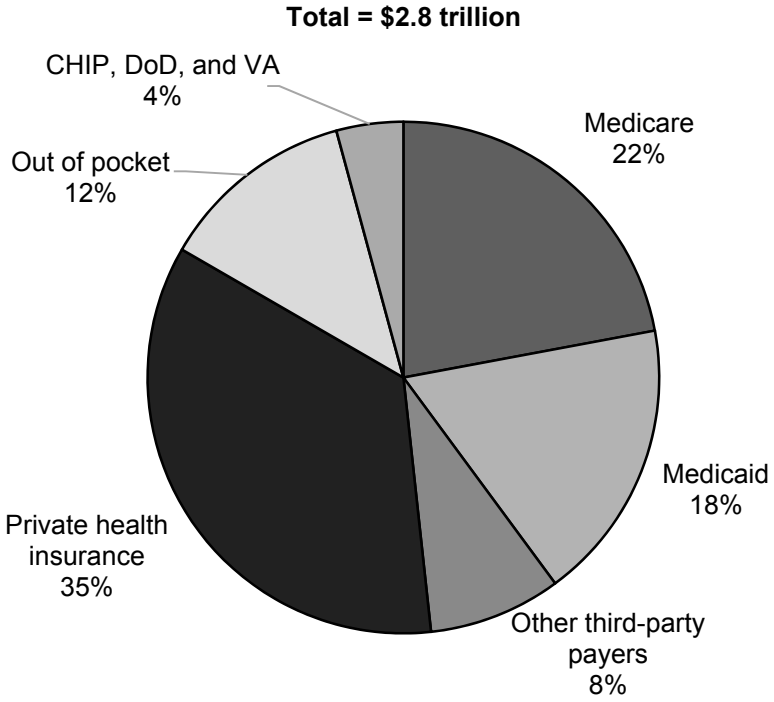
SECTION 1

National health care and Medicare spending

Chart 1-1. Medicare was the largest single purchaser of personal health care, 2016



Note: CHIP (Children's Health Insurance Program), DoD (Department of Defense), VA (Department of Veterans Affairs). "Personal health care" is a subset of national health expenditures. It includes spending for all medical goods and services that are provided for the treatment of an individual and excludes other spending such as government administration, the net cost of health insurance, public health, and investment. "Out-of-pocket" spending includes cost sharing for both privately and publicly insured individuals. Premiums are included in the shares of each program (e.g., Medicare, private health insurance) rather than in the share of the out-of-pocket category. "Other third-party payers" includes worksite health care, other private revenues, Indian Health Service, workers' compensation, general assistance, maternal and child health, vocational rehabilitation, other federal programs, Substance Abuse and Mental Health Services Administration, other state and local programs, and school health. Slices do not total 100 percent because of rounding.

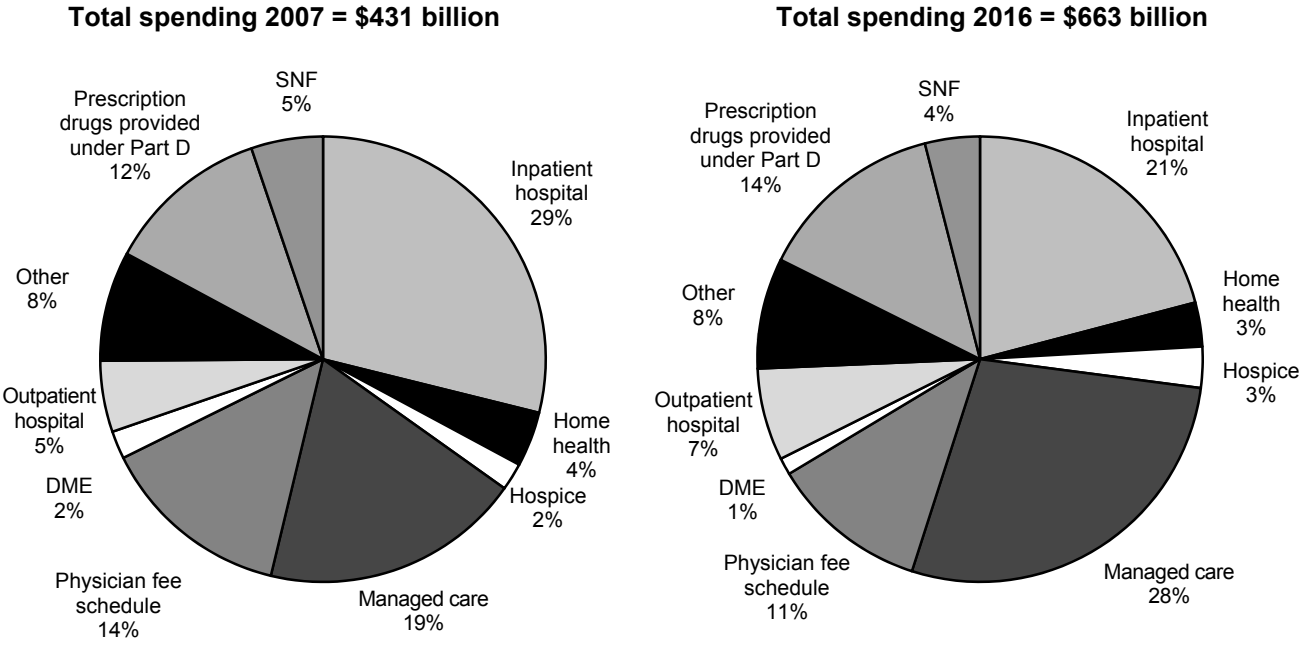
Source: CMS Office of the Actuary, National Health Expenditure Accounts, "Table 6: Personal Health Care Expenditures; Levels, Percent Change and Percent Distribution, by Source of Funds: Selected Calendar Years 1970–2016," released December 2017.

- Medicare is the largest single purchaser of health care in the United States. (The share of spending accounted for by private health insurance (35 percent in 2016) is greater than Medicare's share (22 percent in 2016). However, private health insurance is not a single purchaser of health care; rather, it includes many private plans, including traditional managed care, self-insured health plans, and indemnity plans.) Of the $2.8 trillion spent on personal health care in 2016, Medicare accounted for 22 percent, or $625 billion (as noted above, this amount includes spending on direct patient care and excludes certain administrative and business costs).

- Thirty-five percent of spending was financed through private health insurance payers, and 12 percent was consumer out-of-pocket spending.

- Medicare and private health insurance spending includes premium contributions from enrollees.

