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National Health Care Spending In 2016: Spending And Enrollment Growth Slow After Initial Coverage Expansions

ABSTRACT Total nominal US health care spending increased 4.3 percent and reached $3.3 trillion in 2016. Per capita spending on health care increased by $354, reaching $10,348. The share of gross domestic product devoted to health care spending was 17.9 percent in 2016, up from 17.7 percent in 2015. Health spending growth decelerated in 2016 following faster growth in 2014 and 2015 associated with coverage expansions under the Affordable Care Act (ACA) and strong retail prescription drug spending growth. In 2016 the slowdown was broadly based, as spending for the largest categories by payer and by service decelerated. Enrollment trends drove the slowdown in Medicaid and private health insurance spending growth in 2016, while slower per enrollee spending growth influenced Medicare spending. Furthermore, spending for retail prescription drugs slowed, partly as a result of lower spending for drugs used to treat hepatitis C, while slower use and intensity of services drove the slowdown in hospital care and physician and clinical services.

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Total health care expenditures in the United States reached $3.3 trillion in 2016, or 4.3 percent above the level of spending in 2015 (exhibit 1). The share of the economy devoted to health care reached 17.9 percent in 2016, up 0.2 percentage point from the 17.7 percent share in 2015. The increase in the share in 2016 occurred as health care spending grew 1.5 percentage points faster than the gross domestic product (GDP), which increased 2.8 percent. Per capita health care spending was $10,348 in 2016, or $354 higher than in 2015.

Over the past ten years the health sector has experienced major changes influenced largely by overall economic conditions, a low inflationary environment, and a more recent dramatic increase in health insurance coverage associated with the Affordable Care Act (ACA). During the period 2008–13, health care spending increased at historically low rates of growth, averaging 3.8 percent per year. Over this period, the Great Recession of 2007–09 and the subsequent mild recovery affected health insurance coverage and the use of health care. Additionally, medical price inflation was at historically low levels, in part because of lower economywide price growth and various legislative actions aimed at slowing health care spending growth. Following that period, 2014 and 2015 saw dramatic increases in health insurance enrollment, as major provisions of the ACA expanded insurance options under private health insurance Marketplaces and the Medicaid program—factors contributing to 8.7 million people gaining private health insurance and 10.2 million gaining Medicaid coverage in 2014 and 2015 (exhibit 2). In addition, growth in spending for retail prescription drugs was very strong in 2014 and 2015 (12.4 percent and 8.9 percent, respectively), mainly the result

EXHIBIT 1

National health expenditures (NHE), aggregate and per capita amounts, share of gross domestic product (GDP), and annual growth, by source of funds, calendar years 2010–16

Source of funds	2010[a]	2011	2012	2013	2014	2015	2016
EXPENDITURE AMOUNT							
NHE, billions	$2,598.8	$2,689.3	$2,797.3	$2,879.0	$3,026.2	$3,200.8	$3,337.2
Health consumption expenditures	2,456.1	2,539.9	2,644.0	2,725.9	2,876.4	3,047.1	3,179.8
Out of pocket	299.7	310.0	318.3	325.2	330.1	339.3	352.5
Health insurance	1,876.9	1,950.2	2,022.9	2,087.8	2,228.1	2,382.8	2,486.8
Private health insurance	864.3	898.6	928.2	946.4	999.9	1,068.8	1,123.4
Medicare	519.8	544.7	569.6	590.2	618.9	648.8	672.1
Medicaid	397.2	406.7	422.7	445.4	496.6	544.1	565.5
Federal	266.4	247.1	243.3	256.9	305.1	343.1	358.1
State and local	130.9	159.6	179.4	188.5	191.5	201.0	207.5
Other health insurance programs[b]	95.6	100.1	102.4	105.9	112.7	121.1	125.8
Other third-party payers and programs and public health activity	279.4	279.7	302.8	312.9	318.2	325.0	340.5
Investment	142.7	149.5	153.2	153.1	149.7	153.7	157.4
Population (millions)[c]	309.0	311.1	313.4	315.7	318.0	320.3	322.5
GDP, billions of dollars	$14,964.4	$15,517.9	$16,155.3	$16,691.5	$17,427.6	$18,120.7	$18,624.5
NHE per capita	$8,412	$8,644	$8,924	$9,121	$9,515	$9,994	$10,348
GDP per capita	$48,436	$49,879	$51,542	$52,880	$54,799	$56,580	$57,751
Prices (2009 = 100.0)							
Chain-weighted NHE deflator	102.7	105.1	106.9	108.3	110.2	111.3	112.8
GDP price index	101.2	103.3	105.2	106.9	108.8	110.0	111.4
Real spending							
NHE, billions of chained dollars	$2,530	$2,558	$2,617	$2,659	$2,746	$2,877	$2,960
GDP, billions of chained dollars	$14,784	$15,021	$15,355	$15,612	$16,013	$16,472	$16,716
NHE as percent of GDP	17.4	17.3	17.3	17.2	17.4	17.7	17.9
ANNUAL GROWTH							
NHE	4.1%	3.5%	4.0%	2.9%	5.1%	5.8%	4.3%
Health consumption expenditures	4.2	3.4	4.1	3.1	5.5	5.9	4.4
Out of pocket	2.0	3.4	2.7	2.2	1.5	2.8	3.9
Health insurance	4.5	3.9	3.7	3.2	6.7	6.9	4.4
Private health insurance	3.8	4.0	3.3	2.0	5.7	6.9	5.1
Medicare	4.2	4.8	4.6	3.6	4.9	4.8	3.6
Medicaid	6.1	2.4	3.9	5.4	11.5	9.5	3.9
Federal	7.7	–7.2	–1.6	5.6	18.8	12.5	4.4
State and local	3.0	22.0	12.4	5.0	1.6	4.9	3.2
Other health insurance programs[b]	5.9	4.8	2.2	3.4	6.4	7.5	3.9
Other third-party payers and programs and public health activity	4.9	0.1	8.3	3.3	1.7	2.1	4.7
Investment	2.7	4.7	2.5	–0.1	–2.2	2.7	2.4
Population[c]	0.8	0.7	0.7	0.7	0.8	0.7	0.7
GDP, billions of dollars	3.8	3.7	4.1	3.3	4.4	4.0	2.8
NHE per capita	3.3	2.8	3.2	2.2	4.3	5.0	3.5
GDP per capita	2.9	3.0	3.3	2.6	3.6	3.3	2.1
Prices (2009 = 100.0)							
Chain-weighted NHE deflator	2.7	2.4	1.7	1.3	1.8	0.9	1.4
GDP price index	1.2	2.1	1.8	1.6	1.8	1.1	1.3
Real spending							
NHE, billions of chained dollars	1.4	1.1	2.3	1.6	3.3	4.8	2.9
GDP, billions of chained dollars	2.5	1.6	2.2	1.7	2.6	2.9	1.5

