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By Micah Hartman, Anne B. Martin, Joseph Benson, Aaron Catlin, and the National Health Expenditure Accounts Team

National Health Spending In 2011: Overall Growth Remains Low, But Some Payers And Services Show Signs Of Acceleration

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ABSTRACT In 2011 US health care spending grew 3.9 percent to reach \$2.7 trillion, marking the third consecutive year of relatively slow growth. Growth in national health spending closely tracked growth in nominal gross domestic product (GDP) in 2010 and 2011, and health spending as a share of GDP remained stable from 2009 through 2011, at 17.9 percent. Even as growth in spending at the national level has remained stable, personal health care spending growth accelerated in 2011 (from 3.7 percent to 4.1 percent), in part because of faster growth in spending for prescription drugs and physician and clinical services. There were also divergent trends in spending growth in 2011 depending on the payment source: Medicaid spending growth slowed, while growth in Medicare, private health insurance, and out-of-pocket spending accelerated. Overall, there was relatively slow growth in incomes, jobs, and GDP in 2011, which raises questions about whether US health care spending will rebound over the next few years as it typically has after past economic downturns.

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The National Health Expenditure Accounts Team is recognized in an acknowledgment at the end of the article.

Total US health care spending reached \$2.7 trillion in 2011, or \$8,680 per person, representing an increase of 3.9 percent from 2010 and the third consecutive year of relatively low growth (Exhibits 1 and 2). National health spending growth remained steady overall in 2011. However, spending growth for personal health care goods and services¹ accelerated slightly, from 3.7 percent in 2010 to 4.1 percent in 2011, primarily because of increases in nonprice factors such as the use and intensity of services. This faster growth in personal health care spending occurred as the economy continued to recover from the recent recession and as private health insurance enrollment stabilized after substantial losses over the prior three years.

Although spending for retail prescription drugs and physician and clinical services grew

at a quicker pace in 2011 than in 2010, growth slowed for hospital care services and certain categories of nonpersonal health care spending, including the net cost of health insurance (that is, the difference between premiums and benefits)² and noncommercial research. Spending declined for government public health activities.

Trends in health spending by payer were also largely offsetting. Medicaid spending grew more slowly in 2011, as states worked to control expenditures in response to the expiration of the enhanced Federal Medical Assistance Percentage, discussed below, and to the tightening of state budgets (Exhibit 3).

However, Medicare spending grew more rapidly in 2011, primarily because of a one-time change in payment rates to skilled nursing facilities and increased use of physician services. Private health insurance and out-of-pocket spending growth accelerated as private health

EXHIBIT 1

National Health Expenditures (NHE), Aggregate And Per Capita Amounts And Share Of Gross Domestic Product (GDP), Selected Calendar Years 1990–2011

Spending category	1990	2000	2007	2008	2009	2010	2011
NHE, billions	\$724.3	\$1,377.2	\$2,298.3	\$2,406.6	\$2,501.2	\$2,600.0	\$2,700.7
Health consumption expenditures	675.6	1,289.6	2,154.6	2,252.8	2,355.1	2,450.8	2,547.2
Personal health care (PHC)	616.8	1,165.4	1,914.1	2,010.4	2,111.6	2,190.0	2,279.3
Hospital care	250.4	415.5	692.5	729.2	777.9	815.9	850.6
Professional services	208.1	390.2	618.6	652.8	672.5	694.2	723.1
Physician and clinical services	158.9	290.9	461.8	486.4	503.2	519.1	541.4
Other professional services	17.4	37.0	59.5	64.0	66.8	69.8	73.2
Dental services	31.7	62.3	97.3	102.4	102.5	105.3	108.4
Other health, residential, and personal care	24.3	64.5	107.7	113.6	122.5	128.0	133.1
Home health care	12.6	32.4	57.8	62.3	67.3	71.2	74.3
Nursing care facilities and continuing care retirement communities	44.9	85.1	126.4	132.6	138.5	143.0	149.3
Retail outlet sales of medical products	76.5	177.6	311.2	320.0	332.9	337.8	348.9
Prescription drugs	40.3	120.9	235.9	242.6	254.6	255.7	263.0
Durable medical equipment	13.8	25.2	34.3	34.9	34.9	36.9	38.9
Other nondurable medical products	22.4	31.6	41.0	42.5	43.5	45.2	47.0
Government administration	7.2	17.1	29.4	30.3	30.8	31.1	32.5
Net cost of health insurance ^a	31.6	64.1	142.4	139.5	137.1	150.4	156.4
Government public health activities	20.0	43.0	68.7	72.6	75.6	79.3	79.0
Investment	48.7	87.5	143.7	153.8	146.1	149.1	153.5
Research ^b	12.7	25.5	41.9	43.4	45.3	49.0	49.8
Structures and equipment	36.0	62.1	101.7	110.4	100.8	100.1	103.7
GDP, billions of dollars	\$5,800.5	\$9,951.5	\$14,028.7	\$14,291.5	\$13,973.7	\$14,498.9	\$15,075.7
Population (millions)	253.8	282.3	301.0	303.8	306.4	308.9	311.1
NHE per capita	\$2,854	\$4,878	\$7,636	\$7,922	\$8,163	\$8,417	\$8,680
GDP per capita	\$22,855	\$35,251	\$46,608	\$47,044	\$45,605	\$46,939	\$48,452
Prices (2005 = 100.0)							
Chain-weighted NHE deflator	— ^c	— ^c	106.7	108.9	111.5	114.6	117.3
Chain-weighted PHC deflator	63.4	85.1	106.5	109.3	112.3	115.4	117.8
GDP price index	72.3	88.7	106.2	108.6	109.5	111.0	113.4
Real spending							
NHE, billions of chained dollars	— ^c	— ^c	\$2,154	\$2,210	\$2,243	\$2,269	\$2,303
PHC, billions of chained dollars	\$973	\$1,369	1,797	1,839	1,880	1,898	1,936
GDP, billions of chained dollars	8,027	11,216	13,206	13,162	12,758	13,063	13,299
NHE as percent of GDP	12.5	13.8	16.4	16.8	17.9	17.9	17.9