Chart 1-2. Medicare spending is concentrated in certain services and has shifted over time

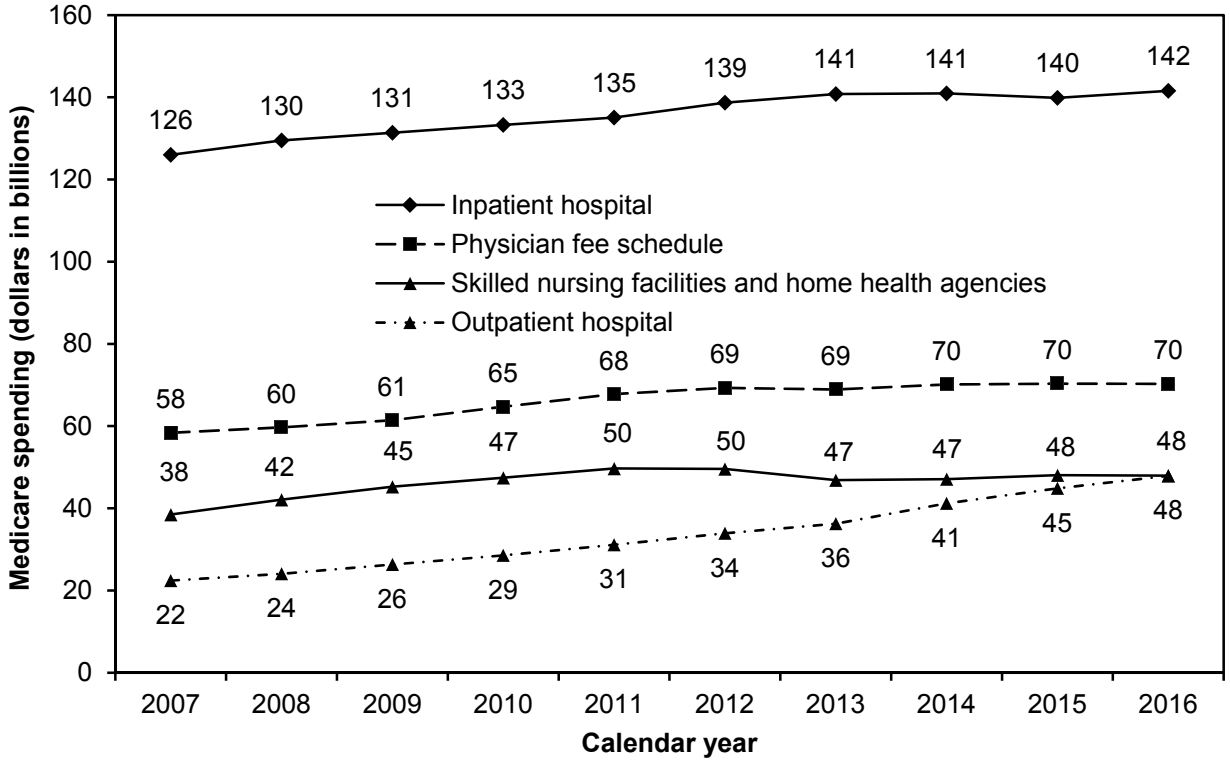


Note: SNF (skilled nursing facility), DME (durable medical equipment). All data are by calendar year. Dollar amounts are Medicare spending only and do not include beneficiary cost sharing. "Other" includes items such as laboratory services, physician-administered drugs, renal dialysis performed in freestanding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

Source: The annual report of the Boards of Trustees of the Medicare trust funds 2017.

- The distribution of Medicare spending among services has changed over time.
- In 2016, Medicare spending totaled $663 billion for benefit expenses. Managed care was the largest spending category (28 percent), followed by inpatient hospital services (21 percent), prescription drugs provided under Part D (14 percent), and services reimbursed under the physician fee schedule (11 percent).
- Spending for inpatient hospital services was a smaller share of total Medicare spending in 2016 than it was in 2007, falling from 29 percent to 21 percent. Spending on beneficiaries enrolled in managed care plans grew from 19 percent to 28 percent over the same period. Medicare managed care enrollment increased 112 percent over the same period (data not shown).

Chart 1-3. Aggregate Medicare spending for FFS beneficiaries, by sector, 2007–2016



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

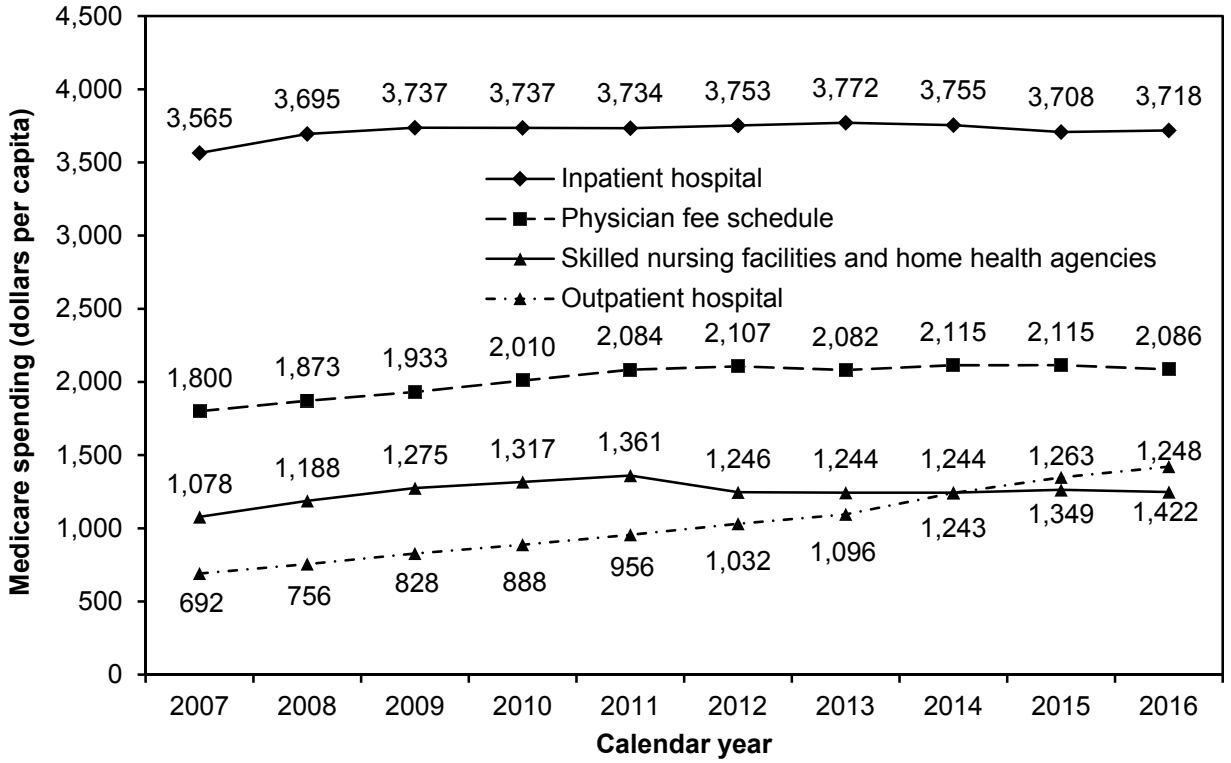
Source: The annual report of the Boards of Trustees of the Medicare trust funds 2017.

- Medicare spending for FFS beneficiaries has increased significantly since 2007 across all sectors, even though spending growth has slowed recently. The slowdown is partly attributable to a decline in the growth of FFS enrollment since the number of Medicare Advantage enrollees has increased.

- Spending growth for inpatient hospital services, the sector with the highest level of spending, averaged 1.6 percent per year from 2007 to 2014. Spending then declined by 0.8 percent between 2014 and 2015 (calculated on unrounded numbers). This decline is partly attributable to a shift in service volume from the inpatient setting to the outpatient setting and to the decline in the growth of FFS enrollment, but it may also reflect broader economic conditions. Spending then increased by 1.2 percent between 2015 and 2016 (calculated on unrounded numbers). Despite the slowdown, spending on inpatient hospital services increased, in aggregate, 12.4 percent from 2007 to 2016 (calculated on unrounded numbers).