SOURCES Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group; and US Department of Commerce, Bureau of Economic Analysis, and the US Census Bureau. **NOTES** Definitions, sources, and methods for NHE categories can be found in Centers for Medicare and Medicaid Services. National Health Accounts methodology paper, 2016: definitions, sources, and methods [Internet]. Baltimore (MD): CMS; 2017 [cited 2017 Dec 6]. Available from http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/dsm-16.pdf. Numbers may not add to totals because of rounding. Percentage changes are calculated from unrounded data. [a]Annual growth, 2009–10. [b]Includes health-related spending for Children's Health Insurance Program (CHIP) Titles XIX and XXI; Department of Defense; and Department of Veterans Affairs. [c]Estimates reflect the US Census Bureau's definition of *resident-based population*, which includes all people who usually reside in the fifty 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.

EXHIBIT 2

National health expenditures (NHE) and health insurance enrollment, aggregate and per enrollee amounts, and annual growth, by source of funds, calendar years 2010–16

	2010[a]	2011	2012	2013	2014	2015	2016
PRIVATE HEALTH INSURANCE							
Expenditure (billions)	$864.3	$898.6	$928.2	$946.4	$999.9	$1,068.8	$1,123.4
Expenditure growth	3.8%	4.0%	3.3%	2.0%	5.7%	6.9%	5.1%
Per enrollee expenditure	$4,653	$4,858	$4,942	$5,044	$5,187	$5,445	$5,721
Per enrollee expenditure growth	6.0%	4.4%	1.7%	2.1%	2.8%	5.0%	5.1%
Enrollment (millions)	185.7	185.0	187.8	187.6	192.8	196.3	196.4
Enrollment growth	–2.1%	–0.4%	1.5%	–0.1%	2.7%	1.8%	0.0%
MEDICARE							
Expenditure (billions)	$519.8	$544.7	$569.6	$590.2	$618.9	$648.8	$672.1
Expenditure growth	4.2%	4.8%	4.6%	3.6%	4.9%	4.8%	3.6%
Per enrollee expenditure	$11,157	$11,408	$11,465	$11,509	$11,711	$11,951	$12,046
Per enrollee expenditure growth	1.7%	2.3%	0.5%	0.4%	1.7%	2.1%	0.8%
Enrollment (millions)	46.6	47.7	49.7	51.3	52.8	54.3	55.8
Enrollment growth	2.5%	2.5%	4.1%	3.2%	3.1%	2.7%	2.8%
MEDICAID							
Expenditure (billions)	$397.2	$406.7	$422.7	$445.4	$496.6	$544.1	$565.5
Expenditure growth	6.1%	2.4%	3.9%	5.4%	11.5%	9.5%	3.9%
Per enrollee expenditure	$7,361	$7,267	$7,268	$7,556	$7,533	$7,870	$7,941
Per enrollee expenditure growth	0.1%	–1.3%	0.0%	4.0%	–0.3%	4.5%	0.9%
Enrollment (millions)	54.0	56.0	58.2	58.9	65.9	69.1	71.2
Enrollment growth	6.0%	3.7%	3.9%	1.3%	11.9%	4.9%	3.0%
UNINSURED AND POPULATION							
Uninsured (millions)	48.1	45.6	44.8	44.2	35.5	29.5	28.6
Uninsured growth	4.7%	–5.1%	–1.9%	–1.3%	–19.5%	–17.1%	–2.8%
Population (millions)[b]	309.0	311.1	313.4	315.7	318.0	320.3	322.5
Population growth	0.8%	0.7%	0.7%	0.7%	0.8%	0.7%	0.7%
Insured share of total population	84.4%	85.3%	85.7%	86.0%	88.8%	90.8%	91.1%

SOURCES Centers for Medicare and Medicaid Services (CMS), Office of the Actuary, National Health Statistics Group; and US Department of Commerce, US Census Bureau. **NOTES** Definitions, sources, and methods for NHE categories can be found in the National Health Accounts methodology paper (see exhibit 1 notes). Numbers may not add to totals because of rounding. Percentage changes are calculated from unrounded data. [a]Annual growth, 2009–10. [b]Estimates are explained in exhibit 1 notes.

of an increase in spending for hepatitis C medication. As a result, health care spending increased 5.1 percent in 2014 and 5.8 percent in 2015 (exhibit 1).

