficiaries 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. We have observed this trend in our annual survey for many years, among both Medicare beneficiaries and privately insured individuals (data not shown).

Chart 7-7 Comparable shares of White, Black, and Hispanic Medicare beneficiaries experienced waits for appointments, 2022

	Medicare (ages 65 and older)			Private insurance (ages 50–64)		
Survey question	White	Black	Hispanic	White	Black	Hispanic
Unwanted delay in getting an appointment: Among those who needed an appointment in the past 12 months, "How often did you have to wait longer than you wanted to get a doctor's appointment?"						
For routine care						
Never	56%[a]	57%	54%[a]	39%[a]	48%	37%[a]
Sometimes	32[a]	33	31	39[a]	42	43
Usually	8[a]	6	8	13[ab]	6[b]	8
Always	3[a]	4	7	9[a]	4[b]	12[b]
For illness or injury						
Never	68[a]	73	63	58[a]	64	57
Sometimes	26	21	27	29	29	28
Usually	4[a]	4	7	8[a]	5	9
Always	2[a]	2	3	5[a]	2	5

Note: Components may not sum to 100 percent because of rounding and because the table does not show the share of respondents who said they didn't know or who refused to answer. "White" refers to non-Hispanic White respondents. "Black" refers to non-Hispanic Black respondents. "Hispanic" refers to Hispanic respondents of any race. The small sample size of our survey prevents us from breaking out results for other races. Sample sizes for each insurance group (Medicare and private insurance) were approximately 4,000 in 2022. Sample sizes for individual questions varied. Survey includes beneficiaries enrolled in fee-for-service Medicare or Medicare Advantage and excludes beneficiaries under the age of 65.

[a]Statistically significant difference between the Medicare and private insurance groups (at a 95 percent confidence level).

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

Source: MedPAC's annual access-to-care survey conducted in August 2022.

> In 2022, the shares of White, Black, and Hispanic Medicare beneficiaries who reported ever having to wait longer than they wanted to get a doctor's appointment were not statistically significantly different from each other. The same was true for privately insured individuals. (The share who "ever" had to wait longer than they wanted for an appointment is the sum of the shares who reported "sometimes," "usually," or "always" waiting longer that they wanted.)

> There were also no statistically significant differences in the shares of White, Black, and Hispanic Medicare beneficiaries who had a primary care provider, tried to get a new primary care provider or a new specialist in the past year, reported forgoing care in the past year, or were satisfied with the quality of their care (not shown). This was also true for the privately insured (not shown).

Chart 7-8 Telehealth experiences reported by Medicare beneficiaries and privately insured individuals in MedPAC's annual survey, 2022

Survey question	Medicare (ages 65 and older)	Private insurance (ages 50–64)
Had a telehealth visit: "In the past 12 months, have you had a [video/telephone] visit with any type of health care provider?"		
Yes (any type of telehealth visit)	35%	37%
Video visit	19*	28*
Telephone visit (audio only)	25*	21*
Reason for visit: Among those who had a telehealth visit, "Why did you have a [video/telephone] visit?"		
Video visit(s)		
COVID-19 pandemic	64	60
Telephone visit(s)		
COVID-19 pandemic	47	48
Satisfaction with telehealth: Among those who had a telehealth visit, "How satisfied were you with the [video/telephone] visit(s) you had?"		
Video visit(s)		
Satisfied (net)	92	89
Very satisfied	54	50
Somewhat satisfied	38	39
Dissatisfied (net)	8	11
Somewhat dissatisfied	6	7
Very dissatisfied	2	4
Telephone visit(s)		
Satisfied (net)	92*	87*
Very satisfied	58	52
Somewhat satisfied	34	35
Dissatisfied (net)	8*	13*
Somewhat dissatisfied	6	9
Very dissatisfied	1*	4*
Interest in continuing to use telehealth: Among those who had a telehealth visit, "Would you be interested in continuing to use telehealth visits to see health care providers after the COVID-19 pandemic ends?"		
Yes (net)	42*	55*
(Share overall)	14*	20*
Interested in video visits	47*	56*
(Share overall)	9*	16*
Interest in telephone visits	38*	47*
(Share overall)	9	10

Note: Components may not sum to 100 percent due to rounding and because infrequently selected response options are not shown. "Share overall" refers to the share of all respondents with this insurance. Survey results from 2022 may not be directly comparable to prior years' survey results due to changes in our survey methodology in 2022. *Statistically significant difference between the Medicare and private insurance groups in the given year (at a 95 percent confidence level).

Source: MedPAC's annual access-to-care surveys conducted in August 2022.

(Continued next page)

Chart 7-8 Telehealth experiences reported by Medicare beneficiaries and privately insured individuals in MedPAC's annual survey, 2022 (continued)

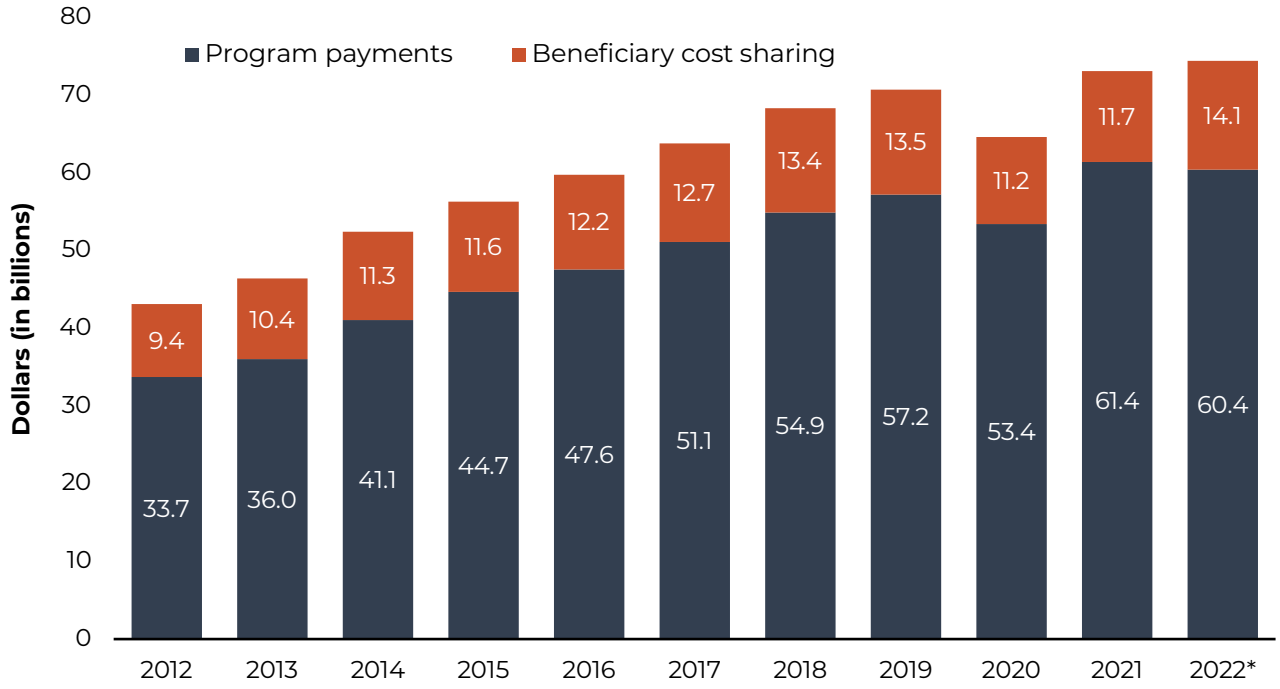
> In 2022, a little over a third of Medicare beneficiaries and privately insured people reported having had a telehealth visit in the past year. Medicare beneficiaries were somewhat more likely to have had an audio-only telephone visit than a video visit, while privately insured people were slightly more likely to have had a video visit than a telephone visit.

> About 90 percent of telehealth users report being satisfied with their telehealth visits.

> In 2022, among Medicare beneficiaries who reported having had a telehealth visit in the past year, 42 percent were interested in continuing to use telehealth after the COVID-19 pandemic ended (equivalent to 14 percent of all beneficiaries). Privately insured people were more interested in continuing to use telehealth, with 55 percent of telehealth users wanting to continue using it after the pandemic (equivalent to 20 percent of all privately insured people).

> In analyses of survey responses from Medicare beneficiary subgroups (not shown), video visits were more commonly used by beneficiaries who resided in urban areas, were Black, had higher household incomes (of at least $50,000), and were younger (ages 65 to 75, as opposed to 75 or over). In contrast, audio-only telephone visits were used at more comparable rates across beneficiary subgroups.

Chart 7-9 Spending on hospital outpatient services covered under the outpatient PPS, 2012–2022



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 $74.5 billion in 2022 ($60.4 billion in program spending, $14.1 billion in beneficiary copayments). We estimate that the outpatient PPS accounted for about 6.5 percent of total Medicare program spending in 2022 (data not shown).

> From calendar year 2012 to 2022, overall spending by Medicare and beneficiaries on hospital outpatient services covered under the outpatient PPS increased by 73 percent, an average of 5.6 percent per year. The Office of the Actuary projects continued growth in total spending, averaging 8.9 percent per year from 2022 to 2024 (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 2022 (data not shown).

Chart 7-10 Most hospitals provide outpatient services

Year	Acute care hospitals	Share offering:		
		Outpatient services	Outpatient surgery	Emergency services
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
2020	3,194	96	93	91
2021	3,189	96	93	91
2022	3,181	95	92	90

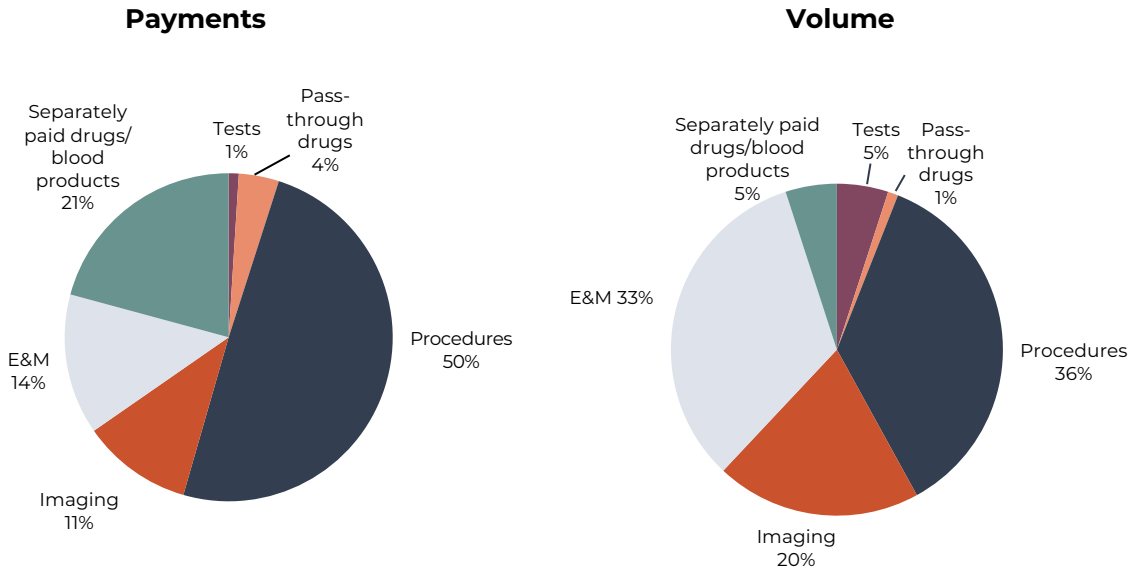
Note: N/A (not applicable). We list emergency services for 2010 as "N/A" because the data source we used for this chart changed the variable for identifying hospitals' provision of emergency services. This change in variable definition makes it appear that the share of hospitals providing emergency services 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 declined slowly from 3,518 in 2008 (data not shown) to 3,181 in 2022.

> The share of hospitals providing outpatient services remained stable, and the share offering outpatient surgery steadily increased from 2010 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, 2021



Note: PPS (prospective payment system), E&M (evaluation and management). "Payments" includes 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 components in "Payments" figure do not sum to 100 percent due to rounding.

Source: MedPAC analysis of standard analytic file of outpatient claims for 2021.

> 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 2021, procedures accounted for 50 percent of payments but only 36 percent of volume.

> Procedures (e.g., endoscopies, surgeries, and skin and musculoskeletal procedures) accounted for the greatest share of payments for services (50 percent) in 2021, followed by separately paid drugs and blood products (21 percent), E&M services (14 percent), and imaging services (11 percent).

Chart 7-12 Hospital outpatient services with the highest Medicare expenditures, 2021

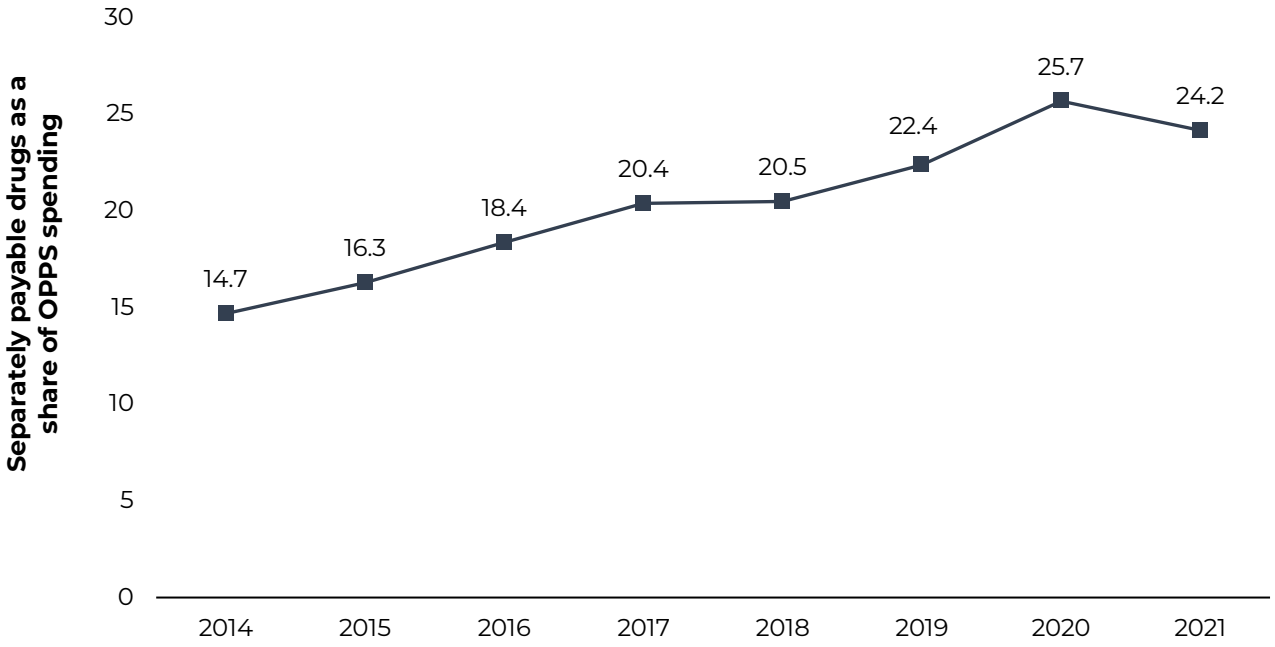
APC title	Share of Medicare expenditures	Volume (thousands)	Payment rate
Level 5 musculoskeletal procedures	7%	389	$12,315
All emergency visits	5	9,632	353
Clinic visits	4	27,835	119
Comprehensive observation services	3	969	2,283
Level 3 electrophysiologic procedures	3	82	21,464
Level 3 endovascular procedures	2	130	10,043
Level 4 musculoskeletal procedures	2	194	6,265
Level 3 drug administration	2	5,460	204
Level 2 ICD and similar procedures	2	32	32,839
Level 3 radiation therapy	1	1,807	543
Level 4 drug administration	1	2,819	311
Level 1 laparoscopy and related procedures	1	173	5,060
Level 1 endovascular procedures	1	298	2,899
Level 4 imaging without contrast	1	1,778	483
Level 2 imaging with contrast	1	2,309	368
Level 2 lower GI procedures	1	877	1,037
Level 2 imaging without contrast	1	7,733	109
Level 3 nuclear medicine and related services	1	619	1,306
Level 4 endovascular procedures	1	50	16,064
Level 3 pacemaker and similar procedures	1	72	10,400
Level 1 intraocular procedures	1	343	2,079
Level 3 imaging without contrast	1	3,000	2,30
Level 5 urology and related procedures	1	150	4,413
Level 2 laparoscopy and related procedures	1	76	8,904
Level 4 nuclear medicine and related services	1	422	1,480
Level 3 vascular procedures	1	214	2,862
Level 1 upper GI procedures	1	821	810
Level 1 imaging without contrast	1	7,072	81
Total	51		
Average for all APC		691	$409

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 28 APC categories do not add to the total share of expenditures (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 2021.

> 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, 2014–2021



Note: OPPS (outpatient prospective payment system). Separately payable drugs include both pass-through drugs and separately paid non-pass-through drugs.

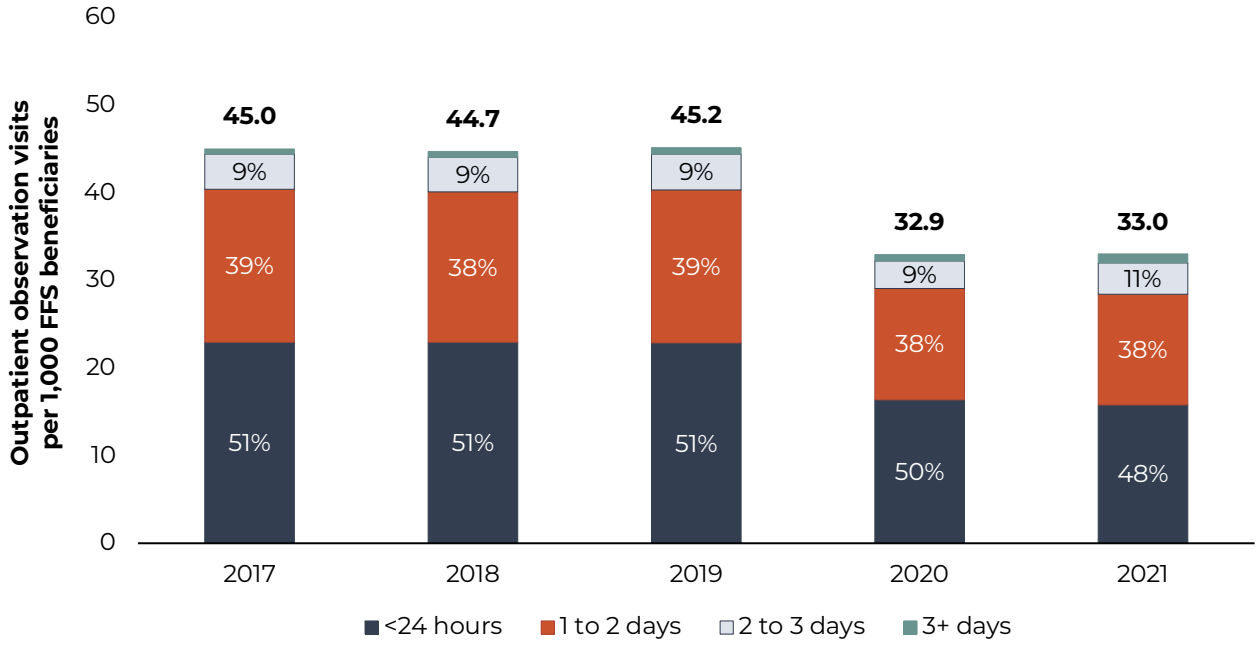
Source: MedPAC analysis of hospital outpatient standard analytic claims files from 2014 through 2020.

> The OPPS packages the cost of most drugs into the payment for the related services. However, the OPPS 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 relatively expensive 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 large share of OPPS spending, increasing from 14.7 percent in 2014 to 24.2 percent in 2021. From 2020 to 2021, the share of OPPS spending attributable to separately payable drugs dropped from 25.7 percent to 24.2 percent. The relatively high percentage in 2020 was largely driven by a substantial 10 percent decrease in OPPS spending coupled with a small increase in spending on separately payable drugs. In 2021, spending on separately payable drugs rose by 5.2 percent, but OPPS spending increased by 11 percent, largely due to significant spending on the administration of coronavirus vaccines and coronavirus testing services.

> The share of OPPS spending attributable to separately payable drugs increased each year from 2014 to 2020, 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 OPPS spending in 2018 and 24.8 percent in 2019.

Chart 7-14 Number of Medicare FFS outpatient observation visits per capita remained at a relatively low level in 2021



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 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 that are 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.

> The number of Medicare FFS outpatient observation visits per capita remained relatively steady from 2017 to 2019, at about 45 visits per 1,000 beneficiaries. The distribution of observation visits by length of stay also remained steady, with about half longer than 24 hours, including 10 percent that spanned more than 2 days.

> In 2020, the number of Medicare FFS outpatient observation visits per capita declined 30 percent to about 33 visits per 1,000 beneficiaries, though the distribution by length of stay remained similar to prior years. In 2021, the number was relatively unchanged. The drop in the number of observation visits in 2020 and 2021 reflects the COVID-19 public health emergency and is similar to the decline in non-COVID emergency room visits (data not shown).

Chart 7-15 Number of Medicare-certified ASCs increased by 11 percent, 2014–2020

	2015	2016	2017	2018	2019	2020	2021
Medicare payments (billions of dollars)	$4.1	$4.3	$4.6	$4.9	$5.2	$4.9	$5.7
New centers (during year)	172	172	218	236	245	184	254
Closed or merged centers (during year)	125	117	126	138	119	73	95
Net total number of centers (end of year)	5,434	5,489	5,581	5,679	5,805	5,916	6,075
Net percent growth in number of centers	0.9%	1.0%	1.7%	1.8%	2.2%	1.9%	2.7%
Share of all centers that are:							
For profit	95	95	95	95	95	95	95
Nonprofit	4	4	4	4	4	4	4
Government	1	1	1	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 2022 data book because CMS updated the Provider of Services file.

Source: MedPAC analysis of Provider of Services file from CMS 2022. Payment data are from MedPAC analysis of carrier standard analytic claims files.

> 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 7 percent per year, on average, from 2015 through 2021 (data not shown). From 2020 to 2021, total payments per FFS beneficiary rose 17.6 percent as FFS beneficiaries' use of ASC services strongly rebounded from the decline in use in 2020 due to the coronavirus pandemic (per beneficiary data not shown).

> The number of Medicare-certified ASCs grew at an average annual rate of 2.2 percent from 2015 through 2021. In this same period, an annual average of 212 new facilities entered the market, while an average of 113 closed or merged with other facilities.

Chart 7-16 Between 34 and 70 low-value services were provided per 100 FFS beneficiaries in 2021; Medicare spent between $2.2 billion and $6.5 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	12.8	9.3%	$262	3.8	3.4%	$77
PSA screening at age > 75 years	9.5	6.5	88	5.5	4.5	50
Spinal injection for low back pain	6.8	3.6	1,381	2.9	1.8	588
PTH testing in early CKD	6.4	3.8	125	5.3	3.2	104
Colon cancer screening for older adults	6.1	5.8	408	0.2	0.2	2
T3 level testing for patients with hypothyroidism	4.7	2.8	30	4.7	2.8	30
Carotid artery disease screening in asymptomatic adults	4.5	4.2	254	3.6	3.3	201
Stress testing for stable coronary disease	3.6	3.5	1,084	0.4	0.4	126
Preoperative chest radiography	3.4	3.1	53	0.8	0.7	12
Head imaging for uncomplicated headache	3.1	2.9	221	1.9	1.8	135
Cervical cancer screening at age > 65 years	1.6	1.6	35	1.4	1.4	31
Homocysteine testing in cardiovascular disease	1.1	0.8	9	0.2	0.1	1
Head imaging for syncope	1.0	0.9	69	0.6	0.5	40
Preoperative echocardiography	1.0	0.9	81	0.3	0.3	25
Preoperative stress testing	0.6	0.6	177	0.2	0.2	53
CT for uncomplicated rhinosinusitis	0.5	0.5	38	0.2	0.2	18
Imaging for plantar fasciitis	0.5	0.4	10	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	8	0.4	0.4	7
Screening for carotid artery disease for syncope	0.4	0.4	24	0.3	0.3	17
PCI/stenting for stable coronary disease	0.3	0.3	1,415	0.1	0.1	245
Cancer screening for patients with CKD on dialysis	0.3	0.2	9	0.1	0.05	1
Hypercoagulability testing after DVT	0.2	0.1	6	0.1	0.1	2
Vertebroplasty/kyphoplasty for osteoporotic vertebral fractures	0.2	0.1	319	0.2	0.1	312
Arthroscopic surgery for knee osteoarthritis	0.2	0.2	146	0.03	0.03	23
Preoperative PFT	0.1	0.1	2	0.1	0.1	0.8
IVC filter to prevent pulmonary embolism	0.1	0.1	18	0.1	0.1	18
Renal artery angioplasty/stenting	0.1	0.1	153	0.01	0.01	36
EEG for headache	0.04	0.04	3	0.02	0.02	2
Carotid endarterectomy for asymptomatic patients	0.4	0.04	108	0.02	0.02	44
Pulmonary artery catheterization in ICU	0.01	0.01	0.2	0.01	0.01	0.2
Total	70.1	35.8	6,545	33.8	21.9	2,214

(Chart continued next page)

Chart 7-16 Between 34 and 70 low-value services were provided per 100 FFS beneficiaries in 2021; Medicare spent between $2.2 billion and $6.5 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), PFT (pulmonary function test), PCI (percutaneous coronary intervention), DVT (deep vein thrombosis), IVC (inferior vena cava), EEG (electroencephalography), ICU (intensive care unit). "Count" refers to the number of unique services. Components 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. 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 2021. This method was developed by Schwartz et al. (2014. The broad and narrow versions of the measures for T3 level testing for patients with hypothyroidism and IVC filter to prevent pulmonary embolism are the same.

Source: MedPAC analysis of 100 percent of Medicare claims using measures developed by Schwartz and colleagues (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; Schwartz, A. L., B. E. Landon, A. G. Elshaug, et al. 2014. Measuring low-value care in Medicare. *JAMA Internal Medicine* 174: 1067–1076).

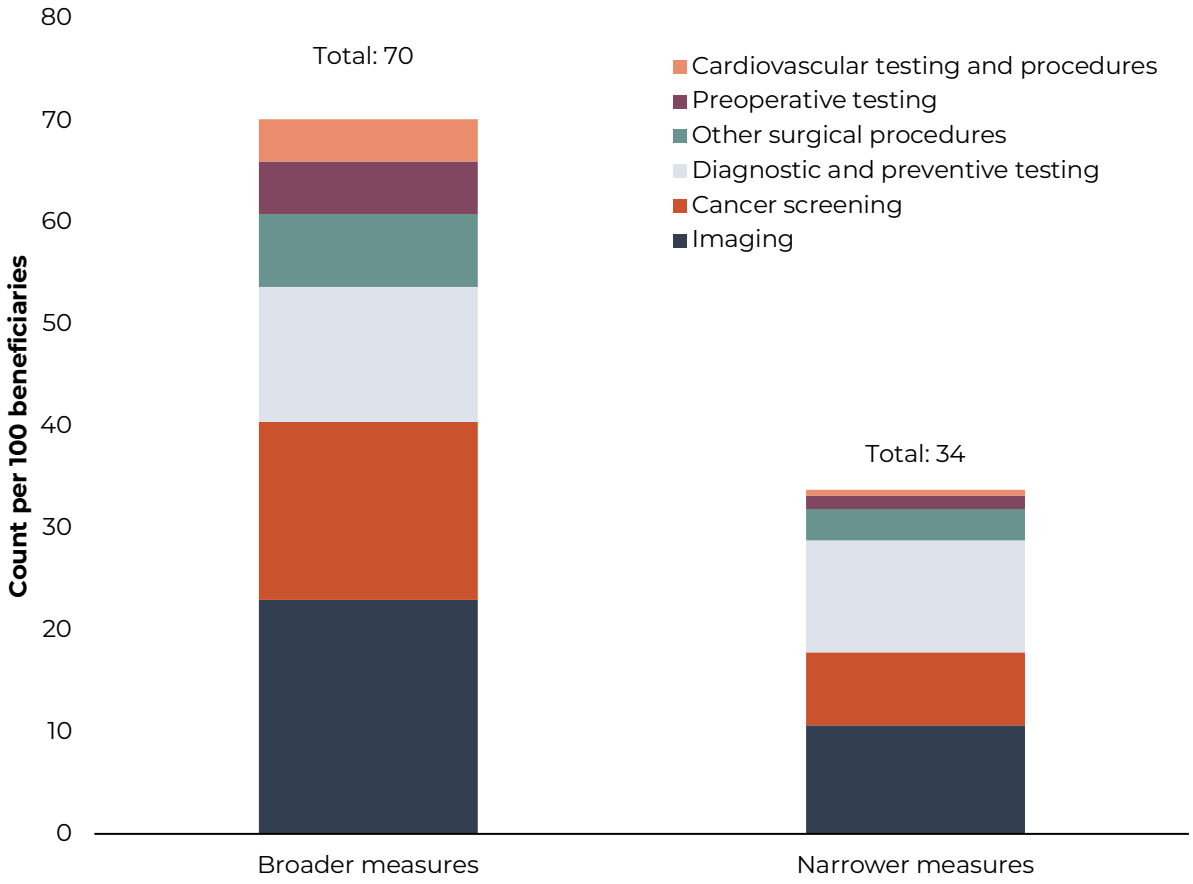
> Low-value care is the provision of a service that has little or no clinical benefit or care in which the risk of harm from the service outweighs its potential benefit.

> 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 2021. 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 2021, with about 36 percent of beneficiaries receiving at least 1 low-value service that year. Medicare spending for these services was $6.5 billion. Based on the narrower versions of the measures, our analysis showed about 34 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 $2.2 billion.