- Spending growth for outpatient hospital services remained high throughout the period, averaging 8.8 percent per year from 2007 to 2016. Aggregate spending on outpatient hospital services increased 113.7 percent from 2007 to 2016 (calculated on unrounded numbers).

Chart 1-4. Per capita Medicare spending for FFS beneficiaries, by sector, 2007–2016



Note: FFS (fee-for-service). "Physician fee schedule" includes spending on services provided by physicians and other health professionals such as nurse practitioners, physician assistants, and physical therapists. Dollar amounts are Medicare spending only and do not include beneficiary cost sharing. Spending for Medicare Advantage enrollees is also not included. Spending per beneficiary for inpatient hospital services equals spending for the sector (see Chart 1-3) divided by FFS enrollment in Part A. Spending per beneficiary for physician fee schedule services and outpatient hospital services equals spending for the sector (see Chart 1-3) divided by FFS enrollment in Part B. Spending per beneficiary for skilled nursing facilities and home health agencies equals spending for those sectors (see Chart 1-3) divided by total FFS enrollment.

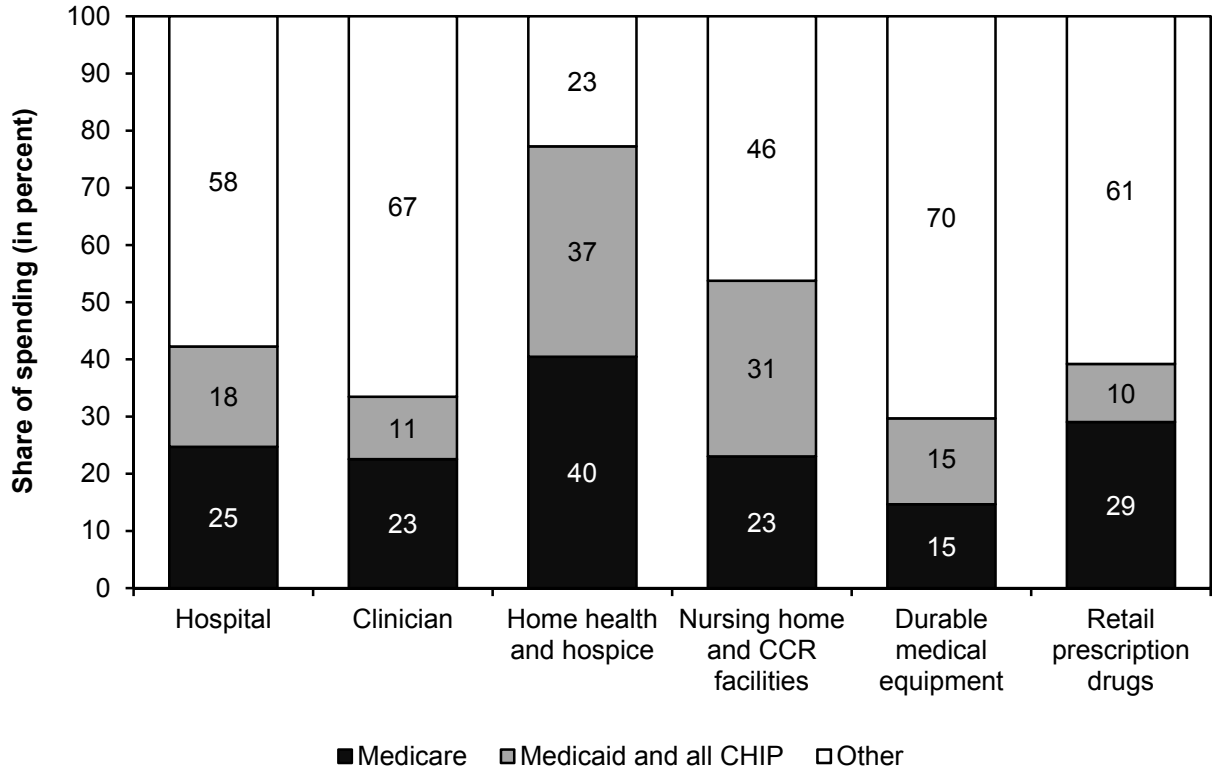
Source: The annual report of the Boards of Trustees of the Medicare trust funds 2017.

- Medicare spending per beneficiary in FFS Medicare has increased substantially since 2007 across all sectors, despite slowing down or declining recently in some sectors.

- Growth in spending per beneficiary for inpatient hospital services, the sector with the highest level of spending, averaged 2.4 percent per year from 2007 to 2009 and then decreased by 0.1 percent from 2009 to 2016. Despite the decline in recent years, spending per beneficiary for inpatient hospital services increased, in aggregate, 4.3 percent from 2007 to 2016.

- Growth in spending per beneficiary for outpatient hospital services remained high throughout the period, averaging 8.3 percent per year from 2007 to 2016. Spending per beneficiary for outpatient hospital services increased, in aggregate, 105.6 percent from 2007 to 2016.

Chart 1-5. Medicare's share of spending on personal health care varied by type of service, 2016



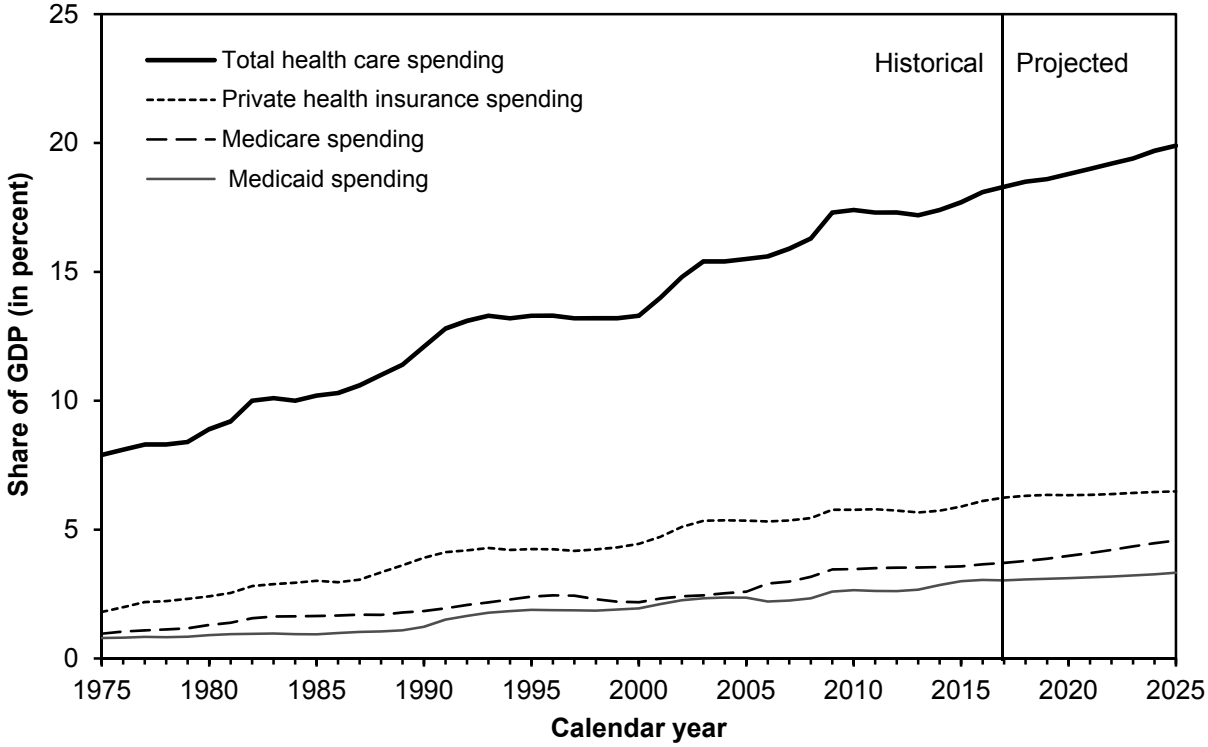
Note: CCR (continuing care retirement), CHIP (Children's Health Insurance Program). "Personal health care" is a subset of national health expenditures. It includes spending for all medical goods and services that are provided for the treatment of an individual and excludes other spending such as government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