With the main impacts of the ACA's enrollment expansions realized, health care spending increased 4.3 percent in 2016—a rate that was 1.2 percentage points slower than the average annual growth experienced in 2014 and 2015 but in line with the average annual growth rate of 4.2 percent during the period 2008–15. From a payer perspective, spending growth for all three major payers slowed in 2016. Growth in Medicaid (3.9 percent) and private health insurance (5.1 percent) was lower in 2016, in part because of decelerating enrollment growth. Medicare spending slowed (from 4.8 percent in 2015 to 3.6 percent in 2016) because of lower per enrollee growth rates for both the traditional fee-for-service program and Medicare Advantage. From a goods and services perspective, there was a dramatic deceleration in spending growth for retail prescription drugs (from 8.9 percent in 2015 to 1.3 percent in 2016) (exhibit 3), as a result of a decline in spending for drugs used to treat hepatitis C, fewer new drugs being introduced in 2016, and slower growth in prices for both brand-name and generic drugs. Additionally, spending growth for hospital care (4.7 percent) and physician and clinical services (5.4 percent) (exhibit 3) decelerated in 2016, in part because of slower growth in the use and intensity of services.

Factors Accounting For Growth

Aggregate national health care expenditures increased 4.3 percent, or 3.5 percent on a per capita basis, in 2016 (exhibit 1). Growth in per capita health spending can be further disaggregated into the price and nonprice factors that drive such growth. In 2016, medical price growth accounted for 1.4 percentage points of the 3.5 percent growth in per capita spending, while the

EXHIBIT 3

National health expenditures (NHE) amounts and annual growth, by spending category, calendar years 2010–16

Spending category	2010[a]	2011	2012	2013	2014	2015	2016
EXPENDITURE AMOUNT							
NHE, billions	$2,598.8	$2,689.3	$2,797.3	$2,879.0	$3,026.2	$3,200.8	$3,337.2
Health consumption expenditures	2,456.1	2,539.9	2,644.0	2,725.9	2,876.4	3,047.1	3,179.8
Personal health care	2,196.0	2,274.0	2,366.9	2,436.7	2,560.2	2,715.5	2,834.0
Hospital care	822.3	851.9	902.5	937.6	978.1	1,033.4	1,082.5
Professional services	688.3	716.6	743.2	759.4	792.5	837.7	881.2
Physician and clinical services	512.6	535.9	557.1	569.6	595.7	631.0	664.9
Other professional services	69.9	72.8	76.4	78.7	83.0	87.8	92.0
Dental services	105.9	108.0	109.7	111.1	113.8	118.9	124.4
Other health, residential, and personal care	129.1	131.7	139.1	144.2	151.6	164.8	173.5
Home health care	71.6	74.6	78.1	80.5	84.0	88.8	92.4
Nursing care facilities and continuing care retirement communities	140.5	145.4	147.4	149.0	152.4	158.1	162.7
Retail outlet sales of medical products	344.3	353.9	356.6	365.9	401.7	432.7	441.7
Prescription drugs	253.1	258.8	259.2	265.2	298.0	324.5	328.6
Durable medical equipment	39.9	42.3	43.7	45.1	46.7	48.6	51.0
Other nondurable medical products	51.2	52.8	53.7	55.7	57.0	59.6	62.2
Government administration	30.0	32.5	33.8	36.9	41.0	42.1	43.8
Net cost of health insurance	154.4	159.2	165.9	174.0	195.8	207.7	219.8
Government public health activities	75.6	74.3	77.4	78.3	79.4	81.7	82.2
Investment	142.7	149.5	153.2	153.1	149.7	153.7	157.4
Noncommercial research	49.2	49.7	48.4	46.6	45.9	46.5	47.7
Structures and equipment	93.5	99.8	104.8	106.5	103.8	107.2	109.7
ANNUAL GROWTH							
NHE	4.1%	3.5%	4.0%	2.9%	5.1%	5.8%	4.3%
Health consumption expenditures	4.2	3.4	4.1	3.1	5.5	5.9	4.4
Personal health care	3.9	3.5	4.1	2.9	5.1	6.1	4.4
Hospital care	5.5	3.6	6.0	3.9	4.3	5.7	4.7
Professional services	3.1	4.1	3.7	2.2	4.4	5.7	5.2
Physician and clinical services	3.0	4.5	4.0	2.2	4.6	5.9	5.4
Other professional services	4.3	4.2	5.0	3.0	5.4	5.9	4.7
Dental services	2.7	2.0	1.6	1.2	2.5	4.4	4.6
Other health, residential, and personal care	4.6	2.0	5.7	3.7	5.1	8.7	5.3
Home health care	5.7	4.2	4.7	3.1	4.3	5.8	4.0
Nursing care facilities and continuing care retirement communities	3.9	3.5	1.4	1.1	2.3	3.7	2.9
Retail outlet sales of medical products	1.0	2.8	0.8	2.6	9.8	7.7	2.1
Prescription drugs	0.1	2.2	0.2	2.3	12.4	8.9	1.3
Durable medical equipment	5.6	5.8	3.4	3.2	3.6	4.1	4.9
Other nondurable medical products	1.8	3.1	1.7	3.6	2.4	4.6	4.4
Government administration	1.6	8.1	4.0	9.2	11.2	2.8	4.0
Net cost of health insurance	11.8	3.1	4.2	4.9	12.5	6.1	5.8
Government public health activities	1.9	–1.7	4.2	1.1	1.5	2.9	0.6
Investment	2.7	4.7	2.5	–0.1	–2.2	2.7	2.4
Noncommercial research	8.5	0.9	–2.4	–3.7	–1.6	1.2	2.6
Structures and equipment	–0.1	6.7	5.0	1.6	–2.5	3.3	2.3

