

Health Affairs

At the Intersection of Health, Health Care and Policy

Cite this article as:

Sean P. Keehan, Andrea M. Sisko, Christopher J. Truffer, John A. Poisal, Gigi A. Cuckler, Andrew J. Madison, Joseph M. Lizonitz and Sheila D. Smith
National Health Spending Projections Through 2020: Economic Recovery And Reform Drive Faster Spending Growth
Health Affairs, , no. (2011):

doi: 10.1377/hlthaff.2011.0662

The online version of this article, along with updated information and services, is available at:

<http://content.healthaffairs.org/content/early/2011/07/27/hlthaff.2011.0662.full.html>

For Reprints, Links & Permissions:

http://healthaffairs.org/1340_reprints.php

E-mail Alerts : <http://content.healthaffairs.org/subscriptions/etoc.dtl>

To Subscribe: <http://content.healthaffairs.org/subscriptions/online.shtml>

Health Affairs is published monthly by Project HOPE at 7500 Old Georgetown Road, Suite 600, Bethesda, MD 20814-6133. Copyright © 2011 by Project HOPE - The People-to-People Health Foundation. As provided by United States copyright law (Title 17, U.S. Code), no part of *Health Affairs* may be reproduced, displayed, or transmitted in any form or by any means, electronic or mechanical, including photocopying or by information storage or retrieval systems, without prior written permission from the Publisher. All rights reserved.

Advance online articles have been peer reviewed and accepted for publication but have not yet appeared in the paper journal (edited, typeset versions may be posted when available prior to final publication). Advance online articles are citable and establish publication priority; they are indexed by PubMed from initial publication. Citations to Advance online articles must include the digital object identifier (DOIs) and date of initial publication.

Not for commercial use or unauthorized distribution

By Sean P. Keehan, Andrea M. Sisko, Christopher J. Truffer, John A. Poisal, Gigi A. Cuckler, Andrew J. Madison, Joseph M. Lizonitz, and Sheila D. Smith

National Health Spending Projections Through 2020: Economic Recovery And Reform Drive Faster Spending Growth

DOI: 10.1377/hlthaff.2011.0662
HEALTH AFFAIRS 30,
NO. 8 (2011): –
©2011 Project HOPE—
The People-to-People Health
Foundation, Inc.

ABSTRACT In 2010, US health spending is estimated to have grown at a historic low of 3.9 percent, due in part to the effects of the recently ended recession. In 2014, national health spending growth is expected to reach 8.3 percent when major coverage expansions from the Affordable Care Act of 2010 begin. The expanded Medicaid and private insurance coverage are expected to increase demand for health care significantly, particularly for prescription drugs and physician and clinical services. Robust growth in Medicare enrollment, expanded Medicaid coverage, and premium and cost-sharing subsidies for exchange plans are projected to increase the federal government share of health spending from 27 percent in 2009 to 31 percent by 2020. This article provides perspective on how the nation's health care dollar will be spent over the coming decade as the health sector moves quickly toward its new paradigm of expanded insurance coverage.

Sean P. Keehan (dnhs@cms.hhs.gov) is an economist in the Office of the Actuary, Centers for Medicare and Medicaid Services (CMS), in Baltimore, Maryland.

Andrea M. Sisko is an economist in the CMS Office of the Actuary.

Christopher J. Truffer is an actuary in the CMS Office of the Actuary.

John A. Poisal is deputy director of the National Health Statistics Group, CMS Office of the Actuary.

Gigi A. Cuckler is an economist in the CMS Office of the Actuary.

Andrew J. Madison is an actuary in the CMS Office of the Actuary.

Joseph M. Lizonitz is an actuary in the CMS Office of the Actuary.

Sheila D. Smith is an economist in the CMS Office of the Actuary.

National health spending is expected to grow 5.8 percent per year for the period 2010 through 2020, 1.1 percentage points faster than the expected average annual rise in gross domestic product. As a result, the health share of the gross domestic product is projected to increase from 17.6 percent in 2009 to 19.8 percent by 2020.¹ During this period, we expect that the Affordable Care Act of 2010 will reduce the number of uninsured people by nearly thirty million, lead to prescription drugs and physician services accounting for a greater share of health spending than would have been the case otherwise, and contribute to an increase in the government-sponsored (federal, state, and local) share of health spending to just under 50 percent by 2020.

In this article we review some highlights of overall projected spending trends in several time periods; summarize our methods and assumptions; then provide an outlook for major health

industry sectors, payers, and sponsors. In so doing, we provide perspective on how the nation's health care dollar will be spent over the coming decade as the health sector moves quickly toward its new paradigm of expanded insurance coverage.

2010

National health spending is estimated to have reached \$2.6 trillion in 2010, reflecting a growth rate of 3.9 percent over the previous year, which is slightly slower than the previous historic low growth rate of 4.0 percent in 2009 (Exhibits 1 and 2).² Growth in nominal gross domestic product (that is, not adjusted for inflation) accelerated to 3.8 percent in 2010 from -1.7 percent in 2009.³ Because the rate of economic growth has accelerated and the projected rate of growth of health spending is similar, the health share of gross domestic product is projected to remain unchanged in 2010 at 17.6 percent. This is in

EXHIBIT 1

National Health Expenditures (NHE), Aggregate And Per Capita Amounts, And Share Of Gross Domestic Product (GDP), Selected Calendar Years 2008–20