Source: CMS Office of the Actuary, National Health Expenditure Accounts, "Table 19: National Health Expenditures by Type of Expenditure and Program: Calendar Year 2016," released December 2017.

- While Medicare's share of total personal health care spending was 22 percent in 2016 (see Chart 1-1), its share of spending by type of service varied, with a slightly higher share of spending on hospital care (25 percent) and retail prescription drugs (29 percent) and a much higher share of spending on home health and hospice services (40 percent) relative to other types of care.

- Medicare's share of spending on nursing homes and CCR facilities was smaller than Medicaid's share because Medicare pays for nursing home services only for Medicare beneficiaries who require skilled nursing or rehabilitation services, whereas Medicaid pays for custodial care (assistance with activities of daily living) provided in nursing homes for people with limited income and assets.

Chart 1-6. Health care spending growth rates have begun to gradually increase following recent slowdown



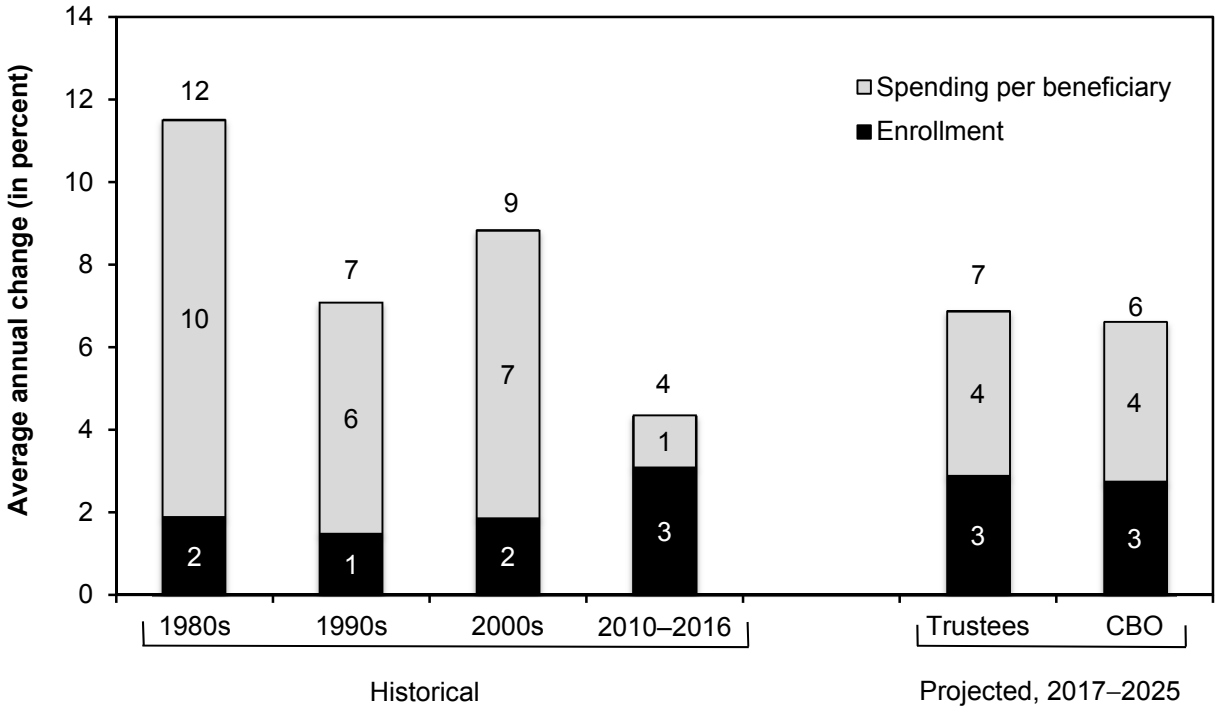
Note: GDP (gross domestic product).

Source: CMS Office of the Actuary, National Health Expenditure Accounts 2016.

- Historically, health care spending has risen as a share of GDP, but in recent years its growth rate slowed. That general trend was true for health care spending by private sector payers as well as by Medicare and Medicaid. As shown in the chart above, health care spending as a share of GDP remained relatively constant between 2009 and 2013. Since then, health care spending as a share of GDP has begun to rise again.

- As a share of GDP, total health care spending more than doubled from 1975 to 2015, increasing from 7.9 percent to 17.7 percent. Private health insurance spending, Medicare spending, and Medicaid all more than tripled over that same time period, increasing from 1.8 percent to 5.9 percent, from 1.0 percent to 3.6 percent, and from 0.8 percent to 3.0 percent, respectively, as a share of GDP.

Chart 1-7. Despite recent slowdown in per beneficiary spending growth, total Medicare spending growth rate is projected to rise



Note: CBO (Congressional Budget Office). Bar totals reflect average annual change in total Medicare spending and may differ from the sum of annual change in spending per beneficiary and Medicare enrollment due to rounding.

Source: The annual report of the Boards of Trustees of the Medicare trust funds 2017 and the Congressional Budget Office's 2018 Baseline.