SOURCE Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group. **NOTES** Definitions, sources, and methods for NHE categories can be found in the National Health Accounts methodology paper (see exhibit 1 notes). Numbers may not add to totals because of rounding. Percentage changes are calculated from unrounded data. [a]Annual growth, 2009–10.

changing age and sex mix of the population accounted for 0.6 percentage point, and growth in the residual use and intensity of health care goods and services constituted the remaining 1.6 percentage points (exhibit 4).[1]

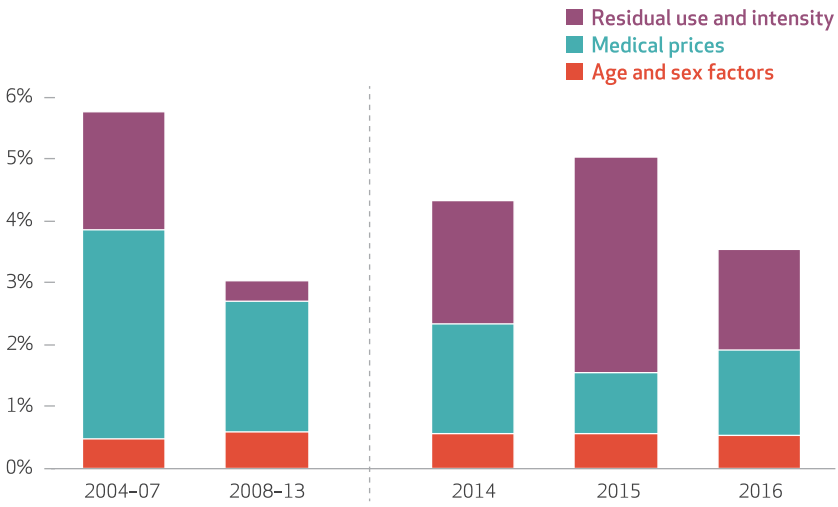
Medical price growth, which includes both economywide and medical-specific price inflation, was slightly faster in 2016 (1.4 percent) than in 2015 (1.0 percent). However, this rate was below the average annual growth of 2.1 percent in 2008–13 and well below the growth of 3.4 percent in 2004–07. The slight uptick in 2016 was due to slightly faster economywide price growth (1.3 percent compared to 1.1 percent in 2015) (exhibit 4) as measured by the GDP price index, while medical-specific price inflation was

essentially flat, increasing 0.1 percent in 2016 compared to almost no increase in 2014 and 2015. Prices grew more rapidly for all health care services and for durable medical equipment but slowed for retail prescription drugs and other nondurable medical products.

During the 2007–09 economic recession and in the years that followed, the use and intensity of health care goods and services experienced little to no growth, averaging just 0.3 percent during the period 2008–13. However, the significant expansion of health insurance coverage in 2014 and 2015 contributed to the increased use of health care goods and services, and use and intensity grew 2.0 percent in 2014 and 3.5 percent in 2015 (exhibit 4). In 2016, growth in use and intensity slowed to 1.6 percent, but this rate was still well above the average growth during 2008–13 and slightly lower than the pre-recession average annual growth of 1.9 percent during 2004–07.

EXHIBIT 4

Factors accounting for growth in per capita national health expenditures (NHE), selected calendar years 2004–16



SOURCE Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group. **NOTES** Medical price growth, which includes economywide and excess medical-specific price growth (or changes in medical-specific prices in excess of economywide inflation), is calculated using the chain-weighted National Health Expenditures (NHE) price deflator. "Residual use and intensity" is calculated by removing the effects of population, age and sex factors, and price growth from the nominal expenditure level.

Sponsors Of Health Care

In 2016 the federal government and households accounted for the largest shares of health care spending (28 percent each), followed by private businesses (20 percent), state and local governments (17 percent), and other private revenues (7 percent) (exhibit 5). Spending on health care by federal and state and local governments and households increased more slowly than in 2015, while spending by private businesses and other private revenue sources grew more rapidly.

After two consecutive years of rapid growth (10.9 percent in 2014 and 8.9 percent in 2015), federal government spending for health care slowed, increasing 3.9 percent in 2016. Despite the slower growth, this share of total health spending remained stable at 28 percent. The primary reason for the deceleration in federal spending growth in 2016 was federal Medicaid spending, which grew more slowly in 2016 (4.4 percent) as a result of less Medicaid enrollment growth. The much larger increases in federal Medicaid expenditures in 2014 and 2015 (18.8 percent and 12.5 percent, respectively) were attributable mainly to increased Medicaid funding, which fully financed newly eligible adults under the ACA (exhibit 1). In 2013, federal Medicaid payments represented 34 percent of total federal government expenditures on health; in 2014 the share increased to 37 percent, and in 2015 and 2016 the share remained stable at 38 percent.

State and local governments accounted for 17 percent of health expenditures in 2016, a share that has remained steady since 2014. Growth in this spending category decelerated from 4.8 percent in 2015 to 2.8 percent in 2016, driven by slower growth in spending for state and local government contributions to employer-sponsored private health insurance premiums (which constituted 33 percent of total state and local government health expenditures); growth in these spending contributions was 4.7 percent in 2016, following a rate of 7.7 percent in 2015. Also contributing to the slowdown was a deceleration in state Medicaid spending growth (which represented 37 percent of total state and local government spending on health), from 4.9 percent in 2015 to 3.2 percent in 2016 (exhibit 1), in part because of reduced supplemental payments to hospitals.

