

By Sean P. Keehan, Andrew J. Madison, John A. Poisal, Gigi A. Cuckler, Sheila D. Smith, Andrea M. Sisko, Jacqueline A. Fiore, and Kathryn E. Rennie

National Health Expenditure Projections, 2024–33: Despite Insurance Coverage Declines, Health To Grow As Share Of GDP

DOI: 10.1377/hlthaff.2025.00545
HEALTH AFFAIRS 44, NO. 7 (2025): –
This open access article is distributed in accordance with the terms of the Creative Commons Attribution (CC BY-NC-ND 4.0) license.

ABSTRACT National health expenditures are projected to have grown 8.2 percent in 2024 and to increase 7.1 percent in 2025, reflecting continued strong growth in the use of health care services and goods. During the period 2026–27, health spending growth is expected to average 5.6 percent, partly because of a decrease in the share of the population with health insurance (related to the expiration of temporarily enhanced Marketplace premium tax credits in the Inflation Reduction Act of 2022) and partly because of an anticipated slowdown in utilization growth from recent highs. Each year for the full 2024–33 projection period, national health care expenditure growth (averaging 5.8 percent) is expected to outpace that for the gross domestic product (GDP; averaging 4.3 percent) and to result in a health share of GDP that reaches 20.3 percent by 2033 (up from 17.6 percent in 2023).

Sean P. Keehan (sean.keehan@cms.hhs.gov), Centers for Medicare and Medicaid Services (CMS), Baltimore, Maryland.

Andrew J. Madison, CMS.

John A. Poisal, CMS.

Gigi A. Cuckler, CMS.

Sheila D. Smith, CMS.

Andrea M. Sisko, CMS.

Jacqueline A. Fiore, CMS.

Kathryn E. Rennie, CMS.

National health expenditures are projected to have grown strongly, at 8.2 percent, in 2024, which is nearly 3 percentage points faster than growth in the gross domestic product (GDP; 5.3 percent), and to have exceeded \$5 trillion (exhibit 1). This largely reflects sustained high growth in the use of health care services and goods after the muted growth that was observed during the COVID-19 pandemic. As a result of this increase in health spending, the health share of the economy is expected to have increased to 18.0 percent in 2024 (up from 17.6 percent in 2023).

During 2024–33, as the population continues to age and as demand for health care grows more rapidly than income (consistent with history), annual growth in national health spending (5.8 percent) is expected to be faster than average growth in GDP (4.3 percent) (calculable from exhibit 1). By 2033, the health share of the economy is projected to reach 20.3 percent.

In 2023, the insured share of the population reached an all-time high of 92.5 percent (exhibit 2).¹ The peak in 2023 was primarily a result of record-high Medicaid enrollment, which was influenced by the continuous enrollment requirement in the Families First Coronavirus Response Act (FFCRA) of 2020. Also contributing was rapid enrollment growth in direct-purchase private health insurance (the category that includes Marketplace plans),² with this increase driven by the temporary extension of enhanced premium tax credits and the implementation of a Medicaid special enrollment period as part of the Inflation Reduction Act (IRA) of 2022.³ Despite the expiration of the Medicaid continuous enrollment requirement in March 2023, the associated resumption of states redetermining eligibility for their respective programs, and the resulting drop in Medicaid enrollment, the insured share of the population is projected to have decreased slightly to 92.1 percent in 2024. Although Medicaid enrollment is projected to have declined from 91.7 million in 2023 to 84.5 million in 2024, the drop in the insured share is projected to have been mostly offset by three factors: the existence of concurrent health insur-

it 2).¹ The peak in 2023 was primarily a result of record-high Medicaid enrollment, which was influenced by the continuous enrollment requirement in the Families First Coronavirus Response Act (FFCRA) of 2020. Also contributing was rapid enrollment growth in direct-purchase private health insurance (the category that includes Marketplace plans),² with this increase driven by the temporary extension of enhanced premium tax credits and the implementation of a Medicaid special enrollment period as part of the Inflation Reduction Act (IRA) of 2022.³ Despite the expiration of the Medicaid continuous enrollment requirement in March 2023, the associated resumption of states redetermining eligibility for their respective programs, and the resulting drop in Medicaid enrollment, the insured share of the population is projected to have decreased slightly to 92.1 percent in 2024. Although Medicaid enrollment is projected to have declined from 91.7 million in 2023 to 84.5 million in 2024, the drop in the insured share is projected to have been mostly offset by three factors: the existence of concurrent health insur-

EXHIBIT 1

National health expenditures (NHE) and personal health care (PHC) expenditures, aggregate and per capita amounts, share of gross domestic product (GDP), and annual growth, selected calendar years 2022–33

	2022	2023	Projected			
			2024	2025	2027	2033
NHE, billions	\$4,525.8	\$4,866.5	\$5,263.3	\$5,635.1	\$6,280.8	\$8,585.3
PHC, billions	\$3,755.2	\$4,107.4	\$4,463.3	\$4,778.4	\$5,317.8	\$7,293.7
GDP, billions	\$26,006.9	\$27,720.7	\$29,184.9	\$30,527.4	\$33,272.9	\$42,283.3
NHE as percent of GDP	17.4%	17.6%	18.0%	18.5%	18.9%	20.3%
Disposable personal income, billions	\$18,844.0	\$20,546.8	\$21,625.7	\$22,625.3	\$24,606.7	\$31,485.5
Population, millions ^a	332.4	334.0	337.2	340.1	344.2	354.8
NHE per capita	\$13,617	\$14,570	\$15,610	\$16,570	\$18,247	\$24,200
PHC per capita	\$11,299	\$12,297	\$13,237	\$14,051	\$15,450	\$20,559
GDP per capita	\$78,249	\$82,996	\$86,554	\$89,766	\$96,667	\$119,185
Prices (2017 = 100.0)						
Chain-weighted NHE deflator	1.113	1.146	1.180	1.211	1.283	1.505
Chain-weighted PHC deflator	1.097	1.127	1.159	1.190	1.258	1.476
Chain-weighted GDP Implicit Price Deflator	1.180	1.223	1.252	1.282	1.343	1.519
Real spending						
NHE, billions of chained dollars	\$4,065	\$4,245	\$4,459	\$4,652	\$4,897	\$5,703
PHC, billions of chained dollars	\$3,424	\$3,645	\$3,850	\$4,017	\$4,226	\$4,941
GDP, billions of chained dollars	\$22,035	\$22,671	\$23,305	\$23,818	\$24,804	\$27,934
Average annual growth	2022^b	2023	2024	2025	2026–27	2028–33
NHE	6.4%	7.5%	8.2%	7.1%	5.6%	5.3%
PHC	5.8	9.4	8.7	7.1	5.5	5.4
GDP	6.5	6.6	5.3	4.6	4.4	4.1
Disposable personal income	5.2	9.0	5.3	4.6	4.3	4.2
Population ^a	0.3	0.5	1.0	0.9	0.6	0.5
NHE per capita	6.0	7.0	7.1	6.2	4.9	4.8
PHC per capita	5.5	8.8	7.6	6.1	4.9	4.9
GDP per capita	6.2	6.1	4.3	3.7	3.8	3.6
Prices (2017 = 100.0)						
Chain-weighted NHE deflator	2.5	3.0	3.0	2.6	2.9	2.7
Chain-weighted PHC deflator	2.1	2.7	2.9	2.6	2.9	2.7
Chain-weighted GDP Implicit Price Deflator	4.3	3.6	2.4	2.4	2.3	2.1
Real spending						
NHE	3.7	4.4	5.0	4.3	2.6	2.6
PHC	3.6	6.5	5.6	4.4	2.6	2.6
GDP	2.1	2.9	2.8	2.2	2.0	2.0