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 Bureau of the Census. **NOTES** Definitions, sources, and methods for NHE categories can be found at CMS.gov. National Health Accounts methodology paper, 2011: definitions, sources, and methods [Internet]. Baltimore (MD): Centers for Medicare and Medicaid Services; 2013 [cited 2013 Jan 7]. Available from: <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/dsm-11.pdf>. Numbers might not add to totals because of rounding. ^aNet cost of health insurance is calculated as the difference between calendar-year incurred premiums earned and benefits paid for private health insurance. This includes administrative costs and, in some cases, additions to reserves, rate credits and dividends, premium taxes, and plan profits or losses. Also included in this category is the difference between premiums earned and benefits paid for the private health insurance companies that insure the enrollees of the following programs: Medicare, Medicaid, Children's Health Insurance Program (CHIP), and workers' compensation (health portion only). ^bResearch and development expenditures of drug companies and other manufacturers and providers of medical equipment and supplies are excluded from "research expenditures" but are included in the expenditure class in which the product falls. ^cData not available.

insurance enrollment stabilized and economic conditions improved slightly.

Although some provisions of the Patient Protection and Affordable Care Act as amended by the Health Care and Education Reconciliation Act of 2010—together known as the Affordable Care Act—were in effect in 2010 and 2011, the impact on aggregate health spending growth was minimal in these years.³ The most prominent provisions of the act will not be implemented until 2014.

Nominal—that is, not adjusted for inflation—gross domestic product (GDP) and national health spending increased at approximately the same rates in 2011 (4.0 percent and 3.9 percent, respectively). Consequently, the share of the economy devoted to health care spending remained at 17.9 percent, where it has been since 2009.

Periods of stability in the health spending share of the economy often follow recessions as economic growth rebounds. In comparison,

EXHIBIT 2
National Health Expenditures (NHE), Average Annual Growth From Prior Year Shown, Selected Calendar Years 1990–2011

Spending category	1990	2000	2007	2008	2009	2010	2011
NHE	11.0%	6.6%	7.6%	4.7%	3.9%	3.9%	3.9%
Health consumption expenditures	11.1	6.7	7.6	4.6	4.5	4.1	3.9
Personal health care (PHC)	11.0	6.6	7.3	5.0	5.0	3.7	4.1
Hospital care	9.6	5.2	7.6	5.3	6.7	4.9	4.3
Professional services	12.4	6.5	6.8	5.5	3.0	3.2	4.2
Physician and clinical services	12.8	6.2	6.8	5.3	3.5	3.1	4.3
Other professional services	17.5	7.8	7.0	7.6	4.4	4.6	4.9
Dental services	9.0	7.0	6.6	5.2	0.1	2.7	3.0
Other health, residential, and personal care	11.1	10.3	7.6	5.5	7.8	4.5	4.0
Home health care	18.1	9.9	8.6	7.8	8.0	5.8	4.5
Nursing care facilities and continuing care retirement communities	11.4	6.6	5.8	4.9	4.5	3.2	4.4
Retail outlet sales of medical products	11.4	8.8	8.3	2.8	4.1	1.5	3.3
Prescription drugs	12.8	11.6	10.0	2.8	5.0	0.4	2.9
Durable medical equipment	13.0	6.2	4.5	1.7	-0.1	5.8	5.3
Other nondurable medical products	8.6	3.5	3.8	3.7	2.3	4.0	4.0
Government administration	10.0	9.1	8.1	2.9	1.8	0.7	4.7
Net cost of health insurance ^a	13.1	7.3	12.1	-2.0	-1.7	9.8	4.0
Government public health activities	12.0	8.0	6.9	5.8	4.1	4.9	-0.5
Investment	9.2	6.0	7.3	7.1	-5.0	2.1	2.9
Research ^b	8.9	7.2	7.4	3.5	4.3	8.2	1.7
Structures and equipment	9.4	5.6	7.3	8.6	-8.7	-0.7	3.6
Gross domestic product (GDP), billions of dollars	7.6	5.5	5.0	1.9	-2.2	3.8	4.0
Population (millions)	1.0	1.1	0.9	0.9	0.9	0.8	0.7
NHE per capita	9.9	5.5	6.6	3.7	3.0	3.1	3.1
GDP per capita	6.6	4.4	4.1	0.9	-3.1	2.9	3.2
Prices							
Chain-weighted NHE deflator	— ^c	— ^c	— ^c	2.1	2.4	2.7	2.4
Chain-weighted PHC deflator	7.1	3.0	3.3	2.6	2.8	2.7	2.1
GDP price index	4.2	2.1	2.6	2.2	0.9	1.3	2.1
Real spending							
NHE, billions of chained dollars	— ^c	— ^c	— ^c	2.6	1.5	1.2	1.5
PHC, billions of chained dollars	3.7	3.5	4.0	2.4	2.2	1.0	2.0
GDP, billions of chained dollars	3.2	3.4	2.4	-0.3	-3.1	2.4	1.8

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 Bureau of the Census. **NOTES** Definitions, sources, and methods for NHE categories can be found in a CMS National Health Accounts methodology paper (see Exhibit 1 notes). Data for 1990 show average annual growth, 1980–90. Percentage changes are calculated from unrounded numbers. ^aNet cost of health insurance is calculated as the difference between calendar-year incurred premiums earned and benefits paid for private health insurance. This includes administrative costs and, in some cases, additions to reserves, rate credits and dividends, premium taxes, and plan profits or losses. Also included in this category is the difference between premiums earned and benefits paid for the private health insurance companies that insure the enrollees of the following programs: Medicare, Medicaid, Children's Health Insurance Program (CHIP), and workers' compensation (health portion only). ^bResearch and development expenditures of drug companies and other manufacturers and providers of medical equipment and supplies are excluded from "research expenditures" but are included in the expenditure class in which the product falls. ^cData not available.

as economic growth fell during the recession, the share of GDP devoted to health spending increased, from 16.4 percent in 2007 to 17.9 percent in 2009.