Health spending by private businesses accounted for 20 percent of total health spending from 2010 through 2016. Growth in this spending was 5.0 percent in 2016, following a rate of 4.4 percent in 2015 (exhibit 5). Contributions by private businesses to employer-sponsored private health insurance premiums represented the largest share of health spending by private businesses in 2016 (76 percent) and increased 4.9 percent in 2016.

Household spending for health care includes out-of-pocket spending, contributions to private health insurance premiums, and contributions to Medicare through payroll taxes and payment of premiums. Households accounted for 28 percent of total health care expenditures in 2016—a

EXHIBIT 5

National health expenditures (NHE) amounts, annual growth, and percent distribution, by type of sponsor, calendar years 2010–16

Type of sponsor	2010[a]	2011	2012	2013	2014	2015	2016
EXPENDITURE AMOUNT							
NHE, billions	$2,598.8	$2,689.3	$2,797.3	$2,879.0	$3,026.2	$3,200.8	$3,337.2
Businesses, household, and other private revenues	1,445.9	1,498.5	1,577.0	1,618.7	1,667.1	1,742.6	1,828.7
Private businesses	519.4	543.3	568.1	579.8	606.8	633.3	664.6
Household	751.5	776.2	809.0	832.1	854.9	897.5	938.8
Other private revenues	175.0	179.0	200.0	206.8	205.4	211.8	225.2
Governments	1,152.9	1,190.9	1,220.2	1,260.3	1,359.0	1,458.3	1,508.6
Federal government	731.0	730.0	731.4	752.7	834.7	908.9	944.1
State and local governments	421.9	460.8	488.8	507.6	524.3	549.3	564.5
ANNUAL GROWTH							
NHE	4.1%	3.5%	4.0%	2.9%	5.1%	5.8%	4.3%
Businesses, household, and other private revenues	2.5	3.6	5.2	2.6	3.0	4.5	4.9
Private businesses	1.0	4.6	4.6	2.1	4.7	4.4	5.0
Household	3.1	3.3	4.2	2.8	2.7	5.0	4.6
Other private revenues	4.8	2.3	11.7	3.4	-0.7	3.1	6.3
Governments	6.2	3.3	2.5	3.3	7.8	7.3	3.5
Federal government	7.5	–0.1	0.2	2.9	10.9	8.9	3.9
State and local governments	4.1	9.2	6.1	3.8	3.3	4.8	2.8
PERCENT DISTRIBUTION							
NHE	100%	100%	100%	100%	100%	100%	100%
Businesses, household, and other private revenues	56	56	56	56	55	54	55
Private businesses	20	20	20	20	20	20	20
Household	29	29	29	29	28	28	28
Other private revenues	7	7	7	7	7	7	7
Governments	44	44	44	44	45	46	45
Federal government	28	27	26	26	28	28	28
State and local governments	16	17	17	18	17	17	17

SOURCE Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group. **NOTES** Definitions, sources, and methods for NHE categories can be found in the National Health Accounts methodology paper (see exhibit 1 notes). Numbers may not add to totals because of rounding. Percentage changes are calculated from unrounded data. [a]Annual growth, 2009–10.

share that has remained unchanged since 2014. In 2016, health spending by households grew 4.6 percent, after increasing 5.0 percent in 2015. The slower growth in 2016 resulted mainly from a deceleration in household contributions to employer-sponsored private health insurance premiums. Out-of-pocket spending is the largest category of household spending, at 38 percent in 2016, and it increased 3.9 percent in 2016, faster than the 2.8 percent increase in 2015 (exhibit 1)—partially because cost sharing for those with private insurance continued to increase. Growth in out-of-pocket spending in 2015 was relatively low, as the impacts of insurance coverage expansions and the subsequent effects on direct out-of-pocket spending were being realized.

Retail Prescription Drugs

Total retail prescription drug spending grew 1.3 percent in 2016 to $328.6 billion (exhibit 3). This low growth followed much stronger growth rates in 2014 and 2015 (12.4 percent and 8.9 percent, respectively), which were primarily the result of increased spending on new medicines and higher price growth for existing brand-name drugs. In particular, strong growth in spending for drugs used to treat hepatitis C contributed to high overall spending growth in 2014 and 2015. The 2016 rate of prescription drug spending growth is more in line with the lower average annual growth during the period 2010–13 of 1.2 percent—a rate that was driven by the shift to more consumption of generic drugs, which was partly influenced by the loss of patent protection of major brand-name drugs.[2] Despite these large fluctuations in growth rates over the past several years, retail prescription drugs' 10 percent share of national health expenditures in 2016 is similar to the share in 2009.

In 2016, fewer new medicines were approved—twenty-two compared to forty-five in 2015 and forty-one in 2014.[3] Spending for brand-name

drugs, which accounted for almost three-quarters of total retail prescription drug spending in 2016, grew more slowly partially because spending for drugs used to treat hepatitis C decreased, as fewer patients received treatment and net prices for these drugs declined.[4] Furthermore, aggregate spending growth for diabetes drugs decelerated in 2016 even as diabetes remained one of the fastest-growing therapeutic segments.[4]

Spending for generic drugs (excluding brand-name generics), which constituted 15.0 percent of total prescription drug expenditures, declined in 2016 primarily because of slower growth in prices.[4]

Utilization, measured as the number of prescriptions dispensed, increased 1.9 percent in 2016, accelerating from 1.4 percent growth in 2015.[5] This faster rate primarily resulted from acceleration in the number of prescriptions dispensed for drugs to treat high blood pressure and high cholesterol, as well as for mental health.[4] Although generic drugs accounted for a smaller share of total drug spending in 2016 than in 2015, they represented 84.1 percent of total dispensed prescriptions in 2016, up from 83.0 percent in 2015.[5]