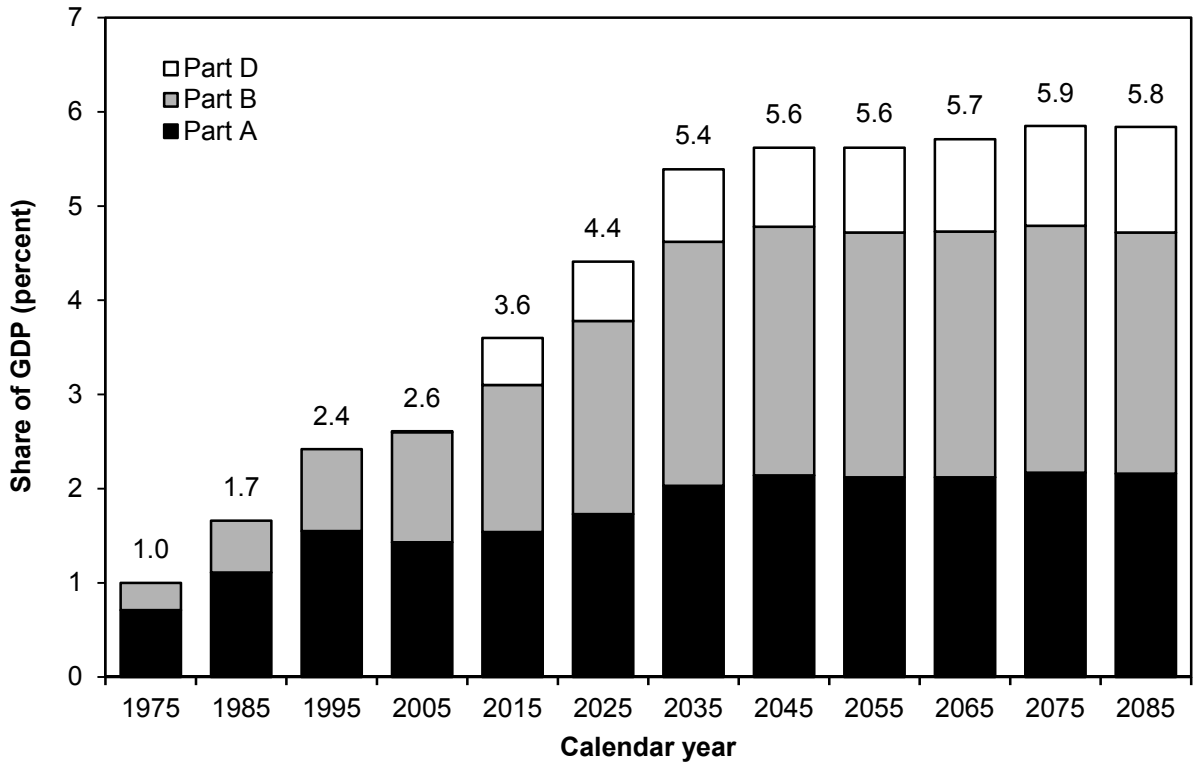
- The growth in Medicare's per beneficiary spending has fallen from average annual rates of 10 percent in the 1980s and 6 percent and 7 percent in the 1990s and 2000s, respectively, to 1 percent between 2010 and 2016.

- For 2017 to 2025, the Trustees and CBO project that growth in per beneficiary spending will be higher than the recent lows but lower than the historical highs, with an average annual growth rate of 4 percent.

- At the same time, the aging of the baby-boom generation is causing enrollment to increase. Over the last few years, the enrollment growth rate rose from about 1 percent to 2 percent per year historically to 3 percent and is projected to continue growing at a similar rate throughout the next decade.

- So, despite the slowdown in spending per beneficiary (relative to historical standards), growth in total spending over the next decade is projected by the Trustees to average 7 percent and by CBO to average 6 percent annually, which outpaces the projected average annual GDP growth of less than 5 percent.

Chart 1-8. Trustees project Medicare spending to continue to increase as a share of GDP



Note: GDP (gross domestic product). Shares for 2025 and later are projections based on the Trustees' intermediate set of assumptions. The Part D benefit began in 2006.

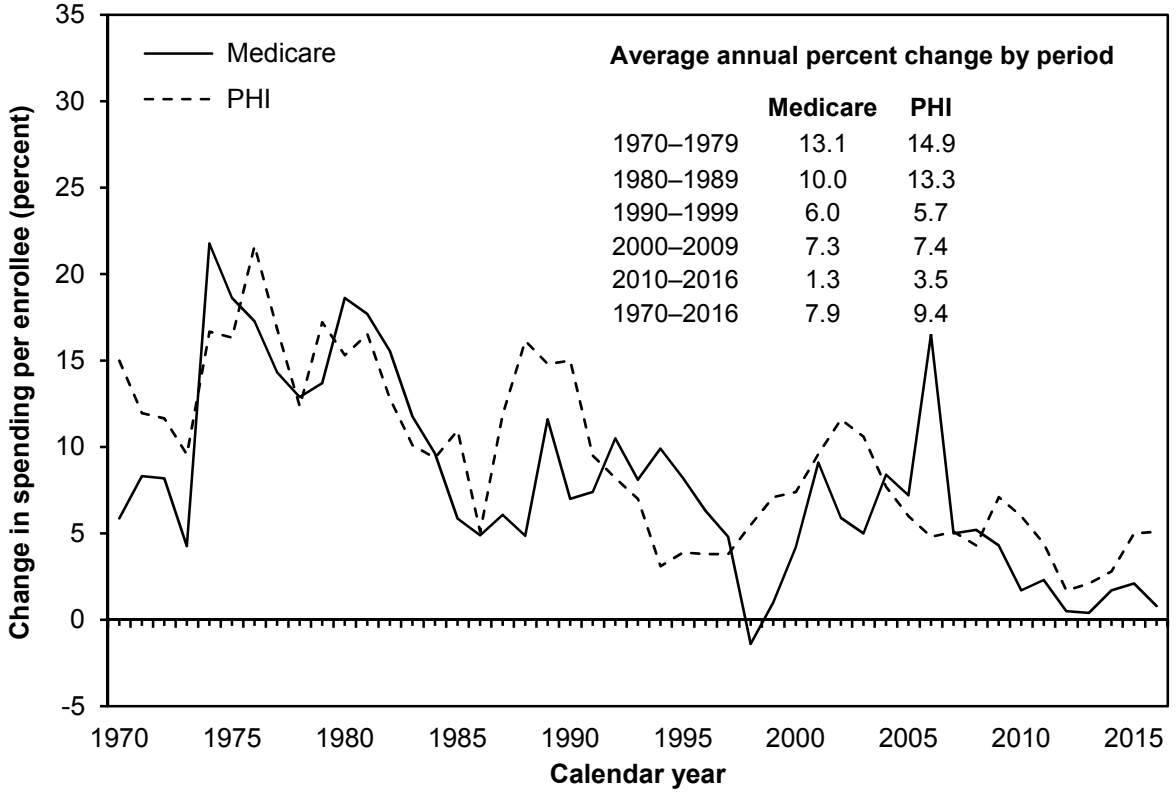
Source: The annual report of the Boards of Trustees of the Medicare trust funds 2017.

- Over time, Medicare spending has accounted for an increasing share of GDP. From 1 percent in 1975, it is projected to reach nearly 6 percent of GDP in 2075.

- The Medicare Trustees project that spending will rise from 3.6 percent of GDP in 2015 to 5.4 percent of GDP by 2035, largely because of rapid growth in the number of beneficiaries, and then to 5.9 percent of GDP in 2075, with growth in spending per beneficiary becoming the greater factor in the later years of the forecast. The rapid growth in the number of beneficiaries began in 2011 and will continue through 2030 as members of the baby-boom generation reach age 65 and become eligible to receive benefits.

- Medicare spending is projected to continue rising as a share of GDP, but at a slower pace than in the past. Nominal Medicare spending grew on average 9.6 percent per year over the period from 1975 to 2015, considerably faster than nominal growth in the economy, which averaged 6.1 percent per year over the same time frame (data not shown). Between 2015 and 2045, Medicare spending is projected to continue growing faster than GDP, averaging 6.1 percent per year compared with an annual average growth rate of 4.5 percent for the economy as a whole. Then, between 2045 and 2085, Medicare spending is projected to grow at a rate similar to GDP, averaging 4.5 percent per year compared with an annual average growth rate of 4.4 percent for the economy as a whole (data not shown).