Chart 7-17 Imaging, cancer screening, and diagnostic and preventive testing accounted for most of the volume of low-value care in 2021



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

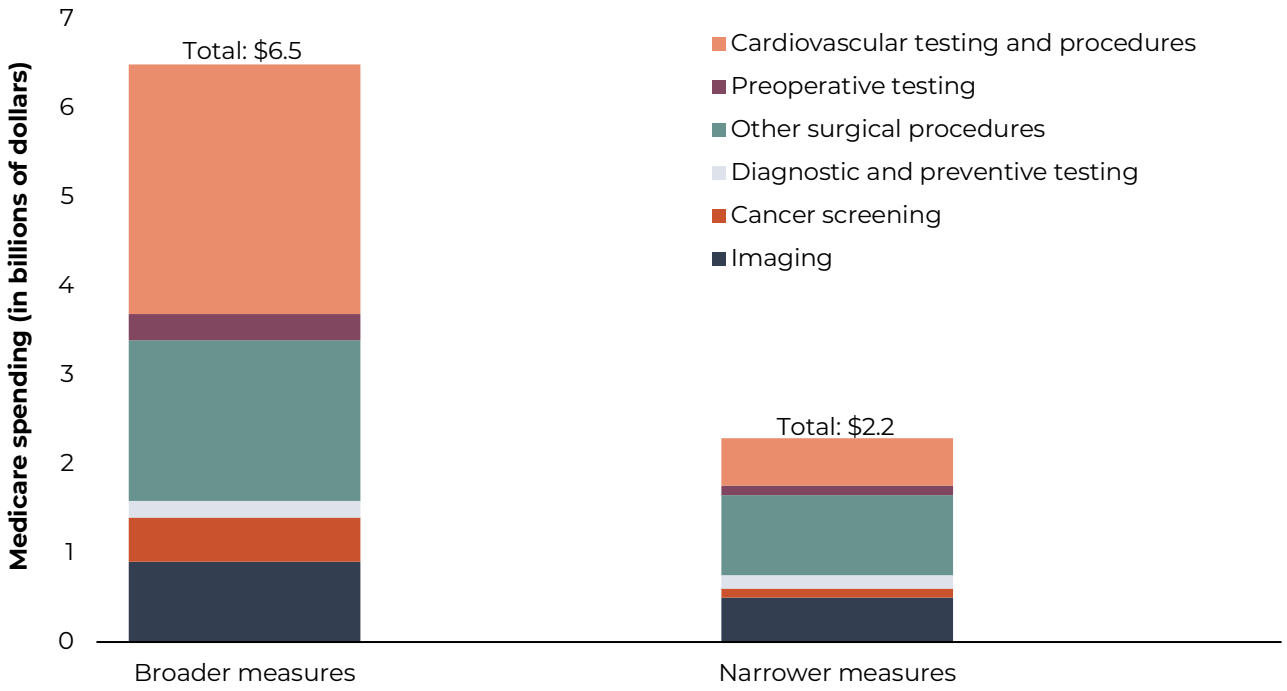
Source: MedPAC analysis of 100 percent of Medicare claims using measures developed by Schwartz and colleagues (Schwartz, A. L., M. E. Chernew, B. E. Landon, et al. 2015. Changes in low-value services in year 1 of the Medicare Pioneer Accountable Care Organization Program. *JAMA Internal Medicine* 175: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

> We assigned each of the 31 measures of low-value care in Chart 7-16 to 1 of 6 clinical categories.

> Imaging and cancer screening accounted for 58 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 7-18 Cardiovascular testing and procedures, other surgical procedures, and imaging accounted for most spending on low-value care in 2021



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 2021. 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., 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; Schwartz, A. L., B. E. Landon, A. G. Elshaug, et al. 2014. Measuring low-value care in Medicare. *JAMA Internal Medicine* 174: 1067–1076).

> Cardiovascular testing and procedures and other surgical procedures accounted for about 70 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 2022

	2017	2018	2019	2020	2021	2022	Average annual percent change 2017–2022	Percent change 2021–2022
Skilled nursing facilities	15,357	15,359	15,305	15,173	15,098	14,973	–0.5	–0.8
Home health agencies	11,963	11,699	11,569	11,565	11,474	11,353	–1.0%	–1.1%
Inpatient rehabilitation facilities	1,178	1,170	1,152	1,159	1,181	1,181	<0.1	0.0
Long-term care hospitals	411	386	371	351	345	341	–3.7	–1.2

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).

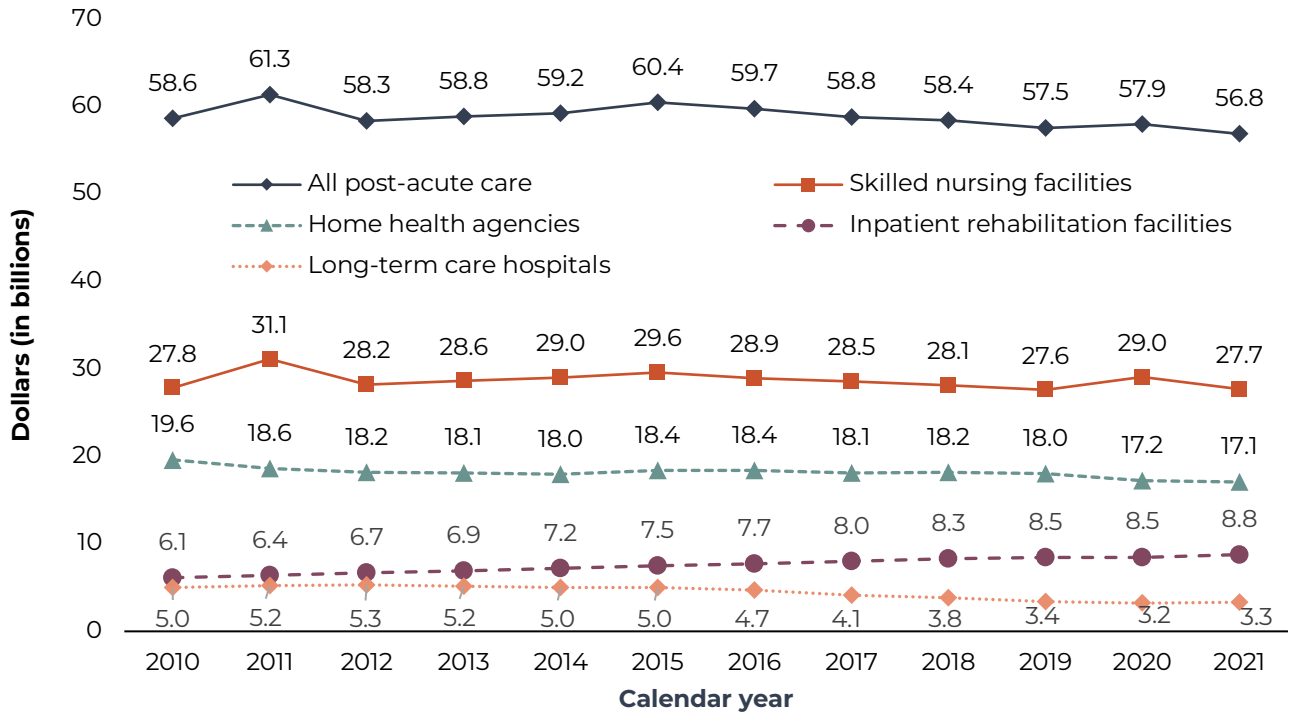
> The number of skilled nursing facilities decreased less than 1 percent per year between 2017 and 2022.

> The number of home health agencies (HHAs) began to decline after 2013 following 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. Between 2017 and 2022, the number of HHAs decreased by about 1 percent per year.

> After declining for several years, the total number of inpatient rehabilitation facilities increased slightly in 2020 and 2021.

> 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, but the decline slowed in 2021 and 2022.

Chart 8-2 Medicare fee-for-service spending for post-acute care declined between 2015 and 2021



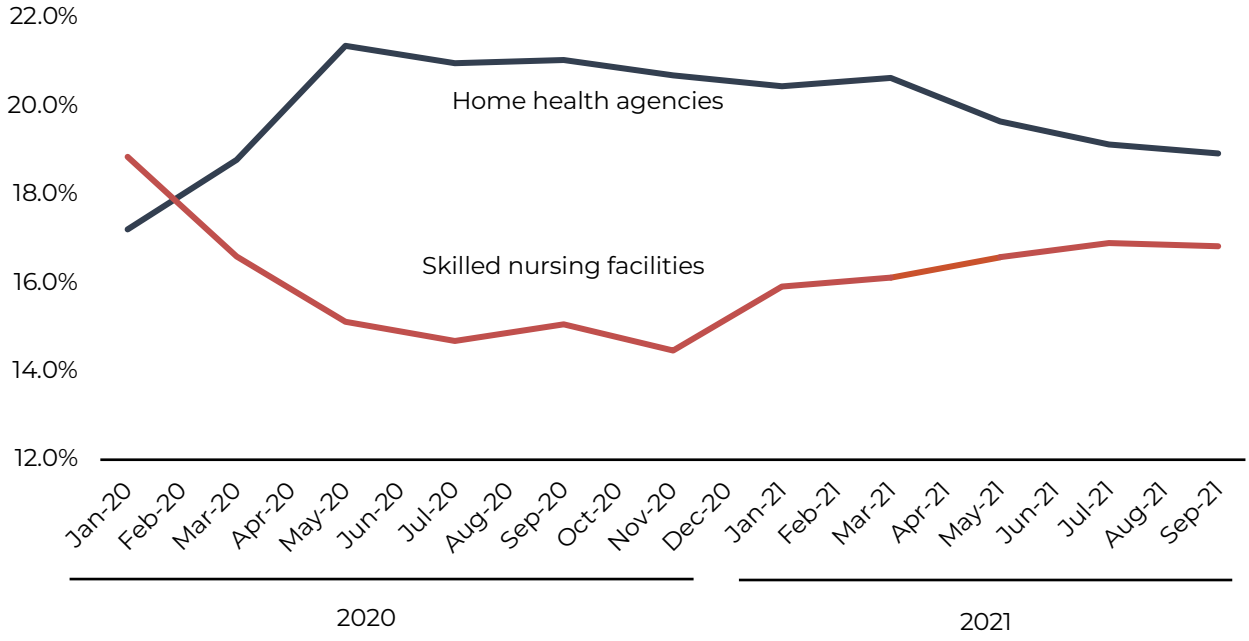
Note: These calendar year–incurred data represent program spending only; they do not include beneficiary cost sharing.

Source: CMS Office of the Actuary 2023.

> With the exception of a slight uptick in 2020, aggregate fee-for-service (FFS) spending on all post-acute care (PAC) sectors combined had been declining in recent years. In part, the decline is due to expanded enrollment in Medicare Advantage, which is not included in this chart. However, while spending declined in other PAC sectors, spending on inpatient rehabilitation facilities (IRFs) increased.

> Between 2020 and 2021, spending for skilled nursing facility care declined due to reduced volume. Spending remained relatively stable for home health care and long-term care hospitals, while spending on IRFs increased.

Chart 8-3 The COVID-19 pandemic altered the use of SNF and home health care after discharge from an acute care hospital



Note: This chart shows where beneficiaries enrolled in fee-for-service Medicare received post-acute care (PAC) after a hospitalization. PAC use for beneficiaries admitted from the community is not included.

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

> In January 2020, the share of Medicare beneficiaries discharged from the acute inpatient hospital to a skilled nursing facility (SNF) was 18.9 percent, compared to 17.2 percent discharged to home health care services. Beginning in March 2020, the COVID-19 pandemic had a significant impact on services, and the share of inpatient hospital discharges referred to SNFs declined to 16.6 percent and by November 2020 had fallen to 14.5 percent. Conversely, the share of discharges that received home health care services increased relative to the pre-pandemic period and relative to the share that received SNF care. The shift to home health care reflected the pandemic-related effects experienced by nursing homes and the reluctance of beneficiaries to use them. As of September 2021, the share of discharges to SNFs had increased from the public health emergency nadir in November 2020 and the share to home health care had declined but remained higher than the share going to SNFs.

> Overall, about 41 percent of inpatient hospital discharges in both 2020 and 2021 were followed by services at a SNF, home health agency, inpatient rehabilitation facility, or long-term acute care hospital (data not shown). Use of PAC after hospital discharge varied depending on the condition or treatment a patient received while hospitalized. For example, in 2020 the share of hospital discharges using PAC was 47 percent for postsurgical patients compared with 38 percent for patients who received mostly medical services during their inpatient stay (data not shown).

Chart 8-4 Freestanding SNFs and for-profit SNFs accounted for the majority of facilities, Medicare stays, and Medicare spending in 2021

Type of SNF	Facilities	Medicare-covered FFS stays	Medicare FFS payments (billions)
Totals	14,720	1,689,000	$24.3
Freestanding	97%	97%	98%
Hospital based	3	3	2
Urban	73	84	85
Rural	27	16	14
For profit	72	74	77
Nonprofit	23	23	20
Government	5	3	3

Note: SNF (skilled nursing facility), FFS (fee-for-service). Totals may not sum to 100 percent due to rounding and missing values. The number of facilities and the Medicare FFS spending amounts shown here are lower than those displayed in Charts 8-1 and 8-2 due to the use of different data sources. Facilities, stays, and spending reported for 2020 in our 2022 Data Book were undercounts due to an error in the Provider of Services file. This error did not materially affect the proportions of facilities, stays, or spending by SNF type reported in the table.

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

> In 2021, freestanding facilities accounted for 97 percent of Medicare-covered SNF stays and 98 percent of Medicare's payments to SNFs.

> In 2021, urban facilities accounted for 73 percent of facilities, 84 percent of stays, and 85 percent of Medicare payments.

> In 2021, for-profit facilities accounted for 72 percent of facilities, 74 percent of stays and 77 percent of Medicare payments.

Chart 8-5 Fee-for-service SNF admissions continued to decline in 2021

	Prepandemic			Pandemic		Average annual change	
Volume measure	2017	2018	2019	2020	2021	2017–2019	2020–2021
Covered admissions per 1,000 FFS beneficiaries	64.6	62.5	59.5	54.8	53.5	–4.0%	–2.4%
Covered days per 1,000 FFS beneficiaries	1,623	1,559	1,475	1,453	1,399	–4.7	–3.7
Covered days per admission	25.1	25.0	24.8	26.5	26.2	–0.6	–1.3

Note: SNF (skilled nursing facility), FFS (fee-for-service). Data are for the calendar year and include 50 states and the District of Columbia. Average annual changes are calculated using unrounded values and then rounded to the nearest tenth.

Source: Calendar year data from CMS, Office of Information Products and Data Analytics, 2022.

> To control for changes in FFS enrollment, we examine service use per 1,000 FFS beneficiaries. Between 2020 and 2021, SNF admissions per 1,000 FFS beneficiaries dropped 2.4 percent. Because stays were slightly shorter in 2021 than 2020, covered days declined more (3.7 percent). However, the decline in admissions and days per 1,000 FFS beneficiaries between 2020 and 2021 was less than the annual decline between 2017 and 2019.

Chart 8-6 Freestanding SNF Medicare margins remained high in 2021

	2016	2018	2019	2020	2021
All	11.6%	10.9%	12.1%	17.8%	17.2%
Rural	9.7	8.6	10.2	19.1	16.8
Urban	11.9	11.2	12.5	17.5	17.3
Nonprofit	2.6	0.8	1.7	3.0	2.8
For profit	14.1	13.7	15.2	21.0	20.6

Note: SNF (skilled nursing facility).

Source: MedPAC analysis of freestanding SNF cost reports 2016–2021.

> The aggregate Medicare margin for freestanding SNFs in 2021 (17.2 percent) exceeded 10 percent for the 22nd consecutive year (not all years are shown). Had we considered an allocated share of the federal relief funds providers received due to the coronavirus pandemic, we estimate the aggregate margin would be even higher, at 19.6 percent (not shown).

> The aggregate Medicare margin decreased in 2021 because SNFs' cost growth exceeded the growth in payments. Between 2020 and 2021, the average payment per day increased 3 percent, while costs per day increased 4 percent (data not shown). The relatively high cost growth reflects fewer covered days over which to spread fixed costs, an increase in routine costs per day, and a small decline in ancillary costs per day compared with 2020, consistent with declining therapy minutes under the new SNF case-mix system, the Patient-Driven Payment Model, which eliminated incentives to provide more therapy in order to receive higher payments. Higher routine costs per day reflect an increase in labor costs that may be driven by signing bonuses, use of contract labor, and a greater decline in lower-paid nursing aide staff relative to higher-paid nursing staff.

> Aggregate Medicare margins for freestanding SNFs varied widely across SNFs: One-quarter of SNFs had Medicare margins that were 27.9 percent or higher, and one-quarter had margins that were 3.8 percent or lower (data not shown). Consistent with several years before the pandemic, urban SNFs had a higher aggregate Medicare margin than rural or frontier SNFs in 2021. For-profit SNFs had a considerably higher aggregate Medicare margin than nonprofit SNFs. Compared with for-profit SNFs, nonprofit facilities were smaller (fewer beds and lower volume) and had lower payments per day, higher costs per day, and higher growth in costs per day between 2020 and 2021.

> Compared with SNFs in the lowest Medicare margin quartile, high-margin SNFs have lower standardized daily total, routine, and ancillary costs and lower costs per discharge. Further, high-margin SNFs have, on average, fewer nursing hours per resident day, adjusted for facility case mix. Economies of scale also affect the difference in financial performance. In 2021, high-margin SNFs had higher daily censuses on average and higher occupancy rates. High-margin SNFs also had, on average, a higher share of Medicare-covered SNF days attributable to beneficiaries receiving the Part D low-income subsidy and higher shares of total Medicaid-covered facility days. Facilities with a higher Medicaid mix may keep their costs lower, in part through lower staffing, contributing to their higher Medicare margins.

> In 2021, the average total margin (the margin across all payers and all lines of business) for freestanding facilities was 3.4 percent, up from 3.1 percent in 2020 (data not shown).

Chart 8-7 SNF quality measures were stable or improving between 2017 and 2019; 2020 and 2021 rates reflect conditions unique to the coronavirus PHE

	Prepandemic			Pandemic	
Measure	2017	2018	2019	2020	2021
Successful discharge to the community					
All SNFs	44.4%	44.3%	44.8%	38.6%	43.5%
For profit	43.6	43.5	43.7	37.6	42.7
Nonprofit	47.6	47.4	48.0	42.5	46.6
Freestanding	44.0	44.0	44.4	38.2	43.1
Hospital based	53.8	52.8	53.6	48.2	53.0
Hospitalization during SNF stay					
All SNFs	14.4%	14.1%	13.7%	14.2%	13.1%
For profit	14.9	14.6	14.2	14.7	13.5
Nonprofit	12.9	12.7	12.3	12.6	11.7
Freestanding	14.6	14.3	13.8	14.3	13.2
Hospital based	10.2	10.6	10.0	10.4	9.8

Note: SNF (skilled nursing facility). "Successful discharge to the community" includes beneficiaries discharged to the community (home with or without home health care) 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 occur during the SNF stay. 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. The "All SNFs" category includes the performance of government-owned SNFs, which are not displayed separately in the table.

Source: MedPAC analysis of SNF claims and linked inpatient hospital stays, 2017 through 2021, for fee-for-service beneficiaries.

> We report the Commission's quality measure results for 2020 and 2021 with the caveat that the pandemic and public health emergency–related policies confound our measurement and assessment of trends in our quality measures for several reasons. First, capacity constraints of acute care hospitals or post-acute care providers, increased mortality due to COVID-19 infections, and increased or earlier discharges to avoid the setting could affect the measures during the pandemic. Second, the public health emergency–related waiver of the three-day hospital stay could result in long-stay patients making up a greater share of SNF cases, which could affect the rates of both measures. Third, risk adjustment for these measures does not include COVID-19, so our models may not adequately adjust for the acuity and mix of patients receiving care during the pandemic.

Chart 8-8 Fee-for-service home health care use and spending declined slightly in 2021

	Prepandemic			Pandemic		Average annual change	
	2017	2018	2019	2020	2021	2017–2019	2020–2021
Medicare FFS home health users (millions)	3.4	3.4	3.3	3.1	3.0	–1.7%	–1.1%
Share of Medicare FFS beneficiaries using home health care	8.8%	8.7%	8.5%	8.1%	8.3%	–1.3%	2.5%
Total payments (in billions)	$17.9	$18.0	$17.9	$17.1	$16.9	>–0.1%	–1.2%
Total visits (millions)	104.8	103.9	99.7	81.1	76.8	–2.5%	–5.3%
Visit per user	30.7	30.8	30.2	26.6	25.4	–0.8%	–4.2%
30-day periods (millions)	N/A	N/A	N/A	9.6	9.3	N/A	–2.9%
30-day periods per 100 FFS Medicare beneficiary	N/A	N/A	N/A	25	26	N/A	0.7%

Note: FFS (fee-for-service), N/A (Not available). Percentage changes were calculated on unrounded data. Payment amounts shown here are lower than those displayed in Chart 8-2 due to the use of different data sources.

Source: MedPAC analysis of home health standard analytic files from CMS and the 2022 annual report of the Boards of Trustees of the Medicare trust funds.

> In 2021, the number of beneficiaries using FFS-covered home health care declined by 1.1 percent, and the volume of 30-day periods declined by 2.9 percent. FFS home health utilization and spending have been declining for several years, driven by growth in the number of beneficiaries enrolling in Medicare Advantage and a decline in aggregate and per capita FFS hospitalizations, which are a common source of referral to home health care. Controlling for the number of FFS beneficiaries, however, use of the benefit increased 0.7 percent in 2021. Nevertheless, the share of FFS beneficiaries using home health care (8.3 percent) remains below prepandemic levels.

> The number of visits per user fell 4.2 percent between 2020 and 2021. Fewer visits could, in part, reflect policy changes related to the coronavirus public health emergency, during which CMS expanded the use of telehealth in home health care, permitting agencies to provide virtual visits and other telehealth services under the benefit. (These changes were later made permanent.) No data are available on the number and type of telehealth services home health agencies provided in 2020 and 2021. It is not known, therefore, whether the decline in visits represents a real reduction in service provision or if some or all of those visits were replaced with telehealth services. Beginning July 1, 2023, home health agencies are required to report telehealth visits on Medicare claims, similar to what is required for in-person visits.

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

Type of 30-day period	2020	2021
Periods by source of referral		
Preceded by hospital or institutional PAC	25.7%	24.3%
Community admitted	74.3%	75.6%
Periods by timing of 30-day period		
Early	31.1%	29.3%
Late	68.9%	70.7%

Note: PAC (post-acute care). Periods "preceded by hospitalization or institutional PAC" refer to periods 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. "Community admitted" refers to periods for which there was no hospitalization or PAC stay in the previous 15 days. "Early" periods are periods for beneficiaries who have not received any home health care in the prior 60 days; "late" periods are the second or later in a series of consecutive periods.
Source: MedPAC analysis of 2021 home health standard analytic file.

> Most home health periods are not preceded by a hospitalization or institutional PAC stay, and these periods accounted for about three-quarters of PAC stays in 2020 and 2021.

> Home health periods for beneficiaries who have not received any home health care in the prior 60 days are classified as "early" under the home health payment system. Periods that are the second or later in a series of consecutive periods are classified as "late." The share of periods by timing or source of referral did not change substantially in 2021 compared to the prior year. The mix of cases by clinical payment group (data not shown) also did not change significantly.

Chart 8-10 Medicare margins for freestanding home health agencies, 2020 and 2021

	2020	2021	Share of agencies 2021
All	20.2%	24.9%	100%
Geography			
Mostly urban	20.0	24.8	85
Mostly rural	21.6	25.2	15
Type of control			
For profit	22.7	26.1	88
Nonprofit	12.4	20.2	12
Volume quintile (lowest to highest)			
First	11.6	14.0	20
Second	14.0	15.9	20
Third	17.0	19.3	20
Fourth	18.8	22.8	20
Fifth	22.4	28.3	20

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

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

> In 2021, freestanding home health agencies (HHAs) (87 percent of all HHAs) had an aggregate margin of 24.9 percent. The 2021 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 2019 averaged 16.4 percent (data not shown), indicating that most agencies have been paid well in excess of their costs under the PPS.

> HHAs that served mostly urban patients in 2021 had an aggregate margin of 24.8 percent; HHAs that served mostly rural patients had an aggregate margin of 25.2 percent. For-profit agencies in 2021 had an average margin of 26.1 percent, while nonprofit agencies had an average margin of 20.2 percent.

> Agencies with higher volumes of 30-day periods had higher margins. The agencies in the lowest-volume quintile in 2021 had an aggregate margin of 14.0 percent, while those in the highest quintile had an aggregate margin of 28.3 percent.

Chart 8-11 Changes in home health care quality in 2020 likely reflect disruption of COVID-19 public health emergency

	Prepandemic			Pandemic	
Measure	2017	2018	2019	2020	2021
Successful discharge to the community					
All HHAs	69.6%	70.4%	72.2%	61.8%	52.2%
For profit	68.2%	68.9%	70.7%	60.1%	50.7%
Nonprofit	76.6%	77.5%	78.9%	70.4%	59.7%
Freestanding	69.0%	69.8%	71.6%	61.1%	51.5%
Hospital based	75.3%	76.2%	77.5%	64.9%	58.2%
Hospitalization during home health care services					
All HHAs	21.4%	21.5%	21.4%	18.4%	18.2%
For profit	22.0%	22.1%	22.0%	18.8%	18.6%
Nonprofit	18.8%	18.9%	19.0%	17.0%	16.4%
Freestanding	21.7%	21.8%	21.6%	18.6%	18.4%
Hospital based	19.0%	19.1%	19.4%	16.9%	16.5%

Note: "Successful discharge to the community" includes beneficiaries discharged to the community (home with or without home health care) 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 home health agency claims and linked inpatient hospital stays, 2017 through 2021, for fee-for-service beneficiaries.

> From 2016 to 2019, the share of patients successfully discharged from home health care to the community rose from 69.2 percent to 72.2 percent (higher rates indicate better performance). Over this period, the share of patients hospitalized while receiving home health care increased slightly from 20.8 percent to 21.4 percent (higher rates indicate worse performance).

> While we report results for these measures in 2020 and 2021, these data reflect conditions unique to the public health emergency that confound our measurement and assessment of trends during the pandemic. For example, increased mortality due to COVID-19 infection and other changes to the health care delivery system could affect these measures. In addition, the Commission's quality metrics rely on risk-adjustment models that use performance from previous years to predict beneficiary risk. As a result, our models may not adequately represent the acuity and mix of patients receiving care in 2020. Therefore, we report the changes we have observed in the quality measures but do not draw conclusions about whether quality improved, worsened, or stayed the same in 2020.

> The implementation of 30-day periods in 2020 shortened the length of time beneficiaries received home health care, and likely also affected the results we report. Under the new unit of payment, time periods between the 31st and 60th day of home health care that were previously (before 2020) included as part of a home health spell of care became part of a postdischarge period. As a result, data on some hospitalizations that previously would have occurred within a home health stay could have been captured as occurring after discharge, resulting in a decline in the community discharge rate. Correspondingly, the data for 2019 and prior years reflect the 60-day unit of payment and thus cannot be compared with the 2021 data.

Chart 8-12 Number of fee-for-service IRF cases was stable in 2021

	Prepandemic		Pandemic		Average annual change	
	2017	2019	2020	2021	2017–2019	2020–2021
Number of IRF cases	396,000	409,000	379,000	379,000	1.6%	0.0%
Cases per 10,000 FFS beneficiaries	102.0	106.0	100.9	104.6	2.0	3.6
ALOS (in days)	12.7	12.6	12.9	12.9	–0.6	–0.2
Number of users	355,000	363,000	335,000	335,000	1.2	–0.1

Note: IRF (inpatient rehabilitation facility), FFS (fee-for-service), ALOS (average length of stay). 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.

> Between 2017 and 2019, the number of FFS cases steadily rose, reaching over 409,000 cases by 2019.

> A large portion of IRF volume comes from patients who are transferred from the acute care hospital (ACH) setting after surgery. Although the share of ACH cases discharged to IRFs was unaffected in 2020, the drop in volume that year (a decline of 7.4 percent) is consistent with a temporary suspension of elective surgeries in ACHs from March through May 2020.

> From 2020 to 2021, the number of FFS cases was stable at about 379,000 cases. However, when controlling for the number of FFS beneficiaries, the number of cases increased 3.6 percent in 2021. Average length of stay remained stable at 12.9 days.

Chart 8-13 The number of fee-for-service IRF cases with debility continued to rise in 2021

Type of case	Share of cases
Stroke	18.1%
Other neurological conditions	14.9
Debility	14.0
Brain injury	11.3
Fracture of the lower extremity	11.2
Other orthopedic conditions	7.3
Cardiac conditions	5.9
Spinal cord injury	4.6
Major joint replacement of lower extremity	3.0
All other	9.6

Note: IRF (inpatient rehabilitation facility). "Other neurological conditions" includes multiple sclerosis, Parkinson's disease, polyneuropathy, and neuromuscular disorders. Patients with debility have generalized deconditioning not attributable to other conditions. "Fracture of the lower extremity" includes hip, pelvis, and femur fractures. "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 fee-for-service IRF cases with valid patient assessment information were included in this analysis. Components may not sum to 100 percent due to rounding.

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

> In 2021, the most frequently occurring case type among fee-for-service (FFS) beneficiaries admitted to IRFs was stroke, which accounted for 18.1 percent of Medicare FFS cases.

> Due to the public health emergency, in addition to waiving the 3-hour rule in 2020, CMS waived the "60 percent rule," which requires that at least 60 percent of patients admitted to an IRF have as a primary diagnosis or comorbidity at least 1 of 13 qualifying conditions. The waiver of these rules allowed IRFs to treat a broader mix of patients, including those without a qualifying condition or who were unable to tolerate intensive therapy. Nevertheless, the mix of case types in IRFs remained relatively stable.