Each of the major payers for retail prescription drug spending experienced slower growth in 2016. Private health insurance, the largest payer of prescription drugs (a 43 percent share in 2016), experienced a sharp slowdown from 10.4 percent growth in 2015 to just 0.8 percent in 2016. Medicare prescription drug spending, which accounted for a 29 percent share in 2016, decelerated from a rate of 9.3 percent in 2015 to 2.8 percent in 2016, driven by slower growth in spending for hepatitis C and diabetes drugs. Medicaid spending on prescription drugs, which constituted a share of 10 percent, slowed to a rate of 5.5 percent in 2016 following two years of double-digit growth primarily associated with expanded Medicaid enrollment. Out-of-pocket prescription drug spending, accounting for a 14 percent share in 2016, declined 1.0 percent because of the increased use of generics; more patients having zero out-of-pocket costs because of insurance arrangements; and contributions made by manufacturers, such as copayment coupons, to offset patients' out-of-pocket spending.[4]

Hospital Care

Spending for hospital care services represented 32 percent of total health care spending in 2016, a figure that was unchanged since 2013. Hospital expenditures reached $1.1 trillion and increased 4.7 percent in 2016, slower than the rate of 5.7 percent in 2015 (exhibit 3).

The slower growth in hospital care spending in 2016 reflected slower growth of 2.3 percent in the use and intensity of services, which was lower than the increase of 3.4 percent in 2015. This deceleration followed two years of accelerated growth in nonprice factors, as utilization increased in 2014 and 2015 largely because the share of the population with health insurance increased (from 86 percent in 2013 to 91 percent in 2015)—a result of implementation of the ACA and improved economic conditions.[6] However, enrollment growth slowed in 2016, as did the use of hospital services. Aggregate utilization measures for all hospitals in the US show that days and discharges both declined in 2016 (by 0.3 percent and 0.6 percent, respectively), following two years of positive growth.[7,8] Slower growth in the use and intensity of hospital services was partly offset by faster growth in hospital prices, which accelerated slightly from 0.9 percent in 2015 to 1.2 percent in 2016.[9]

For the major payers, hospital expenditures exhibited mixed trends, with slower growth in Medicaid and private health insurance spending, stable growth in Medicare spending, and faster growth in out-of-pocket spending. The slower growth in Medicaid and private health insurance spending was mainly the result of slower growth in enrollment following the initial impacts of the ACA expansion in 2014 and 2015. In addition, growth in Medicaid hospital spending slowed in part because of a decline in supplemental payments to hospitals.[10] Medicare hospital spending growth remained relatively flat for the fourth consecutive year, increasing within the range of 2.8 and 3.3 percent during 2013 to 2016. In 2016, traditional Medicare fee-for-service spending growth accelerated for hospital services but was offset by slower spending growth for Medicare Advantage. Finally, out-of-pocket hospital spending growth accelerated in 2016, following declines in 2014 and 2015. This more rapid growth was partly attributable to continued strong growth in enrollment in consumer-directed health plans, which tend to have higher copayments and deductibles than other forms of insurance.[11]

Physician And Clinical Services

Total spending for physician and clinical services grew 5.4 percent, reaching $664.9 billion, and accounted for 20 percent of total health care spending in 2016 (exhibit 3). Although growth was slightly slower in 2016 than in 2015 (5.9 percent), spending on physician and clinical services increased more rapidly in 2016 than expenditures for all other health care goods and services. Growth in spending for clinical services (8.2 percent in 2016), which represented just

over one-fifth of total spending in the physician and clinical services category, outpaced growth in spending for physician services (4.6 percent in 2016) for the twelfth consecutive year. Continued strong growth in spending for freestanding ambulatory surgical and emergency centers contributed to the faster growth in spending for clinical services.

In 2016, growth in the use and intensity of physician and clinical services was a driving factor in overall growth in spending for physician and clinical services, accounting for almost three-quarters of the 5.4 percent increase. The rate of increase in the use and intensity of those services, however, was slower in 2016 than in 2015, in part because health insurance enrollment (particularly for Medicaid and private health insurance) grew more slowly. Despite this slowdown, the use and intensity of physician and clinical services increased faster in 2016 than it did on average in 2007–13.

Both Medicare and Medicaid experienced slower growth in physician and clinical services spending in 2016, compared to 2015. Medicare spending on physician and clinical services, which constituted a 23 percent share in 2016, increased 3.8 percent after growing 4.7 percent in 2015. This deceleration was driven by the slowdown in physician spending under Medicare Advantage, which increased 6.9 percent in 2016 following growth of 12.2 percent in 2015. Medicaid spending on physician and clinical services experienced a larger slowdown, increasing only 4.1 percent in 2016 after growing 9.9 percent in 2015 and 21.8 percent in 2014, due in part to slower enrollment growth. Private health insurance spending on physician and clinical services, which represented a 43 percent share of all physician and clinical services spending, increased 5.8 percent in 2016, a slight uptick from 5.5 percent growth in 2015.

Medicaid

Total Medicaid spending, which comprises expenditures by federal and by state and local governments, reached $565.5 billion in 2016 and represented 17 percent of total national health spending (exhibit 1). Medicaid spending increased 3.9 percent in 2016—much slower growth than the rates in 2015 and 2014 (9.5 percent and 11.5 percent, respectively), both of which were due to the initial impacts of the ACA's expansion of Medicaid eligibility and enrollment during those two years.