SOURCES Centers for Medicare and Medicaid Services (CMS), Office of the Actuary, National Health Statistics Group; and Department of Commerce, Bureau of Economic Analysis and Census Bureau. **NOTES** Definitions, sources, and methods for NHE categories can be found in CMS, National Health Expenditure Accounts: methodology paper, 2023, definitions, sources, and methods [Internet]. Baltimore (MD): CMS; 2024 Dec 18 [cited 2025 May 21]. Available from: <https://www.cms.gov/files/document/definitions-sources-and-methods.pdf>. Percent changes are calculated from unrounded data. Tables with data for all years of the projection period can be found in CMS.gov, NHE projections tables (see note 4 in text). ^aEstimates reflect the Census Bureau's definition of resident-based population, which includes all people who usually reside in the 50 states or the District of Columbia but excludes residents living in Puerto Rico and areas under US sovereignty, members of the US Armed Forces overseas, and US citizens whose usual place of residence is outside of the US. Estimates also include a small (typically less than 0.2 percent of the population) adjustment to reflect census undercounts. ^bAnnual growth, 2020–22.

ance coverage from other sources for those who were disenrolled from Medicaid, an additional 3.9 million enrolling in direct-purchase (mostly Marketplace) plans from the temporarily extended enhanced subsidies and special enrollment period, and projected gains in employer-sponsored health insurance of 1.3 million.⁴ A high insured share combined with the continued rebound in utilization from the somewhat suppressed levels during the COVID-19 public health emergency, particularly for those with private health insurance, contributed to the robust na-

tional health spending growth (8.2 percent) projected for 2024.

Beyond 2024, the early years of the projection period are expected to experience downward pressure on spending growth from the expired FFCRA and from a few key provisions of the IRA. From an enrollment perspective, the drop in Medicaid enrollment in 2024 is expected to be followed by a smaller decline (1.0 million) in 2025, which is the net effect of states completing their redetermination procedures (and related disenrollments) and incorporating re-enrolled

EXHIBIT 2
National health expenditures (NHE) and health insurance enrollment, aggregate and per enrollee amounts, and average annual growth, by source of funds, selected calendar years 2022–33

Source of funds	2022	2023	Projected			
			2024	2025	2027	2033
EXPENDITURE, BILLIONS						
Private health insurance	\$1,313.8	\$1,464.6	\$1,616.8	\$1,740.1	\$1,878.6	\$2,421.7
Medicare	952.5	1,029.8	1,115.0	1,201.0	1,425.5	2,192.0
Medicaid	807.5	871.7	925.6	994.4	1,135.2	1,626.3
PER ENROLLEE SPENDING						
Private health insurance	\$6,441	\$7,065	\$7,608	\$8,104	\$8,981	\$11,483
Medicare	14,933	15,808	16,860	17,654	20,020	28,109
Medicaid	8,869	9,502	10,951	11,905	13,273	18,189
ENROLLMENT, MILLIONS						
Private health insurance	204.0	207.3	212.5	214.7	209.2	210.9
Medicare	63.8	65.1	66.1	68.0	71.2	78.0
Medicaid	91.0	91.7	84.5	83.5	85.5	89.4
Uninsured	26.6	24.9	26.6	26.8	31.2	30.9
Population	332.4	334.0	337.2	340.1	344.2	354.8
Insured share of total population	92.0%	92.5%	92.1%	92.1%	90.9%	91.3%
Average annual growth						
	2022^a	2023	2024	2025	2026–27	2028–33
EXPENDITURE						
Private health insurance	4.5%	11.5%	10.4%	7.6%	3.9%	4.3%
Medicare	5.8	8.1	8.3	7.7	8.9	7.4
Medicaid	9.5	7.9	6.2	7.4	6.8	6.2
PER ENROLLEE SPENDING						
Private health insurance	4.1	9.7	7.7	6.5	5.3	4.2
Medicare	3.8	5.9	6.7	4.7	6.5	5.8
Medicaid	1.7	7.1	15.2	8.7	5.6	5.4
ENROLLMENT						
Private health insurance	0.3	1.6	2.5	1.0	-1.3	0.1
Medicare	1.9	2.1	1.5	2.9	2.3	1.5
Medicaid	7.7	0.8	-7.9	-1.2	1.2	0.7
Uninsured	-5.7	-6.3	6.8	0.8	7.9	-0.2
Population	0.3	0.5	1.0	0.9	0.6	0.5

SOURCE Centers for Medicare and Medicaid Services (CMS), Office of the Actuary, National Health Statistics Group. **NOTES** Definitions, sources, and methods for NHE categories can be found in CMS, National Health Expenditure Accounts: methodology paper (see the exhibit 1 notes). Numbers might not add to totals because of rounding. Percent changes are calculated from unrounded data. Tables with data for all years of the projection period can be found in CMS.gov. NHE projections tables (see note 4 in text). ^aAnnual growth, 2020–22.

and newly enrolled beneficiaries. The IRA is projected to affect spending and enrollment trends as well, including direct-purchase insurance enrollment growth through 2025, which is associated with the temporarily extended enhanced premium tax credits and the accompanying special enrollment period. Private health insurance enrollment is projected to decline by 2.2 percent in 2026 (largely reflecting a 12.3 percent decrease in direct-purchase insurance), when the subsidies expire under current law.⁴ The IRA also contains provisions that change the cost-sharing requirements for Medicare beneficiaries with Part D coverage (including a \$2,000 cap on out-of-pocket drug expenses beginning in 2025). In addition, the legislation directs the Department of Health and Human Services to negotiate prices

for selected drugs beginning in 2026, and it links drug price increases to the Consumer Price Index (CPI)—two provisions that are expected to put downward pressure on prescription drug spending growth.⁵