Health expenditure growth can be broken down into several broad factors or categories: some that directly reflect changes in prices, such as economywide inflation and additional medical-specific inflation; and others not involving changes in prices, such as population changes and shifts in the age and sex mix of the population, as well as other nonprice factors.

Other nonprice factors reflect a wide range of phenomena—such as utilization, intensity (that

is, complexity of services), and investment⁴—that may be influenced by larger economic conditions. Analysis of these factors can shed light on the recession's effect on various behaviors, as highlighted in the discussion below.

During 2004–08, other nonprice factors contributed an average of 1.5 percentage points to average annual per capita national health spending growth of 5.1 percent (Exhibit 4). In contrast, as the economic downturn began to have a considerable impact on private health insurance coverage and investment in structures and equipment, other nonprice factors contributed less than one-tenth of a percentage point to average

EXHIBIT 3

National Health Expenditures (NHE), Amounts And Average Annual Growth From Previous Year Shown, By Source Of Funds, Selected Calendar Years 1990–2011

	1990 ^a	2000	2007	2008	2009	2010	2011
SOURCE OF FUNDS							
NHE, billions	\$724.3	\$1,377.2	\$2,298.3	\$2,406.6	\$2,501.2	\$2,600.0	\$2,700.7
Health consumption expenditures	675.6	1,289.6	2,154.6	2,252.8	2,355.1	2,450.8	2,547.2
Out-of-pocket	138.6	201.7	286.1	293.0	293.3	299.4	307.7
Health insurance	439.5	920.4	1,613.9	1,705.2	1,801.1	1,879.4	1,960.1
Private health insurance	234.2	459.2	778.9	809.5	835.0	863.7	896.3
Medicare	110.2	224.8	433.6	468.2	500.4	522.0	554.3
Medicaid	73.7	200.5	326.2	344.9	375.4	397.7	407.7
Federal	42.6	116.9	185.8	203.5	248.1	267.2	248.2
State and local	31.1	83.6	140.4	141.4	127.3	130.5	159.5
Other health insurance programs ^b	21.4	35.8	75.3	82.6	90.2	96.0	101.8
Other third-party payers and programs and public health activity ^c	97.5	167.5	254.7	254.7	260.7	272.0	279.4
Investment	48.7	87.5	143.7	153.8	146.1	149.1	153.5
AVERAGE ANNUAL GROWTH FROM PRIOR YEAR SHOWN							
NHE	11.0%	6.6%	7.6%	4.7%	3.9%	3.9%	3.9%
Health consumption expenditures	11.1	6.7	7.6	4.6	4.5	4.1	3.9
Out-of-pocket	9.0	3.8	5.1	2.4	0.1	2.1	2.8
Health insurance	11.9	7.7	8.4	5.7	5.6	4.4	4.3
Private health insurance	13.0	7.0	7.8	3.9	3.2	3.4	3.8
Medicare	11.4	7.4	9.8	8.0	6.9	4.3	6.2
Medicaid	11.0	10.5	7.2	5.8	8.8	5.9	2.5
Federal	11.4	10.6	6.8	9.6	21.9	7.7	-7.1
State and local	10.4	10.4	7.7	0.7	-10.0	2.5	22.2
Other health insurance programs ^b	8.2	5.3	11.2	9.7	9.3	6.4	6.0
Other third-party payers and programs and public health activity ^c	10.7	5.6	6.2	-0.0	2.4	4.3	2.7
Investment	9.2	6.0	7.3	7.1	-5.0	2.1	2.9

SOURCE Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group. **NOTES** Numbers might not add to totals because of rounding. Percentage changes are calculated from unrounded data. ^aAverage annual growth, 1980–90. ^bIncludes health-related spending for Children's Health Insurance Program (CHIP) Titles XIX and XXI; Department of Defense; and Department of Veterans Affairs. ^cIncludes health-related spending for worksite health care, other private revenues, Indian Health Service, workers' compensation, general assistance, maternal and child health, vocational rehabilitation, other federal programs, Substance Abuse and Mental Health Services Administration, other state and local programs, and school health.

annual per capita national health spending growth of 3.1 percent during 2009–10. This change mainly reflects much slower growth in the use and intensity of services, in part because of losses of insurance coverage and, in 2009, a decline in the amount and mix of investment in structures and equipment.

Analysis of these factors for personal health care spending (health care goods and services) reveals a more pronounced decline in other non-price factors in 2010, as reductions in the use and intensity of services contributed to the slowest rate of annual personal health care spending growth in the history of the National Health Expenditure Accounts: 3.7 percent. In particular, other nonprice factors declined 0.4 percentage point, primarily because of slower growth in the use of hospital services and physician and clinical services and in the volume of prescription drugs dispensed.^{5–7}

In 2011, however, per capita personal health

care spending increased 3.3 percent, accelerating by 0.4 percentage point over 2010. Much of this acceleration was driven by a rebound in other nonprice factors, which contributed 0.7 percentage point to the growth in 2011.