Medicaid enrollment grew 3.0 percent in 2016 after increasing 4.9 percent in 2015 and 11.9 percent in 2014 (exhibit 2). The slower growth in 2016 followed a total increase in enrollment of 10.2 million people during 2014 and 2015 (averaging 8.3 percent per year), when most of the impact of the ACA Medicaid expansion occurred. Growth in Medicaid spending per enrollee slowed in 2016, increasing only 0.9 percent after growth of 4.5 percent in 2015. The slower growth in 2016 reflects states' increased efforts to control costs,[12,13] a decline in supplemental payments to hospitals, and a decrease in per enrollee costs for newly eligible adults.[14]

The slower growth in overall Medicaid spending was broadly based, with all Medicaid goods and services—except for nursing care facilities and continuing care retirement communities—experiencing decelerating growth in 2016. Hospital spending—the largest category at just over one-third of all Medicaid spending—increased 3.4 percent in 2016 following 8.6 percent growth in 2015. The slower Medicaid hospital spending growth was a result of slower growth in enrollment and decreases in supplemental payments. The second-largest category—other health, residential, and personal care—increased 5.7 percent in 2016, a slowdown from the 10.8 percent increase in 2015. The deceleration can be partly attributed to a slowdown in the growth of home and community-based waivers.[10]

Because the Medicaid expansion was fully federally funded, federal Medicaid spending continued to increase more rapidly (4.4 percent) than state and local spending (3.2 percent) in 2016 (exhibit 1). However, the difference was much smaller than it was in 2015, when federal Medicaid spending grew 12.5 percent, compared to 4.9 percent for state and local spending. During the period 2014–16, the level of federal Medicaid spending increased by $101 billion, while state and local spending grew by $19 billion.

Private Health Insurance

Private health insurance expenditures increased 5.1 percent in 2016 to reach $1.1 trillion (exhibit 2). This spending accounted for 34 percent of all health care spending in the US as private insurance continued to be the largest payer for health care goods and services, with just over 60 percent of the insured population covered by some form of private insurance in 2016.

The 5.1 percent growth in 2016 was slower than growth was in 2014 and 2015, when private health insurance spending increased 5.7 percent and 6.9 percent, respectively, as enrollment grew by 8.7 million over the two years (averaging 2.3 percent annually). The slowdown in private health insurance spending in 2016 was mainly driven by slower growth in enrollment, which increased less than 0.1 percent following 1.8 percent growth in 2015. The enrollment trend was

driven by decreased enrollment in directly purchased private insurance that was purchased outside of the Marketplace and by slower growth in enrollment in employer-sponsored insurance plans, all of which followed the initial impacts of the ACA coverage expansion in 2014 and 2015.

Per enrollee, private health insurance spending grew 5.1 percent in 2016—about the same rate as in 2015, 5.0 percent. The trend in per enrollee spending in 2016 reflected faster growth in the net cost of private health insurance and a slight slowdown in the growth of per enrollee benefit spending, from 5.9 percent in 2015 to 5.3 percent in 2016. The slightly slower growth in that spending was due in part to slower growth in spending for retail prescription drugs and the continued shift to high-deductible plans, which were partly offset by continued strong growth in the benefit trends for some of the newly covered expansion populations.[11,15]

The net cost of private health insurance, or the amount of private health insurance spending attributed to nonmedical benefit expenses (such as administrative costs, taxes, net gains or losses to reserves, and profits), grew faster in 2016, increasing 3.3 percent after almost zero growth in 2015. However, because the net cost of private health insurance grew more slowly than benefit spending (5.3 percent) in 2016, the net cost share of private health insurance expenditures was slightly lower (11.5 percent in 2016, compared to 11.7 percent in 2015).

Medicare

Total Medicare expenditures reached $672.1 billion in 2016 and constituted 20 percent of total health care spending (exhibit 2). Medicare spending grew 3.6 percent in 2016, slowing from a rate of 4.8 percent in 2015, while enrollment growth remained relatively stable, increasing 2.8 percent in 2016 compared to 2.7 percent in 2015. Medicare spending per enrollee increased at a slower rate in 2016 (0.8 percent) than in 2015 (2.1 percent). The deceleration was influenced by slower growth in spending for both the fee-for-service and the Medicare Advantage portions of Medicare, which accounted for 67 percent and 33 percent of total Medicare expenditures in 2016, respectively.

Fee-for-service Medicare spending growth slowed slightly from 2.2 percent in 2015 to 1.8 percent in 2016, while enrollment growth accelerated, increasing 1.6 percent in 2016 after 0.7 percent growth in 2015. Per enrollee spending growth also slowed for Medicare fee-for-service—increasing just 0.2 percent in 2016, following faster growth of 1.5 percent in 2015—and was primarily driven by slower growth in prescription drug spending and declines in spending for durable medical products and nursing home care.[16] The slower growth in fee-for service prescription drug expenditures was caused largely by reduced spending for drugs used to treat hepatitis C and diabetes, while the decline in expenditures for durable medical equipment was due to further implementation of the competitive bidding program, which established a new payment methodology and, in turn, lowered average prices.[17] For nursing home care, the decreased spending was a result of lower use of services and a smaller increase in the Medicare reimbursement rate.