During 2024–33, Medicare spending is projected to grow the most rapidly, at a rate of 7.8 percent annually (calculable from exhibit 3), mostly as a result of strong average enrollment growth compared with Medicaid and private health insurance as the last cohort of baby boomers ages into Medicare through 2029. Although yearly spending trends are projected to be more volatile for Medicaid than for other payers, annual Medicaid spending growth is projected to average 6.4 percent for the period 2024–33, which is about the same as the program’s average

EXHIBIT 3

National health expenditures (NHE) and annual growth, by source of funds, selected calendar years 2022–33

Source of funds	2022	2023	Projected			
			2024	2025	2027	2033
Expenditure (billions)						
NHE	\$4,525.8	\$4,866.5	\$5,263.3	\$5,635.1	\$6,280.8	\$8,585.3
Health consumption expenditures	4,298.6	4,627.7	5,012.0	5,372.7	5,993.6	8,211.6
Out of pocket	471.5	505.7	542.6	577.5	621.4	781.9
Health insurance	3,245.6	3,558.6	3,862.9	4,156.5	4,689.1	6,572.8
Private health insurance	1,313.8	1,464.6	1,616.8	1,740.1	1,878.6	2,421.7
Medicare	952.5	1,029.8	1,115.0	1,201.0	1,425.5	2,192.0
Medicaid	807.5	871.7	925.6	994.4	1,135.2	1,626.3
Federal	570.7	591.4	597.0	638.0	726.1	1,029.9
State and local	236.8	280.3	328.7	356.5	409.1	596.4
Other health insurance programs ^a	171.8	192.5	205.4	221.0	249.8	332.7
Other third-party payers and programs	374.7	403.3	445.4	476.2	516.2	659.6
Public health activity	206.8	160.2	161.1	162.5	166.9	197.3
Investment	227.2	238.8	251.4	262.4	287.2	373.6
Average annual growth	2022^b	2023	2024	2025	2026–27	2028–33
NHE	6.4%	7.5%	8.2%	7.1%	5.6%	5.3%
Health consumption expenditures	6.4	7.7	8.3	7.2	5.6	5.4
Out of pocket	5.4	7.2	7.3	6.4	3.7	3.9
Health insurance	6.1	9.6	8.6	7.6	6.2	5.8
Private health insurance	4.5	11.5	10.4	7.6	3.9	4.3
Medicare	5.8	8.1	8.3	7.7	8.9	7.4
Medicaid	9.5	7.9	6.2	7.4	6.8	6.2
Federal	13.8	3.6	0.9	6.9	6.7	6.0
State and local	1.4	18.4	17.3	8.5	7.1	6.5
Other health insurance programs ^a	5.8	12.1	6.7	7.6	6.3	4.9
Other third-party payers and programs	3.8	7.6	10.5	6.9	4.1	4.2
Public health activity	24.1	–22.6	0.6	0.9	1.3	2.8
Investment	4.6	5.1	5.3	4.4	4.6	4.5

SOURCE Centers for Medicare and Medicaid Services (CMS), Office of the Actuary, National Health Statistics Group. **NOTES** Definitions, sources, and methods for NHE categories can be found in CMS, National Health Expenditure Accounts: methodology paper (see the exhibit 1 notes). Numbers might not add to totals because of rounding. Percent changes are calculated from unrounded data. Tables with data for all years of the projection period can be found in CMS.gov. NHE projections tables (see note 4 in text). ^aIncludes health-related spending for Children’s Health Insurance Program, Titles XIX and XXI; Department of Defense; and Department of Veterans Affairs. ^bAnnual growth, 2020–22.

during the twenty-year period 2000–19. For private health insurance, high growth in utilization, along with notable changes in enrollment, are expected to moderate during 2024–33, with spending projected to increase by 5.2 percent, on average. Among the major payers, out-of-pocket spending is expected to grow at the slowest rate during 2024–33, at 4.5 percent, in part because of multiple provisions in the IRA that alter financial responsibilities by shifting drug expenses from Medicare beneficiaries onto the program. The out-of-pocket share of total health spending is projected to decline from 10.4 percent in 2023 to 9.1 percent by 2033.

Comparable spending growth rate trends for 2024–33 are expected for hospital care, physician and clinical services, and prescription drugs, with an expectation of the highest rates during 2024–25, some volatility during 2026–27 (in part related to expected changes in private health insurance enrollment), and then largely

stabilizing growth thereafter. On average, the respective growth rates during 2024–33 are projected to be 5.9 percent, 5.5 percent, and 5.6 percent (calculable from exhibit 4).

In terms of health care financing, the government’s share (including federal and state and local) of health spending in 2024 is projected to have been 48 percent (exhibit 5), falling from a peak of 51 percent in 2020 (2020 not shown). During 2024, federal government–sponsored expenditures for Medicaid grew 1.0 percent, whereas state and local government–sponsored spending for Medicaid increased by 17.3 percent, as temporary federal matching rate increases to states during the public health emergency expired.⁴ For 2024–33, growth in total government health care spending is generally expected to outpace that of national health expenditures and to reach a 50 percent share by 2033. This result largely reflects average annual federal expenditure growth of 9.3 percent for Medicare.⁴

National health expenditures (NHE) amounts and average annual growth, by spending category, selected calendar years 2022–33