Spending category	2008	2009	2010	2011	2012	2013	2014	2020
NHE, billions	\$2,391.4	\$2,486.3	\$2,584.2	\$2,708.4	\$2,823.9	\$2,980.4	\$3,227.4	\$4,638.4
Health Consumption Expenditures	2,234.2	2,330.1	2,424.3	2,540.8	2,646.9	2,792.6	3,027.6	4,337.7
Personal health care	1,997.2	2,089.9	2,166.6	2,266.9	2,354.8	2,481.6	2,680.0	3,840.7
Hospital care	722.1	759.1	794.3	831.4	873.1	919.1	985.2	1,410.4
Professional services	652.2	674.9	690.4	718.0	728.3	768.0	834.2	1,164.2
Physician and clinical services	486.5	505.9	517.8	538.4	542.9	573.5	624.3	867.7
Other professional services	63.4	66.8	70.2	74.0	75.8	79.7	88.2	128.7
Dental services	102.3	102.2	102.4	105.7	109.6	114.7	121.7	167.9
Other health, residential, and personal care ^a	113.3	122.6	130.7	137.6	147.4	158.4	170.8	271.5
Home health care ^b	62.1	68.3	71.9	75.7	80.2	85.7	92.0	136.1
Nursing care facilities and continuing care retirement communities ^{b,c}	132.8	137.0	140.6	145.6	150.7	157.3	164.5	218.4
Retail outlet sales of medical products	314.7	328.0	338.7	358.7	375.1	393.1	433.4	640.1
Prescription drugs	237.2	249.9	258.6	275.7	290.2	305.3	337.9	512.6
Durable medical equipment	35.1	34.9	35.7	37.0	37.5	38.7	41.2	55.0
Other nondurable medical products	42.3	43.3	44.4	46.0	47.3	49.1	54.2	72.4
Government administration ^d	29.2	29.8	32.8	35.6	38.6	42.1	48.3	71.5
Net cost of health insurance ^e	134.8	133.2	144.0	152.1	162.2	171.9	195.8	271.0
Government public health activities	72.9	77.2	81.0	86.2	91.3	97.1	103.5	154.4
Investment	157.2	156.2	159.9	167.6	176.9	187.8	199.9	300.7
Research ^f	43.2	45.3	49.9	53.3	56.7	60.3	64.1	93.0
Structures and equipment	114.0	110.9	110.0	114.3	120.3	127.4	135.8	207.7
Population (millions)	304.8	307.5	310.3	313.2	316.0	318.8	321.6	338.4
NHE per capita	\$7,845.0	\$8,086.5	\$8,327.3	\$8,648.5	\$8,936.8	\$9,348.8	\$10,035.2	\$13,708.8
GDP, billions of dollars	\$14,369.1	\$14,119.0	\$14,659.6	\$15,334.4	\$16,071.0	\$16,891.1	\$17,803.8	\$23,388.4
NHE as percent of GDP	16.6	17.6	17.6	17.7	17.6	17.6	18.1	19.8

SOURCES Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group; US Department of Commerce, Bureau of Economic Analysis; and US Bureau of the Census. **NOTES** Numbers may not add to totals due to rounding. Data from 2010 to 2020 are projections. ^aIncludes spending for residential care facilities (North American Industry Classification Codes [NAICS] 623210 and 623220), ambulance providers (NAICS 621910), medical care delivered in nontraditional settings (such as community centers, senior citizens centers, schools, and military field stations), and expenditures for Home and Community Waiver programs under Medicaid. ^bIncludes freestanding facilities only. Additional services of this type provided in hospital-based facilities are counted as hospital care. ^cIncludes care provided in nursing care facilities (NAICS 6231), continuing care retirement communities (623311), state and local government nursing facilities, and nursing facilities operated by the Department of Veterans Affairs. ^dIncludes all administrative costs (federal, state, and local employees' salaries; contracted employees including fiscal intermediaries; rent and building costs; computer systems and programs; other materials and supplies; and other miscellaneous expenses) associated with insuring individuals enrolled in the following public health insurance programs: Medicare, Medicaid, Children's Health Insurance Program, Department of Defense, Department of Veterans Affairs, Indian Health Service, workers' compensation, maternal and child health, vocational rehabilitation, Substance Abuse and Mental Health Services Administration, and other federal programs. ^eNet cost of health insurance is calculated as the difference between calendar year 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 public programs: Medicare, Medicaid, Children's Health Insurance Program, and workers' compensation (health portion only). ^fResearch and development spending 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.

contrast to the period from 2008 to 2009, when the health share of gross domestic product rose by one percentage point.

The continued low rate of estimated growth in national health spending in 2010 reflects two major factors. First, Medicare spending growth is estimated to have been lower as the rate of growth in payments to private plans under the Medicare Advantage program slowed in 2010. Second, the continuing impact of losses in em-

ployment and health insurance coverage associated with the recession helped to limit growth in private spending. Private health insurance spending growth is estimated to have been just 2.6 percent in 2010 as the number of people enrolled in private plans fell by roughly 5 million. Moreover, out-of-pocket spending climbed just 1.8 percent (after 0.4 percent growth in 2009) as many people continued to restrain their use of health care goods and services.

EXHIBIT 2
National Health Expenditures (NHE), Average Annual Growth From Prior Year Shown, Selected Calendar Years 2008–20

Spending category	2008	2009	2010	2011	2012	2013	2014	2020
NHE, billions	7.1%	4.0%	3.9%	4.8%	4.3%	5.5%	8.3%	6.2%
Health Consumption Expenditures	7.1	4.3	4.0	4.8	4.2	5.5	8.4	6.2
Personal health care (PHC)	7.0	4.6	3.7	4.6	3.9	5.4	8.0	6.2
Hospital care	7.2	5.1	4.6	4.7	5.0	5.3	7.2	6.2
Professional services	6.7	3.5	2.3	4.0	1.4	5.4	8.6	5.7
Physician and clinical services	6.7	4.0	2.4	4.0	0.8	5.6	8.9	5.6
Other professional services	7.0	5.3	5.0	5.5	2.4	5.2	10.7	6.5
Dental services	6.5	-0.1	0.2	3.2	3.7	4.7	6.1	5.5
Other health, residential, and personal care ^a	7.2	8.3	6.6	5.3	7.1	7.5	7.8	8.0
Home health care ^b	8.5	10.0	5.3	5.3	6.1	6.8	7.3	6.8
Nursing care facilities and continuing care retirement communities ^{b,c}	5.7	3.1	2.6	3.5	3.5	4.4	4.6	4.8
Retail outlet sales of medical products	7.4	4.2	3.3	5.9	4.6	4.8	10.2	6.7
Prescription drugs	8.8	5.3	3.5	6.6	5.3	5.2	10.7	7.2
Durable medical equipment	4.3	-0.8	2.3	3.8	1.4	3.0	6.5	5.0
Other nondurable medical products	3.7	2.2	2.7	3.6	2.9	3.7	10.4	4.9
Government administration ^d	7.0	2.0	9.9	8.7	8.4	9.0	14.6	6.8
Net cost of health insurance ^e	9.8	-1.2	8.1	5.6	6.6	6.0	13.9	5.6
Government public health activities	6.8	5.9	4.8	6.5	6.0	6.3	6.6	6.9
Investment	7.3	-0.6	2.4	4.8	5.6	6.1	6.5	7.0
Research ^f	6.8	4.8	10.1	6.8	6.3	6.5	6.3	6.4
Structures and equipment	7.5	-2.7	-0.8	3.9	5.2	6.0	6.5	7.3
Population (millions)	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.8
NHE per capita	6.1	3.1	3.0	3.9	3.3	4.6	7.3	5.3
GDP, billions of dollars	4.7	-1.7	3.8	4.6	4.8	5.1	5.4	4.7