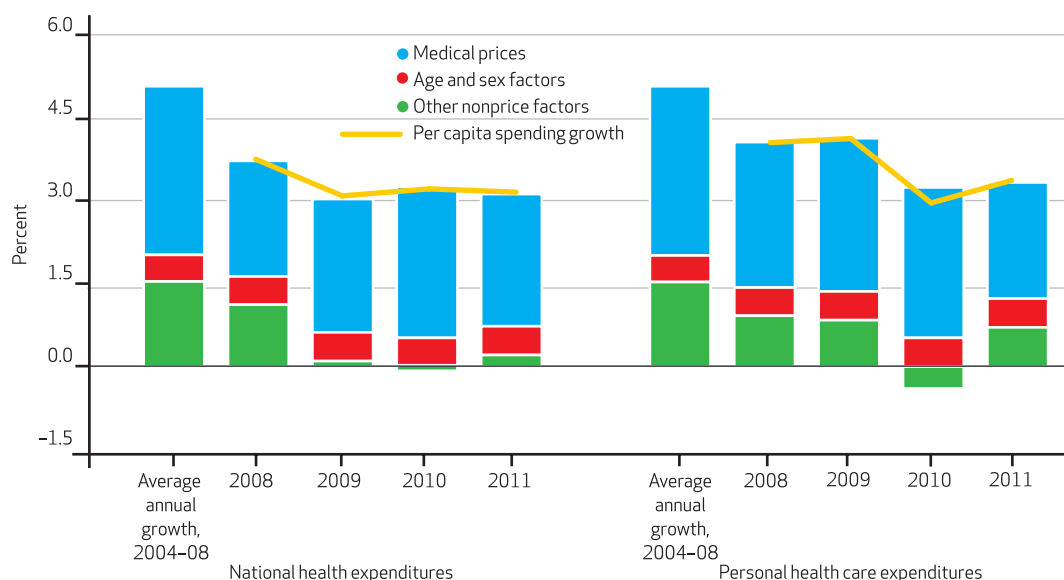
The Recession's Impact, 2008–10

The recession that began in December 2007 and ended in June 2009 was longer and more severe than any previous economic downturn since the Great Depression. Although the health sector tends to be somewhat insulated from overall recessions, this one had an immediate effect on health care spending. High levels of unemployment, a considerable reduction in the number of people with private health insurance,⁸ lower household income and assets, and financial uncertainty all had a substantial impact on consumers, providers, and sponsors of health care.

All of these factors highlight the severity of the

EXHIBIT 4

Factors Accounting For Growth In Per Capita National Health Expenditures And Personal Health Care Expenditures, Selected Calendar Years 2004–11



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) deflator for NHE and the chain-weighted personal health care (PHC) deflator for PHC expenditures. As a residual, the category of other nonprice factors includes use and intensity and any errors in measuring prices or total spending.

downturn. However, the recession's impact on insurance enrollment was one of the most influential contributors to the slower growth in national health expenditures, compared to previous recessions. During 2007–10, private health insurance enrollment declined by 11.2 million (Exhibit 5), while Medicaid enrollment increased by 7.5 million and the number of uninsured people increased by 7.0 million.⁹

A closer examination of trends in annual health spending during 2008–10 reveals the distinct effects of the recession on health spending.

In 2008 health spending growth slowed to 4.7 percent (from 6.2 percent in 2007) as private health insurance coverage, other private revenues, and employment all declined. Additionally, as private health insurance enrollment fell, growth in aggregate premium spending slowed, but growth in per enrollee benefit spending accelerated. This resulted in a narrowing of the difference between premiums and benefits.

Other private revenues declined by 5.9 percent as nonprofit hospitals and nursing homes recorded substantial reductions in investment income. In addition, both out-of-pocket and private health insurance spending growth slowed in 2008, apparently because some consumers spent more cautiously, lost insurance coverage, or both. Growth in spending for goods and

services with a high relative share of out-of-pocket spending, such as dental care and both durable and other nondurable medical products, also slowed in 2008.

The recession officially ended in June 2009. However, its effect on the health sector persisted, which is typical following economic downturns. In 2009 national health spending grew 3.9 percent—at that time a historically low rate that coincided with the sharpest contraction in GDP since the Great Depression. The main factors behind the slow growth of health spending were a decline in investment in structures and equipment, a further drop in private health insurance enrollment, and a slowdown in out-of-pocket spending. In 2009 alone private health insurance enrollment fell by 6.2 million (a 3.2 percent decline)—the largest one-year drop recorded to date in the National Health Expenditure Accounts. There is a well-documented correlation between insurance coverage and health care use: People tend to seek less medical care when they lack coverage.¹⁰

Enrollment in public programs helped offset some of the decline in private health insurance enrollment in 2009, with 3.4 million new enrollees in Medicaid and 0.3 million in the Children's Health Insurance Program. But the number of uninsured people still increased by more than

EXHIBIT 5

Expenditure Levels, Enrollment, And Annual Growth For Private Health Insurance, Medicare, and Medicaid, Calendar Years 2005–11

Type of payer	2005	2006	2007	2008	2009	2010	2011
NATIONAL HEALTH EXPENDITURE LEVELS AND ENROLLMENT							
Private health insurance ^a (billions)	\$704.0	\$741.6	\$778.9	\$809.5	\$835.0	\$863.7	\$896.3
Enrollment (millions)	196.4	197.0	197.5	195.9	189.7	186.3	187.3
Per enrollee spending	\$3,585	\$3,764	\$3,945	\$4,132	\$4,402	\$4,637	\$4,786
Medicare ^a (billions)	\$339.8	\$403.7	\$433.6	\$468.2	\$500.4	\$522.0	\$554.3
Enrollment (millions)	41.5	42.4	43.3	44.4	45.5	46.6	47.7
Per enrollee spending	\$8,180	\$9,531	\$10,021	\$10,549	\$11,006	\$11,204	\$11,610
Medicaid ^a (billions)	\$309.5	\$306.9	\$326.2	\$344.9	\$375.4	\$397.7	\$407.7
Enrollment (millions)	45.8	45.6	45.6	47.2	50.6	53.1	54.8
Per enrollee spending	\$6,756	\$6,736	\$7,150	\$7,308	\$7,412	\$7,483	\$7,434
PERCENT CHANGE							
Private health insurance	6.6	5.3	5.0	3.9	3.2	3.4	3.8
Enrollment	0.5	0.3	0.2	-0.8	-3.2	-1.8	0.5
Per enrollee spending	6.1	5.0	4.8	4.8	6.5	5.3	3.2
Medicare	9.2	18.8	7.4	8.0	6.9	4.3	6.2
Enrollment	1.8	2.0	2.1	2.6	2.4	2.5	2.5
Per enrollee spending	7.2	16.5	5.1	5.3	4.3	1.8	3.6
Medicaid	6.4	-0.9	6.3	5.8	8.8	5.9	2.5
Enrollment	2.9	-0.6	0.1	3.5	7.3	4.9	3.2
Per enrollee spending	3.4	-0.3	6.2	2.2	1.4	1.0	-0.7