> Between 2020 and 2021, the share of IRF cases with a diagnosis of debility increased from 13.5 percent to 14.0 percent of IRF discharges. The share of cases with lower extremity fracture decreased from 11.3 percent to 11.2 percent, while the share of patients with stroke declined from 19.1 percent to 18.1 percent (2020 data not shown).

Chart 8-14 Freestanding and for-profit IRF Medicare margins remained high in 2021

	Prepandemic			Pandemic	
	2017	2018	2019	2020	2021
All IRFs	13.9%	14.7%	14.3%	13.4%	17.0%
Hospital based	1.4	2.6	2.2	1.7	5.8
Freestanding	25.7	25.4	24.7	23.4	25.8
Urban	14.2	15.0	14.7	13.7	17.4
Rural	8.7	9.9	8.6	9.5	11.5
Nonprofit	2.0	2.6	1.4	−0.1	5.3
For profit	24.3	24.6	24.3	23.5	25.3
Number of beds					
1–10	–10.6	−5.9	−4.3	−7.3	−2.4
11–24	0.7	2.3	2.1	2.3	5.7
25–64	15.7	16.9	16.0	15.1	18.9
65+	22.0	21.2	20.9	19.3	22.1

Note: IRF (inpatient rehabilitation facility).

Source: MedPAC analysis of cost report data from CMS.

> In 2021, the aggregate margin increased to 17.0 percent (17.5 percent when including Medicare's share of federal relief funds) from 13.4 percent in 2020 (14.9 percent when including Medicare's share of federal relief funds).

> Medicare margins vary by IRF type, with freestanding IRFs having a substantially higher aggregate margin compared to that of hospital-based facilities. Medicare margins also varied by ownership, with the aggregate margin of for-profit IRFs far exceeding that of non-profit IRFs.

> There are also large differences in Medicare margins by IRF size. In 2021, the aggregate Medicare margin for IRFs with 10 or fewer beds was –2.4 percent. By contrast, the Medicare margin for IRFs with 65 or more beds was 22.1 percent. These differences are in large measure due to economies of scale, as smaller facilities have higher unit costs.

Chart 8-15 IRF quality measures held steady or improved slightly between 2017 and 2019; 2020 and 2021 rates reflect conditions unique to the coronavirus PHE

	Prepandemic			Pandemic	
Measure	2017	2018	2019	2020	2021
Successful discharge to the community					
All IRFs	64.8%	65.1%	65.5%	67.3%	67.6%
For profit	64.7	65.1	65.3	66.8	67.0
Nonprofit	64.9	65.1	65.6	67.6	68.0
Freestanding	63.6	64.0	64.2	66.0	66.5
Hospital based	65.2	65.5	66.0	67.9	68.1
All-condition hospitalizations within an IRF stay					
All IRFs	7.9%	7.7%	7.8%	7.8%	7.2%
For profit	7.9	7.7	7.9	7.8	7.2
Nonprofit	7.8	7.7	7.7	7.8	7.3
Freestanding	8.0	7.8	7.8	8.0	7.2
Hospital based	7.8	7.7	7.7	7.8	7.2

Note: IRF (inpatient rehabilitation facility), PHE (public health emergency). "Successful discharge to the community" includes beneficiaries discharged to the community (home with or without home health care) who did not have an unplanned hospitalization or die in the 30 days after discharge. The "all-condition 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 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: MedPAC analysis of IRF claims and linked inpatient hospital stays from 2017 through 2021 for fee-for-service beneficiaries.

> From 2017 to 2019, IRFs' rates of successful discharge to the community and all-condition hospitalizations within an IRF stay remained steady.

> While we report 2020 and 2021 results for our quality measures, we have not used those results to inform our conclusions about trends in IRFs' quality of care. The results reflect temporary changes in the delivery of care and data limitations unique to the coronavirus pandemic rather than trends in quality of care provided to beneficiaries. In addition, the Commission's IRF quality metrics rely on risk-adjustment models developed using data from previous years. COVID-19 is a relatively new diagnosis and therefore is not included in the current risk-adjustment models, though many associated conditions are. As a result, our models may not adequately represent the acuity and mix of patients receiving care from IRFs during the pandemic. Therefore, we report the changes observed in the quality measures but do not draw conclusions about whether quality has improved, worsened, or stayed the same.

Chart 8-16 In 2021, fee-for-service LTCH volume continued to decline, but the number and share of nonqualifying cases increased compared to 2020

		2020	Average annual percent change 2017–2020	2021	Percent change 2020–2021
Cases	All	77,603	–12.6%	70,021	–9.8%
	Nonqualifying cases	18,702	–23.5	20,072	7.3
	Qualifying cases	58,901	–7.6	49,949	–15.2
	Share of qualifying cases	76%	6.0	71%	–6.0
Cases per 10,000 FFS beneficiaries	All	20.7	–11.8	19.5	–5.7
	Nonqualifying cases	5.0	–22.8	5.6	12.2
	Qualifying cases	15.7	–6.7	13.9	–11.4
Payment per case	All	$45,634	6.1	$48,557	6.4
	Nonqualifying cases	$32,401	10.3	$39,063	20.6
	Qualifying cases	$49,835	2.6	$52,745	5.8
Length of stay (in days)	All	27.6	1.6	27.6	–0.1
	Nonqualifying cases	23.8	0.6	25.7	8.1
	Qualifying cases	28.8	1.1	28.3	–1.7

Note: LTCH (long-term care hospital), FFS (fee-for-service). "Qualifying cases" 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. 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, on average, by 11.8 percent per year between 2017 and 2020. In contrast, the number of cases meeting the LTCH-qualifying criteria declined more slowly, falling 6.7 percent per year during the same period.

> In 2021, the volume of all LTCH cases fell nearly 10 percent. The volume of qualifying cases fell 15.2 percent that year, while the volume of nonqualifying cases increased, likely owing to the pandemic and the waiver of site neutral payments for nonqualifying cases.

> During the public health emergency (PHE), all cases were paid the higher, standard LTCH PPS rate. As a result of this temporary PHE-related payment change, the average payment per nonqualifying case between 2019 and 2020 increased 26 percent (not shown) and increased again by 20.6 percent between 2020 and 2021.

Chart 8-17 Ten MS–LTC–DRGs accounted for over half of LTCH fee-for-service discharges in 2021

MS–LTC–DRG	Description	Discharges	Share of cases
189	Pulmonary edema and respiratory failure	13,085	18.7%
207	Respiratory system diagnosis with ventilator support 96+ hours	10,936	15.6
177	Respiratory infections and inflammations with MCC	6,374	9.1
871	Septicemia without ventilator support 96+ hours with MCC	2,736	3.9
208	Respiratory system diagnosis with ventilator support <96 hours	2,476	3.5
166	Other respiratory system OR procedures with MCC	1,952	2.8
981	Extensive OR procedure unrelated to principal diagnosis with MCC	1,544	2.2
949	Aftercare with CC/MCC	1,326	1.9
539	Osteomyelitis with MCC	1,175	1.7
682	Renal failure with MCC	998	1.4
	Top 10 MS–LTC–DRGs	42,602	60.9
	Total	70,021	100.0

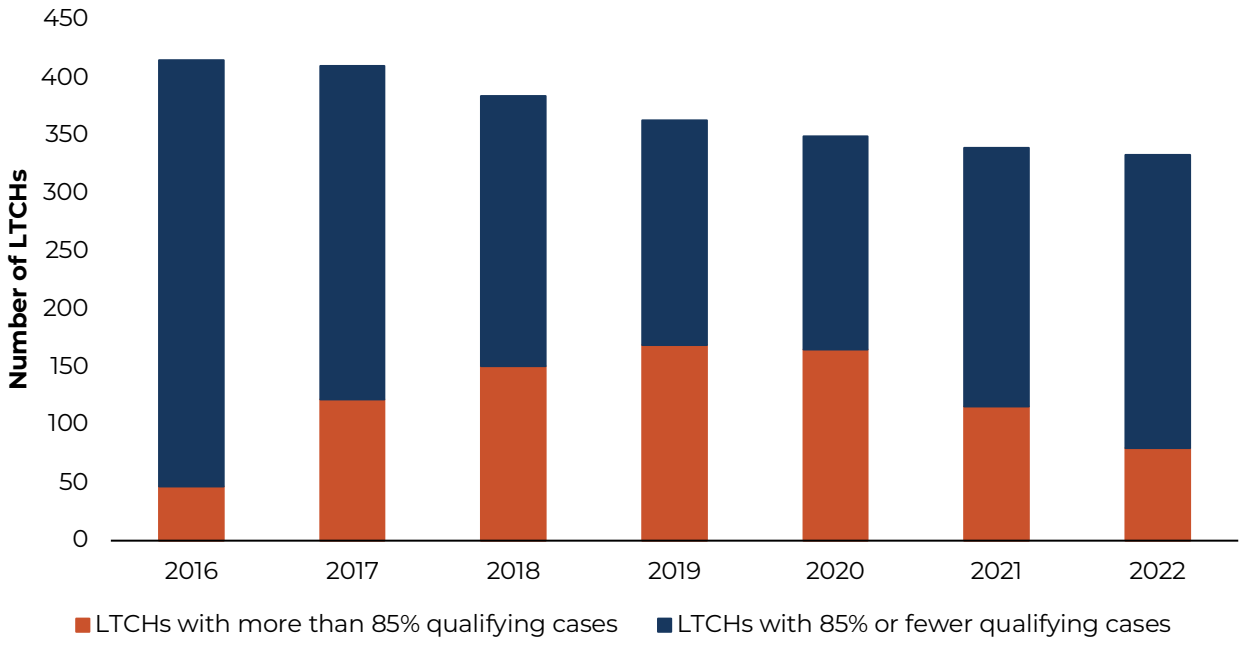
Note: MS–LTC–DRG (Medicare severity long-term care diagnosis related group), LTCH (long-term care hospital), MCC (major complication or comorbidity), OR (operating room), CC (complication or comorbidity). MS–LTC–DRGs are the case-mix system for LTCHs. Shares for each MS–LTC–DRG presented in the table are rounded, but the sum of the top 10 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 2021, the top 10 MS–LTC–DRGs accounted for over 60 percent of LTCHs' fee-for-service cases. Cases in LTCHs have grown more concentrated over time. In 2019, the top 10 MS–LTC–DRGs accounted for 53.7 percent of fee-for-service cases in LTCHs (data not shown).

> The share of fee-for-service LTCH cases in MS–LTC–DRG 177 (respiratory infections and inflammations with major complication or comorbidity) increased from 1.9 percent of cases in 2019 (not shown) to 9.1 percent of cases in 2021. The share of cases in MS–LTC–DRG 207 (respiratory system diagnosis with ventilator support 96+ hours) also increased, from 13.2 percent of cases in 2019 (not shown) to 15.6 percent of cases in 2021.

Chart 8-18 **The number and share of LTCHs with more than 85 percent of Medicare FFS cases meeting the LTCH PPS criteria fell during the PHE, when site-neutral payments were suspended**



Note: LTCH (long-term care hospital), FFS (fee-for-service), PPS (prospective payment system), PHE (public health emergency). "Qualifying cases" 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 stays that are covered by private plans.

Source: MedPAC analysis of LTCH impact files.

> Beginning in fiscal year 2016, only certain LTCH cases qualify for the higher standard LTCH PPS rate. 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.

> As the site-neutral policy was being phased in (2016 through 2019), the number and share of LTCHs with more than 85 percent of Medicare FFS cases meeting the LTCH PPS criteria increased.

> Starting January 27, 2020, the site-neutral payment policy was waived due to the coronavirus public health emergency (PHE). Under the waiver, which was in effect through the end of the PHE, all LTCH cases were paid the higher standard LTCH PPS rates. In 2021 and 2022, when the waiver was in effect for the entire year, the number and share of LTCHs with more than 85 percent of Medicare FFS cases meeting the LTCH PPS criteria decreased.

Chart 8-19 LTCHs' Medicare margins increased in 2020 and 2021 due to higher Medicare payments

	Prepandemic			Pandemic	
LTCH	2017	2018	2019	2020	2021
All	–2.2%	–0.5%	–1.6%	3.6	6.7%
Type of control					
Nonprofit	–13.0	–11.7	–12.2	–12.7	–9.6
For profit	–0.3	1.3	0.4	6.3	9.3
Facility share of qualifying cases					
High share	0.8	3.3	2.5	5.7	4.7
Low share	–1.9	–1.0	–2.9	2.5	7.8

Note: LTCH (long-term care hospital). "Qualifying cases" 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. "High share" means more than 85 percent of a provider's cases are qualifying cases in the year. "Low share" means 85 percent or fewer of a provider's cases are qualifying cases in the year.

Source: MedPAC analysis of cost report and Medicare Provider Analysis and Review 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 and remained negative through 2019.

> Due to the public health emergency waiver of site-neutral payment rates, all cases were paid the higher standard LTCH prospective payment system rates starting January 27, 2020. That year, the Medicare aggregate margin (excluding relief funds) for all LTCHs increased to 3.6 percent. In 2021, when LTCHs were paid the higher LTCH rate for the entire year, the aggregate margin nearly doubled to 6.7 percent. With reported Provider Relief Fund revenue allocated to Medicare payments, the aggregate margin in 2021 was 9.8 percent (data not shown).

> In 2021, also due to the public health emergency waiver of site-neutral payment rates, LTCHs with a high share (greater than 85 percent) of qualifying cases had an aggregate Medicare margin of 4.7 percent, while LTCHs with a low share (85 percent or less) of qualifying cases had an aggregate margin of 7.8 percent, excluding relief funds (data not shown).

Chart 8-20 Pandemic-related payment increases drove growth in LTCH Medicare PPS payments per case in 2020 and 2021

	Percent change			
	2017–2018	2018–2019	2019–2020	2020–2021
Payments per case				
All LTCHs	3.8%	3.0%	9.4%	7.1%
LTCHs with >85% qualifying cases	6.6	1.9	9.3	8.0
Cost per case				
All LTCHs	3.0	4.5	4.4	3.9
LTCHs with >85% qualifying cases	3.9	2.9	5.6	9.5

Note: LTCH (long-term care hospital), PPS (prospective payment system). "Qualifying cases" 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.

Source: MedPAC analysis of cost report data from CMS.

> Between 2020 and 2021, aggregate Medicare payments per case for all LTCHs increased 7.1 percent to more than $48,000 per case (latter data not shown). For LTCHs with high shares (more than 85 percent) of qualifying cases, payments per case increased 8.0 percent to more than $56,000 per case (not shown) during the same period. This increase in payments is likely due to the suspension of the 2 percent sequestration and waiver of site-neutral payments.

> In 2021, reduced case volume and coronavirus pandemic–related costs likely contributed to aggregate growth in costs per case. Between 2020 and 2021, aggregate cost per case for all LTCHs rose 3.9 percent to nearly $45,000 per case. For LTCHs with high shares of qualifying cases, costs increased 9.5 percent to nearly $54,000 per case (not shown) during the same period.

Chart 8-21 LTCH quality measures were worsening or stable between 2017 and 2019; 2020 and 2021 rates reflect conditions unique to the coronavirus pandemic and related PHE

	Prepandemic			Pandemic	
Measure	2017	2018	2019	2020	2021
Successful discharge to community	24.4%	22.9%	22.1%	23.0%	22.4%
Hospitalization during LTCH stay	5.3	5.2	5.3	6.1	6.2

Note: LTCH (long-term care hospital), PHE (public health emergency). "Successful discharge to the community" includes beneficiaries discharged to the community 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 data from CMS.

> From 2017 to 2019, the share of fee-for-service beneficiaries successfully discharged from LTCHs to the community declined from 24.4 to 22.1 (lower rates indicate worse performance), although the share that were hospitalized during the LTCH stay was unchanged.

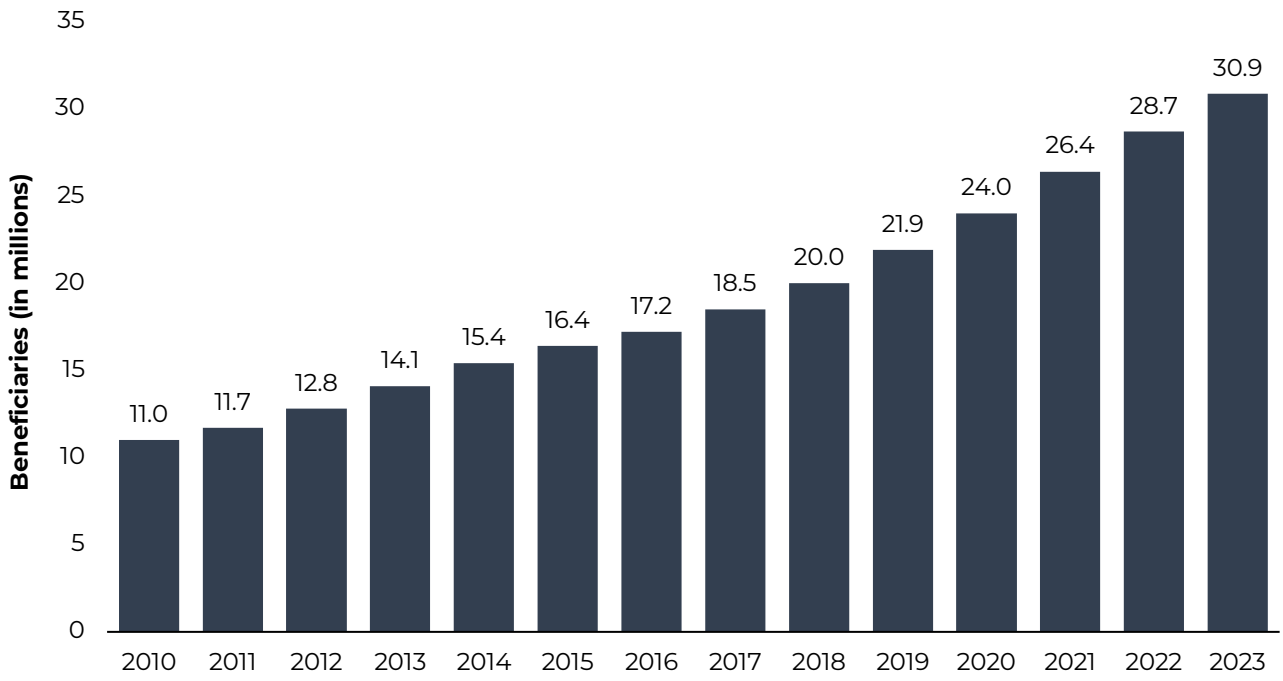
> While we report 2020 and 2021 results for quality measures we track, these data reflect conditions unique to the PHE that confound our measurement and assessment of trends during the pandemic. For example, increased mortality due to COVID-19 infection and capacity constraints of acute care hospitals likely affected outcomes. In addition, the Commission's quality metrics rely on risk-adjustment models that use performance from previous years to predict beneficiary risk; COVID-19 is not included in the current models. As a result, our models may not adequately represent the acuity and mix of patients receiving care during the pandemic. Therefore, we report the changes we have observed in the quality measures but do not draw conclusions about whether quality improved, worsened, or stayed the same during the pandemic.

SECTION

9

Medicare Advantage

Chart 9-1 Enrollment in MA plans, 2010–2023



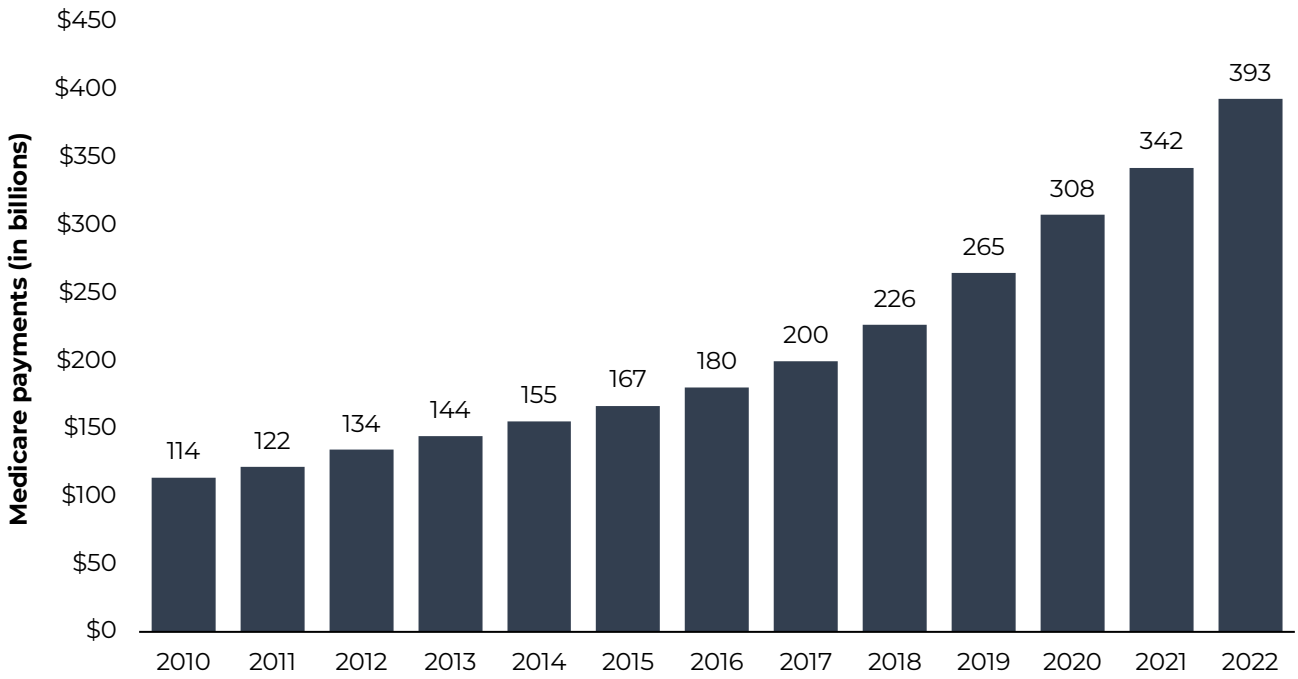
Note: MA (Medicare Advantage).

Source: CMS Medicare managed care contract reports and monthly summary reports, February 2010–2023.

> In February 2023, enrollment in MA plans, which are paid on an at-risk capitated basis, reached 30.9 million, or 52 percent of all eligible Medicare beneficiaries (only beneficiaries enrolled in both Part A and Part B are eligible to enroll in an MA plan). An additional 1 percent of all Medicare beneficiaries with both Part A and Part B coverage are enrolled in other private plans such as 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 (data not shown).

> MA enrollment has grown steadily since 2010, increasing nearly threefold. Enrollment growth has been particularly rapid in recent years, climbing by at least 8 percent in each of the last six years.

Chart 9-2 Medicare payments to MA plans, 2010–2022



Note: MA (Medicare Advantage). In contrast with prior MedPAC estimates, the figures above do not include Medicare MSA plans, cost-reimbursed plans, Medicare-Medicaid demonstration plans, and the Program of All-Inclusive Care for the Elderly.

Source: MedPAC estimate based on the Reports of The Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust funds, 2020-2023.

> The Medicare program paid MA plans an estimated $393 billion in 2022 to cover Part A and Part B services for MA enrollees.

> The rapid growth in MA enrollment (Chart 9-1) coincided with rapid growth in total Medicare payments to MA plans. From 2017 to 2022, total payments to MA plans nearly doubled.

Chart 9-3 MA plans available to almost all Medicare beneficiaries, 2016–2023

	Share of Medicare beneficiaries living in counties with plans available					Average plan offerings per beneficiary
	CCPs					
	HMO or local PPO (local CCP)	Regional PPO	Any CCP	PFFS	Any MA plan	
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
2022	99	74	99	35	99	36
2023	99	74	99	29	>99.5	41

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 (special needs plans, employer plans) or are not paid based on MA rates (cost plans and certain demonstration plans). For 2015 through 2021, "share of Medicare beneficiaries" includes beneficiaries who do not have both Part A and Part B coverage (i.e., includes all Medicare beneficiaries). As of 2022, the share of Medicare beneficiaries includes only beneficiaries with both Part A and Part B coverage (i.e., MA-eligible beneficiaries).

Source: MedPAC analysis of plan bid data from CMS, 2016–2023.

> 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 one or more entire states and have networks that may be looser than those of local PPOs. CCPs accounted for 98 percent of Medicare private plan enrollees as of February 2023 (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 99 percent of eligible Medicare beneficiaries in 2022, and regional PPOs are available to 74 percent of beneficiaries. Since 2006, almost all Medicare beneficiaries have had MA plans available (data not shown); Nearly 100 percent have an MA plan available in 2023.

> The number of plans from which beneficiaries may choose in 2023 is higher than at any time during the years examined. In 2023, beneficiaries can choose from an average of 41 plans operating in their counties.

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

Plan type	Total enrollees (in thousands)					Percent change 2022–2023
	2019	2020	2021	2022	2023	
Local CCPs	20,502	22,704	25,325	27,878	30,291	9%
Regional PPOs	1,255	1,170	1,003	756	534	–29
PFFs	118	87	61	48	37	–23

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 2019–2023.

> Almost all MA enrollees (98 percent) choose local CCPs (HMOs or local PPOs), which limit or discourage use of out-of-network providers. Though network requirements may be looser in regional PPOs and PFFS plans, enrollment in both types of plans has been declining for several years and dropped sharply in 2023, with enrollment in regional PPOs falling by 29 percent and enrollment in PFFS plans falling by 23 percent.

> Combined enrollment in the three types of plans grew by 8 percent from February 2022 to February 2023 (data not shown). Enrollment in local CCPs grew by 9 percent over the past year, and special needs plans (SNPs) accounted for 45 percent of this growth (data not shown). Local PPOs grew by 14 percent over the past year and accounted for nearly two-thirds (64 percent) of the growth in local CCP enrollment (data not shown). Most enrollment growth among HMOs (92 percent) occurred within SNPs (data not shown). The growth in SNP and local PPO enrollment may be driven by increases in Medicare payments for extra benefits of MA enrollees (data not shown).

Chart 9-5 MA and cost plan enrollment by state and type of plan, 2023

State or territory	All MA-eligible beneficiaries (in thousands)	Distribution (in percent) of beneficiaries by plan type					
		HMO	Local PPO	Regional PPO	PFFS	Cost	Total
U.S. total	59,914	30%	21%	1%	0%	0%	52%
Alabama	1,011	29	32	0	0	0	61
Alaska	100	0	2	0	0	0	2
Arizona	1,330	38	15	0	0	0	53
Arkansas	616	19	24	2	1	0	46
California	6,018	49	5	0	0	0	54
Colorado	910	36	19	0	0	0	55
Connecticut	660	20	35	0	0	0	56
Delaware	216	14	18	0	0	0	32
Florida	4,668	37	19	2	0	0	58
Georgia	1,722	16	38	3	0	0	57
Hawaii	260	22	39	0	0	0	61
Idaho	351	32	18	0	0	0	50
Illinois	2,133	14	25	0	0	0	40
Indiana	1,245	21	28	1	0	0	50
Iowa	623	16	18	0	0	2	37
Kansas	528	11	21	1	0	0	34
Kentucky	893	26	27	1	0	0	55
Louisiana	854	44	12	1	0	0	57
Maine	340	33	26	0	0	0	59
Maryland	961	14	11	0	0	0	25
Massachusetts	1,276	18	15	1	0	0	33
Michigan	2,052	23	37	0	0	0	60
Minnesota	1,030	17	39	0	0	6	62
Mississippi	588	22	18	1	0	0	41
Missouri	1,203	28	25	1	0	0	55
Montana	234	8	21	0	0	0	30
Nebraska	343	16	15	0	0	3	34
Nevada	524	44	10	0	0	0	54
New Hampshire	297	13	22	0	0	0	36
New Jersey	1,519	13	30	0	0	0	43
New Mexico	412	26	26	0	0	0	52
New York	3,464	32	19	3	0	0	54
North Carolina	2,011	27	26	1	0	0	54
North Dakota	131	0	16	0	0	17	33
Ohio	2,284	34	20	1	0	0	55
Oklahoma	716	18	22	0	0	0	41
Oregon	854	35	22	0	0	0	57
Pennsylvania	2,641	30	25	0	0	0	55
Puerto Rico	674	94	1	0	0	0	95
Rhode Island	211	44	13	0	0	0	57
South Carolina	1,102	12	30	3	0	0	45
South Dakota	177	2	16	0	0	18	35
Tennessee	1,336	36	18	0	0	0	54
Texas	4,187	32	21	3	0	0	56
Utah	405	38	16	0	0	0	54
Vermont	148	5	25	2	0	0	33
Virgin Islands	19	1	29	0	0	0	30
Virginia	1,468	25	13	1	0	0	39
Washington	1,348	34	15	0	0	0	49
Washington, D.C.	79	12	21	0	0	0	32
West Virginia	417	8	42	0	0	4	54
Wisconsin	1,193	30	23	1	0	4	58
Wyoming	113	0	10	0	1	1	13

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 but does not include beneficiaries residing in foreign areas. Component percentages and U.S. total may not sum to totals due to rounding. We report MA enrollment as a share of MA-eligible beneficiaries (Medicare beneficiaries with both Part A and Part B coverage).

Source: CMS enrollment and population data, February 2023.