Spending category	2022	2023	Projected			
			2024	2025	2027	2033
NHE	\$4,525.8	\$4,866.5	\$5,263.3	\$5,635.1	\$6,280.8	\$8,585.3
Health consumption expenditures	4,298.6	4,627.7	5,012.0	5,372.7	5,993.6	8,211.6
Personal health care	3,755.2	4,107.4	4,463.3	4,778.4	5,317.8	7,293.7
Hospital care	1,376.7	1,519.7	1,659.2	1,772.4	1,960.4	2,697.0
Professional services	1,216.8	1,311.7	1,418.5	1,516.9	1,680.1	2,260.6
Physician and clinical services	910.4	978.0	1,053.9	1,123.5	1,243.7	1,676.1
Other professional services	142.7	159.9	175.1	189.4	211.4	289.7
Dental services	163.7	173.8	189.4	204.0	225.0	294.8
Other health, residential, and personal care	247.7	270.2	292.5	314.4	361.7	540.3
Home health care	133.4	147.8	160.5	173.6	202.6	317.3
Nursing care facilities and continuing care retirement communities	192.9	211.3	228.8	247.1	278.4	385.9
Retail outlet sales of medical products	587.7	646.7	703.9	754.1	834.6	1,092.7
Prescription drugs	403.6	449.7	494.9	529.4	590.1	776.1
Durable medical equipment	68.6	72.8	78.0	84.0	91.3	120.8
Other nondurable medical products	115.6	124.1	130.9	140.7	153.2	195.7
Government administration	54.0	57.4	60.3	62.8	69.4	87.1
Net cost of health insurance	282.6	302.9	327.2	369.0	439.4	633.5
Government public health activities	206.8	160.2	161.1	162.5	166.9	197.3
Investment	227.2	238.8	251.4	262.4	287.2	373.6
Noncommercial research	68.0	72.1	75.5	77.4	82.4	105.0
Structures and equipment	159.2	166.6	175.8	184.9	204.8	268.7
Average annual growth	2022^a	2023	2024	2025	2026–27	2028–33
NHE	6.4%	7.5%	8.2%	7.1%	5.6%	5.3%
Health consumption expenditures	6.4	7.7	8.3	7.2	5.6	5.4
Personal health care	5.8	9.4	8.7	7.1	5.5	5.4
Hospital care	4.9	10.4	9.2	6.8	5.2	5.5
Professional services	6.0	7.8	8.1	6.9	5.2	5.1
Physician and clinical services	5.8	7.4	7.8	6.6	5.2	5.1
Other professional services	8.8	12.0	9.5	8.2	5.6	5.4
Dental services	4.4	6.2	9.0	7.7	5.0	4.6
Other health, residential, and personal care	8.3	9.1	8.3	7.5	7.2	6.9
Home health care	5.9	10.8	8.5	8.2	8.0	7.8
Nursing care facilities and continuing care retirement communities	3.5	9.5	8.3	8.0	6.2	5.6
Retail outlet sales of medical products	7.3	10.0	8.8	7.1	5.2	4.6
Prescription drugs	6.2	11.4	10.1	7.0	5.6	4.7
Durable medical equipment	8.9	6.2	7.1	7.6	4.3	4.8
Other nondurable medical products	10.7	7.3	5.5	7.5	4.3	4.2
Government administration	4.3	6.2	5.2	4.1	5.2	3.9
Net cost of health insurance	6.3	7.2	8.0	12.8	9.1	6.3
Government public health activities	24.1	–22.6	0.6	0.9	1.3	2.8
Investment	4.6	5.1	5.3	4.4	4.6	4.5
Noncommercial research	6.3	6.1	4.7	2.5	3.2	4.1
Structures and equipment	3.9	4.6	5.5	5.2	5.2	4.6

SOURCE Centers for Medicare and Medicaid Services (CMS), Office of the Actuary, National Health Statistics Group. **NOTES** Definitions, sources, and methods for NHE categories can be found in CMS. National Health Expenditure Accounts: methodology paper (see exhibit 1 notes). Numbers might not add to totals because of rounding. Percent changes are calculated from unrounded data. Tables with data for all years of the projection period can be found in CMS.gov. NHE projections tables (see note 4 in text). ^aAnnual growth, 2020–22.

Chronological Overview Of Major Trends In National Health Expenditures

2024–25 National health spending is projected to have increased by 8.2 percent in 2024, reaching \$5.3 trillion (exhibit 1). This follows 7.5 per-

cent growth in 2023, influenced in part by expiring pandemic-related funding. The 2024 growth rate for health spending was faster than GDP growth (5.3 percent), resulting in a projected increase from 17.6 percent to 18.0 percent in the share of the economy devoted to health.

EXHIBIT 5

National health expenditures (NHE) amounts, average annual growth, and percent distribution, by type of sponsor, selected calendar years 2022–33

Type of sponsor	2022	2023	Projected			
			2024	2025	2027	2033
Expenditure, billions						
NHE	\$4,525.8	\$4,866.5	\$5,263.3	\$5,635.1	\$6,280.8	\$8,585.3
Businesses, household, and other private revenues	2,329.9	2,539.0	2,748.3	2,945.1	3,259.6	4,268.7
Private businesses	805.7	894.0	965.6	1,034.9	1,132.9	1,426.7
Household	1,233.0	1,316.6	1,415.6	1,513.9	1,694.1	2,285.2
Other private revenues	291.3	328.4	367.1	396.3	432.6	556.8
Governments	2,195.9	2,327.5	2,515.0	2,689.9	3,021.2	4,316.6
Federal government	1,514.0	1,566.2	1,668.3	1,782.6	2,002.4	2,938.4
State and local governments	681.9	761.3	846.7	907.3	1,018.9	1,378.2
Average annual growth						
NHE	6.4%	7.5%	8.2%	7.1%	5.6%	5.3%
Businesses, household, and other private revenues	4.5	9.0	8.2	7.2	5.2	4.6
Private businesses	4.4	11.0	8.0	7.2	4.6	3.9
Household	5.1	6.8	7.5	6.9	5.8	5.1
Other private	2.2	12.7	11.8	8.0	4.5	4.3
Governments	8.5	6.0	8.1	7.0	6.0	6.1
Federal government	10.9	3.4	6.5	6.9	6.0	6.6
State and local governments	3.8	11.6	11.2	7.2	6.0	5.2
Distribution						
NHE	100%	100%	100%	100%	100%	100%
Businesses, household, and other private revenues	51	52	52	52	52	50
Private businesses	18	18	18	18	18	17
Household	27	27	27	27	27	27
Other private	6	7	7	7	7	6
Governments	49	48	48	48	48	50
Federal government	33	32	32	32	32	34
State and local governments	15	16	16	16	16	16

SOURCE Centers for Medicare and Medicaid Services (CMS), Office of the Actuary, National Health Statistics Group. **NOTES** Definitions, sources, and methods for NHE categories can be found in CMS, National Health Expenditure Accounts: methodology paper (see the exhibit 1 notes). Numbers might not add to totals because of rounding. Percent changes are calculated from unrounded data. Tables with data for all years of the projection period can be found in CMS.gov. NHE projections tables (see note 4 in text) *Annual growth, 2020–22.

Spending on medical services and goods, referred to as personal health care spending, is projected to have continued to exhibit a high rate of growth in 2024, at 8.7 percent, compared with 9.4 percent in 2023 (exhibit 4). This growth rate, driven by continued strong growth in utilization, was generally faster than many major health insurers expected, and it resulted in higher medical loss ratios for some publicly traded health insurance companies.⁶ Hospital spending growth is projected to have moderated from 10.4 percent in 2023 to 9.2 percent in 2024 (the highest rates since 1991) as growth in private health insurance spending on hospital services decelerated but remained high (from 13.0 percent in 2023 to 10.7 percent in 2024). For prescription drug spending, growth is also expected to have been slower but to have continued to be strong, with the rate decreasing from 11.4 percent in 2023 to 10.1 percent in 2024.