SOURCE Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group; US Department of Commerce, Bureau of Economic Analysis; and US Bureau of the Census. **NOTES** 2008 shows average annual growth, 2000–08; data from 2010 to 2020 are projections; percent changes are calculated from unrounded data. ^aIncludes expenditures for residential care facilities (North American Industry Classification Codes [NAICS] 623210 and 623220), ambulance providers (NAICS 621910), medical care delivered in nontraditional settings (such as community centers, senior citizens centers, schools, and military field stations), and expenditures for Home and Community Waiver programs under Medicaid. ^bIncludes freestanding facilities only. Additional services of this type provided in hospital-based facilities are counted as hospital care. ^cIncludes care provided in nursing care facilities (NAICS 6231), continuing care retirement communities (623311), state and local government nursing facilities, and nursing facilities operated by the Department of Veterans' Affairs. ^dIncludes all administrative costs (federal, state, and local employees' salaries; contracted employees including fiscal intermediaries; rent and building costs; computer systems and programs; other materials and supplies; and other miscellaneous expenses) associated with insuring individuals enrolled in the following public health insurance programs: Medicare, Medicaid, Children's Health Insurance Program, Department of Defense, Department of Veterans' Affairs, Indian Health Service, workers' compensation, maternal and child health, vocational rehabilitation, Substance Abuse and Mental Health Services administration, and other federal programs. ^eNet cost of health insurance is calculated as the difference between calendar year 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 public programs: Medicare, Medicaid, Children's Health Insurance Program, and workers' compensation (health portion only). ^fResearch 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.

2011–13

For the period 2011–13, national health spending is projected to increase more rapidly than the preceding two years, averaging 4.9 percent. Underlying this projection is expected faster growth in private health insurance spending (reaching 4.8 percent in 2013), related to anticipated gains in employer-sponsored health insurance enrollment. Out-of-pocket spending is also projected to grow faster through 2013, averaging 3.2 percent growth in this period. The accelerated growth in out-of-pocket spending is driven by increases in disposable personal incomes dur-

ing economic recovery and expansion, which in turn leads to greater use of more medical services. The projection is also based on an expectation that many employers will continue the recent trend of offering health insurance plans that require higher cost sharing, also leading to higher out-of-pocket spending.⁴

During the period 2011–13, the immediate reforms prescribed by the Affordable Care Act will continue to be implemented, including two programs that expand access to insurance coverage to specific populations. The Pre-Existing Condition Insurance Plan program (for those who have

had difficulty acquiring individual coverage because of their medical conditions) and the expansion of dependent coverage to eligible people under age twenty-six are projected to provide coverage to 1.6 million people in 2013. The impact of these reforms on overall health spending levels, however, is projected to be minor during this period (averaging 0.1 percent higher).

Medicare spending growth through 2013 most notably reflects the effect of a 29.4 percent scheduled physician payment rate reduction, effective January 1, 2012. This rate reduction is mandated by Medicare's sustainable growth rate formula, which determines the rates that Medicare pays for services under the physician fee schedule. Accordingly, Medicare spending growth is projected to decelerate sharply in 2012 to 1.7 percent, down from 5.9 percent in 2011. Under the alternative Medicare projection scenario in which physician payment rate increases are based on growth in the Medicare Economic Index,⁵ Medicare spending growth is projected to accelerate to 6.6 percent in 2012.

2014

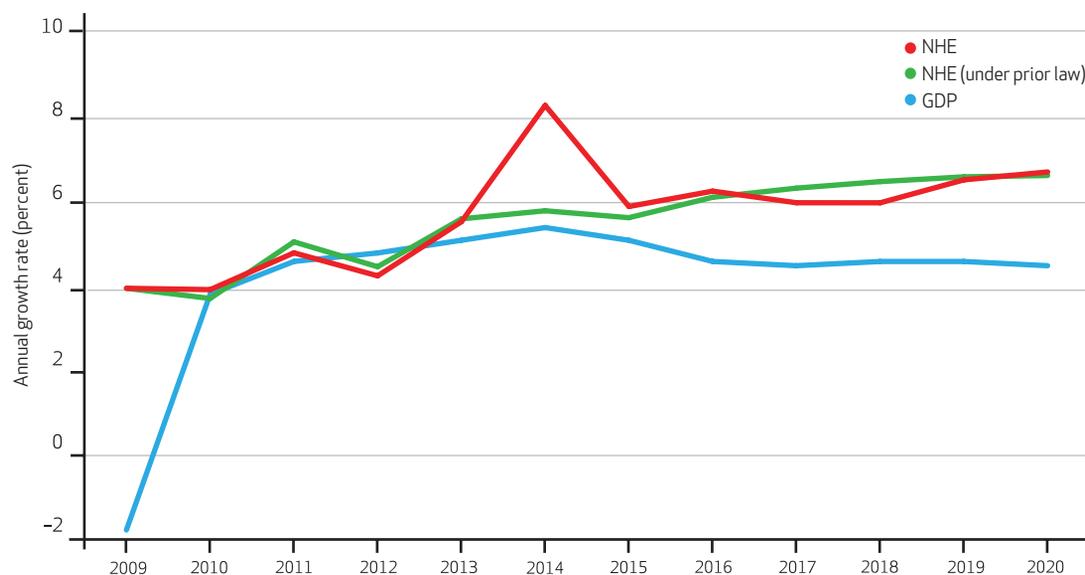
In 2014, the Affordable Care Act will greatly expand access to insurance coverage, mainly through Medicaid and new state health insur-