SOURCE Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group. **NOTES** Numbers might not add to totals because of rounding. Percentage changes are calculated from unrounded data. ^aIncludes enrollees in the fifty states and the District of Columbia.

3.8 million in 2009.⁹

Some mixed signs of economic recovery occurred in 2010 as GDP growth increased, but employment growth still lagged.^{11,12} For the health sector, however, the recent slow economywide income growth and job losses led to record-low growth in personal health care spending (3.7 percent, as noted above) and the first decline ever in measured nonprice factors, such as use and intensity of services. This experience is consistent with historical evidence suggesting a lagged relationship between economic recessions and health care spending, although the impact in 2010 was more pronounced than those in prior economic cycles.¹³

In 2010 private health insurance coverage declined by another 3.4 million, and the number of uninsured people increased by 2.2 million. Additionally, with the lingering effects of the recession and the modest recovery, consumers apparently remained cautious about their health care spending and limited their use of health care goods and services in 2010.

The Affordable Care Act

Since the enactment of the Affordable Care Act in March 2010, various provisions have become effective. Although their influence on overall health spending through 2011 was minimal,³

certain provisions of the act had notable implications for some subcomponents of national health expenditures.

For example, private health insurance spending and enrollment were affected by the provision, effective in late 2010, that requires health insurers to cover dependents of enrollees up to age twenty-six. Estimates suggest that as many as 2.7 million dependents, who either had had some other form of coverage or had been uninsured, moved to their parents' plans by 2011.¹⁴ Adding these dependents increased overall employer-sponsored insurance spending. However, they are typically less expensive than the average private enrollee because they are generally younger and healthier. Thus, adding them helped temper the increase in the average per enrollee cost of employer-sponsored insurance.

Other provisions of the Affordable Care Act lowered health spending for particular subcomponents of national health expenditures. Federal law requires rebates from prescription drug manufacturers on drugs used by Medicaid enrollees, which lower the ultimate costs of those drugs. The Affordable Care Act increased these rebates for Medicaid fee-for-service enrollees and extended rebates to Medicaid managed care plans. These additional rebates slowed the rate of growth in Medicaid prescription drug

spending in 2011.

Another provision of the Affordable Care Act offered a 50 percent discount on brand-name prescription drugs to Medicare Part D enrollees whose out-of-pocket spending for drugs reached the coverage gap, or “doughnut hole.” This provision led to somewhat greater use of brand-name drugs by Medicare beneficiaries in 2011 and decreased the amount that Medicare beneficiaries spent out of pocket on drugs.

Other provisions affecting Medicare expenditures in 2010, 2011, or both years included coverage for new preventive services and reduced cost-sharing requirements for existing ones, together with lower payment rate updates for hospitals and certain other providers.

Finally, the medical loss ratio provision, which required private health insurance plans to meet minimum medical benefit requirements relative to premiums or pay rebates to consumers,¹⁵ contributed to an increase in benefit spending as a share of premiums for some plans in 2011. Although it is clear that the Affordable Care Act contributed to shifts in spending for payers and services, there is no discernible impact of the legislation on aggregate health spending trends.¹⁶

Sponsors Of Health Care

Businesses, households, governments, and private revenue sources are the entities that sponsor health care payments through premiums, direct out-of-pocket payments, and dedicated or general tax revenue. Examining health spending by sponsor can reveal underlying shifts not only in who is responsible for ultimately financing health care spending, but also in the burden that such spending places on a sponsor’s available resources to pay for health care.

The recent economic recession, and subsequent legislation (the American Recovery and Reinvestment Act of 2009 and the Affordable Care Act in 2010) affected each sponsor’s share of overall health spending. In 2007, just prior to the recession, households accounted for the largest portion (29 percent) of health care spending (Exhibit 6), followed by the federal government (23 percent), businesses (23 percent), and state and local governments (18 percent).

By 2011, a full year and a half after the end of the recession, the federal government’s share had increased almost five percentage points and accounted for 28 percent of total health spending. This increase was partly attributable to increased federal aid to states for Medicaid. In contrast, by 2011 the shares of health care spending for the remaining sponsors had fallen slightly: Households accounted for 28 percent,

businesses for 21 percent, and state and local governments for 17 percent.

Hospitals

Hospital spending reached \$850.6 billion in 2011—an increase of 4.3 percent that was 0.6 percentage point slower than in the previous year (Exhibit 2). Hospital price growth, as measured by the Producer Price Index, contributed to the overall trend by increasing 2.1 percent in 2011—down from 3.0 percent in each of the prior three years.¹⁷ The growth in use of hospital services remained low, with the number of inpatient days declining 1.1 percent in 2011, following a decline of 1.6 percent in 2010, and the number of outpatient visits increasing 0.7 percent, a slowdown from the increase of 1.5 percent in 2010.¹⁸

The growth in private health insurance spending for hospital services accelerated in 2011 as enrollment increased. However, per enrollee growth slowed to 4.3 percent, down from 6.0 percent in 2010. This reduction in the rate of growth may be partly because of the enrollment of the generally healthier people younger than twenty-six.