Chart 9-6 MA plan benchmarks, bids, and Medicare program payments relative to FFS spending, 2023

	All plans	HMOs	Local PPOs	Regional PPOs	All plans after coding estimate
Benchmarks/FFS	109%	109%	110%	95%	114%
Bids/FFS	83	82	85	82	87
Payments/FFS	101	100	102	91	106

Note: MA (Medicare Advantage), FFS (fee-for-service), HMO (health maintenance organization), PPO (preferred provider organization), PFFS (private fee-for-service). Employer plans do not submit plan bids and generally receive payment based on the bidding behavior of PPOs. Thus, employer plans are included only in "Payments/FFS." We estimate FFS spending by county using the 2023 MA rate book. We removed spending related to the remaining double payment for indirect medical education payments made to teaching hospitals. To account for our most recent coding estimate of 4.9 percent (after accounting for the mandatory coding adjustment which reduces MA risk score by 5.9 percent), we estimated overall benchmarks, bids, and payments if coding differences between MA and FFS were fully reflected (i.e., if the risk-adjusted differences between MA and FFS did not include coding differences). We assume, conservatively, that the coding differences for 2023 are the same as for 2021 (the most recent year of data available). We did not estimate coding differences between MA and FFS by plan type. Although MA enrollees must be enrolled in both Part A and Part B, the FFS spending denominator used in the table includes all Part A and Part B spending. Overall MA payments relative to actual historical spending for FFS enrollees with both Part A and Part B have been historically similar to our estimates using all FFS enrollees. MA benchmarks, bids, and payments assume this level of FFS spending. All numbers in this table have been risk adjusted and reflect quality bonuses but have not been adjusted for favorable selection of beneficiaries in MA plans, and only aggregate numbers for all plans have been adjusted for coding intensity differences between MA and FFS.

Source: MedPAC analysis of CMS FFS spending projections and plan bid data from CMS, October 2022.

> 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 a bidding target in each county that is 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 typically have their benchmarks raised by 5 percent (and up to 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 is typically 65 percent or 70 percent. After accounting for administrative expenses and profit, plans must return rebates to enrollees in the form of lower cost sharing, supplemental benefits, or lower premiums.

> We estimate that MA benchmarks average 109 percent of FFS spending when weighted by MA enrollment. The ratio varies by plan type, as they draw enrollment from different geographic areas.

> Plans' enrollment-weighted bids average 83 percent of CMS's FFS spending projections for 2023.

> After accounting for risk-coding differences between FFS and MA plans that have not been resolved through the coding intensity factor, we estimate that MA payments are 6 percent higher than spending for similar beneficiaries in FFS. This estimate would be higher if we included an adjustment for the effect of favorable selection—where payments to plans are systemically greater than plans' spending for their enrollees.

Chart 9-7 Impact of coding intensity on MA risk scores was larger for enrollees eligible for partial or full Medicaid benefits, 2021

Medicaid eligibility	Coding intensity relative to FFS Medicare
All MA enrollees	10.8%
No Medicaid benefits	10.2
Partial Medicaid benefits	14.5
Full Medicaid benefits	11.3

Note: MA (Medicare Advantage), FFS (fee-for-service). Analysis is based on retrospective cohorts of 2021 enrollees, tracked backward for as long as they were continuously enrolled in the same program (FFS or MA) or as far back as 2007. The analysis compares risk scores for MA and FFS beneficiaries with the same Medicaid eligibility (e.g., MA enrollees eligible for full Medicaid benefits are compared with FFS beneficiaries eligible for full Medicaid benefits) and accounts for differences in age, sex, and length of enrollment between the MA and FFS populations.

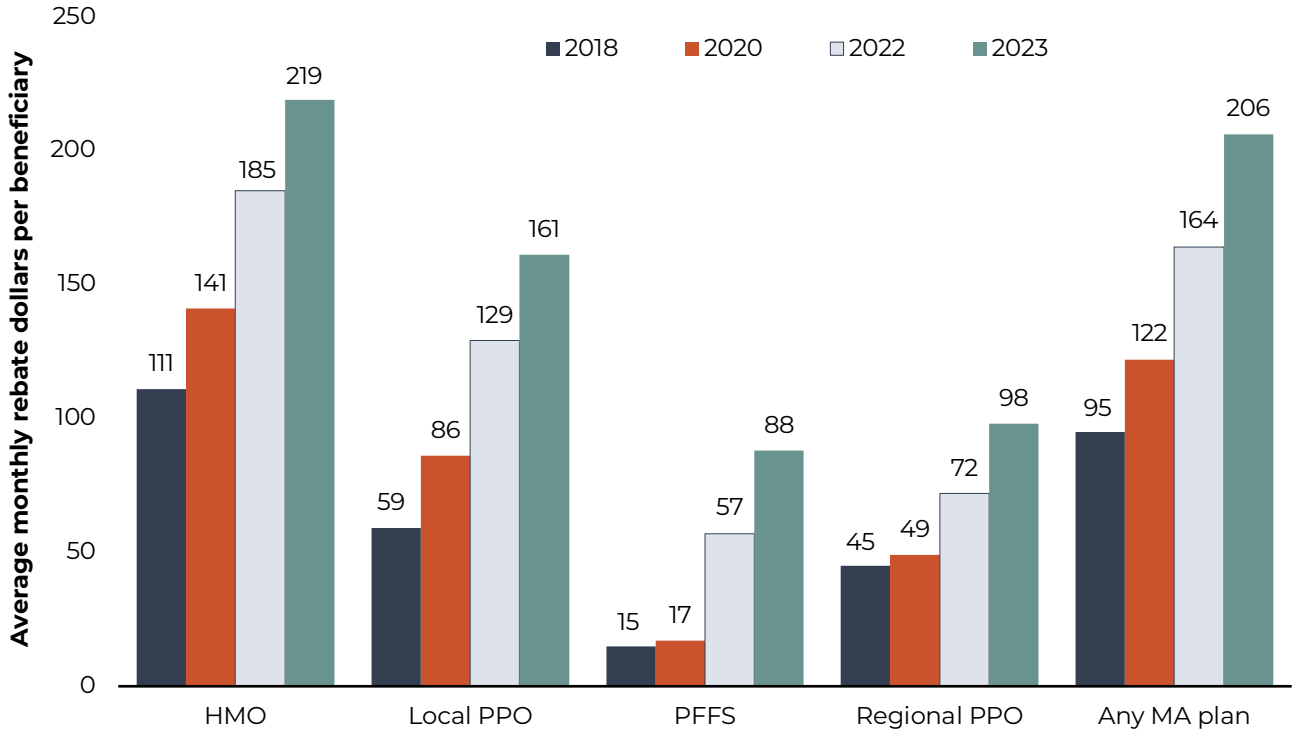
Source: MedPAC analysis of CMS enrollment and risk score files, 2007 through 2021.

> Payments to MA plans are risk adjusted to account for differences in health status. Higher risk scores increase payments to plans for enrollees with higher expected Medicare spending. Risk scores are based on demographic information and diagnoses that plans submit to CMS. Documenting additional diagnosis codes raises plan enrollees' risk scores, generating two distinct benefits for MA plans: (1) increasing plans' monthly payments and (2) increasing the rebates plans use to provide extra benefits to enrollees. Plans that document relatively more diagnosis codes have a competitive advantage over other plans. In contrast, the payment policies in FFS Medicare offer relatively little incentive to code all diagnosis codes. This difference in coding incentives causes beneficiary risk scores to be higher when a beneficiary enrolls in MA than if the same beneficiary enrolls in FFS Medicare. As a result of higher MA coding intensity, the Medicare program pays MA plans more than the program would have paid for services provided through FFS Medicare.

> In 2021, MA risk scores on average were 10.8 percent higher than risk scores for comparable FFS beneficiaries.

> MA enrollees who were eligible for full or partial Medicaid benefits had higher coding intensity relative to FFS than enrollees who were not eligible for Medicaid. Risk scores for MA enrollees eligible for partial Medicaid benefits were 14.5 percent higher than the scores for FFS beneficiaries eligible for partial Medicaid benefits, and risk scores for MA enrollees eligible for full Medicaid benefits were 11.3 percent higher than the scores for FFS beneficiaries eligible for full Medicaid benefits. By contrast, risk scores for MA enrollees who were not eligible for Medicaid were 10.2 percent higher than the scores for their FFS counterparts,

Chart 9-8 Average monthly rebate dollars, by plan type, 2018–2023



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 data from CMS.

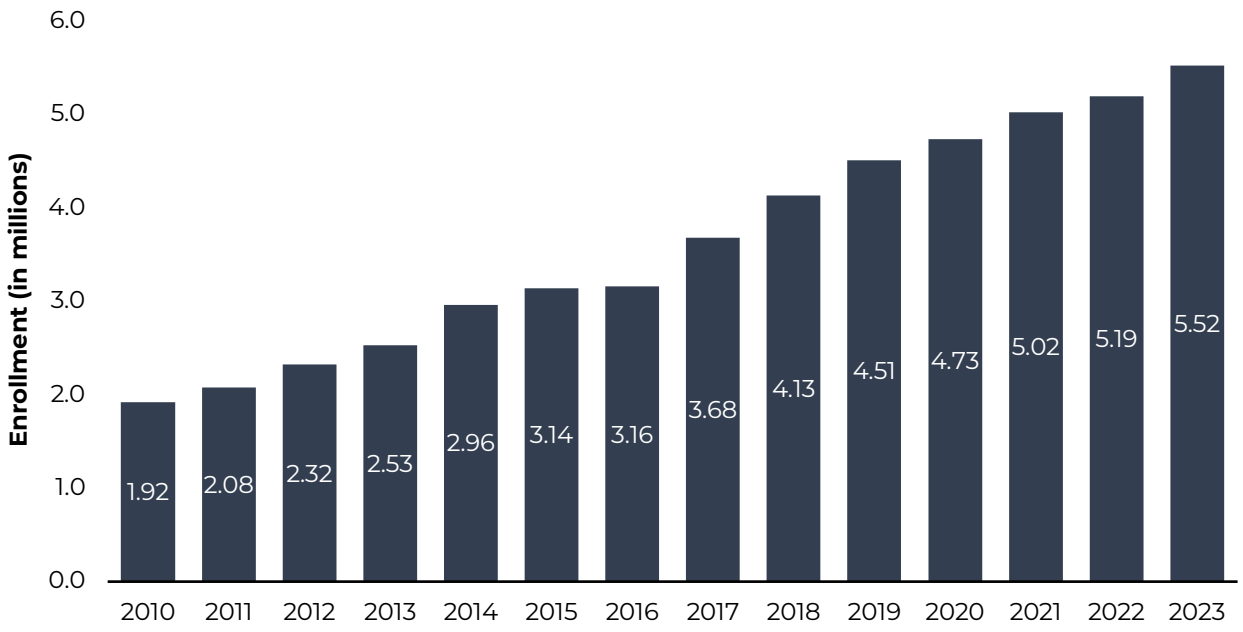
> Perhaps the best summary measure of plan benefit value is the average rebate, which plans receive to provide additional benefits that are not covered under Medicare Part A and Part B. Plans are awarded rebates for bidding under their benchmarks. The rebates must be returned to the plan members in the form of extra benefits (after accounting for plan margins and administrative costs). The extra benefits may be lower cost sharing, supplemental benefits, or lower premiums. The average rebate for all nonemployer, non–special needs plans rose to a high of $206 per month per beneficiary for 2023.

> 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 $219 per month per beneficiary for 2023.

> For local PPOs, rebates have risen sharply in recent years, more than doubling since 2019.

> While the availability of PFFS plans is relatively low, rebates for PFFS plans rose sharply in 2023 among the relatively small number of PFFS plans.

Chart 9-9 Enrollment in employer group MA plans, 2010–2023



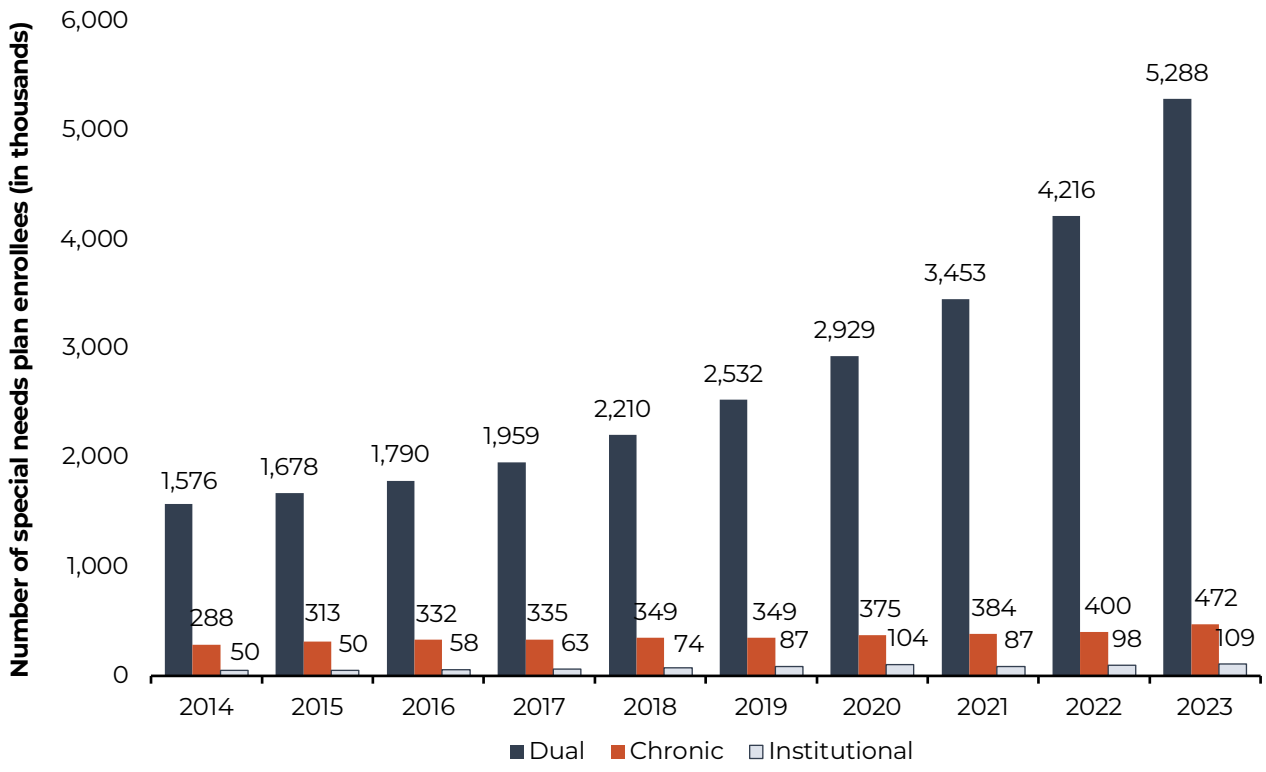
Note: MA (Medicare Advantage).

Source: CMS enrollment data, February 2010–2023.

> 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 2023, about 5.5 million enrollees were in employer group plans, or about 18 percent of all MA enrollees. Employer plan enrollment grew by 6 percent from 2022 and has more than doubled since 2013.

Chart 9-10 Number of special needs plan enrollees, 2014–2023



Source: CMS special needs plans comprehensive reports, April 2014–2023.

> The Congress created special needs plans (SNPs) as a new Medicare Advantage (MA) plan type in the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 to provide a common framework for the existing plans serving special needs beneficiaries and to expand beneficiaries' access to and choice among MA plans.

> SNPs were originally authorized for five years, but SNP authority was extended several times. The Bipartisan Budget Act of 2018 made SNPs permanent.

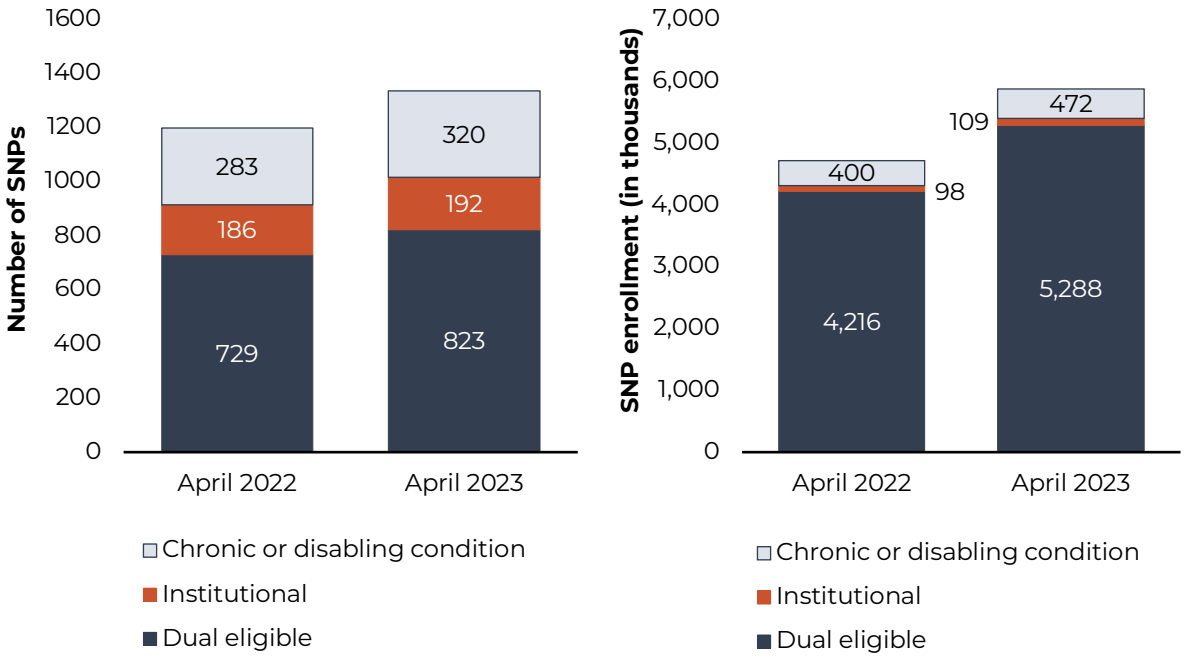
> CMS approves three types of SNPs: Dual-eligible SNPs enroll only beneficiaries dually entitled to Medicare and Medicaid, chronic condition SNPs enroll only beneficiaries who have certain chronic or disabling conditions, and institutional SNPs enroll only beneficiaries who reside in institutions or are nursing-home certified.

> Enrollment in dual-eligible SNPs has grown continuously and exceeds 5.2 million in 2023, tripling since 2014.

> Enrollment in chronic condition SNPs has grown at varying rates as plan requirements have changed, but it has generally risen annually since 2014.

> Enrollment in institutional SNPs increased to its highest level ever in 2023.

Chart 9-11 Number of SNPs and SNP enrollment rose from 2022 to 2023



Note: SNP (special needs plan).

Source: CMS special needs plans comprehensive reports, April 2022 and 2023.

> The number of SNPs increased by 11 percent from April 2022 to April 2023. Dual-eligible SNPs increased by 13 percent, institutional SNPs increased by 3 percent, and the number of chronic condition SNPs increased by 13 percent.

> In 2023, most SNPs (61 percent) are for dual-eligible beneficiaries, while 16 percent are for beneficiaries who reside in institutions (or reside in the community but have a similar level of need), and 24 percent are for beneficiaries with chronic conditions.

> From April 2022 to April 2023, the number of SNP enrollees increased by 24 percent. Enrollment in SNPs for dual-eligible beneficiaries grew by 25 percent, enrollment in SNPs for institutionalized beneficiaries increased by 11 percent, and enrollment in SNPs for beneficiaries with certain chronic conditions grew by 18 percent. Enrollment in all SNPs has grown from 0.9 million in May 2007 (data not shown) to 5.9 million in April 2023.

> The availability of SNPs varies by type of special needs population served (data not shown). In 2022, 94 percent of beneficiaries reside in areas where SNPs serve dual-eligible beneficiaries (unchanged from 2022), 74 percent live where SNPs serve institutionalized beneficiaries (up from 77 percent in 2022), and 66 percent live where SNPs serve beneficiaries with chronic conditions (up from 59 percent in 2022).

Chart 9-12 MA enrollment patterns, by age, dual-eligible status, and ESRD status, June 2022

	All MA-eligible beneficiaries		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	57.6	100%	29.2	100%	28.4	100%	49%
Aged (65 or older)	50.3	87	25.7	88	24.6	87	49
Under 65	7.2	13	3.5	12	3.7	13	52
Non–dual eligible	46.2	80	24.4	84	21.8	77	47
Aged (65 or older)	43.2	75	23.0	79	20.3	71	47
Under 65	3.0	5	1.4	5	1.6	5	52
Full dual eligibility	8.0	14	3.8	13	4.1	15	52
Aged (65 or older)	4.9	8	2.1	7	2.7	10	56
Under 65	3.1	5	1.7	6	1.4	5	46
Partial dual eligibility	3.4	6	1.0	3	2.4	8	71
Aged (65 or older)	2.2	4	0.6	2	1.7	6	74
Under 65	1.1	2	0.4	1	0.8	3	66
Enrollment subcategories, all ages							
ESRD	0.5	1	0.3	1	0.2	1	42
Beneficiaries with partial dual eligibility							
QMB only	1.7	3	0.5	2	1.2	4	70
SLMB only	1.0	2	0.3	1	0.8	3	73
QI	0.6	1	0.2	1	0.4	2	73

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 (PACE), 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 2022, Puerto Rico had about 630,000 Medicare beneficiaries enrolled in MA plans, and about 288,000 were enrolled in dual-eligible special needs plans. Figures may not sum to totals due to rounding.

Source: MedPAC analysis of 2022 common Medicare environment files.

> Medicare beneficiaries with Medicaid benefits who have full dual eligibility (i.e., those who have coverage of 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 have 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 (such as QMBs).

> Medicare plan enrollment among the dually eligible continues to increase. In 2021, 52 percent of fully dual-eligible beneficiaries were in MA plans (up from 46 percent in 2021; data not shown), and 71 percent of partial dual-eligible beneficiaries were in MA plans (up from 66 percent in 2021; data not shown). QI beneficiaries have the highest rates of MA enrollment among partial duals (73 percent).

> A substantial share of the dually eligible (37 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 less likely than aged fully dual-eligible beneficiaries to enroll in MA (46 percent vs. 56 percent, respectively). A higher share of MA enrollees are fully dual eligible compared with FFS enrollees (15 percent vs. 13 percent, respectively).

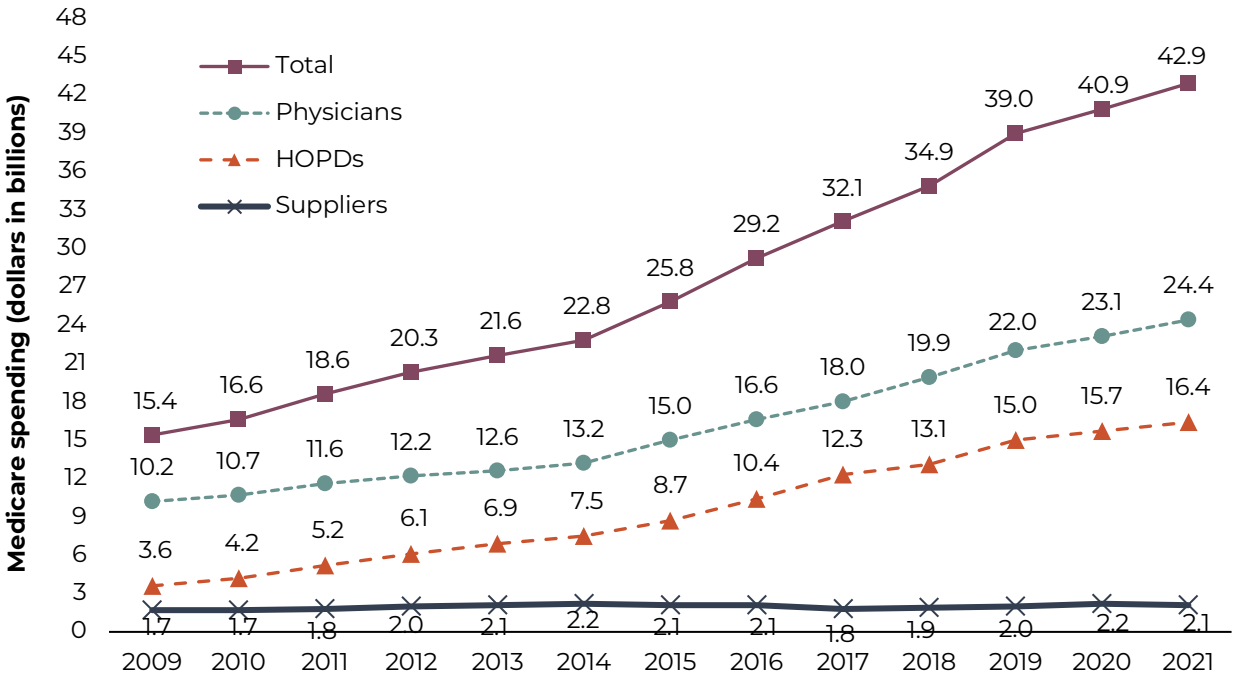
> ESRD beneficiaries had higher rates of plan enrollment in 2022 (42 percent) compared with 2021 (35 percent; data not shown).

SECTION

10

Prescription drugs

Chart 10-1 Medicare spending for Part B drugs furnished by physicians, hospital outpatient departments, and suppliers, 2009–2021



Note: HOPD (hospital outpatient department). Data include Part B–covered drugs furnished by several provider types, including physicians, suppliers, and HOPDs, 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 other methods. 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 its beneficiaries spent about $43 billion on separately paid Part B drugs in 2021, with physician offices, HOPDs, and suppliers accounting for 57 percent, 38 percent, and 5 percent of spending, respectively.

> Between 2009 and 2021, Part B drug spending grew 8.9 percent per year on average. Growth was more rapid between 2009 and 2019 (9.7 percent per year on average) than between 2019 and 2021 (4.9 percent per year on average). The slower spending growth between 2019 and 2021 reflects the decline in FFS enrollment; controlling for the change in FFS enrollment, spending grew nearly 9 percent per year on average during that period.

> Overall, from 2009 to 2021, Part B drug spending has grown more rapidly for HOPDs than for physicians and suppliers—at average annual rates of about 13 percent, 8 percent, and 2 percent, respectively.

> The data exclude Part B drugs furnished by critical access hospitals and Maryland hospitals, which are not paid under the general Part B drug average sales price payment system. Medicare and beneficiaries spent about $1.2 billion in critical access hospitals and $0.4 billion in Maryland hospitals for Part B drugs in 2021. Also, the data do not reflect Part B drugs paid as part of larger payment bundles (i.e., certain drugs furnished by HOPDs that are packaged into payment for other services and drugs furnished by dialysis facilities that are paid under the broader dialysis payment bundle).

Chart 10-2 Change in Medicare payments and utilization for separately payable Part B drugs, 2009–2021

	2009	2021	Average annual growth 2009–2021
Total payments: Separately payable Part B drugs (in billions)	$11.6*	$40.2*	10.9%*
Total payments: All Part B drugs excluding vaccines (in billions)	$11.4	$39.1	10.8
Number of beneficiaries using a Part B drug (in millions)	2.5	3.6	3.2
Average number of Part B drugs per beneficiary	1.35	1.31	–0.3
Average annual payment per Part B drug per beneficiary	$3,396	$8,241	7.7
Total payments: Part B vaccines (in billions)	$0.2	$1.1	14.2
Number of beneficiaries using a Part B vaccine (in millions)	13.4	14.7	0.7
Average number of Part B vaccines per beneficiary	1.08	1.09	0.1
Average annual payment per Part B vaccine per beneficiary	$15	$67	13.3

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 other methods. "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 2021 (i.e., drugs that were packaged under the outpatient prospective payment system in 2009 or 2021 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 $42.9 billion in 2021, 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 10.9 percent per year, on average, between 2009 and 2021.

> Medicare spending on separately payable Part B drugs excluding Part B–covered preventive vaccines grew at a similar rate (10.8 percent per year) between 2009 and 2021.

> Growth in the average price that Medicare Part B paid per drug was the largest factor contributing to increased spending for separately payable Part B drugs excluding vaccines between 2009 and 2021. During that period, the average annual payment per drug grew 7.7 percent per year on average, which reflects increases in the prices of existing drugs; the launch of new, higher-priced drugs; and shifts in the mix of drugs. Growth in the number of beneficiaries using nonvaccine Part B drugs (about 3.2 percent per year on average) also contributed to increased spending. The number of Part B drugs received per user declined slightly.

> In 2021, Medicare and beneficiaries spent $1.1 billion on three Part B–covered preventive vaccines (influenza, pneumococcal, and hepatitis B) furnished by physicians, hospital outpatient departments, and pharmacy suppliers. Between 2009 and 2021, Part B vaccines spending grew 14 percent per year on average. Almost all of that growth was due to growth in the average payment per vaccine, which climbed at an average rate of 13 percent per year, reflecting higher launch prices for new influenza and pneumococcal vaccines and postlaunch price increases for vaccines.

Chart 10-3 Top 20 Part B drugs, 2021

		2021			Percent change, 2020–2021		
		Total spending (billions)	Number of users	Average spending per user	Total spending	Number of users	Average spending per user
Keytruda	CA	4.0	63,200	$62,900	14%	7%	6%
Eylea	MD	3.4	312,200	11,000	13	9	4
Prolia/Xgeva	CA SE, OS	1.8	627,600	2,800	9	7	2
Opdivo	CA	1.6	25,600	61,500	–1	0	–1
Darzalex	CA	1.5	18,800	81,400	64	32	24
Rituxan*	AR, CA, ID	1.3	64,900	20,100	–17	–3	–14
Lucentis	MD	1.0	115,200	9,100	–6	–5	–1
Orencia	CA SE, RA	1.0	31,700	31,200	–3	5	–8
Avastin*	CA, MD	0.9	191,200	4,600	–14	–6	–9
Neulasta*	CA SE	0.9	85,700	10,100	–29	–4	–26
Tecentriq	CA	0.7	12,700	51,700	5	2	4
Remicade*	AR, ID	0.6	53,900	12,000	–18	0	–18
Soliris	AI	0.6	1,700	382,700	5	0	5
Ocrevus	MS	0.6	12,800	47,600	–2	3	–5
Entyvio	ID	0.5	16,000	32,900	21	14	6
Herceptin*	CA	0.5	18,500	27,600	–25	–4	–22
Gammagard	IMD, NE	0.5	18,800	27,000	30	11	17
Cimzia	AR, ID	0.5	21,500	23,300	–2	9	–10
Alimta	CA	0.5	17,500	27,300	–4	–6	2
Fluzone HD	VA	0.5	7,596,800	62	1	–6	7
Top 10 drugs		17.4					
Top 20 drugs		22.9					
All Part B drugs		42.9					

Note: CA (cancer), MD (macular degeneration and other eye disorders), SE (side effect), OS (osteoporosis), AR (arthritis), ID (inflammatory disorders), AI (autoimmune), MS (multiple sclerosis), IMD (immune deficiency), NE (neuropathy), VA (vaccine), HD (high-dose). "Drug spending" includes Medicare program payments and beneficiary cost sharing. The 20 drugs shown in the chart reflect the Part B drug billing codes with the highest Medicare expenditures in 2021. 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. Data exclude blood and blood products (other than clotting factor). Components may not sum to totals due to rounding.
*For originator biologics that have biosimilar competitors, data in the table reflect both the originator biologic and biosimilars.