Notable differential enrollment trends emerged in 2024, with largely offsetting effects,

as the insured share of the population is projected to have remained high, at 92.1 percent (exhibit 2). These enrollment patterns, however, are expected to have had a significant effect on trends in per enrollee Medicaid and private health insurance spending. Medicaid enrollment is projected to have declined by more than seven million people in 2024 (nearly 8 percent), a decrease associated with state-initiated coverage redeterminations that resulted in many younger and healthier people no longer being enrolled. Accordingly, per enrollee Medicaid spending growth is expected to have accelerated from 7.1 percent in 2023 to 15.2 percent in 2024. For private health insurance, enrollment is projected to have increased by 5.2 million in 2024 (or by 2.5 percent), a gain driven by the enhanced premium tax credits extension and special enrollment period. Although per enrollee private health insurance spending growth is expected to have slowed somewhat, from 9.7 percent in 2023 to 7.7 percent in 2024, the rate of

growth remains high compared to 2010–19 (averaging 3.2 percent)⁴ and reflects strong growth in the use of services and goods.

In 2025, national health spending growth is expected to remain strong, at 7.1 percent, slowing from 8.2 percent in 2024 (exhibit 1). Partly contributing to this deceleration is expected slower growth in personal health care prices, based on the chain-weighted personal health care deflator (from 2.9 percent in 2024 to 2.6 percent in 2025), as inflationary pressures on input price growth for providers abate. Private health insurance spending is projected to grow 7.6 percent in 2025, down from 10.4 percent in 2024, as enrollment growth slows from the surge in 2024 that resulted from Marketplace gains (exhibit 2). Hospital spending growth is also projected to moderate as growth in the use of services retreats some after the pandemic-related rebound during 2023–24 (exhibit 4).

2026–27 National health spending is expected to grow 5.4 percent in 2026 and 5.7 percent in 2027, which are slower rates of growth than the increase of 7.1 percent in 2025. These slower rates are largely due to decelerating growth rates in private health insurance spending (from 7.6 percent in 2025 to 3.3 percent in 2026 and to 4.5 percent in 2027), which are primarily the result of projected declines in private health insurance enrollment. The expiration of the temporarily enhanced premium tax subsidies for Marketplace plans in 2026 is projected to reduce enrollment in direct-purchase insurance by 4.7 million enrollees (representing a 12.3 percent drop in direct-purchase insurance enrollment and a 2.2 percent reduction in aggregate private health insurance enrollment).⁴ In 2027, enrollment in private health insurance is projected to decline by an additional 0.4 percent, and as a result, the insured share of the population is projected to decrease to 90.9 percent (compared with 92.1 percent in 2025).

2028–33 During 2028–33, the latter stage of the projection period, national health spending is projected to increase at an average rate of 5.3 percent, whereas GDP growth is projected to average 4.1 percent. Of the 1.2-percentage-point differential, half is attributable to the expectation of faster health price growth (personal health care price growth is projected to average 2.7 percent annually, whereas economywide prices, based on the GDP deflator, are projected to increase by 2.1 percent per year), and the remainder is attributable to comparatively faster expected growth in the use and intensity of health care services and goods (exhibit 1).

For 2028–33, although average Medicare spending is expected to increase at a slower rate (7.4 percent) relative to the program's average

spending growth during 2026–27 (8.9 percent), expenditures for Medicare are expected to grow the most rapidly among the major payers (exhibit 3). This reflects the continued strong enrollment of the baby-boom generation through 2029, the aging of current beneficiaries, and the expiration of the sequester in 2033.⁷ Partially mitigating this trend, however, are expected slower increases in Medicare prescription drug spending, which reflect lower prices associated with negotiated savings on certain high-expenditure pharmaceuticals and the linking of drug price increases to the CPI.

For both Medicaid and private health insurance, enrollment and per enrollee growth rates are expected to largely stabilize over the course of 2028–33 after notable yearly variation during the 2024–27 period. These trends are projected to result in an average annual Medicaid spending growth rate of 6.2 percent over the course of the six-year period, whereas private health insurance spending growth is projected to average 4.3 percent annually (exhibit 2). The differential between the two payers is partly due to differences in their respective projected enrollment growth rates during 2028–33, along with the aging of the Medicaid population. Out-of-pocket spending is projected to increase an average of 3.9 percent per year over the course of 2028–33 (exhibit 3), which is the lowest rate among the major payers, partly because of lower cost sharing at the point of sale for Medicare's Part D enrollees, associated with lower negotiated prices for selected drugs.

Model And Assumptions

The national health expenditure projections are produced using actuarial and econometric modeling methods. The Medicare projections were produced for the 2025 *Medicare Trustees Report*,⁸ and the Medicaid projections represent the latest estimates prepared by the Centers for Medicare and Medicaid Services (CMS) Office of the Actuary. These projected estimates of enrollment and spending, as well as those for private payers, are consistent with economic and demographic assumptions from the 2025 *Medicare Trustees Report*.^{8,9} Further, the private-payer spending projections combine and normalize health sector-specific expectations with an aggregate top-line private-payer projection, reflect current law, and in some instances are judgmentally adjusted regarding the degree to which other factors may affect future health spending and health insurance enrollment.

It is important to note that there is inherent uncertainty associated with these projections. Specifically, this analysis included assumptions

about future macroeconomic conditions that were largely set in late 2024 and early 2025, as well as all legislation and finalized administrative actions as of March 25, 2025.⁹ To the extent that new legislation is enacted that affects coverage patterns or payment rates, or to the extent that the assumptions used in this analysis differ from the ultimate outcomes, such events may result in deviations between health spending projections and actual experience.

Outlook For Spending And Enrollment By Payer

MEDICARE Medicare expenditures are expected to have grown 8.3 percent in 2024 (similar to growth of 8.1 percent in 2023) and to have reached \$1.1 trillion (exhibit 2). This stable rate of growth for the Medicare program occurred because of a slower increase in Medicare Advantage capitation rates offsetting faster growth in fee-for-service payments for hospital and physician and clinical services. Medicare prescription drug spending growth is expected to have remained elevated, at 14.7 percent, in 2024 (up from 12.2 percent in 2023),⁴ in part because of the IRA's Part D benefit redesign provisions, which eliminate the 5 percent coinsurance component for catastrophic coverage and expand eligibility for full cost-sharing benefits under the low-income subsidy.