ance exchanges which will facilitate the purchase of insurance. The result will be an estimated 22.9 million newly insured people, some of whom will be covered through employer-sponsored insurance. The associated increases in Medicaid spending (20.3 percent) and private health insurance spending (9.4 percent) for this newly insured population are anticipated to contribute to a significant acceleration in the national health spending growth rate in 2014 (8.3 percent, compared to 5.5 percent in 2013) (Exhibit 3). Correspondingly, out-of-pocket spending is projected to decline by 1.3 percent as the number of people with insurance coverage increases and many services formerly paid for out of pocket are now covered by insurance.⁶

Spending growth for major health care services and goods in 2014 is expected to be higher than in previous years as the effects of expanded coverage more than offset the Medicare savings provisions found in the Affordable Care Act. (These Medicare savings include a slowing in the rate of growth of payments to hospitals, for example.) Notably, because many of the newly insured will be younger and healthier, on average, compared to the existing Medicaid and private insurance populations, they are expected to use physician services and prescription drugs to a greater extent than hospital or other

EXHIBIT 3

Annual Growth Rates, Gross Domestic Product (GDP) And National Health Expenditures (NHE) Calendar Years 2009–20



SOURCE Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group; US Department of Commerce, Bureau of Economic Analysis. **NOTES** 2009 is a historical estimate; 2010 through 2020 are projections. 2010–13 is based on recovery from recession, includes impact of some Affordable Care Act provisions, and a 2012 Medicare physician payment cut. 2014 reflects the beginning of the major Affordable Care Act coverage expansions. 2015–20 reflects that Affordable Care Act coverage expansions continue through 2017, and other provisions of the act impact payment and coverage. Elevated Medicare enrollment growth is due to baby boomers.

more intensive services.

Prescription drug spending growth is projected to be 10.7 percent in 2014, or 5.1 percentage points higher than in the absence of the Affordable Care Act. The higher growth rate stems from the fact that the newly insured are expected to consume more prescriptions because of substantially lower out-of-pocket requirements for prescription drugs (Exhibit 4). Spending growth for physician and clinical services is projected to be 8.9 percent (3.1 percentage points higher than in the absence of the Affordable Care Act) in 2014, driven by an expected increase in office visits. Hospital spending is projected to grow 7.2 percent or 1.0 percentage point higher than it would have without the passage of the Affordable Care Act.

2015–20

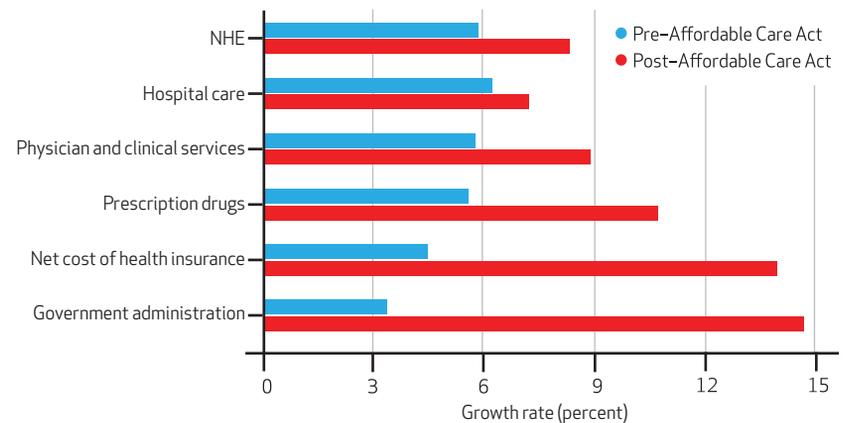
For 2015–20, national health spending growth is projected to average 6.2 percent per year. During this period, some large employers with low-wage employees are expected to discontinue offering health insurance to their workers and instead pay the penalty mandated in the Affordable Care Act. Of the workers losing employer-based coverage, many are expected to obtain insurance coverage through the state exchanges, while others would enroll in Medicaid (and some would become uninsured). Also, the Affordable Care Act mandates an excise tax on high-cost insurance plans starting in 2018; costs of employer-sponsored health insurance plans that exceed \$10,200 for an individual employee or \$27,500 for dependent coverage will be subject to a 40 percent tax. Consequently, many plans that exceed the taxable threshold are expected to provide enrollees incentives to enroll in plans with lower premiums and higher cost-sharing requirements. The effect is likely to be a slowdown in the growth of health services, health insurance premiums, and health spending overall. As a result, in our projection both premiums and the use of health services are expected to grow more slowly in 2018 than in the absence of this provision.

Model And Assumptions

These projections are generated within a “current-law” framework that incorporates actuarial and econometric modeling techniques, as well as judgments about future events and trends that influence health spending. The projections use the economic and demographic assumptions from the 2011 *Medicare Trustees Report*, which are updated to reflect the latest macroeconomic data.⁷

EXHIBIT 4

2014 Growth Rates By Selected Sector, Before And After The Impact Of The Affordable Care Act



SOURCE Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group.