Medicare Advantage spending, in contrast, had a larger impact on the overall deceleration in total Medicare spending, as growth slowed from 11.1 percent in 2015 to 7.4 percent in 2016. Because Medicare Advantage spending is based on capitated per member per month payments, trends in total spending are directly influenced by trends in enrollment.[18] The number of Medicare Advantage enrollees grew by 0.9 million to 17.9 million in 2016 (total Medicare enrollment increased 1.5 million to reach 55.8 million enrollees), or an increase of 5.2 percent, following growth of 7.6 percent in 2015. Accordingly, Medicare Advantage spending growth per enrollee slowed from 3.3 percent in 2015 to 2.0 percent in 2016. Over the past several years, Medicare Advantage payments were affected by changes associated with the ACA, including the phasing in of payment rates that are linked to fee-for-service costs, productivity adjustments that are tied to fee-for-service benchmark rates, the implementation of quality measures that are tied to bonuses and rebates, and the implementation of insurer fees. Additionally, Medicare Advantage payments were influenced by federal budget sequestration, which reduced Medicare benefit payments across the board by 2 percent per year, starting in 2013.

Spending for hospital care, physician and clinical services, and prescription drugs represented 76 percent of total Medicare expenditures in 2016. While growth in Medicare hospital care spending remained fairly stable in 2015 and 2016 (at 2.8 percent and 2.9 percent, respectively), spending growth slowed for Medicare physician and clinical services and for Medicare prescription drugs. The deceleration in physician and clinical services spending (from 4.7 percent growth in 2015 to 3.8 percent in 2016) was primarily due to slower growth in Medicare Advantage physician spending; in the fee-for-service program, physician and clinical services spending accelerated. For prescription drugs, the slowdown (from 9.3 percent in 2015 to 2.8 percent in 2016) was evident in both fee-for-service and

Medicare Advantage expenditures, and it was primarily due to slower growth in Part D spending—specifically, reduced utilization and higher manufacturer rebates for hepatitis C drugs and reduced spending on diabetes drugs resulting from slower price growth for insulin.

Out-Of-Pocket Spending

Total out-of-pocket spending (which includes all direct consumer payments such as copayments, deductibles, coinsurance, and spending for noncovered services) increased 3.9 percent in 2016 (exhibit 1)—the fastest rate of growth since 2007 and higher than the average annual growth of 2.0 percent in 2008–15. In 2016, out-of-pocket spending continued to account for 11 percent of all health care spending, unchanged since 2012.

In 2014 and 2015, out-of-pocket spending grew just 1.5 percent and 2.8 percent, respectively. Growth in both years was affected by changes in health insurance coverage, as the number of uninsured people (who pay out of pocket for a majority of their health care costs) was reduced from 44.2 million in 2013 to 29.5 million in 2015 (exhibit 2). Concurrently, however, increased utilization resulting from enrollment expansion and an ongoing shift toward enrollment in high-deductible health plans led to more out-of-pocket spending.[19] In 2016, 29 percent of covered workers were enrolled in these high-deductible plans, up from 24 percent in 2015 and 20 percent in 2014, making these plans a likely contributor to the faster growth in out-of-pocket spending in 2016.[11] At the same time, average private health insurance deductibles for single coverage plans increased 12 percent in 2016, compared to 8 percent in 2015 and 7 percent in 2014.[11]

Notably, hospital services experienced more rapid growth in out-of-pocket spending in 2016, with a 4.8 percent increase in such spending following declines of 5.1 percent and 2.8 percent in 2015 and 2014, respectively. This faster growth in 2016 was below the longer-term average annual growth rate of 6.8 percent in 2008–13. The decreases in out-of-pocket hospital spending in 2014 and 2015 were due in part to the expansion in health insurance coverage, while hospitals' uncompensated care costs declined.[20] In 2016, out-of-pocket spending grew the fastest for durable medical equipment (6.9 percent) and declined for retail prescription drugs (–1.0 percent).

Conclusion

Within the ten-year period 2007–16, the US experienced, among other events, the most severe economic recession since the Great Depression, followed by a mild economic recovery; medical price inflation that was at historic lows; and major changes to the health care system associated with the ACA. During these years, health care spending increased at the lowest rates in the history of the National Health Expenditure Accounts, but low economic growth led to an increase of 2.0 percentage points in the share of the economy devoted to health care, from 15.9 percent in 2007 to 17.9 percent in 2016. The resulting average increase of 0.2 percentage point per year is nearly equal to the historical annual average over the past half-century.

In 2016, as expected, health care spending growth slowed following the major expansion of health insurance coverage in 2014 and 2015, when the ACA expanded eligibility for the Medicaid program and provided access to private health insurance Marketplaces. The insured share of the population stabilized at 91 percent in 2016, the same as for 2015 but higher than the shares of 89 percent in 2014 and 86 percent in 2013. Not surprisingly, federal government spending grew more slowly in 2016, as the initial impacts of enrollment expansion were realized and Medicaid enrollment growth (particularly for the newly eligible) decelerated. At the same time, private health insurance spending growth slowed, as enrollment growth decelerated and the impact of new hepatitis C drugs lessened.

The slower growth in health care spending in 2016 was more in line with the average annual rate of growth during the period 2008–15 and was higher than growth for the overall economy. Because the unique factors that influenced the health sector over the past decade did not have as great an effect in 2016, this may be an initial indication that this year marks a return to the more typical relationship between annual rates of growth in health care spending and growth in nominal GDP. As a result, future health care expenditure trends are expected to be mostly influenced by changes in economic conditions and demographics, as has historically been the case.[21] ■

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NOTES

1 Growth in the use and intensity of health care goods and services includes changes in utilization as well as changes in the mix (or intensity) of the goods and services consumed. It is calculated as a residual and reflects growth in nominal health care spending less growth in the population, changes in the age and sex mix of the population, and medical price growth. As a residual, use and intensity cannot be estimated separately. The sum of the factors may not equal the total due to rounding.

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