In 2025, Medicare spending is projected to grow 7.7 percent, with most personal health care sectors experiencing slowing increases (exhibit 3). For Medicare physician and clinical services, spending growth is projected to slow to 5.6 percent in 2025 (from 6.9 percent in 2024), in part driven by a physician fee schedule update of -2.5 percent and slower growth in the use of physician-administered drugs.⁸ Moreover, Medicare retail prescription drug spending growth is projected to decelerate sharply to 6.0 percent in 2025 (decreasing from 14.7 percent in 2024). Although the \$2,000 cap on Part D out-of-pocket spending takes effect in 2025, shifting costs from beneficiaries to Medicare, this effect is expected to be offset by IRA provisions that remove the coverage gap discount and introduce a new manufacturer discount program. This new program reduces Medicare spending relative to the gap discount, particularly for the low-income population, which is expected to be smaller in 2025 as a result of Medicaid unwinding procedures.

Over the course of 2026–27, average Medicare spending growth is projected to accelerate from 7.7 percent in 2025 to 8.9 percent, reflecting elevated growth rates for most personal health care sectors (exhibit 2). Medicare physician and

clinical services spending growth is expected to average 9.1 percent during 2026–27 (up from 5.6 percent in 2025), in part because of modest physician fee schedule increases after the payment rate reductions in 2025.⁴

For 2028–33, Medicare spending growth is expected to average 7.4 percent (exhibit 2). Enrollment is projected to increase by 2.2 percent and 2.0 percent for 2028 and 2029, respectively, as the last cohort of baby boomers enrolls in the program in 2029, and then to slow to a projection-period low of 1.0 percent by 2033. The IRA is expected to slow Medicare prescription drug spending growth during 2028–33 because of provisions linking drug price growth to the CPI and the continued drug price negotiations. In addition, slower growth for Medicare hospital and physician and clinical services spending is projected for 2028, when negotiated prices for certain Part B drugs, which are included in these categories, are implemented.

MEDICAID In 2024, Medicaid spending growth is projected to have been 6.2 percent, down from 7.9 percent in 2023, with expenditures having totaled \$925.6 billion. States were permitted to begin redeterminations and could end coverage for those no longer eligible for the program with the expiration of the FFCRA's continuous enrollment requirement starting in April 2023. Medicaid enrollment is projected to have declined by 7.9 percent in 2024, the net result of disenrollments (disproportionately consisting of relatively younger and healthier people) combined with re-enrolled and newly enrolled beneficiaries. Per enrollee Medicaid spending growth is expected to have reached 15.2 percent in 2024, compared with 7.1 percent in 2023 (exhibit 2), reflecting higher provider payment rates and an increased average acuity level of the Medicaid population.

For 2025, although Medicaid enrollment is expected to decline by an additional 1.2 percent (or one million people), growth in expenditures for the program is expected to accelerate to 7.4 percent because the decrease in enrollment is far less rapid than in 2024. Growth rates for Medicaid hospital and physician and clinical services spending are expected to rise, from 5.7 percent and 5.0 percent, respectively, in 2024 to 7.4 percent each in 2025.⁴

During 2026–27, Medicaid spending growth is projected to be 6.8 percent each year, and enrollment growth is projected to become positive again and average 1.2 percent (exhibit 2). Notably, Medicaid hospital expenditure growth is projected to decelerate from 7.4 percent in 2025 to 4.5 percent in 2026 and then to accelerate to 6.1 percent in 2027. Underlying this pattern of growth is the implementation of an \$8 bil-

The spending growth rate for private health insurance is projected to remain high in 2025 but to be slower compared with growth in 2024.

lion disproportionate share hospital payment rate reduction in federal Medicaid spending in 2026.⁴

In 2028–33, annual rates of Medicaid spending growth are expected to range between 6.0 percent and 6.5 percent. Medicaid enrollment growth is expected to be positive and steady and to average 0.7 percent per year for 2028–33. Growth in per enrollee Medicaid spending is similarly expected to be stable and remain between 5.2 percent and 5.7 percent each year.⁴

PRIVATE HEALTH INSURANCE AND OUT-OF-POCKET SPENDING As growth in the use of health care services and goods is projected to have remained strong in 2024, private health insurance spending is expected to have increased 10.4 percent and to have reached \$1.6 trillion (exhibit 2). This projected rate of growth is the second-highest increase since 2002 (growth was 11.5 percent in 2023), and it reflects a continuation of the rebound in utilization by enrollees after negative spending growth in 2020. On a per enrollee basis, private health insurance spending is expected to have grown 7.7 percent in 2024 (down from 9.7 percent in 2023), a rate of growth that substantially exceeds the average observed over the course of 2010–19 (3.2 percent). Private health insurance enrollment is expected to have increased more rapidly in 2024 (2.5 percent compared with 1.6 percent in 2023), an acceleration that reflects the enrollment of an additional 3.9 million people in direct-purchase plans because of the IRA’s temporary extension of enhanced Marketplace subsidies. In 2024, out-of-pocket spending is expected to have reached \$542.6 billion and to have increased 7.3 percent (compared with 7.2 percent in 2023; exhibit 3) because of continued strong growth in the use of services and goods. However, the out-of-pocket share of total health spending in 2024, at

10.3 percent, is expected to have remained nearly unchanged from 2023.

The spending growth rate for private health insurance is projected to remain high in 2025, at 7.6 percent, but is projected to be slower compared with growth in 2024 (exhibit 2). This projected deceleration is due to slowing private health insurance enrollment growth (1.0 percent in 2025 compared with 2.5 percent in 2024) and slowing per enrollee growth (6.5 percent in 2025 compared with 7.7 percent in 2024). Growth in total out-of-pocket spending is projected to slow as well, to 6.4 percent in 2025, down from its elevated rate of 7.3 percent in 2024 (exhibit 3), as expected growth in utilization slows somewhat across most major services and goods and as the IRA’s \$2,000 cap on Part D out-of-pocket prescription drug spending takes effect.

The 2026–27 period is marked by low 2026 growth of 3.3 percent in spending for private health insurance when the extension of the enhanced Marketplace subsidies is scheduled to expire, resulting in an enrollment decline of 4.7 million people (or 12.3 percent) in direct-purchase insurance.⁴ Out-of-pocket spending growth is expected to slow further over the course of 2026–27 as well, averaging 3.7 percent, related to 2026 being the first year of lower gross prices for selected Part D negotiated drugs, which in turn serves to slow growth in Medicare beneficiaries’ out-of-pocket payments (exhibit 3).

For 2028–33, spending growth for private health insurance is expected to average 4.3 percent. The expected growth trend is moderately lower than that of Medicare and Medicaid, reflecting the comparatively lower average enrollment growth rate for private health insurance and slower growth in per enrollee spending as many people disenroll from private health insurance when they age into Medicare. Among all of the major payers during 2028–33, out-of-pocket spending is projected to grow at the slowest rate (3.9 percent). Low average growth in out-of-pocket spending on prescription drugs over this time frame is related to provisions in the IRA that slow growth in prescription drug costs (and associated out-of-pocket spending) for Medicare Part D enrollees through negotiated savings for certain high-cost drugs and the linking of drug price increases to the CPI.