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

> Part B drugs are billed under roughly 900 billing codes, but spending is concentrated. In 2021, Medicare spending (including cost sharing) on the top 10 products accounted for $17.4 billion, or 41 percent of total Part B drug spending. Spending on the top 20 products accounted for $22.9 billion, or about 53 percent of total Part B drug spending.

> Eighteen of the top 20 Part B products are biologics. One product (Alimta) is a drug, and one (Fluzone HD) is a preventive vaccine.

> The top 20 Part B drugs are concentrated in certain therapeutic areas. Eight of the top 20 drugs treat cancer and three treat cancer side effects. The top 20 also includes 3 products for macular degeneration and 5 products for rheumatoid arthritis or other inflammatory disorders.

(Chart continued next page)

Chart 10-3 Top 20 Part B drugs, 2021 (continued)

> Among the top 20 highest-expenditure Part B drugs, average total spending per user varies. Of seven products used to treat cancer (excluding Avastin, for which costs vary substantially depending on whether it is used for cancer or macular degeneration), average spending per user ranged from $20,000 to $81,000, with four products averaging $50,000 or more per user. Average spending per user ranged from $12,000 to $33,000 for five drugs used to treat rheumatoid arthritis and other inflammatory conditions, and from $9,000 to $11,000 for two drugs used to treat macular degeneration (excluding Avastin). Soliris, a product used to treat rare autoimmune conditions, had the highest average cost per user among the top 20, $383,000.

> Between 2020 and 2021, total spending increased for 9 of the top 20 Part B drugs and decreased for 11 drugs. Darzalex experienced the largest total spending growth (64 percent), driven by a 32 percent increase in the number of users and a 24 percent increase in the average spending per user. Gammagard also experienced large total spending growth (30 percent). In 2021, total spending also increased more than 10 percent for Keytruda, Eylea, and Entyvio. Among the products that experienced spending decreases in 2021, the most substantial decreases occurred among the five products with biosimilar competition (Avastin, Herceptin, Neulasta, Remicade, and Rituxan), ranging from 14 percent to 29 percent.

Chart 10-4 Growth in manufacturer prices for the 20 highest-expenditure Part B drugs, 2015–2023

	Total Medicare payments in 2021 (in billions)	Average annual percentage change in average sales price 2015–2022	Percentage change in average sales price 2022–2023
Keytruda	4.0	2.3%[d]	3.1%
Eylea	3.4	–1.0	–1.9
Prolia/Xgeva	1.8	5.4	8.8
Opdivo	1.6	2.4[d]	2.6
Darzalex	1.5	4.0[e]	3.0
Rituxan[a]	1.3	2.4	–4.5
Lucentis[a]	1.0	–3.6	–22.8
Orencia	1.0	4.3	–2.3
Avastin[a]	0.9	0.0	4.3
Neulasta[a]	0.9	–6.5	–25.7
Tecentriq	0.7	1.2[f]	1.5
Remicade[a]	0.6	–9.2	–7.5
Soliris	0.6	1.2	–0.8
Ocrevus	0.6	0.8[f]	1.3
Entyvio	0.5	3.8[d]	1.9
Herceptin[a]	0.5	0.3	–4.2
Gammagard	0.5	2.5	–2.4
Cimzia	0.5	0.2	–19.3
Alimta[b]	0.5	3.3	–63.6
Fluzone HD[c]	0.5	10.1	7.2
Consumer Price Index for Urban Consumers		2.7	6.4

Note: Growth rates are calculated for: average sales price (ASP) from first quarter to first quarter of each year and for the Consumer Price Index for Urban Consumers (CPI–U) from January to January of each year. If a product launched after 2015, the table displays average annual ASP growth between the earliest year that a first-quarter payment rate was available for the product and 2022. ASP at the billing code level is calculated using the publicly available Part B drug payment rate data on CMS's website. "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.
[a]Indicates the product is an originator biologic that has experienced biosimilar entry. ASP trends are for the originator product only.
[b]Indicates the drug has experienced generic entry. ASP trend is for the billing code that originally contained the brand product and now contains the brand and its generic equivalents.
[c]For Fluzone HD, a preventive vaccine paid 95 percent of the average wholesale price, the table displays the percent change in the actual payment rate rather than ASP.
[d]ASP growth for period from 2016 to 2022.
[e]ASP growth for period from 2017 to 2022.
[f]ASP growth for period from 2018 to 2022.

Source: MedPAC analysis of CMS ASP payment rate files publicly available on the CMS website and CPI–U data from the Bureau of Labor Statistics and MedPAC and Acumen LLC analysis of Medicare claims data.

(Chart continued next page)

Chart 10-4 Growth in manufacturer prices for the 20 highest-expenditure Part B drugs, 2015–2023 (continued)

> Medicare pays for most Part B drugs at a rate of 106 percent of the average sales price (ASP + 6 percent). ASP is the average price realized by the manufacturer for sales to most U.S. purchasers, net of rebates, discounts, and price concessions, with certain exceptions. For brand-name products with no generic competitors, Medicare Part B pays each product an ASP-based rate under the product's own billing code. This policy means that Medicare pays whatever price the manufacturer establishes. For brand drugs with generic competitors, Medicare Part B assigns both the brand product and its generic equivalents to the same billing code and pays 106 percent of a volume-weighted ASP. This policy creates incentives for providers to select the lower-cost product within a billing code, which in turn lowers the volume-weighted ASP in future quarters, leading to substantial price reductions in payment rates for brand products after generic entry.

> From 2015 to 2022, 15 out of 20 of the top Part B drugs experienced net price increases, with 6 of these products' prices increasing faster than the CPI–U on net over the 7-year period (or between launch and 2022 if the product launched after 2015): Alimta, Darzalex, Entyvio, Fluzone HD, Orencia, and Prolia/Xgeva. (Fluzone HD, which is a preventive vaccine, is paid 95 percent of the average wholesale price instead of 106 percent of ASP.)

> In the most recent year, more products in the top 20 experienced a price decrease than a price increase. Prices decreased for 11 products and increased for 9 products between the first quarters of 2022 and 2023. Between the first quarters of 2022 and 2023, a year with high inflation (6.4 percent growth in CPI–U), two of the nine products with price increases experienced increases greater than inflation (Prolia/Xgeva, 8.8 percent, and Fluzone HD, 7.2 percent).

> The largest price decrease in 2023 occurred for Alimta, a drug that faced generic entry in the first half of 2022. Alimta and its generic equivalents are paid under a single billing code based on the volume-weighted average sales price for the products, and the payment rate declined 64 percent between January 2022 and 2023.

> Some of the price declines in 2023 among the top 20 products occurred among biologics facing biosimilar competition. Avastin, Herceptin, Neulasta, Lucentis, Remicade, and Rituxan all have biosimilar competitors. Prices for these originator biologics (except for Avastin) declined by 4 percent to 26 percent between 2022 and 2023. Originator Avastin's price increased 4 percent between January 2022 and 2023, despite facing biosimilar competition.

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

	First biosimilar entry	Percent change in originator biologic's ASP		Biosimilars' payment rate as a percent of originator biologic's payment rate (2023 Q1)	Biosimilar market share (2022 Q3)
		In 10 years before biosimilar entry	Since biosimilar entry (through 2023 Q1)		
Neupogen and biosimilars	2015 Q3	71%	–2%	24%–41%	83%
Remicade and biosimilars	2016 Q4	54%	–58%	71%–130%	26%
Neulasta and biosimilars	2018 Q3	117%	–66%	67%–108%	43%
Procrit/Epogen and biosimilars	2018 Q4	35%	–33%	98%	52%
Avastin and biosimilars	2019 Q3	42%	–13%	45%–48%	77%
Herceptin and biosimilars	2019 Q3	69%	–23%	40%–71%	74%
Rituxan and biosimilars	2019 Q4	68%	–14%	40%–61%	59%
Lucentis and biosimilars	2022 Q3	-31%	-14%	99%	N/A

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, Nyvepria, 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; Truxima, Ruxience, and Riabni for originator Rituxan, and and Byooviz for originator Lucentis. 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 ASP payment rate files publicly available on the CMS website 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 or 8 percent of the originator product's ASP. Per the Inflation Reduction Act of 2022, for five years, existing biosimilars beginning October 2022 and new biosimilars receive an 8 percent add-on, as long as the biosimilar's ASP does not exceed the originator's ASP.

(Chart continued next page)

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

> Biosimilar entry has generated savings for Medicare. Between 2020 and 2021, Medicare spending on Part B originator biologics and their biosimilars declined by about 20 percent from $5.5 billion to $4.4. billion (data not shown). Pricing patterns and biosimilar uptake vary across products.

> For some products, biosimilars are priced substantially below originators and biosimilar uptake has driven savings. For example, Neupogen, the originator biologic that has faced biosimilar competition for the longest period (since the third quarter of 2015), has not significantly reduced its price and has lost most of its market share to biosimilars. As of the first quarter of 2023, biosimilars' payment rates were much lower than the originator's payment rate (roughly 60 percent to 75 percent below the originator's payment rate). Biosimilars accounted for about 83 percent of market share as of the third quarter of 2022.

> For other products, reference biologics have responded to biosimilar entry by lowering their prices, and savings have come from both the originator biologic and biosimilars. For example, the price of the originators Procrit/Epogen has fallen 33 percent since biosimilar entry in the fourth quarter of 2018, and the price of the originator Lucentis has fallen 14 percent since biosimilar entry in the third quarter of 2022. For both of these products, Medicare's payment rate for the biosimilars is slightly lower (1 percent or 2 percent) than for the originators, as of the first quarter of 2023.

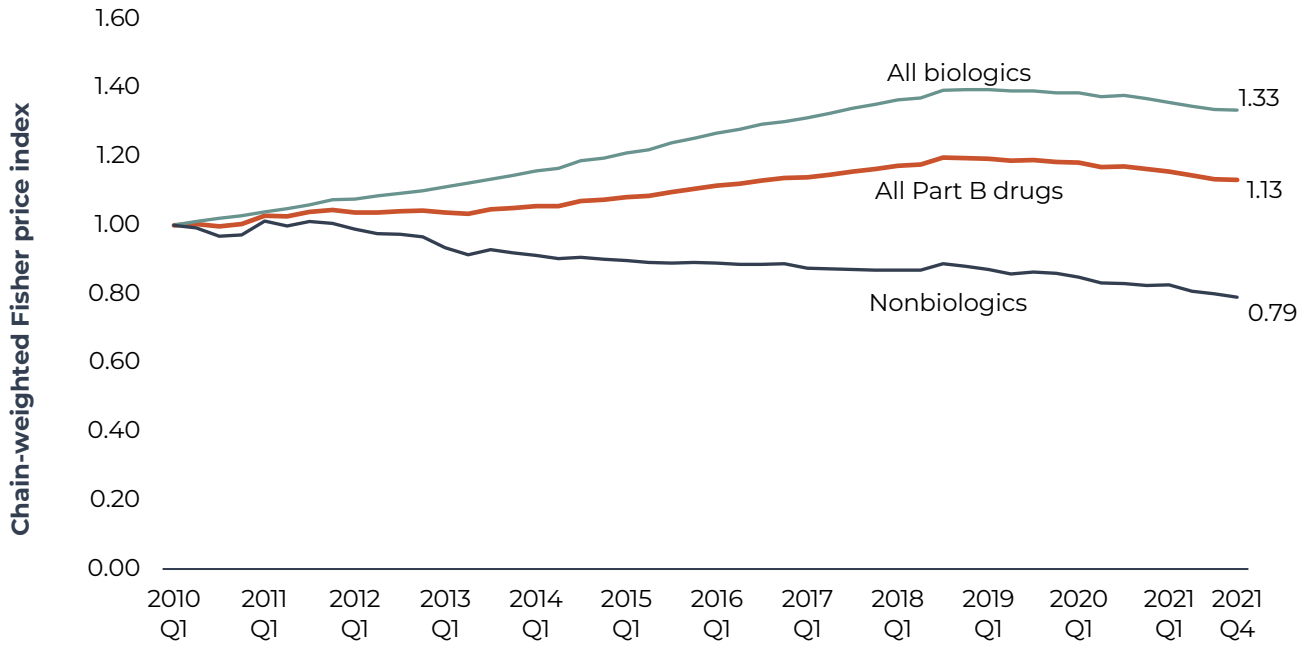
> In a few cases, originator biologics have reduced their prices by more than 50 percent in response to biosimilar entry. Originator Remicade's payment rate has declined 58 percent and originator Neulasta's payment rate has declined 66 percent since biosimilar entry. Nonetheless, as of the first quarter of 2023, both products had some biosimilar competitors on the market that were priced substantially lower (roughly 30 percent below the originator's payment rate). Originators Remicade and Neulasta continue to retain the majority of market share, accounting for 74 percent and 57 percent of utilization in the third quarter of 2022, respectively.

> In 2019, three originator biologics used to treat cancer (Avastin, Herceptin, Rituxan) faced biosimilar entry, representing the first availability of biosimilar anticancer agents. Biosimilars for these three products have rapidly gained market share, with biosimilars accounting for between 59 percent and 77 percent of utilization among these products as of the third quarter of 2022.

> Lucentis is the most recent Part B biologic to face biosimilar competition, with a biosimilar entering in the third quarter of 2022. In the two quarters since biosimilar entry, Lucentis's payment rate has declined 14 percent, and Lucentis and its biosimilar have similar payment rates as of the first quarter of 2023.

> Although biosimilar competition has resulted in reduced prices for originator biologics relative to the products' prices at the time of biosimilar entry, nearly all of these originator biologics experienced substantial price increases prior to biosimilar entry. With the exception of Lucentis, the originator biologics' cumulative growth in payment rates over the 10 years prior to biosimilar entry ranged from 35 percent to 117 percent. In contrast, Lucentis's payment rate declined 31 percent in the 10 years before biosimilar entry.

Chart 10-6 Price indexes for Medicare Part B drugs, 2010–2021



Note: Q1 (first quarter), Q4 (fourth quarter). The Part B price indexes are Fisher price indexes and 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. The price index is different from the change in the aggregate average price Medicare pays for drugs (Chart 10-2), which reflects changes in the prices of existing products, rising launch prices of new products, and shifts in the mix of drugs.

Source: Acumen LLC analysis for MedPAC.

> The Part B price indexes reflect growth in the average sales price (ASP) at the individual product level, which is a measure of average postlaunch price growth for Part B drugs. This measure is different from the change in the aggregate average price Medicare Part B pays for drugs (Chart 10-2), which reflects a broader set of dynamics (including changes in the price of existing products, rising launch prices of new products compared with older products, and shifts in the mix of 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 13 percent cumulatively between 2010 and 2021 (index of 1.13). Since the third quarter of 2018 through the end of 2021, the overall price index for Part B drugs has declined from 1.20 to 1.13, driven by a decline in the biologics' price index, coupled with the continued decline in the nonbiologics' price index.

> The price index for biologics increased cumulatively by 33 percent (index of 1.33) between 2010 and 2021, reaching a high of 1.39 in the first quarter of 2019 and declining to 1.33 by the fourth quarter of 2021. Pricing trends differ for biologics that face biosimilar competition and biologics that do not. Between the first quarter of 2019 and the fourth quarter of 2021, the price index declined for biologics with recent biosimilar entry by roughly one third and increased for biologics without biosimilar competition by about 3 percent.

> The price index for nonbiologics declined 21 percent (index of 0.79) between 2010 and 2021, which in part reflects patent expiration and generic entry for some of these products. The design of the ASP payment system spurs price competition among generics and their associated brand products by paying them the same rate under a combined billing code.

Chart 10-7 Part D enrollment by plan type, 2014–2022

	2014	2021	2022	Average annual growth rate 2014-2022
Total Medicare enrollment, in millions	56.9	66.9	68.1	2.3%
Part D enrollment, in millions				
Part D plans	40.0	51.6	53.1	3.6
Non-Medicare employer plans under the RDS*	2.8	1.2	1.1	–11.0
Total Part D	42.8	52.8	54.2	3.0
Total Part D share of Medicare enrollment	*75%*	*79%*	*79%*	
LIS enrollment				
PDP	9.2	6.7	6.2	–4.8
MA–PD	3.6	7.6	8.5	11.5
Total LIS	12.8	14.3	14.8	1.8
Share of LIS enrollees in MA–PD	*28%*	*53%*	*58%*	
Share of Part D plan enrollees with LIS	*32%*	*28%*	*28%*	
EGWPs (PDPs and MA–PDs), in millions	7.0	7.8	7.9	1.5
EGWP share of total Part D enrollment	*16%*	*15%*	*15%*	
Non-EGWP Part D plans, in millions				
PDP	20.1	20.9	20.2	0.1
MA–PD	13.0	22.9	25.0	8.5
Share of non-EGWP plan enrollees in MA–PD	*39%*	*52%*	*55%*	

Note: RDS (retiree drug subsidy), LIS (low-income subsidy), PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), EGWP (employer group waiver plan). 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.
*Excludes federal government and military retirees covered by either the Federal Employees Health Benefit Program or the TRICARE for Life program.

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

> In 2022, 79 percent of Medicare beneficiaries were enrolled in Part D plans for at least one month during the year or had prescription drug coverage through employer-sponsored plans that receive Medicare's RDS. That share is up from 75 percent in 2014.

> Between 2014 and 2022, the number of enrollees receiving the LIS grew modestly (1.8 percent per year, on average) compared with the number of non-LIS enrollees (about 4.4 percent per year, on average, data not shown). Faster enrollment growth among non-LIS enrollees has resulted in a decline in the share of Part D enrollees who receive the LIS. In 2022, 28 percent of Part D enrollees received the LIS, a decrease from 32 percent in 2014. Over 58 percent of LIS beneficiaries were in MA–PDs.

> Employer and union health plans continue to be important sources of drug coverage for Medicare beneficiaries. In 2022, 7.9 million Medicare beneficiaries (15 percent of Part D plan enrollees) were in plans (including PDPs and MA–PDs) set up by employers or unions for their retirees. Under these EGWPs, Medicare is the primary payer for basic drug benefits, and typically the employer offers wraparound coverage. Separately, 1.1 million Medicare beneficiaries were 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.)

> In 2022, among non-EGWP plans, 25 million (55 percent) were in MA–PDs and 20.2 million (45 percent) were in stand-alone PDPs. Over the 2014 to 2022 period, enrollment in PDPs remained flat while enrollment in MA–PDs rose by an annual average of 8.5 percent.

Chart 10-8 Characteristics of Part D enrollees, 2022

	All Medicare	Part D	Plan type		Subsidy status	
			PDP	MA–PD	LIS	Non-LIS
Beneficiaries* (in millions)	68.1	53.1	24.8	28.2	14.8	38.3
Percent of all Medicare	100%	78%	36%	41%	22%	56%
Gender						
Male	46%	44%	43%	44%	41%	44%
Female	54	56	57	56	59	56
Race/ethnicity						
White, non-Hispanic	73	73	80	66	52	81
Black, non-Hispanic	11	11	7	14	20	7
Hispanic	9	9	5	13	17	6
Asian	4	4	3	4	7	3
Other	4	3	4	3	4	3
Age (years)**						
<65	14	14	13	15	36	6
65–69	27	25	24	26	22	27
70–74	23	23	23	23	15	26
75–79	16	17	17	17	11	19
80+	20	21	22	19	17	22

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), LIS (low-income subsidy). Components may not sum to totals due to rounding.
*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.
**Age as of July 2022.

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

> In 2022, 53.1 million Medicare beneficiaries (78 percent) were enrolled in Part D plans at some point in the year. Less than half (24.8 million) were enrolled in stand-alone PDPs, while the rest were enrolled in MA–PDs (28.2 million). Just under 15 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 Black compared with PDP enrollees; LIS enrollees are more likely to be female, minority, and beneficiaries under age 65 (eligible for Medicare due to disability) compared with non-LIS enrollees.

Chart 10-9 Changes in parameters of the Part D defined standard benefit over time, 2014–2023

	2014	2022	2023	Average annual change 2014–2023
Deductible	$310	$480	$505	5.6%
Initial coverage limit	2,850	4,430	4,660	5.6
Annual out-of-pocket threshold	4,550	7,050	7,400	5.6
Total covered drug spending at annual out-of-pocket threshold				
Enrollees eligible for manufacturers' coverage-gap discount	6,691	10,690	11,206	5.9
Other enrollees	6,455	10,013	10,516	5.6
Cost sharing above the annual out-of-pocket threshold is the greater of 5% coinsurance or these amounts:				
Copay for generic/preferred multisource drugs	2.55	3.95	4.15	5.6
Copay for other prescription drugs	6.35	9.85	10.35	5.6

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. The amounts of total covered drug spending at the annual out-of-pocket (OOP) threshold are for individuals who have no source of supplemental coverage and an 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.

> In 2023, Part D's defined standard benefit has a $505 deductible, 25 percent coinsurance on covered drugs until the enrollee reaches $4,660 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 2023, a person who does not receive Part D's low-income subsidy (LIS) and has no supplemental coverage would, on average, reach the threshold at $11,206 in total drug spending.) Most enrollees pay about 25 percent cost sharing for brand or generic prescriptions filled in the coverage gap. Beneficiaries who do not receive the LIS are eligible for a 70 percent manufacturers' discount on brand prescriptions in the gap phase. Enrollees with drug spending that exceeds the annual threshold pay the greater of $4.15 to $10.35 or 5 percent coinsurance per prescription. CMS updates most parameters of this defined standard benefit structure each year by the annual change in average total drug expenses of Medicare beneficiaries enrolled in Part D.

> Within certain limits, sponsors may offer Part D plans that have the same actuarial value as the defined standard benefit but a different benefit structure. 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 (see Chart 10-15). 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 up to two plans with enhanced benefits—basic and supplemental coverage combined.

> Several changes to Part D's benefit design are underway as a result of enactment of the Inflation Reduction Act of 2022. (See the Commission's March 2023 report for more details.) In 2023, enrollees pay reduced cost sharing for insulin and no cost sharing for recommended vaccines. In 2024, enrollees will pay no cost sharing after reaching the OOP threshold. In 2025, Medicare will implement a redesign of the Part D benefit that will cap enrollees' OOP spending at $2,000, among other measures. The OOP cap will be updated annually in the same manner as other Part D parameters.

Chart 10-10 Characteristics of stand-alone Medicare PDPs, 2022–2023

	2022				2023			
	Plans		Enrollees as of February 2022		Plans		Enrollees as of February 2023	
	Number	Percent	Number (in millions)	Percent	Number	Percent	Number (in millions)	Percent
Total	766	100%	19.0	100%	804	100%	18.5	100%
Type of benefit								
Defined standard	0	0	0.0	0	0	0	0.0	0
Actuarially equivalent	302	39	8.7	46	305	38	7.9	43
Enhanced	464	61	10.3	54	499	62	10.6	57
Type of deductible								
Zero	136	18	2.7	14	133	17	2.6	14
Reduced	90	12	1.2	6	110	14	2.0	11
Defined standard*	540	70	15.1	79	561	70	13.9	75
Some formulary tiers not subject to a deductible	405	53	11.9	63	423	53	9.3	50

Note: PDP (prescription drug plan). The PDPs and enrollment described here exclude employer-only plans and plans offered in U.S. territories. "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 $480 in 2022 and is $505 in 2023.

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

> Plan sponsors are offering 804 stand-alone PDPs in 2023 compared with 766 in 2022—an increase of 5 percent. Total enrollment in PDPs declined by 2.7 percent to 18.5 million beneficiaries in 2023 from 19.0 million in 2022, as enrollees shifted to MA–PDs (see Chart 10-7).

> For 2023, 62 percent of PDP offerings include enhanced benefits (basic plus supplemental coverage); this share has remained steady since 2019 (2019 data not shown). Enhanced plans have maintained their higher share of enrollment, up to 57 percent in 2023, since reaching 50 percent in 2021 (latter data not shown).

> In 2023, 70 percent of PDPs use the same $505 deductible as in Part D's defined standard benefit, the same as in 2022. Only 25 percent of PDP enrollees are in plans with either no or a reduced deductible. Also in 2023, 53 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 2023, just 50 percent of PDP enrollees were in such plans, down from 63 percent in 2022.

Chart 10-11 Characteristics of general MA–PDs, 2022–2023

	2022				2023			
	Plans		Enrollees as of February 2022		Plans		Enrollees as of February 2023	
	Number	Percent	Number (in millions)	Percent	Number	Percent	Number (in millions)	Percent
Total	3,365	100%	18.1	100%	3,540	100%	18.8	100%
Type of organization								
Local HMO	2,052	61	11.7	64	2,086	59	11.7	62
Local PPO	1,261	37	6.0	33	1,404	40	6.8	36
PFFS	19	1	0.0	0	17	0	0.0	0
Regional PPO	33	1	0.4	2	33	1	0.3	2
Type of benefit								
Defined standard	25	1	0.1	<0.5	14	<0.5	0.0	<0.5
Actuarially equivalent	51	2	0.1	1	57	2	0.1	1
Enhanced	3,289	98	17.9	99	3,469	98	18.7	99
Type of deductible								
Zero	1,900	56	11.3	63	2,337	66	14.3	76
Reduced	1,229	37	6.2	34	1,045	30	4.2	22
Defined standard*	236	7	0.6	3	158	4	0.3	2
Some formulary tiers not subject to a deductible	1,415	42	6.7	37	1,154	33	4.4	23

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, 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 $480 in 2022 and is $505 in 2023.

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

> Sponsors are offering 3,540 MA–PDs in 2023 compared with 3,365 in 2022 (5 percent more). Enrollment in MA–PDs grew 4.1 percent from 18.1 million in 2022 to 18.8 million in 2023—a continued deceleration from more than 10 percent growth in 2020 and 2021 (data not shown).

> Between 2022 and 2023, the number of drug plans offered by HMOs grew modestly from 2,052 to 2,086; HMO drug plans remain the dominant type of MA–PD, making up 59 percent of all offerings. But local PPOs are growing in popularity. Over the same period, the number of drug plans offered by local PPOs increased 11 percent from 1,261 plans to 1,404 plans, and their enrollees grew from 6.0 million to 6.8 million.

> In 2023, 98 percent of MA–PDs have enhanced benefits compared with 62 percent of PDPs (see Chart 10-10). In 2023, those MA–PDs enrolled 99 percent of all MA–PD beneficiaries.

> Sixty-six percent of MA–PDs have no deductible in 2023—an increase of 10 percentage points from 2022—and those plans attracted more than three-fourths of all MA–PD enrollees. In addition, 23 percent of enrollees are in plans that designate certain cost-sharing tiers of their formularies that are not subject to a deductible.

Chart 10-12 Characteristics of SNPs, 2022–2023

	2022				2023			
	Plans		Enrollees as of February 2022		Plans		Enrollees as of February 2023	
	Number	Percent	Number (in millions)	Percent	Number	Percent	Number (in millions)	Percent
Total	1,130	100%	4.3	100%	1,254	100%	5.3	100%
Type of SNP								
Chronic condition	267	24	0.4	9	300	24	0.4	8
Dual eligible	679	60	3.8	89	765	61	4.7	90
Institutionalized	184	16	0.1	2	189	15	0.1	2
Type of benefit								
Defined standard	347	31	2.0	46	644	51	3.6	68
Actuarially equivalent	68	6	0.5	11	25	2	0.1	1
Enhanced	715	63	1.8	43	585	47	1.6	31
Type of deductible								
Zero	241	21	0.2	5	296	24	0.4	7
Reduced	140	12	0.4	9	57	5	0.2	4
Defined standard*	749	66	3.7	86	901	72	4.7	89
Some formulary tiers not subject to a deductible	377	33	1.4	33	130	10	0.4	8

Note: SNP (special needs plan), HMO (health maintenance organization), PPO (preferred provider organization), PFFS (private fee-for-service). The SNPs and enrollment described here exclude plans offered in U.S. territories. 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 $480 in 2022 and is $505 in 2023.

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

> The number of SNPs (MA–PDs designed for certain groups of beneficiaries) has grown rapidly; in 2023, there are 11 percent more than in 2022. Enrollment in SNPs grew 22.5 percent from 4.3 million in 2022 to 5.3 million in 2023—continuing the trend of double-digit growth that has occurred since 2017.

> SNPs for individuals dually eligible for Medicare and Medicaid (D–SNPs) are the most popular type. In 2023, 61 percent of SNPs were D–SNPs, and they enrolled 90 percent of all SNP enrollees. Other types of SNPs include those for individuals who have certain chronic conditions and those for institutionalized beneficiaries.

> Compared with PDPs and MA–PDs, SNPs are more likely to offer a defined standard benefit, with more than half of SNPs now offering such coverage. In 2023, these plans enrolled more than two-thirds of SNP beneficiaries. There was a sharp decline in the number of SNPs providing enhanced coverage in 2023, and enrollment in such plans fell to 31 percent of all SNP enrollees.

> Dually eligible beneficiaries automatically receive Part D's low-income subsidy, which means that most recipients pay nominal copayments while the subsidy pays the remainder of their plan's cost sharing. Because nominal copayments limit the effectiveness of a formulary with tiered cost sharing, sponsors of D–SNPs more frequently use Part D's defined standard benefit design. For the same reason, D–SNPs are also less likely to have some formulary tiers not subject to a deductible.