Individuals’ out-of-pocket spending on hospital care—a small share of overall hospital spending—experienced faster growth in 2011 as economic conditions improved slightly and as many enrollees in private health insurance plans faced increased cost-sharing requirements.¹⁹ Growth in Medicaid spending for hospital services slowed noticeably to 2.4 percent in 2011, from 7.6 percent in 2010, as reduced federal Medicaid matching payments in the second half of 2011 and continued financial pressures affected some states’ ability to pay for health care goods and services.

Physician And Clinical Services

Total spending for physician and clinical services²⁰ reached \$541.4 billion in 2011 (Exhibit 1). This amount represented a 4.3 percent increase over spending in 2010, which had grown in that year at only 3.1 percent—the slowest growth rate in the history of the National Health Expenditure Accounts (Exhibit 2).

Despite the acceleration in 2011, spending growth in physician and clinical services remained low compared to the average annual rate of 6.1 percent during 2002–08. Slower growth in prices for these types of services (1.4 percent in 2011) was more than offset by increases in non-price factors, such as the use and intensity of services.^{21,22}

Spending for physician services, which accounted for 80 percent of overall spending for

EXHIBIT 6

National Health Expenditures (NHE), Levels And Annual Growth, By Type Of Sponsor, Selected Calendar Years 1990–2011

Type of sponsor	1990	2000	2007	2008	2009	2010	2011
NHE (billions)	\$724.3	\$1,377.2	\$2,298.3	\$2,406.6	\$2,501.2	\$2,600.0	\$2,700.7
Businesses, households, and other private revenues	488.2	888.0	1,364.5	1,407.6	1,407.9	1,437.5	1,485.9
Private business ^a	178.3	346.1	524.5	531.9	533.0	534.9	557.6
Household ^b	253.0	434.1	668.2	702.6	707.2	728.7	748.8
Other private revenues ^c	56.9	107.9	171.7	173.2	167.7	173.9	179.5
Government	236.1	489.2	933.8	999.0	1,093.3	1,162.4	1,214.9
Federal government ^d	125.3	261.6	530.9	584.6	684.2	735.2	744.6
State and local government ^e	110.8	227.6	403.0	414.4	409.1	427.2	470.2
PERCENT DISTRIBUTION							
NHE	100%	100%	100%	100%	100%	100%	100%
Businesses, households, and other private revenues	67	64	59	58	56	55	55
Private business	25	25	23	22	21	21	21
Household	35	32	29	29	28	28	28
Other private	8	8	7	7	7	7	7
Government	33	36	41	42	44	45	45
Federal government	17	19	23	24	27	28	28
State and local governments	15	17	18	17	16	16	17

SOURCE Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group. **NOTES** Numbers might not add to totals because of rounding. Percent distributions are calculated from unrounded data. ^aIncludes employer contributions to private health insurance premiums, employer Medicare Hospital Insurance (HI) payroll taxes, one-half of self-employment contribution to Medicare HI Trust Fund, workers' compensation, temporary disability insurance, and worksite health care. Excludes Medicare Retiree Drug Subsidy payments to private plans beginning in 2006, small business tax credits beginning in 2010, and Early Retirement Reinsurance Program payments beginning in 2010. ^bIncludes employee contributions to employer-sponsored health insurance, individually purchased health insurance, employee and self-employment payroll taxes and premiums paid to Medicare HI and Supplementary Medical Insurance (SMI) Trust Funds, premiums paid for the Preexisting Condition Insurance Program beginning in 2010, and out-of-pocket health spending. ^cIncludes health-related philanthropic support, nonoperating revenue, investment income, and privately funded structures and equipment. ^dIncludes employer contributions to private health insurance premiums, employer Medicare HI payroll taxes, trust fund interest income, federal general revenue contributions to Medicare less the net change in the trust fund balance and payments for the Retiree Drug Subsidy, federal Medicaid expenditures, the federal portion of Medicaid buy-ins for the Medicare premiums of people eligible for both Medicaid and Medicare (dual eligibles), and the following federal programs: maternal and child health, vocational rehabilitation, Substance Abuse and Mental Health Services Administration, Indian Health Service, federal workers' compensation, other federal programs, public health activities, Department of Defense, Department of Veterans Affairs, Children's Health Insurance Program (CHIP), and investment (research, structures, and equipment). Also includes the subsidy for COBRA coverage beginning in 2009, small business tax credits beginning in 2010, and Early Retirement Reinsurance Program payments beginning in 2010. Excludes premiums paid to Medicare HI and SMI Trust Funds, Part D state phase-down payments beginning in 2006, income from taxation of Social Security benefits, and premiums paid for the preexisting condition insurance program beginning in 2010. ^eIncludes employer contributions to private health insurance premiums, employer Medicare HI payroll taxes, state and local Medicaid expenditures, the state and local portion of Medicaid buy-ins for dual eligibles, and the following state and local programs: maternal and child health, public and general assistance, CHIP Titles XIX and XXI, vocational rehabilitation, other state and local programs, public health activities, and investment (research, structures, and equipment). Includes Part D state phase-down payments to Medicare beginning in 2006.

physician and clinical services in 2011, grew 3.6 percent, up from 2.8 percent in 2010. At the same time, spending for clinical services increased 7.2 percent, faster than the rate of 4.8 percent in 2010. The year 2011 was the seventh consecutive one in which growth in clinical services outpaced that in physician services. As a result, spending for clinical services accounted for 20 percent of total physician and clinical expenditures, up from 17 percent in 2005.