Consistent with the trustees report methodology, the Medicare projections are estimated under two scenarios: current law (where growth in physician payment rates is based on the sustainable growth rate formula) and an alternative scenario (where growth in physician payment rates is based on growth in the Medicare Economic Index).^{5,7,8} The Centers for Medicare and Medicaid Services’ Office of the Actuary health reform model and other actuarial cost estimates were used to determine the full effect of reform on national health spending and to assign the impact of reform among categories for goods and services.⁹

The projections presented in this article differ somewhat from past projections. Specifically, they incorporate data and classification changes made in a recent National Health Expenditure Accounts comprehensive revision, in addition to incorporating new and revised source data and refinements to our models.^{10,11} In addition, this article features health spending projections by sponsor or source of financing, as well as the typical projections by payer and service.

These projections remain subject to substantial uncertainty given the variable nature of future economic trends and a lack of historical experience for many Affordable Care Act health system reforms. Moreover, “supply-side” impacts of the Affordable Care Act, such as changes in provider behavior in reaction to an influx of newly insured patients, remain highly uncertain and are not estimated at this time.¹²

Outlook For Medical Services And Goods

The Affordable Care Act is expected to exert varying effects on spending trends for medical services and goods. For the three largest sectors (hospital services, physician and clinical services, and prescription drugs), total spending is projected to be higher when the major expansions of this law are implemented in 2014. However, the magnitude of the impact on their respective growth rates is expected to be different. The increased demand in response to expanded insurance coverage for physician services and pharmaceuticals is anticipated to be higher than that of hospital services. One reason is that insurance expansions can typically lead to more efficient use of health care services (that is, more preventive care), which would increase office visits and prescription drugs, and could lead to less reliance on hospital care.¹³ As a result, the projected share of national health spending in 2020 accounted for by physicians (19 percent) and prescription drugs (11 percent) is higher than it would have been in the absence of the Affordable Care Act, and the hospital share (30 percent) is lower.

HOSPITAL CARE Hospital spending growth is estimated to have slowed by half a percentage point to 4.6 percent in 2010 and to have reached \$794.3 billion (Exhibits 1 and 2). Growth in private health insurance spending on hospital care is estimated to have remained relatively low at 2.1 percent in 2010 (compared to 2.7 percent in 2009), reflecting the impact of the recent recession and a continued decline in service use.¹⁴ Largely as a result of a 3.4-percent reduction to Medicare's private health plan payments, growth in Medicare spending on hospital care is estimated to have slowed in 2010 to 4.0 percent, from 5.9 percent in 2009.⁷

For 2011 through 2013, growth in hospital spending is projected to accelerate, reaching 5.3 percent by 2013. With expected gains in employment, a rebound in projected private health insurance enrollment is also expected. As a result, private health insurance hospital spending is projected to be 4.2 percent in 2013. Medicare hospital spending growth is projected to grow faster in each year, reaching 6.4 percent in 2013. This trend mainly reflects faster growth in Medicare enrollment as the baby boom generation reaches age sixty-five, offsetting much slower growth in per person spending due to the savings provisions in the Affordable Care Act. These provisions include reduced fee-for-service provider payment updates and lower payments to private plans.

In 2014, overall hospital spending growth is projected to accelerate to 7.2 percent, which is

Insurance expansions can typically lead to more efficient use of health care services.

1.0 percentage point and \$8.6 billion higher than projected in the absence of health reform (Exhibit 4). This growth rate reflects the net impact of increased service use associated with the coverage expansions under Medicaid and private insurance. These impacts are partially offset by lower Medicare payment rate increases for hospitals mandated by the Affordable Care Act, which result in Medicare hospital spending growth of 6.7 percent in 2014, 1.8 percentage points slower than projected had the Affordable Care Act not become law.

Hospital spending is projected to grow 6.2 percent per year during the period 2015–20. By 2020, Medicare hospital spending growth is projected to reach 7.3 percent (up from 5.1 percent in 2015), while private health insurance spending is projected to slow to 5.8 percent. This trend largely reflects the net result of the baby boom enrollment shift from private health insurance coverage to Medicare and is not related to coverage expansions in the Affordable Care Act.

PHYSICIAN AND CLINICAL SERVICES Spending growth for physician and clinical services is estimated to have slowed from 4.0 percent in 2009 to a historically low rate of 2.4 percent in 2010, and to have reached \$517.8 billion (Exhibits 1 and 2). This trend is driven by recession-related declines in physician visits, as many consumers delayed health care to reduce expenses, and in part, by a less severe flu season than in the previous year, 2009.^{15,16} Private health insurance spending growth is estimated to have slowed to only 0.9 percent in 2010 (from 1.9 percent in 2009) in response to elevated unemployment and increased cost sharing in employer-based plans.¹⁴ After rebounding temporarily in 2011 to 4.0 percent, spending growth for physician and clinical services is projected to slow to 0.8 percent in 2012 largely due to the 29.4-percent Medicare physician payment rate reduction that is mandated by Medicare's sustainable growth rate formula. Under the alternative Medicare projection scenario, total physician and clinical spending growth would be 4.5 percent in 2012. This scenario is more fully described in the "Model and Assumptions" section.

By 2014, spending growth for physician and clinical services is projected to accelerate 3.3 percentage points to 8.9 percent, which is 3.1 percentage points and \$17.8 billion higher than projected in the absence of reform (Exhibit 4). Given the demographic and health profile of the populations expected to gain insurance through Medicaid or the exchanges—generally expected to be younger, healthier, and requiring less acute care than those currently insured—the newly insured are anticipated to devote a higher proportion of their total health spending to physician and clinical services.¹³

Overall, spending growth for physician and clinical services is projected to average 5.6 percent for the period 2015–20. Medicaid spending growth for these services (averaging 7.4 percent) is driven by enrollment growth and, in part, by the projected higher proportion of new enrollees' benefits going toward these services. Medicare spending growth for physician and clinical services, averaging 5.7 percent, is driven by higher enrollment in tandem with somewhat suppressed growth in payment levels. This growth rate is expected to slightly outpace that of private health insurance (averaging 5.1 percent) as more people shift into Medicare from private insurance.