Chart 10-13 Change in average Part D premiums, 2014–2023

	2014	2022	2023	Cumulative change in weighted average premium, 2014–2023
All plans	$29	$26	$26	–$3
Basic plans	29	34	35	6
Enhanced plans				
Basic benefits	24	15	13	–11
Supplemental benefits	6	8	9	4
Total premium	30	23	22	–7
All basic coverage	26	21	19	–7
PDPs	38	40	41	3
Basic plans	30	35	36	7
Enhanced plans				
Basic benefits	39	23	19	–20
Supplemental benefits	10	21	25	16
Total premium	49	44	44	–5
All basic coverage	34	28	26	–7
MA–PDs, including SNPs	16	15	15	–1
Basic plans	25	33	32	7
Enhanced plans				
Basic benefits	11	11	10	–1
Supplemental benefits	2	1	1	–1
Total premium	13	12	11	–2
All basic coverage	14	14	14	0
Average MA–PD buy-down of basic premium	13	22	23	10
Average MA–PD buy-down of supplemental benefits	13	26	31	18
Base beneficiary premium	32.42	33.37	32.74	0.32

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.

> 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 https://www.medpac.gov/wp-content/uploads/2021/11/MedPAC_Payment_Basics_22_PartD_FINAL_SEC.pdf.)

(Chart continued next page)

Chart 10-13 Change in average Part D premiums, 2014–2023 (continued)

> The overall average premium paid by enrollees for any type of Part D coverage declined only slightly in 2023 from 2022, rounding to $26 per month for the third straight year (2021 data not shown). Over the period from 2014 to 2023, year-to-year changes in average premiums have varied by type of benefit (premiums for basic plans have grown while premiums for enhanced plans have declined) and type of plan (PDP premium components have changed at slower rates than those for MA–PDs). The base beneficiary premium has fluctuated over the years but is now just slightly higher than it was in 2014.

> Across all basic plans and the basic portion of enhanced plans, the average premium for basic benefits fell from $26 in 2014 to $19 per month in 2023, a cumulative decline of 27 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 12 of the Commission's March 2023 report to the Congress at https://www.medpac.gov/wp-content/uploads/2023/03/Ch12_Mar23_MedPAC_Report_To_Congress_SEC.pdf.)

> Between 2014 and 2023, the average premium for basic coverage in a PDP increased by nearly $7 but fluctuated between $28 in 2015 (data not shown) and $36 in 2023. Among enhanced plans offered by PDPs, the average enrollee premium was $44 in 2023. Over the past 10 years, the average premium for these plans decreased by $5. Of the $44 average premium in 2023 among enhanced PDPs, $19 was for basic benefits and $25 was for supplemental benefits. The portion of enhanced premiums attributable to supplemental benefits has grown, while the portion for basic benefits has declined.

> From 2014 to 2023, the average premium for basic coverage in an MA–PD also increased by $7, ranging from $21 in 2015 (data not shown) to $33 per month in 2022. The average premium paid by beneficiaries enrolled in MA–PDs offering enhanced coverage is down to $11 in 2023, a decrease of $2 since 2014. 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 2023, MA–PD enrollees avoided having to pay $23 per month in basic premiums and an additional $31 per month for supplemental coverage, on average.

Chart 10-14 Part D benchmarks for LIS premiums and number of qualifying PDPs, by region

Region	State(s)	2014		2023		Cumulative change, 2014–2023	
		Benchmark amount	Number of PDPs	Benchmark amount	Number of PDPs	Benchmark amount	Number of PDPs
1	ME, NH	$28	7	$31	5	$3	–2
2	CT, MA, RI, VT	28	8	36	6	8	–2
3	NY	37	8	39	3	2	–5
4	NJ	37	12	35	6	–2	–6
5	DC, DE, MD	32	13	39	5	7	–8
6	PA, WV	36	13	41	7	6	–6
7	VA	29	13	35	6	5	–7
8	NC	28	10	38	5	10	–5
9	SC	34	8	38	5	4	–3
10	GA	29	9	37	6	8	–3
11	FL	22	5	36	4	14	–1
12	AL, TN	30	11	35	7	5	–4
13	MI	32	13	33	7	0	–6
14	OH	29	12	35	4	6	–8
15	IN, KY	35	15	28	5	–7	–10
16	WI	37	12	43	7	6	–5
17	IL	29	14	27	7	–1	–7
18	MO	31	8	36	5	5	–3
19	AR	30	12	32	5	2	–7
20	MS	31	13	32	6	1	–7
21	LA	32	14	38	6	7	–8
22	TX	28	11	25	5	–3	–6
23	OK	30	12	33	6	3	–6
24	KS	34	13	33	5	–1	–8
25	IA, MN, MT, ND, NE, SD, WY	32	10	40	6	8	–4
26	NM	20	7	36	7	16	0
27	CO	27	5	42	5	15	0
28	AZ	27	11	43	8	15	–3
29	NV	23	4	33	5	10	1
30	OR, WA	35	12	41	7	6	–5
31	ID, UT	39	13	43	6	4	–7
32	CA	28	9	39	4	11	–5
33	HI	26	4	35	5	10	1
34	AK	37	11	35	5	–2	–6

Note: LIS (low-income subsidy), PDP (prescription drug plan). All calculations exclude plans offered in U.S. territories. Cumulative changes calculated from unrounded data.

Source: MedPAC analysis of CMS benchmark amounts and plan report data.

(Chart continued next page)

Chart 10-14 Part D benchmarks for LIS premiums and number of qualifying PDPs, by region (continued)

> Part D's LIS covers most premiums and cost sharing for enrollees with low incomes and assets. The LIS's coverage of premiums has a dollar limit, known as the benchmark, that encourages beneficiaries to enroll in lower-cost PDPs. Beneficiaries who enroll in plans with premiums that are less than the benchmark do not pay a premium; those who enroll in plans with higher premiums pay the difference. The PDPs for which LIS beneficiaries do not pay a premium are known as benchmark plans. When LIS beneficiaries do not select a PDP, Medicare automatically enrolls them in benchmark plans.

> The LIS benchmark equals the average premium for basic coverage in a region. CMS calculates it using a weighted average of both PDP and MA–PD premiums. For plans that offer enhanced coverage, CMS uses the portion of the plan's premium that reflects the cost of basic coverage only. For MA–PDs, CMS uses the amount of the premium for basic coverage before the plan sponsor has used any Part C (Medicare Advantage) rebates to reduce or eliminate the premium. The weight for each plan equals its share of LIS enrollment. CMS calculates separate benchmarks for each Part D region and updates them annually.

> In 2023, the lowest benchmark premium was $25 in Region 22 (Texas), for the fourth year in a row. Region 31 (Idaho and Utah) was joined by Region 16 (Wisconsin) and Region 28 (Arizona) for the highest benchmark premium in 2023 at $43 per month.

> The average benchmark premium across regions (not weighted by numbers of enrollees) has risen slowly over the years, from $31 per month in 2014 to $36 in 2023, an increase of 17 percent over 10 years (data not shown); this is in contrast to the average overall premium across all plans, weighted by enrollment, which decreased by 12 percent over the same period (see Chart 10-13).

> In 2014, the average number of benchmark plans in a region was 10; by 2023, that figure had dropped to 6, a decline of 46 percent (data not shown). The number of benchmark plans has declined or remained constant in every region over the past decade except Region 29 (Nevada) and Region 33 (Hawaii), both growing from four plans in 2014 to five in 2023. The overall decline is largely due to mergers and acquisitions among plan sponsors over the years. The maximum number of benchmark plans in any region in 2023 is 8, compared with 15 in 2014.

Chart 10-15 In 2023, about one in two listed drugs is subject to some utilization management

	Benchmark PDPs	PDP enrollees	MA–PD enrollees
5-tier formulary structure* (in percent)	100%	100%	99%
Drugs on formulary as % of all Part D drugs**	70%	74%	76%
Median cost-sharing amounts			
Tier 1: generic drugs	$1	$1	$0
Tier 2: other generic drugs	6	5	6
Tier 3: preferred brand-name drugs	33	44	47
Tier 4: nonpreferred drugs	39%	45%	$100
Tier 5: specialty-tier drugs	25%	25%	33%
Drugs with utilization management requirement (in percent)			
Prior authorization	31%	31%	28%
Step therapy	0	1	2
Quantity limits	42	42	43
Any utilization management	54	54	54

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). Figures 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. "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.
*Includes formularies with an additional (sixth) tier used for certain types of drugs (e.g., vaccines).
**Number of all Part D drugs is based on the counts of unique chemical entities listed on CMS's formulary reference file for the 2023 benefit year.

Source: MedPAC analysis of formularies submitted to CMS.

> In 2023, most Part D enrollees chose 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.

> The number of drugs listed on a plan's formulary affects a beneficiary's access to medications. In 2023, on average, PDP enrollees have access to 74 percent of all Part D–covered products compared with 76 percent among MA–PD enrollees. That share was lower (70 percent) for beneficiaries enrolled in benchmark plans—basic PDPs for which LIS enrollees do not have to pay a premium.

> For enrollees in PDPs with a five-tier structure, the median copay in 2023 is $1 for a generic drug on a lower tier and $5 for other generic drugs. The median copay is $44 for a preferred brand-name drug and 45 percent coinsurance for a nonpreferred drug. Average cost-sharing amounts for benchmark plans are similar to other PDPs for generic drugs, but lower for brand-name drugs. For MA–PD enrollees, in 2023, the median copays for generic drugs are $0 and $6 for the two generic tiers, respectively. Both PDPs and MA–PDs use coinsurance (25 percent and 33 percent, respectively) for specialty-tier drugs.

> 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 2023, both PDPs and MA–PDs use some form of utilization management for 54 percent of drugs listed on a plan's formulary.

Chart 10-16 Components of Part D spending growth, 2014–2021

	2014	2021	Average annual growth 2014–2021
Total gross spending (in billions)	$121.4	$215.7	8.6%
High-cost beneficiaries	64.6	135.9	11.2%
Lower-cost beneficiaries	56.7	79.8	5.0%
Number of beneficiaries using a Part D drug (in millions)	37.1	47.7	3.6%
High-cost beneficiaries	3.4	4.1	2.5%
Lower-cost beneficiaries	33.7	43.6	3.7%
Amount per beneficiary who used Part D drugs			
Gross drug spending per year	$3,267	$4,525	4.8%
Average price per 30-day prescription	$60	$80	4.2%
Number of 30-day prescriptions	54.5	56.7	0.6%
Amount per high-cost beneficiary who used Part D drugs			
Gross drug spending per year	$18,845	$33,386	8.5%
Average price per 30-day prescription	$166	$291	8.4%
Number of 30-day prescriptions per month	9.6	9.7	0.1%
Amount per lower-cost beneficiary who used Part D drugs			
Gross drug spending per year	$1,683	$1,831	1.2%
Average price per 30-day prescription	$35	$36	0.4%
Number of 30-day prescriptions per month	4.2	4.5	0.8%

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 common Medicare environment file from CMS.

> Between 2014 and 2021, gross spending on drugs under the Part D program grew by an annual average rate of 8.6 percent. The annual growth in spending was considerably higher (11.2 percent) among high-cost beneficiaries (individuals who incurred spending high enough to reach the catastrophic phase of the benefit) than among lower-cost beneficiaries (5.0 percent).

> During the 2014 through 2021 period, the number of high-cost beneficiaries grew more slowly (2.5 percent) compared with lower-cost beneficiaries (3.7 percent). The slower growth in the number of high-cost beneficiaries reflects the 25 percent increase in the out-of-pocket (OOP) threshold between 2019 and 2020. (For more information about the impact of the increase in the OOP threshold in 2020, see Chapter 13 of the Commission's March 2022 report to the Congress at https://www.medpac.gov/wp-content/uploads/2022/03/Mar22_MedPAC_ReportToCongress_Ch13_SEC.pdf.)

> The average price per 30-day prescription covered under Part D rose from $60 in 2014 to $80 in 2021. Overall, growth in price per prescription accounted for most (4.2 percentage points) of the 4.8 percent average annual growth in spending per beneficiary among beneficiaries who used Part D drugs. Growth in prices per prescription reflects increases in the prices of existing drugs and changes in the mix of drugs, including the adoption of new, higher-priced 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 (8.4 percent) accounted for nearly all of the spending growth (8.5 percent) during this period. In contrast, among lower-cost beneficiaries, the increase (0.8 percent) in the number of prescriptions accounted for about two-thirds of the spending growth (1.2 percent).

Chart 10-17 Part D spending and use per enrollee, 2021

		Plan type		LIS status	
	Part D	PDP	MA–PD	LIS	Non-LIS
Total gross spending (billions)*	$215.7	$115.0	$100.7	$100.0	$115.6
Above OOP threshold (billions)	92.0	50.2	41.7	52.1	39.9
Share above OOP threshold	*43%*	*44%*	*41%*	*52%*	*35%*
Total number of prescriptions (millions)	2,704	1,326	1,378	909	1,795
Average spending per prescription	$80	$87	$73	$110	$64
Share of beneficiaries with no drug use	7%	7%	6%	8%	6%
Per enrollee per month					
Total spending	$368	$396	$340	$631	$271
OOP spending	31	38	23	5	40
Manufacturer gap discount	25	30	20	N/A	34
Plan liability	243	256	230	428	174
Low-income cost-sharing subsidy	53	53	54	197	N/A
Number of prescriptions	4.6	4.6	4.7	5.7	4.2

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), LIS (low-income 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. "Plan liability" includes plan payments for drugs covered by both basic and supplemental (enhanced) benefits. "Number of prescriptions" is standardized to a 30-day supply. Components may not sum to totals due to rounding.
*"Total gross spending" includes $14.6 billion in manufacturer discounts for brand-name drugs and biologics filled by non-LIS enrollees during the coverage gap.

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

> In 2021, gross spending on drugs for the Part D program totaled $215.7 billion, with about 53 percent ($115 billion) accounted for by Medicare beneficiaries enrolled in stand-alone PDPs. Part D enrollees receiving the LIS accounted for about 46 percent ($100 billion) of the total. Manufacturer discounts for brand-name drugs filled by non-LIS enrollees while they were in the coverage gap accounted for 6.8 percent of the total, or 12.6 percent of the gross spending by non-LIS enrollees (up from 6.3 percent and 11.9 percent, respectively, in 2020; data not shown).

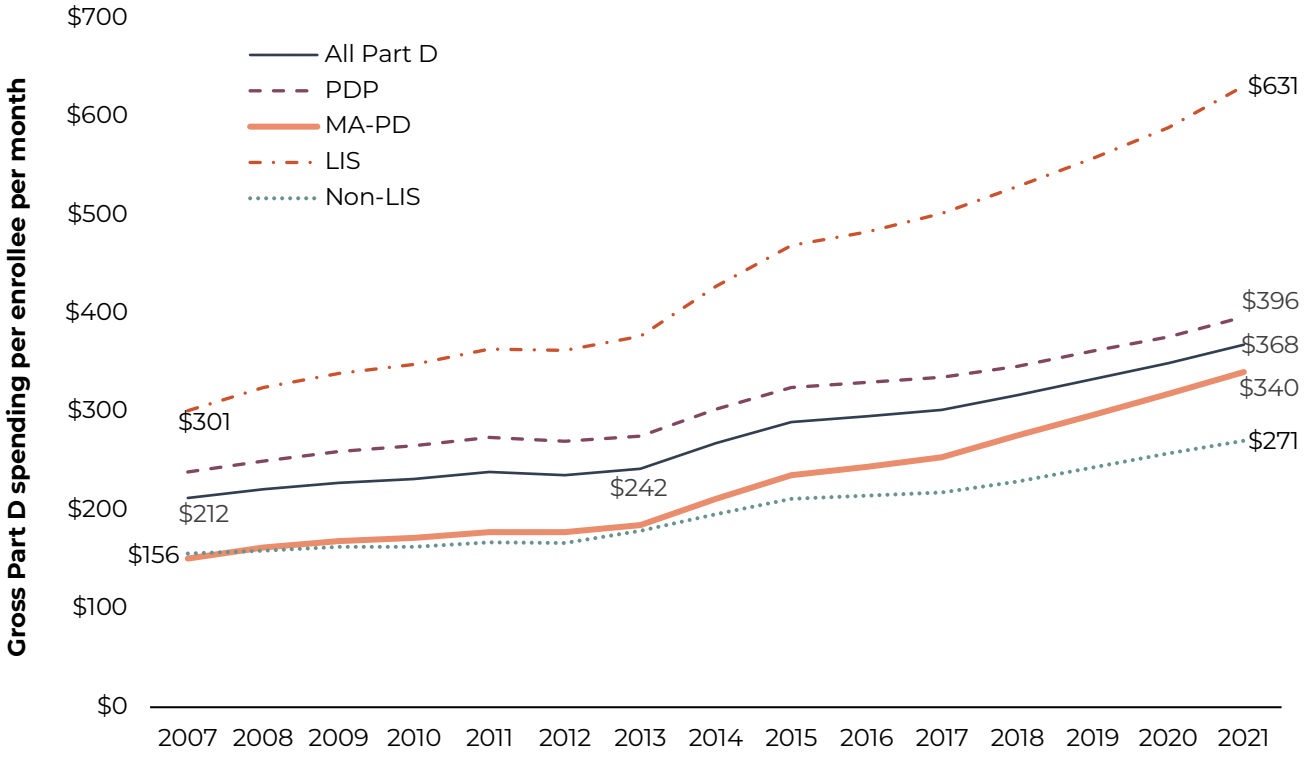
> Overall, 43 percent of gross spending was incurred after a beneficiary reached the annual OOP threshold ($6,550 in 2021). That share was higher among those who received the LIS (52 percent) compared with other enrollees (35 percent).

> The number of prescriptions filled by Part D enrollees totaled 2.7 billion, with 49 percent (1.3 billion) accounted for by PDP enrollees. The 28 percent of enrollees who received the LIS accounted for about 34 percent (909 million) of the total number of prescriptions filled. Overall, 7 percent of Part D enrollees did not fill any prescriptions during the year.

> In 2021, Part D enrollees filled 4.6 prescriptions at $368 per month on average, an increase from $349 per month (for 4.6 prescriptions) in 2020 (2020 data not shown). The average monthly plan liability for PDP enrollees ($256) was higher than that of MA–PD enrollees ($230). The average monthly OOP spending was smaller for MA–PD enrollees than PDP enrollees ($23 vs. $38, respectively). The average monthly low-income cost-sharing subsidy for MA–PD enrollees exceeded that of PDPs for the first time in 2021 ($53 vs. $54).

> Average monthly spending per LIS enrollee ($631) was more than double that of a non-LIS enrollee ($271), 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. $40, respectively). Part D's LIS pays for most of the cost sharing for LIS enrollees, averaging $197 per month in 2021.

Chart 10-18 Trends in Part D spending and use per enrollee per month, 2007–2021



Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), LIS (low-income subsidy). "Spending" (gross) reflects payments from all payers, including beneficiaries (cost sharing) but does not include rebates and fees from manufacturers and pharmacies that are not reflected in prices at the pharmacies.

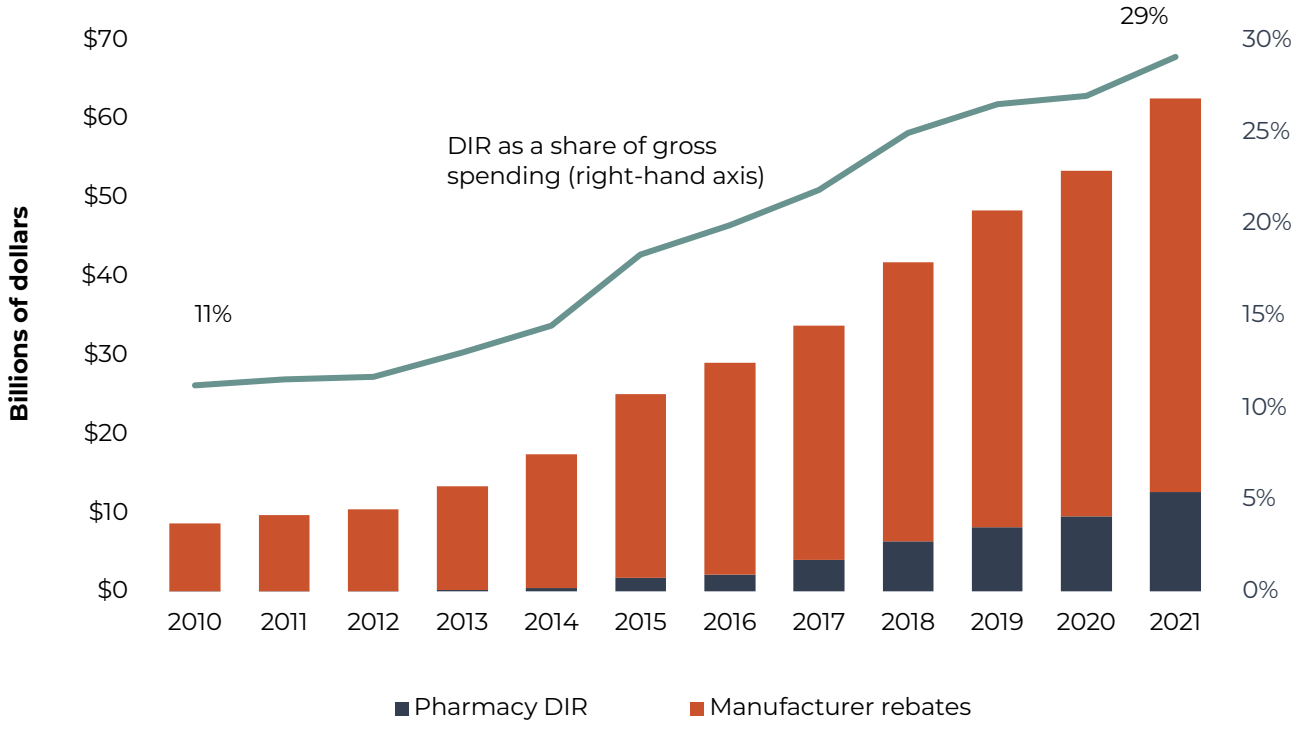
Source: MedPAC analysis of Medicare Part D PDE data and Part D denominator file from CMS.

> Between 2007 and 2021, average per capita spending per month for Part D–covered drugs grew from $212 to $368, an average growth rate of 4.0 percent annually, or about 73 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 2021, monthly per capita spending for LIS enrollees grew faster than that for non-LIS enrollees, increasing from $301 to $631 (a cumulative growth of over 109 percent) compared with an increase from $156 to $271 for non-LIS enrollees (a cumulative growth of 73 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 2021 period (annual average growth of 6.0 percent and 3.7 percent, respectively). The average per capita spending for MA–PD enrollees continued to be lower than that of PDP enrollees (by $56 per month in 2021); however, that difference has been declining since 2014.

Chart 10-19 DIR expanded rapidly in Part D, 2010–2021



Note: DIR (direct and indirect remuneration). "Gross spending" includes enrollee cost sharing and plan (and any other) payments to the pharmacy at the point of sale for both brand and generic prescriptions. Pharmacy DIR consists of net postsale payments from pharmacies to plan sponsors and their pharmacy benefit managers.

Source: MedPAC analysis of prescription drug event data and DIR data.

> The final amounts that Part D plans pay for their enrollees' prescriptions are often lower than prices at the pharmacy because plan sponsors and their pharmacy benefit managers (PBMs) negotiate postsale rebates and fees from drug manufacturers and pharmacies; CMS refers to those amounts as direct and indirect remuneration (DIR). Medicare keeps a portion of DIR to offset some of its reinsurance subsidies to plans. While large rebates help to constrain premium increases, using rebates primarily to lower premiums also means that beneficiaries who use such drugs (or the Medicare program, in the case of Part D's low-income subsidy (LIS) enrollees) sometimes pay cost sharing that is a significant portion of—and may even be higher than—the drug's cost to the plan. For enrollees without the LIS, high cost sharing can affect whether they fill their prescriptions.

> Between 2010 and 2021, DIR ballooned from $8.6 billion to $62.7 billion. With manufacturer rebates accounting for roughly 23 percent of gross Part D spending in 2021 and pharmacy DIR another 6 percent, total DIR equaled about 29 percent, up from 11 percent in 2010.

> Multiple factors have contributed to growth in manufacturer rebates. For certain classes of drugs that lack of generic competition but have considerable rivalry among competing brands, manufacturers have chosen to raise gross prices and compete using postsale rebates. Due to Part D's unusual benefit design and its emphasis on premium competition, sponsors have had incentives to try to maximize rebates and keep premiums low. Vertically integrated insurers with their own PBMs and specialty and mail-order pharmacies have large market shares of enrollment and dispensing, which tends to provide those plan sponsors with greater bargaining leverage for postsale price concessions from both manufacturers and pharmacies.

Chart 10-20 Incidence of Part D spending by type of product, 2021

			Share of gross spending paid					
			Medicare (at risk)			Pharmaceutical manufacturers		
	Total gross spending	Part D plans (at risk)	Reinsurance	Low-income subsidy	Beneficiary cost sharing	Coverage gap discount	Postsale rebates and discounts	Pharmacy fees
Brand-name drugs	$132.8	14%	27%	13%	6%	8%	26%	5%
Biologics	42.9	6	30	12	4	8	33	6
Generic drugs	38.1	39	9	21	21	N/A	<1	9
All products covered under Part D*	215.7	17	24	14	9	7	23	6

Note: "Total gross spending" reflects payment from all payers, including beneficiaries (through cost sharing) before accounting for postsale rebates, discounts, and fees from pharmacies and manufacturers. "Biologics" includes spending for insulins.
*Includes some products that could not be classified as one of the three drug types shown (e.g., nondrug products such as syringes used for insulins).

Source: MedPAC analysis of prescription drug event data and direct and indirect remuneration data.

> In 2021, just over 80 percent of total gross Part D spending was for brand-name drugs ($132.8 billion, or 62 percent) or biologics ($42.9 billion, or 20 percent). Generic drugs accounted for about 18 percent ($38.1 billion) of gross spending.

> The incidence of Part D spending varied by drug type, with Medicare's reinsurance accounting for a larger share of spending for brand-name drugs and biologics compared with generic drugs. For example, plans were at risk for 6 percent of biologics spending (including biosimilars) compared with 30 percent for Medicare's reinsurance. In contrast, for generic drugs, Medicare's reinsurance accounted for 9 percent of gross spending compared with 39 percent for plans. Medicare's low-income subsidy, on average, accounted for a higher share of gross spending for generic drugs (21 percent) compared with brand-name drugs (13 percent) or biologics (12 percent).

> On average, beneficiaries' cost sharing accounted for 21 percent of gross spending for generic drugs compared with 6 percent for brand-name drugs and 4 percent for biologics. Cost sharing as a share of gross spending tends to be lower for brand-name drugs and biologics because these products are more likely to be filled in the catastrophic phase of the benefit, where a lower coinsurance rate applies (5 percent of gross prices at the pharmacy) than for other phases of the benefit (typically averaging 25 percent of gross prices at the pharmacy). However, because prices of brand-name drugs and biologics are much higher than those of generic drugs, the lower coinsurance rate could still result in substantially higher cost-sharing liability than for generic drugs.

> Coverage-gap discount and postsale rebates and fees paid by pharmaceutical manufacturers accounted for 7 percent and 23 percent of gross spending, respectively, across all Part D–covered products. Nearly all of those payments were for brand-name drugs and biologics. Pharmacy fees accounted for the remaining 6 percent of gross spending. On average, pharmacy fees accounted for a higher share of gross spending for generic drugs (9 percent) than for brand-name drugs (5 percent) or biologics (6 percent).

Chart 10-21 Top 15 therapeutic classes of drugs covered under Part D, by spending, 2021

	Gross spending		Negotiated rebates as a share of gross spending	Coverage-gap discount (billions)
	Billions	Percent		
Diabetic therapy	$39.7	18.4%	≥50%	$5.2
Antineoplastics	28.8	13.4	<10%	0.8
Anticoagulants	18.6	8.6	40% to 49%	3.1
Asthma/COPD therapy agents	15.5	7.2	40% to 49%	1.4
Disease-modifying anti-rheumatoid drugs	10.4	4.8	20% to 29%	0.4
Antipsychotics (neuroleptics)	7.5	3.5	10% to 19%	0.1
Antiretrovirals	7.3	3.4	<10%	0.2
Antihypertensive therapy agents	6.9	3.2	10% to 19%	0.4
Ophthalmic agents	5.6	2.6	30% to 39%	0.4
Antihyperlipidemics	5.0	2.3	10% to 19%	0.3
Multiple sclerosis agents	4.5	2.1	10% to 19%	0.1
Anticonvulsants	4.2	2.0	<10%	0.1
Dermatological (antipsoriatics)	3.6	1.7	10% to 19%	0.1
Antidepressants	2.9	1.3	<10%	0.1
Urinary incontinence treatment agents	2.7	1.2	40% to 50%	0.3
Subtotal, top 15 drug classes	163.2	75.7	27%	12.8
Total all drug classes	215.7	100.0	23%	14.6

Note: COPD (chronic obstructive pulmonary disease). "Gross spending" reflects payments from all payers, including beneficiaries (cost sharing) for both brand and generic drugs but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. Therapeutic classification is based on the First DataBank Enhanced Therapeutic Classification System. Components may not sum to totals due to rounding.

Source: MedPAC analysis of Medicare Part D prescription drug event and direct and indirect remuneration data from CMS.

> In 2021, the top 15 therapeutic classes by spending accounted for nearly 76 percent of the $215.7 billion spent on prescription drugs covered by Part D plans.

> In 2021, total manufacturer rebates as a share of gross spending ranged from less than 10 percent to more than 50 percent. Some of that variation reflects the degree of competition within each therapeutic class. Overall, rebates for the top 15 classes averaged 27 percent of gross spending, higher than the average of 23 percent for all Part D spending. Rebates were the highest (greater than or equal to 50 percent) for diabetic therapies, which accounted for more than 18 percent of total gross spending in Part D.