The two largest payers of physician and clinical services in 2011 were private health insurance (46 percent) and Medicare (23 percent), both of which experienced faster growth in 2011 than in 2010. Growth in private health insurance spending for physician and clinical services accelerated to 3.0 percent in 2011 because of increased private health insurance enrollment and greater use and intensity of services.²³ Medicare spending for physician and clinical services grew much faster in 2011 than in 2010—7.6 percent

and 3.2 percent, respectively—because of an increase in the growth of the volume and intensity of physician services in the second half of 2011, following two years of unusually slow growth.²⁴

Prescription Drugs

Prescription drug spending in retail outlets reached \$263.0 billion in 2011—an increase of 2.9 percent from 2010, when growth was at a historically low rate of 0.4 percent, but still well below the 7.8 percent average annual rate during 2000–10. The acceleration in 2011 was partly because of more rapid growth in prescription drug prices, particularly for brand-name and specialty drugs (high-cost drugs usually prescribed by specialists for chronic conditions), and increased spending on new brands. However, other market forces—such as a slowdown in the growth of the number of prescriptions dispensed; the increased use of generics,

cheaper drugs that overall produce the same effect in the body as brand-name medications; and a flurry of patent expirations that led to more generics on the market—continued to curb growth in prescription drug spending in 2011 compared to the longer-term trend.

Prices for brand-name and generic drugs together, as measured by the Consumer Price Index for Prescription Drugs, grew at similar rates in 2010 and 2011.²⁵ Separately, however, prices for generic drugs continued to fall in 2011, while those for brand-name drugs increased.²⁶

According to IMS Health, price increases for brand-name drugs more than offset their reduced volume.²⁷ In addition, prices for specialty drugs have increased at double-digit rates in recent years.²⁸ Furthermore, spending on new brand-name drugs, defined as those launched in the prior two years, more than doubled from 2010 to 2011. The growth was driven by the largest one-year increase in the number of new medicines introduced over the past decade, including breakthrough therapies for several types of cancer, multiple sclerosis, hepatitis C, and cardiovascular conditions.²⁷

Growth in the number of prescriptions dispensed decelerated from 2.1 percent in 2009 to 1.1 percent in 2010 and then to only 0.6 percent in 2011, with slower or negative growth in seven of the top ten therapeutic classes.²⁹ The generic dispensing rate (excluding branded generics³⁰) increased from 58.0 percent in 2007 to 67.1 percent in 2010 and 69.7 percent in 2011.³¹

Insurers continue to encourage the use of generics through tiered benefit plans that offer lower copayments for generics or through other types of discount programs. Additionally, an unprecedented number of “blockbuster” drugs have lost patent protection in recent years, allowing more generic equivalents to come on the market.³²

Private Health Insurance

In 2011 spending for private health insurance premiums increased 3.8 percent (Exhibit 3), as did spending for benefits. As a result, the net cost ratio for private health insurance—the difference between premiums and benefits as a share of premiums—remained unchanged, at 12.3 percent. The net cost ratio for commercial group insurance increased slightly in 2011, while the ratio for individually purchased policies declined. Some of this decline was probably attributable to the newly effective medical loss ratio provisions of the Affordable Care Act, described above.

Enrollment in private health insurance plans increased by 1.0 million enrollees, or 0.5 percent,

in 2011, mostly because of the increased coverage of dependents younger than age twenty-six mandated by the Affordable Care Act. This growth in enrollment occurred after a decline of nearly 11.2 million people with private health insurance during 2007–10.

Private health insurance spending on benefits per enrollee grew more slowly in 2011, increasing 3.2 percent after growth of 4.6 percent in 2010 (data not shown). This slowdown reflects a changing enrollment mix in 2011, as many people who gained insurance coverage had lower per person expenditures because, as noted above, they belonged to a younger and healthier segment of the population.

In 2011, 17 percent of covered workers were enrolled in consumer-directed health plans, up from 8 percent in 2008.¹⁹ Enrollment in such plans has increased, on average, by 23 percent per year, or by 5.3 million enrollees since 2008.³³ This enrollment growth has made these health plans and health maintenance organizations the second and third most popular types of health insurance plan, after preferred provider organizations.

Consumer-directed health plans typically have lower premiums than plans with lower deductibles or cost sharing. Thus, the shift to these types of plans, combined with the decline in the number of people with private health insurance mentioned above, played a role in the low growth in private health insurance spending during 2008–11.

Out-Of-Pocket Spending

Out-of-pocket spending by consumers increased 2.8 percent in 2011 (Exhibit 3), accelerating from 2.1 percent in 2010 but still slower than the average annual growth rate of 4.7 percent in 2002–08. Faster growth in 2011 reflects higher cost sharing for group health insurance plans and increased enrollment in consumer-directed health plans that have higher deductibles, copayments, or both. Additionally, increases in the number of uninsured people over the past few years had resulted in more direct out-of-pocket spending than might otherwise have been the case.

In 2011 faster growth in out-of-pocket spending for hospital and dental services was partially offset by a decline in such spending on prescription drugs, in part because of the reduced costs for Medicare beneficiaries with drug costs in the “doughnut hole.”

Medicaid

Medicaid expenditures and enrollment growth

slowed in 2011. Spending increased 2.5 percent, compared to 5.9 percent in 2010, and enrollment increased 3.2 percent, compared to 4.9 percent (Exhibit 5).

Slower growth in Medicaid spending reflected states' efforts to control expenditure growth as the enhanced federal matching rates expired and state revenues continued to increase at a slow rate.³⁴ With fewer federal matching dollars and continued pressure on their budgets, some states implemented cost-control measures that included provider reimbursement reductions, eligibility restrictions, benefit reductions, and increased cost sharing.³⁵ At the same time, enrollment growth decelerated as economic and job growth slowly rebounded from the recession.