Chart 1-9. Changes in spending per enrollee, Medicare and private health insurance, 1970–2016



Note: PHI (private health insurance). Medicare expenditures reported in this chart include both fee-for-service and Medicare Advantage plans.

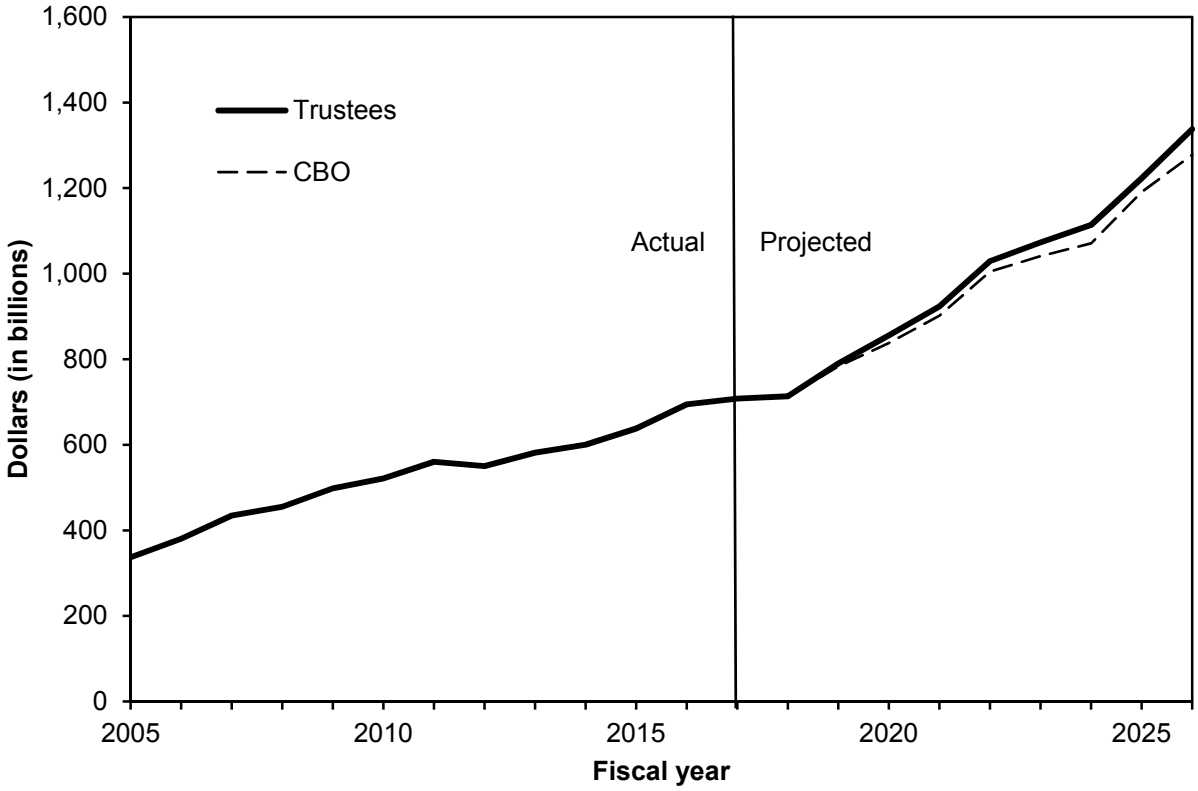
Source: CMS Office of the Actuary, National Health Expenditure Accounts 2013 and 2016.

- Rates of growth in per capita spending for Medicare and private health insurance have followed a similar pattern over the last four decades. For the past several years, rates of growth in per capita spending have been slower for both Medicare and private health insurance than in previous decades.

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

- Comparisons are problematic because private insurers and Medicare do not buy the same mix of services and Medicare covers an older population, which tends to be more costly. In addition, spending trends are also affected by changes in the generosity of covered benefits (e.g., introduction of the Part D drug benefit in 2006) and changes in enrollees' out-of-pocket spending.

Chart 1-10. Trustees and CBO project Medicare spending to exceed $1 trillion by the early part of the next decade



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

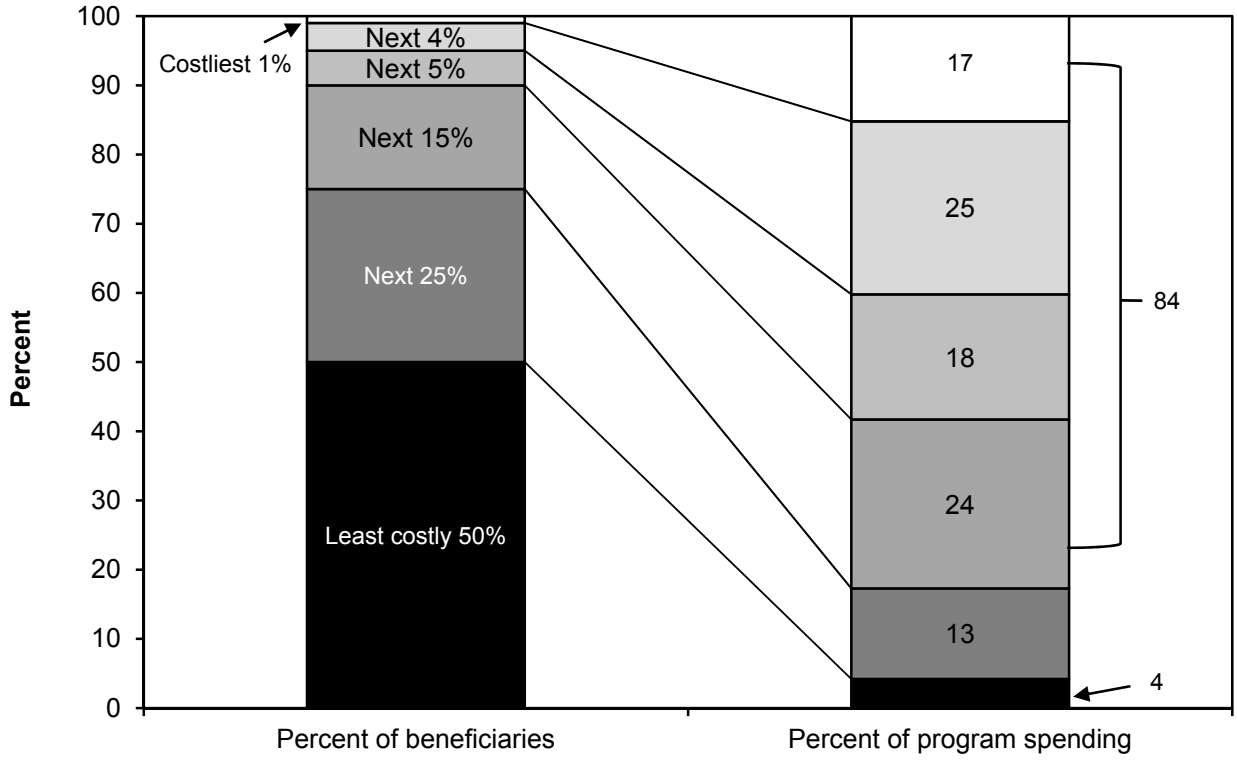
Source: Congressional Budget Office's April 2018 Baseline; the annual report of the Boards of Trustees of the Medicare trust funds 2017.