Outlook For Major Services And Goods

HOSPITAL In 2024, hospital spending growth is projected to have slowed but to have remained somewhat elevated, at 9.2 percent (compared with 10.4 percent in 2023), with expenditures

of \$1.7 trillion (exhibit 4).¹⁰ The deceleration was mostly driven by slower projected growth in private health insurance hospital spending, from 13.0 percent in 2023 to 10.7 percent in 2024. The continuation of double-digit growth in private health insurance spending is indicative of the sustained rebound in utilization growth since the start of the pandemic, with the year 2024 marking the third time since 2021 that growth exceeded 10 percent (this occurred just once during the twenty-nine years before 2020).¹¹ Similarly, out-of-pocket spending growth for hospital services is projected to have remained comparatively high, at 7.4 percent (the second fastest rate of growth since 2012).⁴

For 2025, overall hospital spending growth is projected to slow further, to 6.8 percent (exhibit 4), as growth in the use of hospital services moderates for most major payers, including private health insurance, out-of-pocket spending, and Medicare. Moreover, hospital prices are projected to grow at a relatively slower rate in 2025, at 2.9 percent, down from 3.3 percent in 2024.⁴

Over the course of 2026–27, average growth in overall hospital spending is projected to slow to 5.2 percent (exhibit 4). The lower average projected rate of increase is largely attributable to the trend that is expected for private health insurance hospital spending, with growth slowing from 6.6 percent in 2025 to an average of 3.5 percent for 2026–27, mainly from declines in Marketplace enrollment.⁴

For 2028–33, the remainder of the projection period, overall hospital spending growth is expected to average 5.5 percent annually (exhibit 4). Among the major payers, Medicare hospital spending growth is expected to be the fastest, at 7.6 percent, on average, partly because of an average enrollment growth rate (1.5 percent) that exceeds that of other payers, as well as an acceleration in spending growth to 8.8 percent in 2033, which stems from the expiration of the sequester.⁷ Over the course of 2028–33, private health insurance spending on hospital care is projected to increase more slowly than Medicare hospital spending and to average 4.4 percent growth, consistent with its slower average projected enrollment growth of 0.1 percent.⁴

PHYSICIAN AND CLINICAL SERVICES In 2024, spending on physician and clinical services is projected to have remained high, at 7.8 percent,¹⁰ up from 7.4 percent in 2023, and to have totaled \$1.1 trillion (exhibit 4). Private health insurance spending growth for physician and clinical services is expected to have increased from 9.4 percent in 2023 to 9.6 percent in 2024, partly influenced by higher growth in enrollment (especially in Marketplace plans), as well as by continued robust growth in the use of services.⁴ In

addition, price growth for physician and clinical services is estimated to have accelerated from 0.6 percent in 2023 to 1.8 percent in 2024, in part as a result of increased Medicaid payments to providers.^{12,13}

Despite the increase in Medicaid payment rates, and partially offsetting faster growth elsewhere, Medicaid spending growth for physician and clinical services is projected to have slowed to 5.0 percent in 2024 from 9.5 percent in 2023, related to the 7.9 percent decline in Medicaid enrollment. Medicare spending for physician and clinical services is projected to have increased by 6.9 percent in 2024 after growing by 8.3 percent a year earlier, largely because of a smaller physician fee schedule update relative to 2023.⁸

Overall, physician and clinical services spending growth is projected to slow to 6.6 percent in 2025 (exhibit 4). This is mostly attributable to expected falling growth in private health insurance spending for physician and clinical services (from 9.6 percent in 2024 to 7.3 percent in 2025), related to slowing projected growth in private health insurance enrollment. A modest slowdown in price growth for physician and clinical services, from 1.8 percent in 2024 to 1.6 percent in 2025, is also expected, related to a negative Medicare physician fee schedule update and slower growth in Medicaid provider payment rates.⁴

During 2026–27, overall spending growth for physician and clinical services is expected to slow further to an average of 5.2 percent (exhibit 4). The primary reason for this trend is expected slowing growth in private health insurance expenditures for physician and clinical services (from 7.3 percent in 2025 to an average of 2.8 percent for 2026–27) as expected growth in utilization moderates and as projected enrollment in private insurance declines. This slowdown is expected to be partially offset, however, by faster average Medicare spending growth for physician and clinical services of 9.1 percent for 2026–27, increasing from 5.6 percent in 2025.⁴ This expected acceleration is influenced by a slightly positive physician fee schedule update projected for 2026, after a decline in 2025.

For the period 2028–33, an average annual growth rate of 5.1 percent is projected for overall physician and clinical services spending (exhibit 4). Medicare spending for these services is expected to grow the fastest among the major payers and to average 8.1 percent, largely because of faster Medicare enrollment growth relative to other payers.⁴

PRESCRIPTION DRUGS Prescription drug spending growth is projected to have remained strong in 2024, growing 10.1 percent (decreas-

ing from 11.4 percent in 2023), with spending having reached \$494.9 billion (exhibit 4). The primary driver of the deceleration was slowing projected growth for private health insurance prescription drug spending, at 11.2 percent,⁴ down from 13.8 percent in 2023, despite continued strong use of brand-name drugs, especially those used to treat obesity and diabetes.¹⁴ Medicaid prescription drug spending is projected to have grown more slowly in 2024, as well, at 3.8 percent, down from 11.7 percent in 2023, because of declines in Medicaid enrollment. Moving in the opposite direction, Medicare prescription drug spending growth is projected to have accelerated to 14.7 percent in 2024, up from 12.2 percent in 2023, in part because of the elimination of the 5 percent coinsurance component for catastrophic coverage.⁸

For 2025, growth in overall prescription drug spending is projected to slow to 7.0 percent, driven by lower growth in Medicare prescription drug spending of 6.0 percent.⁴ Underlying this expectation is an increase in program savings from the manufacturer discount program for the low-income population, along with a decline in enrollment for this cohort in 2025. Although private health insurance drug spending growth is expected to slow in 2025 (10.2 percent), the rate of growth remains elevated related to continued strong spending increases for brand-name drugs, especially those linked to oncology and diabetes.¹⁴

Over the course of 2026–27, growth in prescription drug spending is projected to average 5.6 percent, down from 7.0 percent in 2025 (exhibit 4). For private health insurance, growth in prescription drug spending is projected to average 4.8 percent (following 10.2 percent growth in 2025),⁴ mainly because of Marketplace enrollment decreases and a slowdown in the growth of new users of anti-obesity medications.