PRESCRIPTION DRUGS Prescription drug spending is estimated to have grown 3.5 percent in 2010, down from 5.3 percent in 2009, and totaled \$258.6 billion (Exhibits 1 and 2). This deceleration resulted from continued slow growth in the use of drugs and the ongoing change in the mix of drugs purchased. Through tiered copays and other mechanisms, health plans have continued to shift medication use toward less-costly generic drugs. Thus, the generic dispensing rate is projected to have increased to 69 percent in 2010, up from 66 percent in 2009.²

For the period 2011–13, prescription drug spending growth is projected to be faster than in 2010, averaging 5.7 percent as economic conditions improve. Offsetting this faster growth somewhat, six of the top fifty brand-name drugs (based on 2010 retail sales) are scheduled to lose patent protection in 2011, which is projected to affect growth the most in 2012 as lower-priced generic versions of these drugs become available for a full twelve months.^{17,18}

In 2014, growth in prescription drug spending is expected to increase sharply to 10.7 percent, which is 5.1 percentage points and \$15.8 billion higher than projected in the absence of the Affordable Care Act (Exhibit 4). This acceleration is driven mainly by the expectation of a substantial increase in the use of drugs by the newly insured portion of the population.¹⁹

From 2015 through 2020, prescription drug spending growth is expected to average 7.2 percent. This reflects, in part, a projected leveling off of the dispensing rate for generic drugs, resulting in slightly higher drug price growth, and higher spending for new drugs due to an expected increase in the Food and Drug Administration's approvals for new molecular entities and therapeutic biologics during this period.²⁰

Outlook For Payers

MEDICARE Growth in Medicare spending (including spending for fee-for-service providers, private health plans, and administrative costs) is estimated to have slowed from 7.9 percent in 2009 to 4.5 percent in 2010, and to have reached \$525.0 billion (Exhibit 5). This deceleration reflects slower growth across most of Medicare's service categories due in part to an across-the-board reduction of 3.4 percent in Medicare's payments to private health plans.⁷ In 2011, Medicare spending growth is projected to increase 5.9 percent before slowing to 1.7 percent in 2012, as a result of the 29.4-percent reduction in physician payment rates scheduled in current law.²¹ Under the alternative Medicare projection scenario, projected 2012 Medicare spending growth will accelerate to 6.6 percent.

Average annual Medicare spending growth is anticipated to be 6.3 percent for 2013 through 2020. This rate is the net result of, on the one hand, increasing enrollment that will drive up spending, and on the other hand, provisions of the Affordable Care Act that call for reduced fee-for-service provider payment updates and lower payments to private plans.⁷ By 2020, Medicare's share of national health spending is expected to remain at 20 percent (unchanged from 2009). This, too, is the net result of different forces: on the one hand, increases in enrollment from the baby boom generation; on the other, the non-Medicare coverage expansions that will cause spending to rise for other payers, lower Medicare payment updates, and other Medicare savings provisions in the Affordable Care Act.

MEDICAID Medicaid spending (federal and state combined) is estimated to have grown 7.2 percent in 2010, down from 9.0 percent in 2009, and to have accounted for \$400.7 billion (Exhibit 5). The slowdown in Medicaid spending growth was primarily driven by slower enrollment growth (6.0 percent in 2010 compared to 7.4 percent in 2009) following the end of the recession.²² Medicaid spending per enrollee is estimated to have grown slowly in 2010 (1.1 percent). This slow rate of growth was due to projected faster enrollment growth of beneficiaries with relatively lower health care costs (mainly

EXHIBIT 5

National Health Expenditures (NHE), Amounts And Average Annual Growth From Previous Year Shown, By Source of Funds, Selected Calendar Years 2008–20

Source of funds	2008 ^a	2009	2010	2011	2012	2013	2014	2020
NHE (\$ in billions)	\$2,391.4	\$2,486.3	\$2,584.2	\$2,708.4	\$2,823.9	\$2,980.4	\$3,227.4	\$4,638.4
Health consumption expenditures	2,234.2	2,330.1	2,424.3	2,540.8	2,646.9	2,792.6	3,027.6	4,337.7
Out-of-pocket	298.2	299.3	304.9	312.1	322.0	334.6	330.3	443.8
Health insurance	1,681.8	1,767.4	1,847.5	1,942.8	2,023.9	2,139.9	2,371.3	3,411.4
Private health insurance	790.6	801.2	822.3	850.3	884.4	926.9	1,013.7	1,402.0
Medicare	465.7	502.3	525.0	556.1	565.6	599.5	636.8	922.0
Medicaid	343.1	373.9	400.7	428.1	456.8	487.8	586.8	908.1
Federal	202.4	247.0	270.9	261.5	264.5	284.5	366.0	561.1
State and Local	140.7	127.0	129.9	166.6	192.3	203.3	220.8	347.0
Other health insurance programs ^b	82.4	90.0	99.5	108.3	117.1	125.7	134.0	179.4
Other third-party payers and programs and public health activity ^c	254.1	263.3	271.9	285.8	300.9	318.1	326.0	482.4
Investment	157.2	156.2	159.9	167.6	176.9	187.8	199.9	300.7
AVERAGE ANNUAL GROWTH FROM PRIOR YEAR SHOWN								
NHE	7.1%	4.0%	3.9%	4.8%	4.3%	5.5%	8.3%	6.2%
Health consumption expenditures	7.1	4.3	4.0	4.8	4.2	5.5	8.4	6.2
Out-of-pocket	5.0	0.4	1.8	2.4	3.2	3.9	(1.3)	5.0
Health insurance	7.8	5.1	4.5	5.2	4.2	5.7	10.8	6.2
Private health insurance	7.1	1.3	2.6	3.4	4.0	4.8	9.4	5.6
Medicare	9.6	7.9	4.5	5.9	1.7	6.0	6.2	6.4
Medicaid	6.9	9.0	7.2	6.8	6.7	6.8	20.3	7.5
Federal	7.1	22.0	9.7	(3.5)	1.2	7.6	28.7	7.4
State and local	6.7	(9.8)	2.3	28.3	15.4	5.7	8.6	7.8
Other health insurance programs ^b	11.0	9.2	10.6	8.9	8.1	7.3	6.6	5.0
Other third-party payers and programs and public health activity ^c	5.3	3.6	3.3	5.1	5.3	5.7	2.5	6.8
Investment	7.3	(0.6)	2.4	4.8	5.6	6.1	6.5	7.0