> In addition to negotiated rebates, manufacturers must provide discounts for brand-name drugs and biologics filled by non-LIS enrollees when they fill prescriptions in the coverage-gap phase of the benefit. In 2021, these top 15 classes accounted for 88 percent ($12.8 billion) of all coverage-gap discounts. Diabetic therapies alone accounted for more than one-third of all coverage-gap discounts.

Chart 10-22 Despite high generic use, brand-name drugs accounted for the majority of spending in the top 15 therapeutic classes by spending, 2021

	Prescriptions*		Generic dispensing rate	Brand share of gross spending	LIS share of prescriptions
	Millions	Percent			
Diabetic therapy	191.8	7.1%	61%	97%	31%
Antineoplastics	15.0	0.6	86	95	21
Anticoagulants	54.0	2.0	26	99	26
Asthma/COPD therapy agents	81.1	3.0	53	91	43
Disease modifying anti-rheumatoid drugs	2.7	0.1	35	99	48
Antipsychotics (neuroleptics)	34.4	1.3	90	81	68
Antiretrovirals	3.1	0.1	18	97	68
Antihypertensive therapy agents	276.8	10.2	99	63	18
Ophthalmic agents	59.5	2.2	79	79	27
Antihyperlipidemics	309.1	11.4	98	44	18
Multiple sclerosis agents	0.8	<0.1	31	91	54
Anticonvulsants	103.7	3.8	98	50	45
Dermatological (antipsoriatics)	0.7	<0.1	36	98	54
Antidepressants	174.9	6.5	99	27	32
Urinary incontinence treatment agents	19.7	0.7	72	82	36
Subtotal, top 15 drug classes	1,327.3	49.1	85	89	28
Total, all drug classes	2,703.1	100.0	90	81	27

Note: COPD (chronic obstructive pulmonary disease), LIS (low-income subsidy). "Gross spending" reflects payments from all payers, including beneficiaries (cost sharing) for both brand and generic drugs but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. Therapeutic classification is based on the First DataBank Enhanced Therapeutic Classification System. Components may not sum to totals due to rounding.
*Prescriptions are standardized to a 30-day supply.

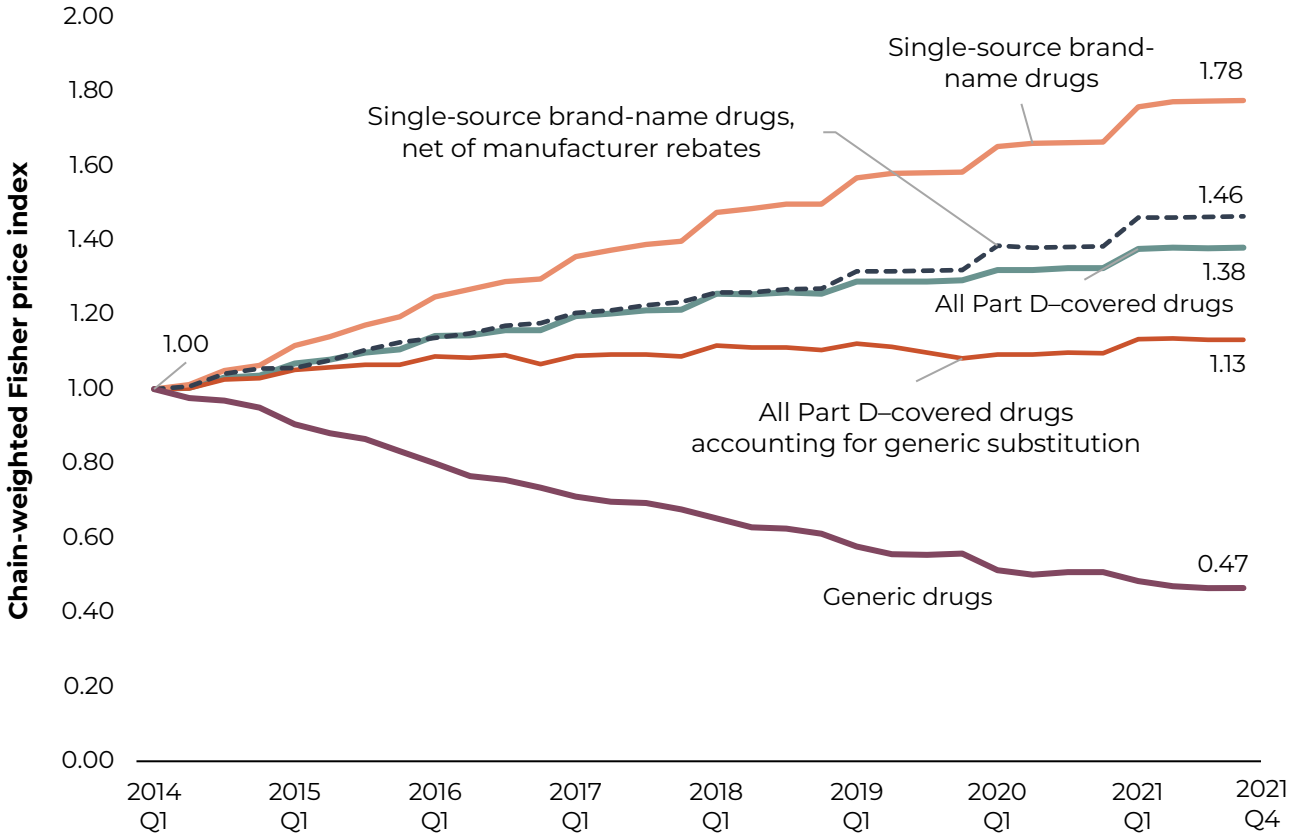
Source: MedPAC analysis of Medicare Part D prescription drug event and direct and indirect remuneration data from CMS.

> Prescriptions filled in the top 15 therapeutic classes by spending in 2021 (from Chart 10-20) totaled more than 1.3 billion prescriptions, accounting for nearly half of all prescriptions filled under Part D. While 85 percent of these prescriptions were for generic drugs, brand-name products accounted for 89 percent of the gross spending for these products in 2021.

> In 2021, LIS beneficiaries filled 28 percent of total prescriptions for products in these 15 classes, roughly equal to their share of prescriptions among all Part D drugs (27 percent). Nevertheless, LIS enrollees accounted for a disproportionate share of prescriptions in a few classes such as antipsychotics (68 percent) and antiretrovirals (68 percent).

> Even when generic drugs are widely used by Part D beneficiaries, for some therapeutic classes, brand-name drugs may still account for the vast majority of spending. For example, in 2021, generic drugs accounted for 86 percent of prescriptions for antineoplastics, but brand-name drugs accounted for 95 percent of gross spending for that class.

Chart 10-23 **Price growth for Part D–covered drugs, 2014–2021**



Note: Q1 (first quarter), Q4 (fourth quarter). Unless noted otherwise, Part D indexes reflect total amounts paid to pharmacies and do not reflect retrospective rebates or discounts from manufacturers and pharmacies.

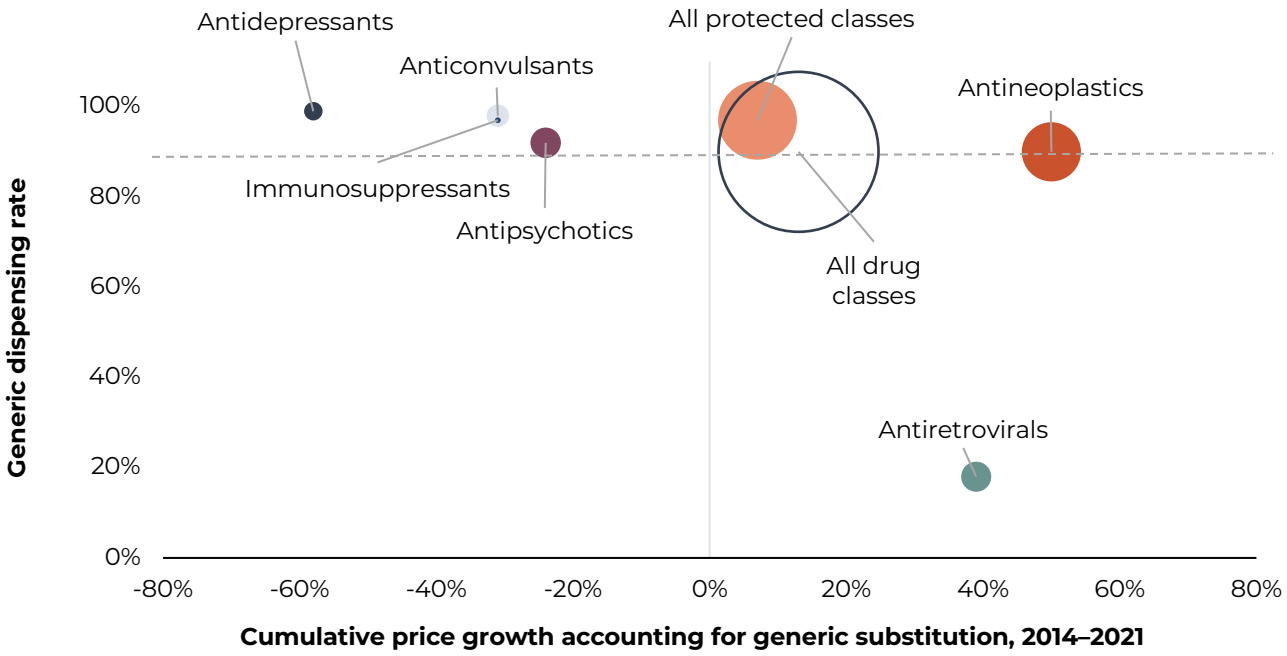
Source: Acumen LLC analysis for MedPAC.

> Measured by individual national drug codes, prices of drugs and biologics covered under Part D rose 38 percent cumulatively between 2014 and 2021 (an index of 1.38). (Prices reflect total amounts paid to pharmacies and do not reflect retrospective rebates or discounts from manufacturers and pharmacies.)

> Overall, between 2014 and 2021, prices of generic drugs covered under Part D decreased to 47 percent of the average price observed at the beginning of 2014. As a result, when measured by a price index that takes generic substitution into account, Part D prices have remained relatively flat during this period, with cumulative increase in prices at the end of 2021 at 13 percent above the prices at the beginning of 2014 (an index of 1.13). New and increased generic competition for selected therapeutic classes, such as anticonvulsants, antineoplastics, and drugs for multiple sclerosis, played a key role in slowing the growth in overall Part D prices during this period.

> Between 2014 and 2021, prices for all single-source, brand-name drugs (drugs with no generic substitutes) grew by a cumulative 78 percent (an index value of 1.78), compared with 46 percent (an index value of 1.46) for prices net of manufacturer rebates.

Chart 10-24 Price growth for therapeutic classes with protected status under Part D after accounting for generic substitution, 2014–2021



Note: Price indexes reflect total amounts paid to pharmacies and do not reflect retrospective rebates or discounts from manufacturers and pharmacies. The size of the bubble for each drug class reflects its relative share of gross spending in 2021.

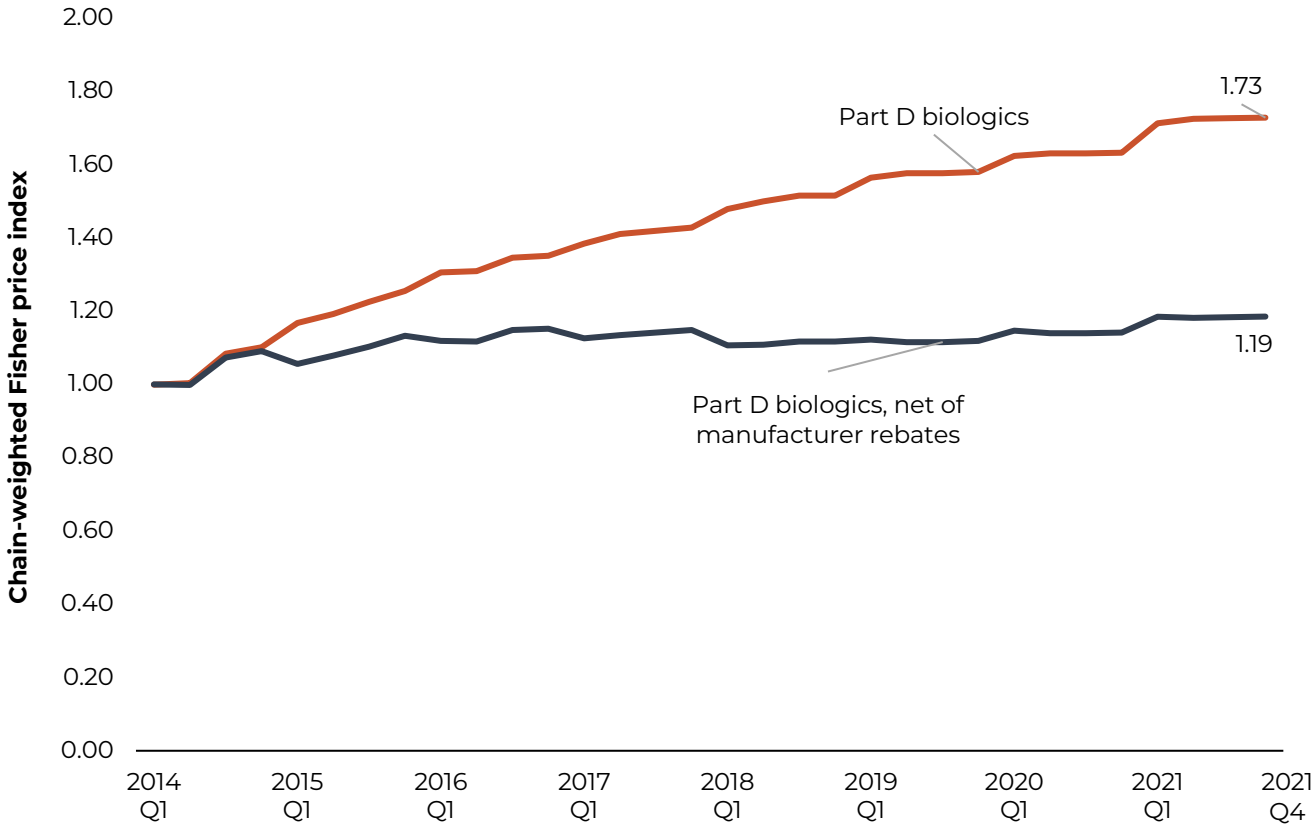
Source: MedPAC analysis of Medicare Part D prescription drug event and direct and indirect remuneration data from CMS and Acumen LLC for MedPAC.

> Medicare Part D designates six “protected classes" for which plan sponsors must include “all or substantially all” available drugs on their formularies: antidepressants, antipsychotics, anticonvulsants, immunosuppressants for treatment of transplant rejection, antiretrovirals, and antineoplastics. This policy provides patients with broader access to products, but it may also give manufacturers greater market power to raise prices for drugs already on the market or set high prices for new drugs. However, there are considerable differences across the six protected classes in the competitive pressures and how generic substitution affects pricing trends.

> Between 2014 and 2021, measured by individual national drug codes, cumulative price growth for all drugs in each of the protected classes, after accounting for generic substitution, ranged from −58 percent for antidepressants to 50 percent for antineoplastics. (Prices reflect total amounts paid to pharmacies and do not reflect retrospective rebates or discounts from manufacturers and pharmacies.)

> The availability of generics varies considerably across the protected classes, and widespread use of generics can influence overall price growth. For most protected classes, generic dispensing rates (GDRs) are high and thus prices have fallen considerably over time. Antineoplastics stand out as an exception: Despite a GDR of 90 percent, prices for the class grew 50 percent between 2014 and 2021, even after accounting for generic substitution (see the Commission’s June 2023 report for more).

Chart 10-25 Price growth for biologics covered under Part D, 2014–2021



Note: Q1 (first quarter), Q4 (fourth quarter). Part D biologics indexes were constructed using total amounts paid to pharmacies with and without retrospective rebates and discounts from manufacturers. Biologics include insulins. The indexes do not reflect retrospective fees and discounts from pharmacies.

Source: Acumen LLC analysis for MedPAC.

> Measured by individual national drug codes, prices of biologics (without retrospective rebates, fees, or discounts) covered under Part D rose 73 percent cumulatively between 2014 and 2021 (an index of 1.73). This increase is similar to the growth in prices for all single-source drugs and biologics (78 percent, or an index value of 1.78). (See Chart 10-23 for index measuring prices of all single-source drugs and biologics.)

> In comparison, between 2014 and 2021, prices of biologics net of retrospective rebates and discounts from manufacturers grew by a cumulative 17 percent (an index value of 1.19). The effect of manufacturer rebates on the prices of biologics was greater than that for all single-source drugs and biologics, which grew by a cumulative 46 percent (an index value of 1.46) for prices net of manufacturer rebates. (See Chart 10-23 for index measuring prices of all single-source drugs (including biologics) net of manufacturer rebates.)

> The prices of biologics are highly influenced by the prices of insulins. In 2021, insulins accounted for about 36 percent of total gross spending on biologics. Insulins and other antidiabetic therapies had some of the highest rebates, totaling more than 50 percent of gross spending for therapies in that class (see Chart 10-21).

Chart 10-26 Part B and Part D spending on products with a biosimilar pipeline

Brand name	Earliest biosimilar launch date (expected)	Number of biosimilars: Approved	Number of biosimilars: In pipeline	2021: Part B spending on originator product (billions)	2021: Part D spending on originator product (billions)	2021: Total Part B and Part D spending on biosimilars (billions)
Products with an approved biosimilar on the market						
Neupogen[a]	2015	3	1–3	$0.02	$0.01	$0.08
Remicade	2016	4	1–3	0.51	0.10	0.15
Procrit/Epogen	2018	1	1–3	0.06	0.14	0.12
Neulasta	2018	6	1–3	0.52	0.06	0.37
Humalog[a]	2018	2	1–3	**	1.70	0.28
Humalog Mix (75/25)[a]	2019	1		**	0.33	0.02
Rituxan	2019	3	4–6	0.83	0.05	0.55
Avastin	2019	4	4–6	0.37	0.02	0.52
Herceptin	2019	5	4–6	0.24	0.01	0.29
Lantus[ab]	2020	3	1–3	–	3.79	0.71
Novolog[a]	2020	1	4–6	–	2.37	0.08
Novolog Mix (50/50)[a]	2020	1	1–3	–	0.48	0.01
Lucentis[b]	2022	2	1–3	1.04	0.00	–
Humira[b]	2023	8	4–6	–	4.73	–
Subtotal				*3.60*	*13.83*	*3.18*
Products with a biosimilar approved but not yet on the market						
Enbrel	(2028)	2	1–3	–	2.36	–
Products with a biosimilar in development but none approved						
Stelara			7+	0.27	1.57	–
Toujeo			1–3	–	0.83	–
Soliris			1–3	0.64	0.25	–
Cimzia			1–3	0.50	0.22	–
Actemra			4–6	0.29	0.22	–
Simponi			1–3	0.37	0.17	–
Xolair			4–6	0.40	0.16	–
Tysabri			1–3	0.21	0.04	–
Eylea			7+	3.42	0.03	–
Prolia/Xgeva			7+	1.78	0.47	–
Subtotal				*7.87*	*3.95*	–
TOTAL		41	87	11.47	20.15	3.18

Note: Products included in this analysis include those approved or known to be in development as of May 2023.
[a]Authorized generics and follow-on products are included as biosimilars for purposes of this analysis. For a list of biosimilars currently on the market and available under Part B, refer to Chart 10-5. Others included in this analysis: Avastin: Alymsys, Vegzelma; Enbrel: Erelzi, Eticovo; Humalog: Admelog, insulin lispro AG; Humalog Mix (75/25): insulin lispro-protamine mix AG; Humira: Amjevita, Cyltezo (INT), Hyrimoz, Hadlima, Abrilada, Hulio, Yusimry, Idacio; Lantus: Basaglar, Semglee (INT), Rezvoglar; Lucentis: Cimerli; Neulasta: Fylnetra, Stimufend; Neupogen: Releuko; Novolog: insulin aspart AG; Novolog Mix (50/50): insulin aspart protamine AG.
[b]At least one biosimilar for this reference product has been designated by the Food and Drug Administration as interchangeable.
**Not able to distinguish spending on Humalog from other insulin lispro products in Part B.

Source: MedPAC analysis of CMS Drug Spending Dashboard, Food and Drug Administration Purple Book, and U.S. Biosimilar Report from AmerisourceBergen.

(Chart continued next page)

Chart 10-26 Part B and Part D spending on products with a biosimilar pipeline (continued)

> The first biosimilar product licensed under the Public Health Service Act was launched in the U.S. in 2015. As of May 2023, the Food and Drug Administration (FDA) has approved 46 biological products to compete with innovator biologics (40 biosimilars and 6 follow-on or authorized generic insulin products). Also as of May 2023, manufacturers have launched 44 biosimilars in the U.S., and another 84 are in development.

> Given that generic dispensing rates have plateaued since 2017 at roughly 90 percent, it is likely that any significant savings on drug spending in the future will come from the successful launch and adoption of biosimilars rather than increased use of traditional generic drugs. This chart shows the high level of spending on biological products for which biosimilars have or may soon enter the market and offer competition to potentially reduce spending.

> In 2021, Medicare spent $17.4 billion ($3.6 billion in Part B and $13.8 billion in Part D) on originator drugs for which biosimilars are now available; this includes spending on Lucentis and Humira, though their biosimilars did not become available until after 2021. Medicare spent another $2.36 billion in Part D on drugs for which the FDA has approved biosimilars but manufacturers have not yet launched their products on the market. Spending on products for which biosimilars are in development but none are yet approved equaled $11.83 billion ($7.87 billion in Part B and $3.95 billion in Part D). In 2021, these products combined accounted for 14 percent of all Medicare spending for separately payable drugs in Part B and Part D.

> In 2021, $3.18 billion was spent on biosimilars, with 61 percent ($1.9 billion) of that spending (data not shown) occurring in Part B. With more biosimilars for top-selling Part D drugs recently launching (including Humira in 2023), this share is likely to shift somewhat; however, the current biosimilar pipeline still favors drugs predominantly covered under Part B.

SECTION

11

Other services

Dialysis
Hospice
Clinical laboratory

Chart 11-1 Growth in the number of dialysis facilities slowed in 2021; most facilities are for profit and freestanding

	2021	Average annual percent change	
		2017–2020	2020–2021
Total number of:			
Dialysis facilities	7,879	3%	2%
Hemodialysis stations	137,900	3	1
Mean number of hemodialysis stations per facility	18	0.4	0
	Share of total facilities		
Hospital based	5%	–3	–1
Freestanding	95	3	2
Urban	84	4	2
Rural, micropolitan	10	1	1
Rural, adjacent to urban	4	0.2	0
Rural, not adjacent to urban	2	–2	0
Frontier	0.4	–1	3
For profit	89	3	2
Nonprofit	11	1	–1

Note: "Nonprofit" includes facilities designated as either nonprofit or government facilities. "Average annual percent change" is based on comparing 2017, 2020, and 2021 end-of-year files. Provider location reflects the county where the provider is located, in one of four categories (urban, micropolitan, rural adjacent to urban, and rural nonadjacent to urban) based on an aggregation of the Urban Influence Codes. Frontier counties have six or fewer people per square mile. 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.

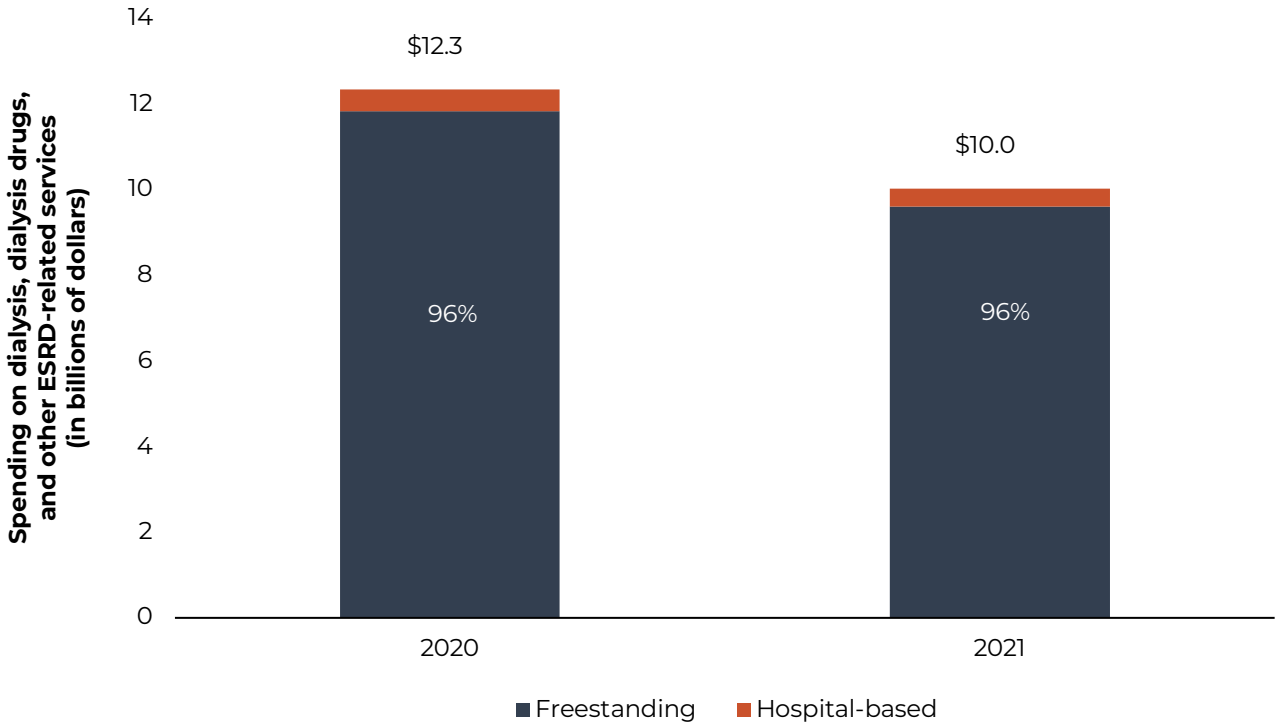
> Between 2017 and 2020, the number of facilities increased, on average, 3 percent per year, while between 2020 and 2021, the number of facilities increased on average by 2 percent. Likewise, facilities' capacity to provide care—as measured by hemodialysis treatment stations—grew more slowly between 2020 and 2021 compared with growth from 2017 through 2020 (1 percent per year vs. 3 percent per year, respectively).

> The recent decline in the growth of the total number of dialysis facilities and in-center capacity is likely attributable in part to coronavirus pandemic–related restrictions that may have affected the development of new facilities in 2020. The decline may also be linked to the growing trend toward home dialysis under the end-stage renal disease prospective payment system and the Center for Medicare & Medicaid Innovation's new model that aims to encourage greater use of home dialysis.

> The decline in rural capacity between 2020 and 2021 (data not shown) is also linked to facility size. Rural facilities are, on average, smaller than urban facilities. Also, compared with facilities that treated beneficiaries in 2020 and 2021, facilities that closed in 2020 were more likely to be small (as measured by the number of in-center hemodialysis treatment stations) (data not shown). The Commission's recommendation to replace the current low-volume payment adjustment and rural adjustment with a single low-volume and isolated adjustment would better protect isolated low-volume rural facilities that are necessary for beneficiary access.

> Since 2017, the number of freestanding and for-profit facilities increased, while hospital-based facilities decreased. Between 2017 and 2020, the number of freestanding and for-profit facilities increased by 3 percent and 1 percent per year, respectively. The average size of a facility has remained relatively constant, averaging between 17 and 18 dialysis treatment stations per facility.

Chart 11-2 Medicare spending for outpatient dialysis services furnished by freestanding and hospital-based dialysis facilities, 2020 and 2021



Note: FFS (fee-for-service), ESRD (end-stage renal disease).

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

> In 2021, total FFS Medicare spending for dialysis, dialysis drugs, and ESRD-related clinical laboratory tests was $10.0 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 paid separately before 2011.

> Between 2020 and 2021, total FFS ESRD expenditures decreased by 19 percent. The spending decline is due in large part to the increasing enrollment of dialysis beneficiaries in MA plans between 2020 and 2021. Specifically, between 2020 and 2021, the annual number of fee-for-service dialysis beneficiaries and treatments declined by 14 percent and 20 percent, respectively. In addition, the decline in spending could be linked to Medicare's inclusion of calcimimetics in the ESRD PPS bundle in 2021. Payment on a per unit basis under a transitional drug add-on payment adjustment in 2020 likely did not promote their efficient prescription.

> Freestanding dialysis facilities treated most dialysis beneficiaries and accounted for 96 percent of expenditures in 2020 and 2021.

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

	2010		2020		2010–2020
	Patients (thousands)	Share of patients	Patients (thousands)	Share of patients	Average annual percent change
Total	596.4	100%	807.9	100%	3%
Dialysis	419.4	70	562.1	70	3
In-center hemodialysis	379.1	64	480.5	59	2
Home hemodialysis*	5.9	1	11.9	1	7
Peritoneal dialysis*	32.9	6	65.4	8	7
Unknown	1.7	0.2	4.2	0.5	11
Functioning graft and kidney transplant	177.0	30	245.8	30	3

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 had a functioning graft at the start of the year in question (i.e., 2010 or 2020), or who received 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 live. The total number of ESRD patients increased on average by 3 percent per year between 2010 and 2020.

> 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 their abdomen as a filter. Peritoneal dialysis is the most common form of home dialysis.