For 2028–33, growth in overall prescription

drug spending is projected to average 4.7 percent (exhibit 4). Because of ongoing negotiations for Part D drugs, projected average growth in prescription drug spending for Medicare (4.3 percent) and out-of-pocket spending (4.1 percent) are expected to be the lowest of the major payers. Average spending growth in Medicaid (5.4 percent) and private health insurance (5.1 percent) are comparatively higher but still below the initial years of the projection period, partly because only a modest number of new drug approvals are expected during the second half of the projection period.⁴

Conclusion

Recent elevated health care spending growth rates are expected to have continued into 2024 and 2025 because of persistently strong growth in the use of services and goods after their respective declines in 2020, which stemmed from the COVID-19 pandemic. As a result of these elevated rates of health care spending growth, relatively larger increases in the health share of GDP are projected for both 2024 and 2025. For 2026 and later, the growth rates for utilization and spending are generally expected to moderate, while at the same time many notable enrollment changes are expected to occur (including the completion of Medicaid unwinding and the expiration of the IRA's temporarily enhanced premium tax subsidies for Marketplace plans in 2026), leading to a somewhat lower insured share of the population. Although the projections presented here reflect current law, future legislative and regulatory health policy changes could have a significant impact on the projections of health insurance coverage, health spending trends, and related cost-sharing requirements, and they thus could ultimately affect the health share of GDP by 2033. ■

The opinions expressed here are the authors' and not necessarily those of the Centers for Medicare and Medicaid Services. The authors thank Stephen Heffler, Catherine Curtis, Blake Pelzer, Aaron Catlin, Anne Martin, John Shatto, Chris Truffer, Paul Spitalnic, and

anonymous peer reviewers for their helpful comments. This is an open access article distributed in accordance with the terms of the Creative Commons Attribution (CC BY-NC-ND 4.0) license, which permits others to distribute this work provided the

original work is properly cited, not altered, and not used for commercial purposes. See <https://creativecommons.org/licenses/by-nc-nd/4.0/>. [Published online June 25, 2025.]

NOTES

- 1 Martin AB, Hartman M, Washington B, Catlin A, National Health Expenditure Accounts Team. National health expenditures in 2023: faster growth as insurance coverage and utilization increased. *Health Aff (Millwood)*. 2025;44(1):12–22.
- 2 In addition to Marketplace plans, the

- direct-purchase category of private health insurance includes non-Marketplace direct-purchased plans as well as Medigap policies.
- 3 These enhanced premium tax credits were originally part of the American Rescue Plan Act of 2021. The special enrollment period allowed people

- who lost Medicaid or Children's Health Insurance Program coverage because of the unwinding process to obtain health insurance through Marketplace plans.
- 4 Detailed data not displayed in the exhibits are included in the Centers for Medicare and Medicaid Services

- web tables. CMS.gov. NHE projections tables [Internet]. Baltimore (MD): CMS; 2025 Jun 25 [cited 2025 Jun 25]. Available for download from: <https://www.cms.gov/files/zip/nhe-projections-tables.zip>
- 5 Cubanski J, Neuman T, Freed M. Explaining the prescription drug provisions in the Inflation Reduction Act [Internet]. San Francisco (CA): KFF; 2023 Jan 24 [cited 2025 May 21]. Available from: <https://www.kff.org/medicare/issue-brief/explaining-the-prescription-drug-provisions-in-the-inflation-reduction-act/>
 - 6 Pifer R. Insurers closed out 2024 on shaky footing. Healthcare Dive [serial on the Internet]. 2025 Feb 25 [cited 2025 May 21]. Available from: <https://www.healthcarediver.com/news/health-insurer-medical-costs-climbing-ma-medicare/740611/>
 - 7 Sequestration on spending for Medicare benefits under the Balanced Budget and Emergency Deficit Control Act of 1985, as amended. See Congressional Research Service. Medicare and budget sequestration [Internet]. Washington (DC): CRS; 2023 Nov 14 [cited 2025 Jun 3]. (Publication No. R45106). Available from: https://www.congress.gov/crs_external_products/R/PDF/R45106/R45106.19.pdf
 - 8 Boards of Trustees. 2025 annual report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplemental Medical Insurance Trust Funds [Internet]. Baltimore (MD): Centers for Medicare and Medicaid Services; 2025 Jun 18 [cited 2025 Jun 18]. Available from: <https://www.cms.gov/oact/tr/2025>
 - 9 Centers for Medicare and Medicaid Services. Projections of national health expenditures and health insurance enrollment: methodology and model specification [Internet]. Baltimore (MD): CMS; 2025 Jun 25 [cited 2025 Jun 25]. Available from: <https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/downloads/projectionmethodology.pdf>
 - 10 Authors' analysis of Census Bureau data. Census Bureau. Quarterly Services Survey, time series/trend charts: 4th quarter 2024 (industry 622, hospitals; 6211, offices of physicians; 6214, outpatient care centers; and 6215, medical and diagnostic laboratories) [Internet]. Washington (DC): Census Bureau; 2025 Apr 24 [cited 2025 Jun 3]. Available for download from: <https://www.census.gov/services/index.html>
 - 11 Kaufman Hall. The state of hospital volumes [Internet]. Chicago (IL): Kaufman Hall; 2025 Feb 28 [cited 2025 May 21]. Available from: <https://www.kaufmanhall.com/insights/infographic/state-hospital-volumes>
 - 12 Bureau of Labor Statistics. Producer Price Indexes, PPI databases, industry data (Producer Price Index—PPI) (“Offices of physicians” with index “PCU6211---6211---” and “Medical and diagnostic laboratories” with index “PCU6215---6215---”) [Internet]. Washington (DC): BLS; [cited 2025 May 21]. Available via query from: <http://www.bls.gov/ppi/#data>
 - 13 Hinton E, Williams E, Raphael J, Mudumala A, Rudowitz R, Gifford K, et al. Amid unwinding of pandemic-era policies, Medicaid programs continue to focus on delivery systems, benefits, and reimbursement rates: results from an annual Medicaid budget survey for state fiscal years 2023 and 2024 [internet]. San Francisco (CA): KFF; 2023 Nov 14 [cited 2025 May 21]. Available from: <https://www.kff.org/report-section/50-state-medicare-budget-survey-fy-2023-2024-provider-rates-and-taxes/>
 - 14 IQVIA. Understanding the use of medicines in the US 2025: evolving standards of care, patient access, and spending [Internet]. Durham (NC): IQVIA; 2025 Apr 30 [cited 2025 May 21]. Available from: <https://www.iqvia.com/insights/the-iqvia-institute/reports-and-publications/reports/understanding-the-use-of-medicines-in-the-us-2025>