SOURCE Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group. **NOTES** Numbers may not add to totals due to rounding. Percentage change is calculated from unrounded data. Data from 2010 to 2020 are projections. ^aAverage annual growth, 2000–08. ^bIncludes Children's Health Insurance Program (Titles XIX and XXI), Department of Defense, and Department of Veterans Affairs. ^cIncludes 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.

children and adults under age sixty-five) than other Medicaid beneficiaries. Further projected improvements in the economy are expected to result in slower enrollment growth in Medicaid during 2011–13, leading to a slight deceleration in spending growth (averaging 6.8 percent).⁴

In 2014, Medicaid spending is projected to increase substantially (20.3 percent) as a result of the expansion in Medicaid eligibility under the Affordable Care Act. Enrollment (75.6 million) is projected to be about one-third higher than in 2013 as eligibility is extended to all persons under age sixty-five in families with incomes at or below 138 percent of the federal poverty level. The transition into the program for those newly eligible is expected to take about

three years, contributing to projected Medicaid spending growth of 7.5 percent in 2015 and 8.5 percent in 2016. By 2020, Medicaid is projected to account for nearly 20 percent of national health spending (from 15 percent in 2009).

PRIVATE HEALTH INSURANCE Growth in private health insurance premiums is estimated to have accelerated, but remained low, reaching 2.6 percent in 2010 (up from 1.3 percent in 2009) and accounted for \$822.3 billion (Exhibit 5). A drop of 5.1 million in the number of people enrolled in private health insurance was the major reason for this slow growth. Additionally, because growth in the use of services was slower than was anticipated when premiums were originally

Health care financing is anticipated to further shift toward governments.

set, the net cost of insurance, or the difference between premiums collected and benefits paid, grew significantly in 2010 at 8.7 percent.²³

Also in 2010, private health insurance benefit payments totaled an estimated \$725.5 billion, representing an increase of just 1.9 percent (down from 2.8 percent in 2009). This historically low rate of growth was influenced by the same factors that contributed to the relatively low premium growth, namely the drop in the number of private health insurance enrollees, as well as slowing growth in the use of some services (such as elective hospital procedures and physician visits).^{14,16}

For 2011–13, private health insurance enrollment is projected to increase by 4.0 million as employment levels increase and more individuals are covered by employer-sponsored insurance due, in part, to the Affordable Care Act. Notably, growth in benefits per enrollee is expected to fall from 4.7 percent in 2010 to below 3 percent in 2011 due, in part, to the Affordable Care Act's expansion of coverage to relatively less-expensive benefits for children under age twenty-six who can join their parents' policies.

In 2014, growth in private health insurance premiums is expected to accelerate to 9.4 percent, 4.4 percentage points higher than in the absence of health reform, as an estimated 13.9 million people obtain coverage through exchange plans. At that time, private health insurance is anticipated to account for roughly 31 percent of national health spending, or about the same share as was expected without enactment of the Affordable Care Act.

For 2015–20, growth in private health insurance premiums is expected to slow somewhat and average 5.6 percent annually. Underlying this expectation is that some employers of low-wage workers will stop offering health coverage (and many of their employees will move to the exchange plans, while others move into Medicaid or become uninsured). Also, as discussed earlier, in 2018, the excise tax on high-cost employer-based insurance plans will take effect, placing further downward pressure on health insurance premiums.

OUT-OF-POCKET SPENDING Out-of-pocket spending is estimated to have grown 1.8 percent in 2010, up from 0.4 percent in 2009, and to have reached \$304.9 billion (Exhibit 5).²⁴ The low growth in out-of-pocket health spending was influenced by job losses and the corresponding loss of employer-sponsored insurance, as well as employers' willingness to increase deductibles and/or copayments.⁴ For 2011–13, growth in out-of-pocket spending is projected to accelerate, reaching 3.9 percent in 2013, partly due to faster growth in disposable personal income that leads to more consumption of medical care.

In 2014, out-of-pocket spending is projected to decline 1.3 percent, largely as a result of the uninsured attaining health coverage through Medicaid or health insurance exchange plans. In addition, cost sharing for exchange plan enrollees in families with incomes at or below 250 percent of the federal poverty level is subsidized, thereby reducing their out-of-pocket spending at the point-of-service.²⁵ Out-of-pocket spending growth is anticipated to reach a projection-period high of 6.6 percent in 2018. This outcome is expected as enrollment shifts to higher cost-sharing employer-sponsored insurance due to the existence of the new excise tax on high-cost insurance plans.

Although cost sharing is expected to increase throughout the projection period, the out-of-pocket share of national health expenditures is projected to fall from 12 percent in 2009 to 9.6 percent in 2020 (the projected out-of-pocket share in 2020 would be 10.5 percent had the Affordable Care Act not been enacted).

Outlook For Sponsors

In contrast to the preceding analysis of national health expenditures by payer, our sponsor analysis focuses on the financing of health care. In 2010, health spending financed by governments (federal and state) is estimated to have grown 7.2 percent (reaching \$1.2 trillion) while spending by businesses, households, and other private sources is expected to have risen 1.4 percent (reaching \$1.4 trillion) (Exhibit 6). The effects of the recession, as well as increased federal matching rates to states for Medicaid, are estimated to have influenced the shift of health care financing toward the federal government. For 2010, the federal government's share of national health spending is estimated to have increased by just over one percentage point, to 29 percent, with state and local governments maintaining their 16-percent share (see online Appendix).²⁶

For 2011–13, government outlays (averaging 5.2 percent growth) are projected to roughly maintain a 45-percent share of total health

EXHIBIT 6

National Health Expenditures (NHE), Amounts and Average Annual Growth From Previous Year Shown, By Type of Sponsor, Selected Calendar Years 2010–20