> Most people with ESRD (70 percent) undergo hemodialysis administered in a dialysis facility three times a week. Between 2010 and 2020, the total number of in-center hemodialysis patients grew on average by 2 percent annually, while the total number of peritoneal dialysis patients increased on average by 7 percent annually. Although a smaller proportion of all dialysis patients undergo home hemodialysis, the number of these patients grew on average by 7 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 2020, 22 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 2020	Average annual percent change 2015–2020
Total (*N* = 807,920)	100%	3%
Age (years)		
0–17	1	1
18–44	14	1
45–64	42	2
65–79	34	4
80+	9	3
Sex		
Male	58	3
Female	42	2
Race/ethnicity		
White	43	2
Black	29	2
Native American	1	1
Asian American	7	5
Hispanic	19	4
Underlying cause of ESRD		
Diabetes	38	2
Hypertension	26	3
Glomerulonephritis	15	1
Other causes	21	3

Note: ESRD (end-stage renal disease). Totals may not equal the 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 43 percent are over age 65. About 43 percent are White.

> Diabetes is the most common cause of renal failure.

> The number of patients with ESRD increased by 3 percent annually between 2015 and 2020. 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, 2021

	Share of all FFS dialysis patients
Age (years)	
Under 45	10%
45–64	35
64–74	29
75–84	19
85+	6
Sex	
Male	57
Female	43
Race	
White	47
Black	33
All other	20
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	82
LIS	55
Dually eligible for Medicare and Medicaid	51

Note: FFS (fee-for-service), LIS (low-income subsidy). "Residence" reflects the beneficiary's county of residence in one of four categories (urban, micropolitan, rural adjacent to urban, and rural nonadjacent to urban) based on an aggregation of the Urban Influence Codes. Frontier counties have six or fewer people per square mile. T Components may not sum to 100 percent due to rounding.
* Data do not account for FFS beneficiaries with other sources of creditable coverage.

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

> Compared with all Medicare patients (see Chart 2-5), FFS dialysis patients are disproportionately younger and Black.

> In 2021, about 17 percent of FFS dialysis patients resided in a rural county.

> Half of all dialysis patients were dually eligible for Medicare and Medicaid services.

> In 2021, 82 percent of FFS dialysis patients were enrolled in Part D plans.

Chart 11-6 Aggregate margins varied by type of freestanding dialysis facility, 2021

Type of facility	Share of freestanding dialysis treatments	Aggregate margin
All facilities	100%	2.3%
Urban	88	3.0
Rural	12	–1.4
Treatment volume (quintile)		
Lowest	7	–20.6
Second	13	–9.2
Third	18	–1.1
Fourth	24	4.5
Highest	39	10.3

Note: Pandemic-related federal relief funds are not accounted for in the data presented in this table. Margins include payments and costs for dialysis services commonly provided under treatment, including injectable drugs and laboratory tests that were paid separately before 2011. 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. Components may not sum to 100 percent due to rounding.

Source: Compiled by MedPAC from 2021 cost reports and the 2021 institutional outpatient file from CMS.

> For 2021, the aggregate Medicare margin for dialysis-related services, including ESRD-related drugs and laboratory tests that were paid separately before 2011, was 2.3 percent.

> Including a portion of the congressional pandemic relief funds (based on fee-for-service Medicare's share of 2019 all-payer operating revenue) in our aggregate Medicare margins would raise the 2021 aggregate Medicare margin to 2.7 percent (data not shown).

> Between 2020 and 2021, the aggregate Medicare margin decreased (from 2.7 percent to 2.3 percent) due to increasing cost per treatment for all cost categories with the exception of ESRD drug costs (data not shown).

> 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 in-center hemodialysis treatment stations and Medicare treatments provided. Some rural facilities have benefited from the ESRD PPS's low-volume adjustment.

Chart 11-7 Dialysis quality of care: Some measures show progress, others need improvement, 2015–2020

Outcome measure	2015	2019	2020
Share of in-center hemodialysis patients:			
Receiving adequate dialysis	97%	98%	98%
Dialyzed with an AV fistula	64	63	63
Share of peritoneal dialysis patients receiving adequate dialysis	92	91	91
Share of all dialysis patients managing anemia			
Mean hemoglobin <10 g/dL	28	30	30
Mean hemoglobin 10 to <12 g/dL	67	65	65
Mean hemoglobin ≥12 g/dL	5	5	5
Share of all dialysis patients wait-listed for a kidney	16.3	13.1	12.7
Renal transplant rate per 100 patient years	3.4	3.9	3.8
Annual mortality rate per 100 patient years*	16.8	16.0	18.7
Total hospital admissions per patient year*	1.7	1.7	1.6
Hospital days per patient year*	11.3	11.3	11.0

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. Analysis of data on dialysis adequacy is based on measures used by CMS in its ESRD Quality Incentive Program. The U.S. Renal Data System (USRDS) adjusts hospitalization and mortality measures by age, gender, race, and primary diagnosis of end-stage renal disease.
*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 care is challenging to interpret due to the effects of the COVID-19 pandemic on many of our quality measures. Sadly, patients with ESRD are at increased risk for COVID-19–associated morbidity and mortality.

> Mortality rates increased during 2020 due to COVID-19 and possibly due to patient avoidance of health care for other illnesses, such as stroke. The decline in all-cause admissions in 2020 is also likely linked to the pandemic.

> 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 2019 and 2020, the share of dialysis patients accepted on the kidney transplant waiting list declined from 13.1 to 12.7, and the renal transplant rate per 100 dialysis-patient years decreased from 3.9 to 3.8. Each of these changes is likely linked to the pandemic.

> Other quality metrics remained relatively 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, remained steady between 2015 and 2020. Similarly, anemia management and dialysis adequacy remained steady throughout the period.

Chart 11-8 Hospice use was stable in 2021

	2010	2019	2020	2021	Average annual change 2010–2020	Change 2020–2021
Medicare payments (in billions)	$12.9	$20.9	$22.4	$23.1*	5.5%	2.8%*
Beneficiaries in hospice (in millions)	1.15	1.61	1.72	1.71*	3.8	0.0*
Number of hospice days for all hospice beneficiaries (in millions)	81.6	121.8	127.8	127.6*	4.6	–0.1*

Note: Total payments, number of hospice users, and number of hospice days displayed in the table are rounded; the percentage change in these figures is calculated using unrounded data.
*These estimates are based on Medicare paid hospice claims, which exclude hospice care paid for by a small number of Medicare Advantage (MA) plans participating in the Center for Medicare & Medicaid Innovation hospice MA VBID hospice model beginning in 2021. A CMS contractor report stated that 9,630 MA beneficiaries received hospice services in 2021 under the MA value-based insurance design program (Khodyakov et al. 2022).

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

> Total Medicare payments to hospices were about $23.1 billion in 2021, about 2.8 percent higher than the prior year.

> The number of Medicare beneficiaries receiving hospice services and total number of days of hospice care were stable in 2021.

Chart 11-9 After increasing from 2010 to 2019, the share of decedents using hospice declined in 2020 and 2021, reflecting the effects of the pandemic

	2010	2019	2020	2021	Average annual percent change 2010–2019	Percent change 2019–2020	Percent change 2020–2021
Number of Medicare decedents (millions)	1.99	2.32	2.73	2.73	1.7%	17.6%	–0.1%
Number of Medicare decedents who used hospice (millions)	0.87	1.20	1.31	1.29	3.6	9.0	–1.3
Share of decedents who used hospice	43.8%	51.6%	47.8%	47.3%			

Note: The "number of Medicare decedents who used hospice" reflects hospice use in the last calendar year of life. Analysis excludes beneficiaries without Medicare Part A because hospice is a Part A benefit. Yearly figures presented in the table are rounded, but figures in the percent change columns were calculated using unrounded data.

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

> Due to the pandemic, over 2.7 million beneficiaries died each year in 2020 and 2021, an 18 percent increase in annual deaths compared with 2019.

> In 2020, growth in deaths (18 percent) outpaced growth in the number of hospice users (9 percent), causing the share of Medicare decedents using hospice to decline from 51.6 percent to 47.8 percent between 2019 and 2020.

> In 2021, the share of decedents using hospice declined slightly to 47.3 percent, as deaths declined 0.1 percent and the number of decedents using hospice declined 1.3 percent between 2020 and 2021.

> The decline in hospice use rates in 2020 and 2021 reflects the effects of the pandemic since elderly people who die of COVID-19, similar to those who die of pneumonia and influenza, have been much more likely to die in the hospital and less likely to die at home or in a nursing facility than elderly people who die of other illnesses (data not shown).

> Prior to the pandemic, hospice use rates among decedents increased substantially, rising from 43.8 percent in 2010 to 51.6 percent in 2019.

Chart 11-10 Share of decedents using hospice declined overall in 2021 but increased for some beneficiary groups

	Share of decedents using hospice				Average annual percentage point change 2010–2020	Percentage point change 2020–2021
	2010	2019	2020	2021		
All	43.8%	51.6%	47.8%	47.3%	0.4	–0.5
FFS beneficiaries	42.8	50.7	47.2	47.2	0.4	–0.0
MA beneficiaries	47.2	53.2	48.7	47.4	0.2	–1.3
Dual eligible	41.5	49.3	42.3	42.1	0.1	–0.2
Non–dual eligible	44.5	52.4	49.8	49.2	0.5	–0.6
Age (years)						
<65	25.7	29.5	26.5	25.0	0.1	–1.5
65–74	38.0	41.0	37.3	35.8	−0.1	–1.5
75–84	44.8	52.2	48.3	47.8	0.4	–0.5
85+	50.2	62.7	59.0	60.8	0.9	1.8
Race/ethnicity						
White	45.5	53.8	50.8	50.0	0.5	–0.8
Black	34.2	40.8	35.5	35.6	0.1	0.1
Hispanic	36.7	42.7	33.2	34.3	−0.4	1.1
Asian American	30.0	39.8	36.0	36.3	0.6	0.3
North American Native	13.0	38.5	33.5	33.8	0.3	0.3
Gender						
Male	40.1	46.7	42.9	42.1	0.3	–0.8
Female	47.0	56.3	52.7	52.5	0.6	–0.2
Beneficiary location						
Urban county	45.6	52.8	48.8	48.5	0.3	–0.3
Rural county, micropolitan	39.2	49.7	46.8	45.1	0.8	–1.7
Rural county, adjacent to urban	39.0	49.5	46.1	44.9	0.7	–1.2
Rural county, nonadjacent to urban	33.8	43.8	40.7	39.8	0.7	–0.9
Frontier county	29.2	36.2	33.4	33.0	0.4	–0.4

Note: FFS (fee-for-service), MA (Medicare Advantage). For each demographic group, the share of decedents who used hospice is calculated as follows: The number of beneficiaries in the group who both died and received hospice in a given year is divided by the total number of beneficiaries in the group who died in that year. Prior to 2021, the "MA beneficiaries" group received hospice paid for by the FFS program; beginning in 2021, most individuals in the "MA beneficiaries" group received hospice paid for by FFS, but a small number received hospice paid for by their MA plan under the MA value-based insurance design model. "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 definitions. The frontier category is defined as population density equal to or less than six people per square mile and overlaps the beneficiary county of residence categories. Analysis excludes beneficiaries without Medicare Part A because hospice is a Part A benefit.

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

> Although the overall rate of hospice use among decedents declined slightly in 2021, the pattern varied by beneficiary characteristics, with hospice use growing among some groups.

> In 2021, 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 11-11 Number of Medicare-participating hospices has increased due to growth in for-profit hospices

	2017	2020	2021
All hospices	4,488	5,058	5,358
For profit	3,101	3,691	4,008
Nonprofit	1,226	1,220	1,195
Government	161	146	143
Freestanding	3,525	4,189	4,511
Hospital based	470	413	396
Home health based	471	437	434
SNF based	22	19	17
Urban	3,605	4,196	4,505
Rural	878	853	845

Note: SNF (skilled nursing facility). Some categories do not sum to total because of missing data for some 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). Type of hospice reflects the type of cost report filed (a hospice files a freestanding hospice cost report or the hospice is included in the cost report of a hospital, home health agency, or skilled nursing facility).

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

> There were 5,358 Medicare-participating hospices in 2021. About 75 percent of them were for-profit hospices.

> The number of Medicare-participating hospices grew by 300 providers between 2020 and 2021 and has increased about 20 percent since 2017. For-profit hospices accounted for all of the net growth in providers between 2020 and 2021.

> Between 2017 and 2021, growth in the number of providers has occurred among freestanding providers, while the number of hospital-based and home health–based providers declined. The number of SNF-based providers is small and has changed little over the years. (A hospice's status as freestanding, 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 4 percent between 2017 and 2021. The number of providers located in rural areas is not necessarily an indicator of access to care because it does not capture the size of those hospice providers, their capacity to serve patients, or the size of their service area; also, some urban hospices furnish services in rural areas. Indeed, despite the decline in the number of rural hospices since 2010 (data not shown), the share of rural decedents using hospice has grown overall since 2010 (see Chart 11-10).

Chart 11-12 Hospice cases by primary diagnosis, 2021

Diagnosis	Share of total cases
Alzheimer's, nervous system disorders, organic psychosis	24%
Cancer	24
Circulatory, except heart failure	21
Heart failure	8
Respiratory disease	6
Other	6
Chronic airway obstruction, NOS	4
Genitourinary disease	2
Digestive disease	2
COVID-19	2
All	100

Note: NOS (not otherwise specified). Cases include all patients who received hospice care in 2021, not just decedents. "Diagnosis" reflects primary diagnosis on the beneficiary's last hospice claim in 2021. Subgroups may not sum to 100 percent due to rounding.

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

> In 2021, the most common primary diagnoses among Medicare hospice patients were neurological conditions (Alzheimer's disease, nervous system disorders, and organic psychosis) and cancer (each accounted for 24 percent of cases), circulatory conditions other than heart failure (21 percent), and heart failure (8 percent).

> About 2 percent of Medicare hospice patients had COVID-19 as their hospice primary diagnosis in 2021. An additional 3 percent of hospice patients had COVID-19 as a secondary diagnosis on their hospice claims in 2021 (data not shown).

Chart 11-13 Hospice average length of stay among decedents decreased in 2021 to 2019 level

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	92.5	2	5	18	85	266
2020	97.0	2	5	18	87	287
2021	92.1	2	5	17	79	264

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 their lifetime.

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

> The average length of stay among decedents was 92.1 days in 2021, a decrease from 2020, but similar to the 2019 prepandemic level. In 2021, 50th percentile (median) length stay fell slightly to 17 days from 18 days in 2020.

> There is wide variation in hospice length of stay. In 2021, hospice length of stay among decedents ranged from 2 days at the 10th percentile to 264 days at the 90th percentile.

> Between 2010 and 2021, growth in average length of stay among decedents has been the result of increases in length of stay for patients with the longest stays. Length of stay grew from 242 days to 264 days at the 90th percentile.

Chart 11-14 Hospice length of stay among decedents, by beneficiary and hospice characteristics, 2021

	Average length of stay (in days)	Length-of-stay percentiles (in days)		
		10th	50th	90th
Beneficiary				
Diagnosis				
Cancer	51	3	16	125
Neurological	155	4	38	467
Heart/circulatory	104	2	18	313
COPD	140	3	32	424
Other	51	1	7	132
Site of service				
Home	95	3	24	260
Nursing facility	109	3	21	326
Assisted living facility	165	5	53	485
Hospice				
For profit	110	2	21	326
Nonprofit	71	2	13	192
Freestanding	94	2	17	272
Home health based	73	2	15	201
Hospital based	58	2	11	155

Note: COPD (chronic obstructive pulmonary disease). Length of stay is calculated for Medicare beneficiaries who died in 2021 and used hospice that year and reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during their lifetime. The location categories reflect where the beneficiary spent the largest share of their 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.

> For beneficiaries with a hospice primary diagnosis of COVID-19, median length of stay was 3 days and average length of stay was 22 days (data not shown).

> 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 11-15 Nearly 60 percent of Medicare hospice spending in 2021 was for patients with stays exceeding 180 days

	Medicare hospice spending, 2021 (in billions)
All hospice users in 2021	$23.1
Beneficiaries with LOS > 180 days	13.6
Days 1–180	4.4
Days 181–365	4.1
Days 366+	5.0
Beneficiaries with LOS ≤ 180 days	9.4

Note: LOS (length of stay). "LOS" reflects the beneficiary's lifetime LOS as of the end of 2021 (or at the time of death or discharge in 2021 if the beneficiary was not enrolled in hospice at the end of 2021). All spending reflected in the chart occurred only in 2021. Components 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 historical claims data).

> In 2021, Medicare hospice spending on patients with stays exceeding 180 days was about $13.6 billion, nearly 60 percent of all Medicare hospice spending that year.

> About $5.0 billion, or nearly 22 percent, of Medicare hospice spending in 2021 was on hospice care for patients who had already received at least one year of hospice.

Chart 11-16 Hospice Medicare aggregate margins, 2016–2020

	Share of hospices (2020)	Medicare margin				
		2016	2017	2018	2019	2020
All	100%	10.9%	12.5%	12.4%	13.4%	14.2%
Freestanding	83	14.0	15.3	15.1	16.2	16.7
Home health based	9	6.2	8.1	8.4	9.6	11.2
Hospital based	8	–16.7	–13.8	–16.5	–18.4	–18.2
For profit	73	17.9	20.0	19.0	19.2	20.5
Nonprofit	24	2.2	2.5	3.8	6.0	5.8
Government	3	N/A	N/A	N/A	N/A	N/A
Urban	83	11.4	12.9	12.6	13.6	14.3
Rural	17	6.3	8.9	10.3	11.5	13.5
Below cap	81	10.7	12.6	12.5	13.8	14.8
Above cap	19	12.6	12.1	10.1	10.0	7.7
Above cap (including cap overpayments)	19	20.2	21.9	21.8	22.5	22.8

Note: N/A (not available). Medicare aggregate margins for all provider categories exclude overpayments to above-cap hospices except where specifically indicated. Medicare aggregate margins are calculated based on Medicare-allowable, reimbursable costs. Margin by hospice ownership status is based on hospices' ownership designation from the Medicare cost report. The rural and urban definitions used in this chart are based on updated definitions of the core-based statistical areas (which rely on data from the 2010 census). Components may not sum to 100 percent due to rounding.

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

> The aggregate Medicare margin was 14.2 percent in 2020, up from 13.4 percent in 2019.

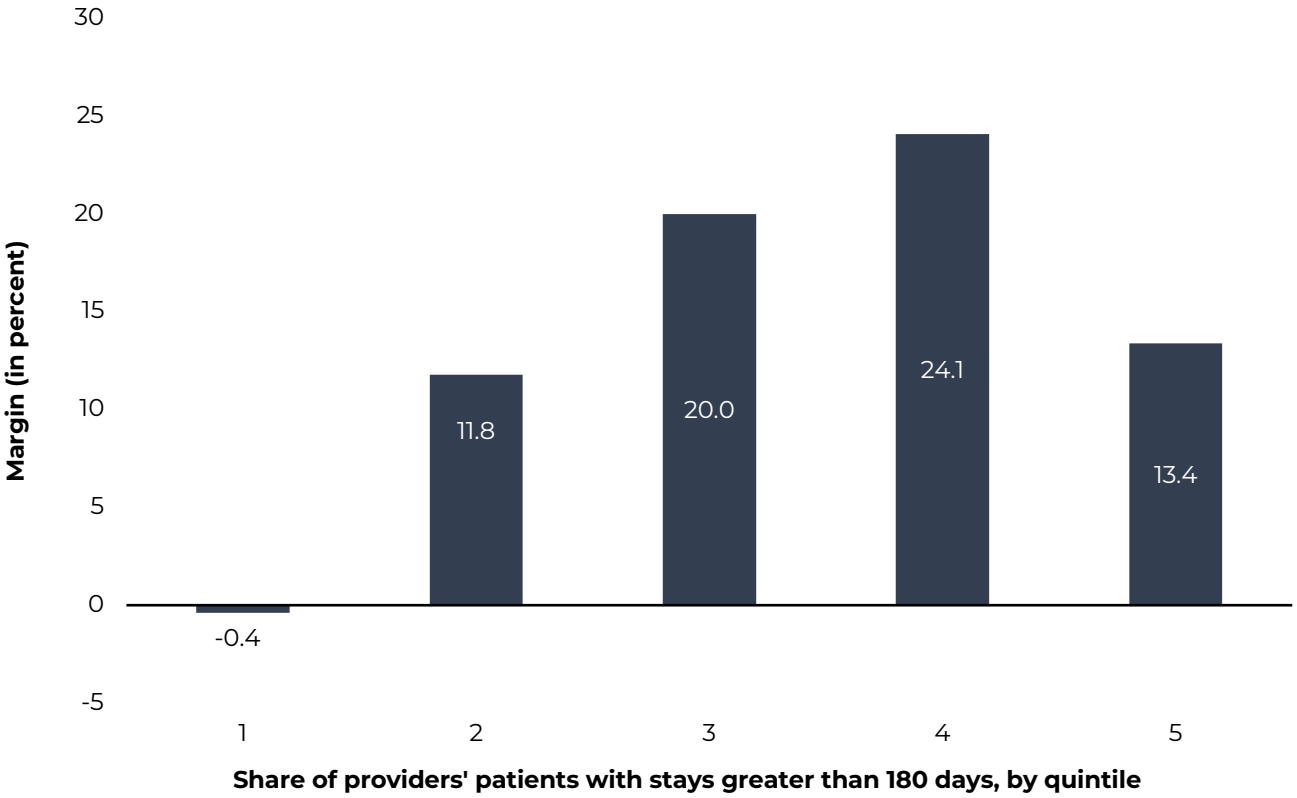
> In 2020, freestanding hospices had higher margins (16.7 percent) than home health–based (11.2 percent) and hospital-based hospices (–18.2 percent).

> The 2020 margin among for-profit hospices was high at 20.5 percent. Nonprofit hospices as a group had a margin of 5.8 percent in 2020, but the subset of nonprofit hospices that were freestanding had a higher margin, 9.5 percent (latter figure not shown in chart).

> The aggregate 2020 margin was slightly higher for urban hospices (14.3 percent) than rural hospices (13.5 percent).

> Hospices that exceeded the cap (Medicare's aggregate average per beneficiary payment limit) had a 2020 margin of about 22.8 percent before the return of the cap overpayments.

Chart 11-17 Medicare aggregate margins were higher among hospices with more long stays, 2020



Note: Medicare aggregate 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 15 percent; it was between 15 percent and 23 percent in the second quintile; it was between 23 percent and 29 percent in the third quintile; it was between 29 percent and 36 percent in the fourth quintile; and it was greater than 36 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 2020. Hospices in the lowest length-of-stay quintile had a margin of –0.4 percent compared with a 24.1 percent margin for hospices in the second highest length-of-stay quintile.

> Margins were somewhat lower in the highest length-of-stay quintile (13.4 percent) compared with the second highest quintile (24.1 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 22.8 percent before the return of overpayments (see Chart 11-16).

Chart 11-18 Hospices that exceeded Medicare's annual payment cap, 2015–2019

	2016	2017	2018	2019	2020
Share of hospices exceeding the cap	12.7%	14.0%	16.3%	19.0%	18.6%
Average payments over the cap per hospice exceeding the cap (in thousands)	$295	$273	$334	$384	$422
Payments over the cap as a share of overall Medicare hospice spending in cap year	1.0%	1.0%	1.3%	1.7%	1.8%

Note: The aggregate cap statistics reflect the Commission's estimates and may differ from the CMS claims processing contractors' calculations. Our estimates assume all hospices use the proportional methodology and rely on claims data through 15 months after the end of each cap year (except for 2016, which used 14 months). The claims processing contractors may reopen the hospice cap calculation for up to three years; the reopening process and timing may vary across contractors. To illustrate the potential effect of reopening, we re-estimated cap overpayments for 2017 using an additional 36 months of claims data (i.e., a 51-month run-out). With the additional 36 months of data, the estimated share of hospices exceeding the cap increased by just under 2 percentage points, the average payments over the cap per hospice exceeding the cap increased by roughly $25,000, and payments over the cap as a share of overall Medicare hospice spending increased by 0.3 percentage point. 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 in 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, and Medicare Provider of Services file data from CMS.

> An estimated 18.6 percent of hospices exceeded the aggregate cap in 2020, similar to 2019.

> On average, above-cap hospices exceeded the cap by approximately $422,000 per provider in 2020, up from about $384,000 per provider in 2019.

> Medicare payments over the cap represented 1.8 percent of total Medicare hospice spending in 2020.

Chart 11-19 Hospice live-discharge rates, 2019–2021

	2019	2020	2021
Live discharges as a share of all discharges, by reason for live discharge			
All live discharges	17.4%	15.4%	17.2%
No longer terminally ill	6.5	5.6	6.3
Beneficiary revocation	6.5	5.7	6.3
Transfer hospice providers	2.3	2.2	2.4
Move out of service area	1.7	1.6	2.0
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	8.6	7.5	8.5
25th percentile	12.3	10.9	12.5
50th percentile	18.9	16.9	19.1
75th percentile	29.5	26.6	30.2
90th percentile	46.6	43.3	50.0

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.

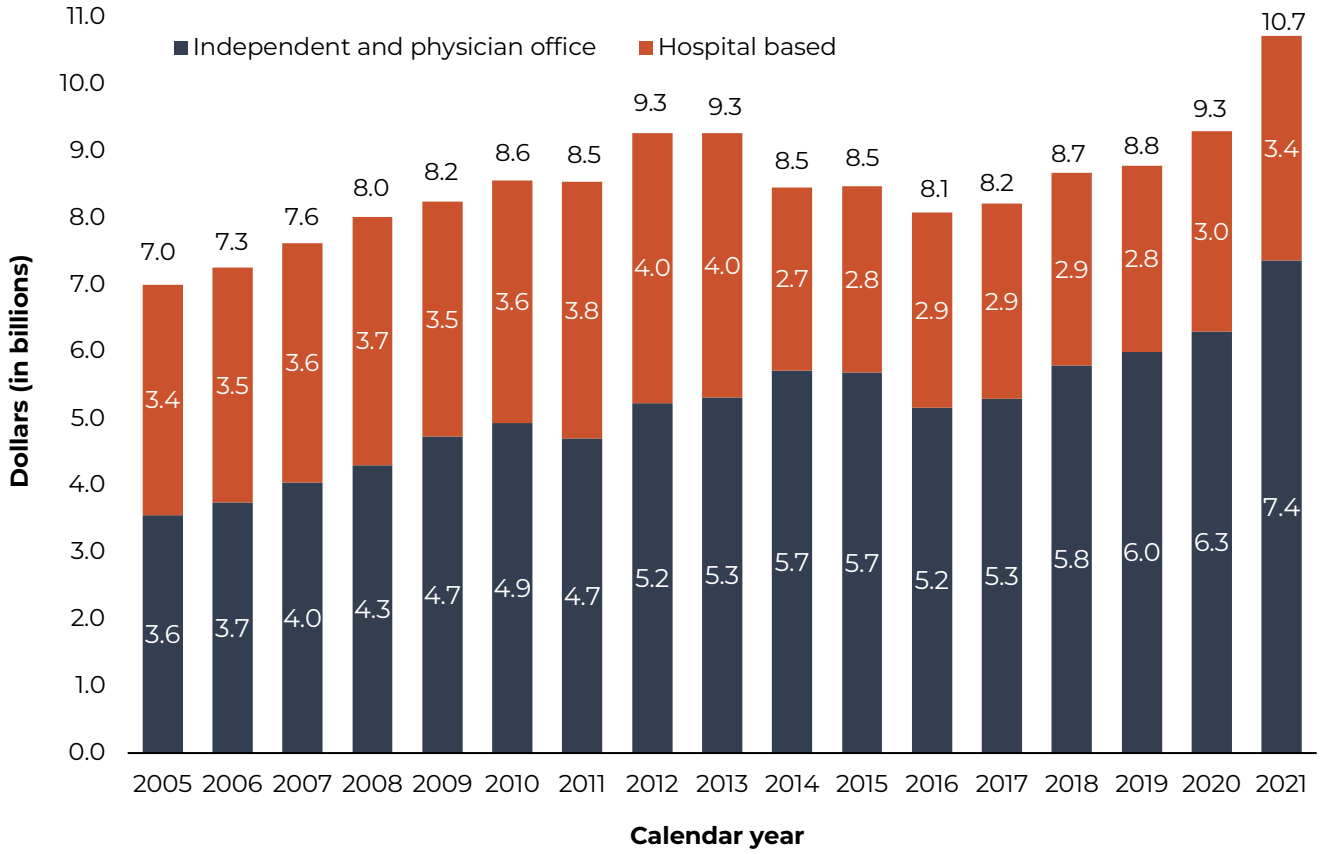
> In 2021, the overall live-discharge rate was 17.2 percent, an increase from 2020, but similar to 2019.

> The most common reasons for live discharge were the beneficiary revoking the hospice benefit and the beneficiary no longer being terminally ill, each accounting for 6.3 percent of all discharges in 2021. 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 of 50 percent or more in 2021.

> Small hospices as a group have substantially higher live-discharge rates than larger hospices. In 2021, the aggregate live-discharge rate was 47 percent for hospices with 30 or fewer discharges, in contrast to a 17 percent aggregate live discharge rate for all hospices (data for small hospices not shown).

Chart 11-20 Medicare spending for clinical laboratory tests, 2005–2021



Note: Spending is for services paid under the clinical laboratory fee schedule. Hospital-based services are furnished in laboratories 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 laboratory tests.

Source: The annual report of the Boards of Trustees of the Medicare trust funds, 2015 and 2021.

> Medicare spending for clinical laboratory tests in all settings grew by an average of 3.6 percent per year between 2005 and 2013.

> From 2013 to 2014, Medicare spending for laboratory tests declined by about 9 percent because, beginning in 2014, many laboratory tests provided in hospital outpatient departments are no longer paid separately under the clinical laboratory 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 laboratory tests 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 laboratory tests grew by an average of 5.2 percent per year.

> Largely due to the COVID-19 public health emergency, lab spending increased by 5.9 percent in 2020 and 15.3 percent in 2021.

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