- Medicare spending has more than doubled since 2005, increasing from $337 billion to $695 billion by 2016 (these data are by fiscal year and include benefit payments and mandatory administrative expenses).

- The Medicare Trustees and CBO project that spending for Medicare between 2017 and 2025 will grow at an average annual rate of 7.3 percent or 6.8 percent, respectively. Medicare spending will reach $1 trillion in 2022 under both the Trustees' projections and CBO's projections.

- Forecasts of future Medicare spending are inherently uncertain, and differences can stem from different assumptions about the economy (which affect annual updates to provider payments) and about growth in the volume and intensity of services delivered to Medicare beneficiaries, among other factors.

Chart 1-11. FFS program spending was highly concentrated in a small group of beneficiaries, 2013



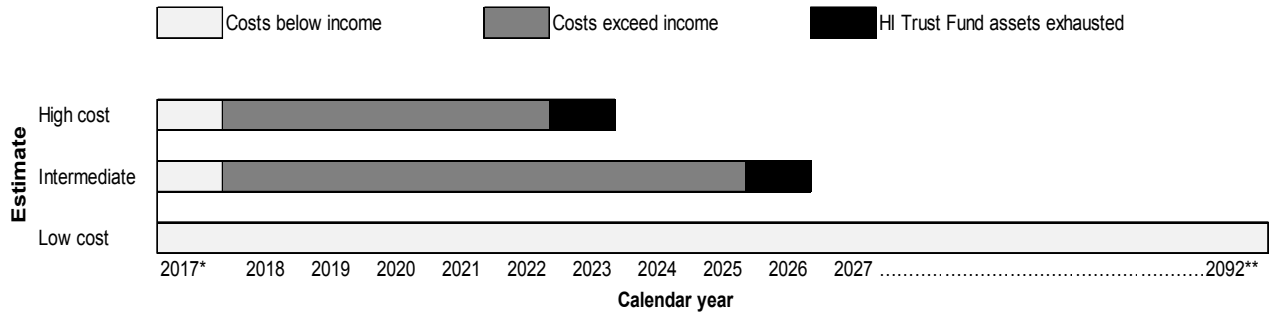
Note: FFS (fee-for-service). Analysis excludes beneficiaries with any group health enrollment during the year. Totals may not sum to 100 percent due to rounding.

Source: **AT THE TIME THIS DATA BOOK WAS PREPARED, ONLY PART OF THE MEDICARE CURRENT BENEFICIARY SURVEY (MCBS), WHICH IS THE CUSTOMARY SOURCE OF DATA FOR THIS CHART, HAD BEEN RELEASED FOR 2015. THIS CHART REFLECTS MEDPAC ANALYSIS OF THE 2013 MCBS COST AND USE FILES, WHICH ARE THE MOST RECENT AVAILABLE. (THERE ARE NO MCBS DATA FOR 2014.) THE READER IS ADVISED TO CONSULT THE 2015 MCBS DIRECTLY, WHEN THE COMPLETE SURVEY BECOMES AVAILABLE, FOR THE MOST CURRENT VERSION OF THESE DATA.**

- Medicare FFS spending is concentrated among a small number of beneficiaries. In 2013, the costliest 5 percent of beneficiaries accounted for 42 percent of annual Medicare FFS spending, and the costliest 25 percent accounted for 84 percent. By contrast, the least costly 50 percent of beneficiaries accounted for only 4 percent of FFS spending.

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

Chart 1-12. Medicare HI Trust Fund is projected to be insolvent in 2026 under Trustees' intermediate assumptions



Note: HI (Hospital Insurance). All years represent calendar years. The primary source of income for HI is the payroll tax on covered earnings. Other HI income sources include (a) a portion of the federal income taxes that Social Security recipients with incomes above certain thresholds pay on their benefits and (b) interest paid on the U.S. Treasury securities held in the HI Trust Fund.
*Costs and income for 2017 represent actual (not projected) experience.
**Under the low-cost assumption, trust fund costs would be below income through the 75-year projection period ending in 2092.

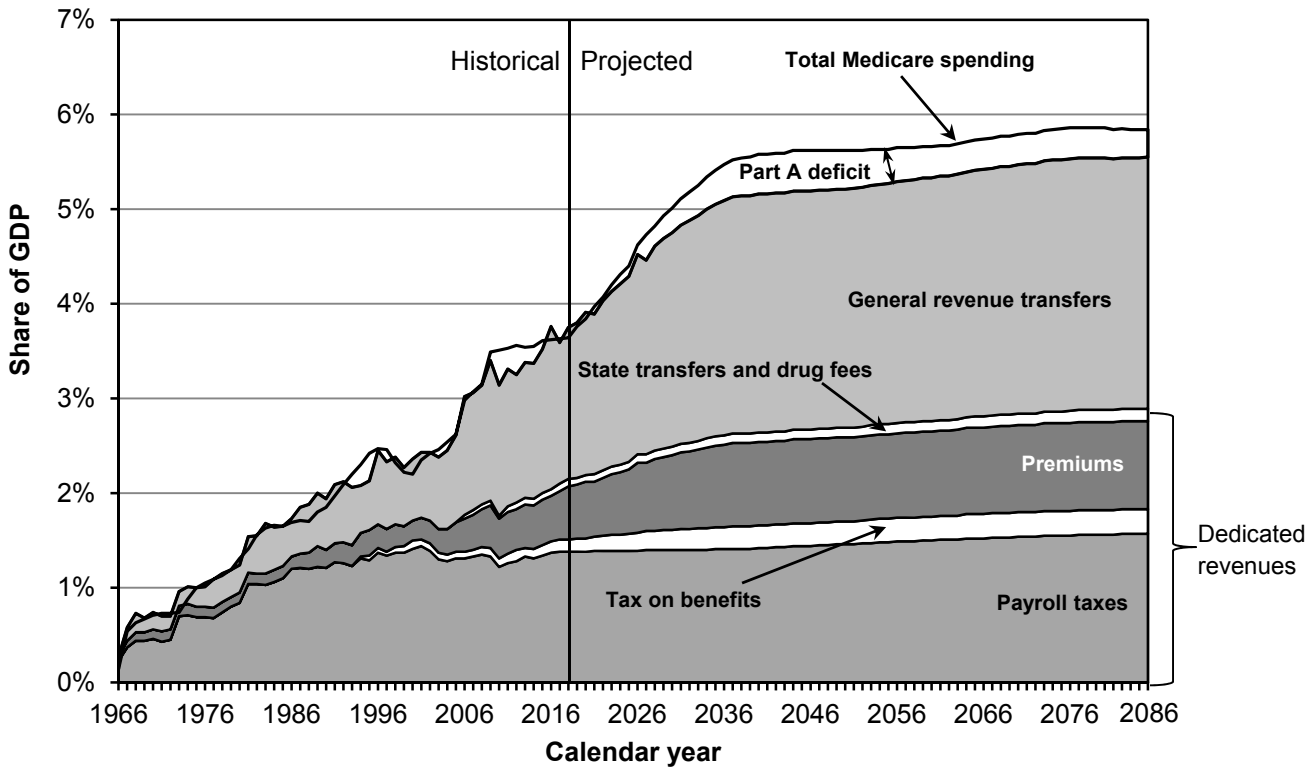
Source: The annual report of the Boards of Trustees of the Medicare trust funds 2018. (The 2018 report of the Boards of Trustees of the Medicare trust funds was released as we were finalizing production of this Data Book. Other charts in this Data Book that use information from the Boards of Trustees reflect the 2017 report. This chart is based on information from the 2018 report.)