Medicaid spending on benefits per enrollee decreased 0.9 percent in 2011, following growth of 0.6 percent in 2010. This decline reflected continued enrollment of generally healthier, lower-cost children and adults, as well as cost-containment measures implemented by the states. The services that contributed most to the slower growth in Medicaid spending in 2011 were hospital care, whose growth decelerated from 7.6 percent in 2010 to 2.4 percent in 2011; and other health, residential, and personal care services, whose growth slowed from 4.9 percent in 2010 to 2.7 percent in 2011.

In 2011 federal Medicaid spending decreased 7.1 percent, while state spending increased by 22.2 percent. Substantial changes to the Federal Medical Assistance Percentage formula, which allocates Medicaid spending between the states and the federal government, caused these divergent trends. The American Recovery and Reinvestment Act mandated an increased federal share from October 2008 to June 2011. After peaking at 67 percent in 2010, the federal share was 61 percent for 2011. Thus, state Medicaid spending was about \$29 billion more in 2011 than in 2010.

Medicare

Medicare spending, which accounted for 21 percent of national health expenditures in 2011, increased 6.2 percent, accelerating from growth of 4.3 percent in 2010 (Exhibit 5). Several factors contributed to the acceleration, including a one-time increase in spending for skilled nursing facilities described below, faster growth in spending for physician services, and an increase in Medicare Advantage spending growth. Per enrollee, Medicare spending also grew faster in 2011, from 1.8 percent in 2010 to 3.6 percent in 2011. In 2011 the oldest members of the baby-boom generation became eligible for Medicare, and overall enrollment reached 47.7 million

beneficiaries—an increase of 2.5 percent from 2010 enrollment levels.

Rapid growth in Medicare spending for skilled nursing facilities, which increased 16.5 percent in 2011 compared to 7.2 percent in 2010, was caused by the introduction of a new Resource Utilization Group classification system that allowed these facilities to get much higher reimbursement from Medicare for particular conditions than in the previous system.³⁶ This higher rate of growth is not expected to continue: A rate reduction was implemented in 2012 to more properly align payments between the new and previous systems.²⁴

Medicare spending for physicians' services also accelerated in 2011, increasing 7.6 percent compared to 3.2 percent growth in 2010, even as the increase in physicians' fees was lower in 2011. Faster fee-for-service spending growth for physician services, therefore, is attributable to a rebound in the volume and intensity of services after unusually slow growth in 2009 and 2010.³⁷

In addition, Medicare Advantage spending grew faster in 2011 than in 2010—7.0 percent and 4.4 percent, respectively. The slower growth in 2010 reflected a one-time adjustment to Medicare Advantage payment rates for risk score coding intensity.³⁸ Per enrollee, Medicare Advantage spending increased only 1.5 percent in 2011, following a decline in 2010. Medicare Advantage enrollment increased 5.4 percent—making 2011 the second consecutive year of growth in that range after double-digit growth each year from 2006 to 2009.

Spending for Medicare Part D prescription drugs increased 7.3 percent in 2011, decelerating from growth of 8.1 percent in 2010. The slight slowdown was partly because of the continued use of lower-cost generic drugs.³⁹ However, the Affordable Care Act provision that provided Medicare Part D beneficiaries with a 50 percent discount on brand-name drugs when their out-of-pocket spending reached the “doughnut hole” is believed to have led to somewhat greater use of brand-name drugs in 2011. As a result of this change, a slightly higher percentage of Part D enrollees reached the level of catastrophic “true out-of-pocket” costs and Part D reinsurance payments were higher. Growth in Part D prescription drug spending was also influenced by continued growth in Part D enrollment, which increased 5.4 percent in 2011, accelerating from 3.9 percent in 2010.⁴⁰

Conclusion

In 2011 national health spending increased 3.9 percent—the same rate of growth experienced in 2009 and 2010. The recent recession

had an immediate and noticeable effect on the health sector because of high unemployment, loss of private health insurance coverage, and a reduction in the resources available to pay for health care. All of these factors contributed to historically low growth in aggregate health spending during 2009–11.

In 2011, however, there were some signs of change, evident in faster growth in nonprice factors such as the use and intensity of health care goods and services. Additionally, insurance coverage expanded in 2011 for dependents under age twenty-six, and overall private health

insurance coverage did not decline as had been experienced in the prior three years.

Nonetheless, economic, income, and job growth in 2011 was modest and less than might normally be expected during an economic recovery. This fact raises questions about whether the near future will hold the type of rebound in health care spending typically seen a few years after a downturn. Data for the years 2012 and 2013 will provide important indications of the state of the US health system as the major insurance expansions associated with the Affordable Care Act grow nearer on the horizon. ■

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NOTES

- 1 "Personal health care" is a subset of national health expenditures. It includes spending for all medical goods and services that are rendered to treat or prevent a specific disease or condition in a specific person and excludes other spending, such as government administration, the net cost of health insurance, public health, and investment.
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- 14 Based on estimates from the Office of the Actuary, Centers for Medicare and Medicaid Services, of the impact on employer-sponsored insurance of provision 2714 of the Public Health Service Act, as added by the Affordable Care Act.
- 15 Consumers include both enrollees and group policy holders (usually employers). Rebates can be provided as direct payments or lower premiums, or in other ways that vary by plan for the benefit of subscribers.
- 16 Certain provisions listed here reduced health expenditures in 2010 and 2011, but others increased spending.
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In this month's *Health Affairs*, Micah Hartman and coauthors—all from the National Health Statistics Group with the Office of the Actuary at the Centers for Medicare and Medicaid Services (CMS)—describe the trends in national health spending in 2011. Overall, US health care spending grew 3.9 percent in 2011—the same rate of growth as in 2009 and 2010—reaching \$2.7 trillion. Beneath that general trend, however, spending growth accelerated for various personal health care goods and services, and also for payers such as Medicare, private health insurance, and consumer out-of-pocket spending. As the economy strengthens, the authors observe, the jury is out on whether health spending growth will rebound as it has in the past.

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