- The HI Trust Fund funds Part A, which helps pay for inpatient hospital stays and post-acute care such as skilled nursing facilities and hospice. Part A is funded through a dedicated payroll tax (i.e., a tax on wage earnings).

- From 2008 to 2015, the HI Trust Fund ran an annual deficit (i.e., paid more in benefits than it collected in payroll taxes). In 2016 and 2017, the HI Trust Fund ran a surplus. However, both intermediate and high-cost assumptions project that deficits will return beginning in 2018. HI Trust Fund assets are projected to be exhausted by 2026 under the Trustees' intermediate assumptions. Under high-cost assumptions, the HI Trust Fund could be exhausted as early as 2023. Under low-cost assumptions, it would remain able to pay full benefits indefinitely.

- The Trustees estimate that the payroll tax would need to be immediately increased from its current rate of 2.90 percent to 3.72 percent to balance the HI Trust Fund over the next 75 years. Alternatively, Part A spending would need to be immediately reduced by 17 percent.

Chart 1-13. General revenue is paying for a growing share of Medicare spending

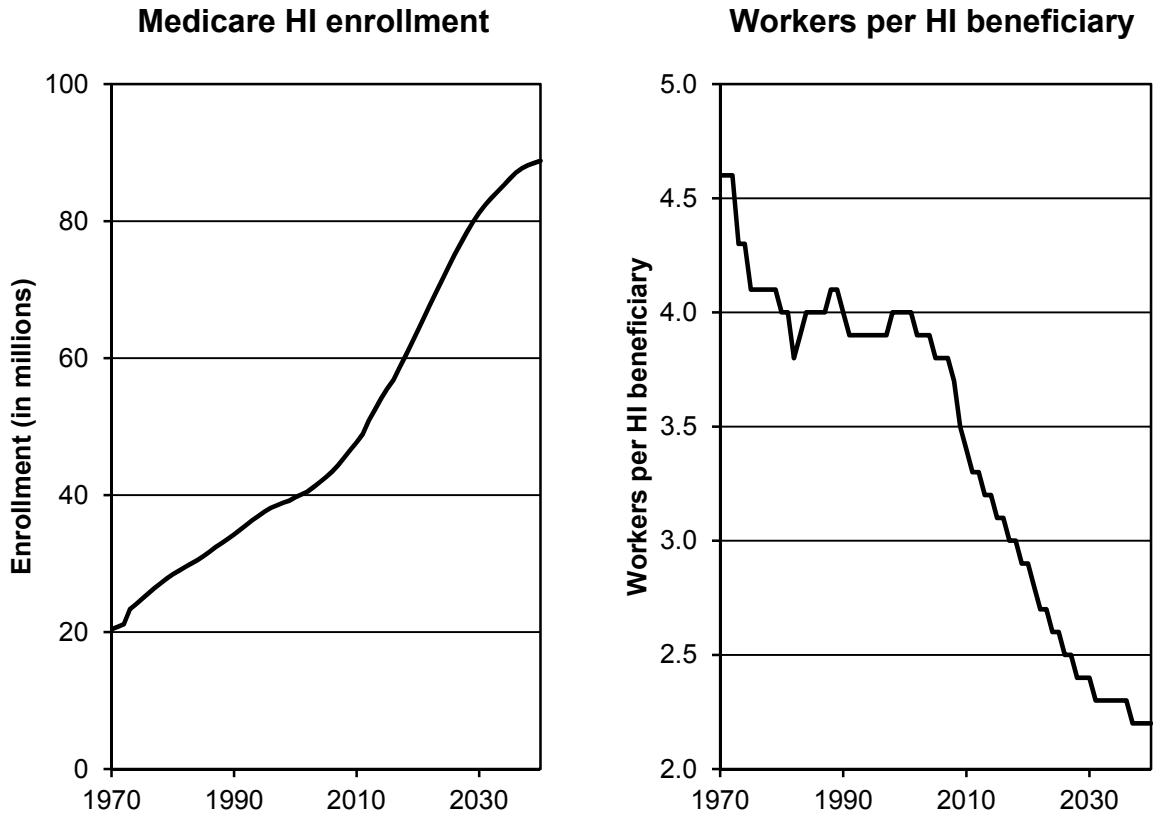


Note: GDP (gross domestic product). These projections are based on the Trustees' intermediate set of assumptions. "Tax on benefits" refers to the portion of income taxes that higher income individuals pay on Social Security benefits, which is designated for Medicare. "State transfers" (often called the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

Source: The annual report of the Boards of Trustees of the Medicare trust funds 2017.

- The Medicare Trustees project that Medicare's share of GDP will rise to 5.5 percent by 2036 and to 5.9 percent by 2075.
- Beginning in 2009, general revenue transfers became the largest single source of Medicare income. They are expected to continue to be a substantial share of Medicare financing, growing to about 48 percent by 2030, and then remaining stable throughout the 75-year budget period.
- As Medicare becomes more dependent on general revenues, fewer resources will be available to invest in growing the economic output of the future or in supporting other national priorities.

Chart 1-14. Medicare enrollment is rising while the number of workers per HI beneficiary is declining



Note: HI (Hospital Insurance). Hospital Insurance is also known as Medicare Part A.

Source: The annual report of the Boards of Trustees of the Medicare trust funds 2017.

- As the baby-boom generation ages, enrollment in the Medicare program will surge. By 2030, Medicare is projected to have over 80 million beneficiaries—up from 60 million beneficiaries today.
- While Medicare enrollment is rising, the number of workers per beneficiary is rapidly declining. Workers pay for Medicare spending through payroll taxes and income taxes. However, the number of workers per Medicare beneficiary declined from 4.6 during the early years of the program to 3.0 today and is projected by the Medicare Trustees to fall to 2.5 by 2026.
- These demographics threaten the financial stability of the Medicare program.

Chart 1-15. Medicare HI and SMI benefits and cost sharing per FFS beneficiary, 2015

	Average benefit in 2015 (in dollars)	Average cost sharing in 2015 (in dollars)
HI	$4,856	$435
SMI	5,259	1,332

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

Source: CMS Program Statistics, CMS Office of Enterprise Data and Analytics, CMS Chronic Conditions Data Warehouse.

- In calendar year 2015, the Medicare program made $4,856 in HI (Part A) benefit payments and $5,259 in SMI (Part B) benefit payments on average per FFS beneficiary.
- Beneficiaries owed an average of $435 in cost sharing for HI and $1,332 in cost sharing for SMI in calendar year 2015. (Cost sharing excludes all monthly premiums.)
- To cover some of those cost-sharing requirements, about 90 percent of beneficiaries have coverage that supplements or replaces the Medicare benefit package, such as Medicare Advantage, Medicaid, supplemental coverage through former employers, and medigap coverage.