Type of sponsor	Expenditures (billions)				Percent change		
	2010	2013	2014	2020	2011–13	2014	2015–20
NHE	\$2,584.2	\$2,980.4	\$3,227.4	\$4,638.4	4.9%	8.3%	6.2%
Business, households and other private	1,423.4	1,628.9	1,707.2	2,356.5	4.6	4.8	5.5
Private business	518.8	595.3	635.6	820.5	4.7	6.8	4.3
Employer contributions to private health insurance premiums ^a	394.9	452.5	485.6	622.8	4.6	7.3	4.2
Other ^b	123.8	142.8	150.1	197.8	4.9	5.1	4.7
Household	727.7	828.0	854.2	1,205.3	4.4	3.2	5.9
Household private health insurance premiums ^c	257.5	291.7	306.3	439.1	4.2	5.0	6.2
Medicare payroll taxes and premiums ^d	165.3	201.6	217.6	322.4	6.8	7.9	6.8
Out-of-pocket health spending	304.9	334.6	330.3	443.8	3.2	-1.3	5.0
Other private revenues ^e	176.9	205.6	217.3	330.7	5.1	5.7	7.2
Government	1,160.8	1,351.5	1,520.2	2,281.9	5.2	12.5	7.0
Federal government	741.6	816.1	950.8	1,445.2	3.2	16.5	7.2
Employer contributions to private health insurance premiums	28.8	32.6	34.0	43.4	4.3	4.3	4.1
Employer payroll taxes paid to Medicare hospital insurance trust fund	4.0	4.1	4.2	5.3	0.3	3.9	3.8
Medicare ^f	249.6	266.5	283.5	425.7	2.2	6.4	7.0
Medicaid ^g	280.1	292.3	374.2	574.1	1.4	28.0	7.4
Other programs ^h	179.1	220.7	254.9	396.7	7.2	15.5	7.7
State and local government	419.2	535.4	569.4	836.8	8.5	6.4	6.6
Employer contributions to private health insurance premiums ^a	131.2	143.2	150.8	214.5	3.0	5.3	6.1
Employer payroll taxes paid to Medicare hospital insurance trust fund	11.4	13.0	13.8	18.4	4.6	5.8	4.9
Medicaid	133.9	209.4	227.3	357.3	16.1	8.5	7.8
Other programs ⁱ	142.7	169.8	177.5	246.5	6.0	4.6	5.6

SOURCE: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group **NOTE:** Numbers may not add to totals due to rounding. Percentage change is calculated from unrounded data. ^aIncludes premiums paid on behalf of employees ^bIncludes employer Medicare hospital insurance payroll taxes, one-half self-employment payroll taxes, temporary disability insurance, workers' compensation, and worksite health care. ^cIncludes household contributions to employer-sponsored health insurance, health insurance purchased through Exchanges, and other private health insurance ^dIncludes employee and self-employment payroll taxes and premiums paid to Medicare hospital insurance and supplementary medical insurance trust funds. ^eIncludes health-related philanthropic support, nonoperating revenue, investment income, and privately funded structures and equipment. ^fIncludes 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. Excludes Medicare hospital insurance trust fund payroll taxes and premiums, Medicare supplementary medical insurance premiums, state phase-down payments, Medicaid buy-ins, and taxation of benefits. ^gIncludes Medicaid buy-ins for the dually eligible Medicare premiums. ^hIncludes maternal and child health, Children's Health Insurance Program (Titles XIX and XXI), 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, research, structures and equipment, and exchange premium and cost-sharing subsidies. ⁱIncludes state phase-down payments, maternal and child health, public and general assistance, Children's Health Insurance Program (Titles XIX and XXI), vocational rehabilitation, other state and local programs, public health activities, research, and structures and equipment.

spending. The federal government share of health spending is projected to decline to 27 percent by 2013, partly due to the expiration of temporary increases in the federal share of Medicaid and the slowdown in Medicare expenditure growth related to the sustainable growth rate formula-based reduction in physician payment rates. Reflecting faster projected economic growth, spending growth financed through private businesses and households is expected to increase during this period (averaging 4.6 percent).

As the major coverage expansions of the Affordable Care Act are implemented in 2014,

health care financing is anticipated to further shift toward governments. In 2014, the federal share of national health spending is projected to rise two percentage points to 29 percent, primarily a result of premium and cost-sharing subsidies for exchange coverage and a 100-percent federal match rate for Medicaid coverage expansion costs. In contrast, households' share of expenditures is projected to decrease to 26 percent, from 28 percent in 2013, due mostly to net lower out-of-pocket spending for those who gain coverage.

By 2020, government health care spending is projected to be 49 percent of national health

spending, up from 47 percent in 2014, reaching a total of \$2.3 trillion; it is expected that the federal government will pay almost two-thirds of this amount. During this period, projected increases in the government's share of health care financing is largely associated with the robust projected Medicare enrollment growth, the Medicaid expansion, and federal costs associated with the exchange premium and cost-sharing subsidies (but offset somewhat by the lower Medicare expenditures resulting from Affordable Care Act provisions). As the government share of spending rises, the projected share for private businesses declines (from 20 percent in 2014 to 18 percent by 2020), and the share for households remains at 26 percent.

Conclusion

This article provides an analysis of projected health care spending by sector, payer, and sponsor inclusive of the effects of the Affordable Care Act. Average annual growth in national health spending is expected to be 0.1 percentage point higher (5.8 percent) under current law compared to projected average growth prior to the passage of the Affordable Care Act (5.7 percent) for 2010 through 2020. Simultaneously, by 2020, nearly thirty million Americans are ex-

pected to gain health insurance coverage as a result of the Affordable Care Act.

The largest impact on the growth of health spending is expected to occur in 2014, when the major coverage expansions begin. There is projected to be a proportionately larger impact on physician and clinical services and on prescription drug spending growth relative to other services and goods, as those who gain coverage are likely to be relatively young and healthy and to use less intensive care than the populations currently enrolled in Medicaid and private health insurance.

Combined with the entry of the baby boomers into Medicare and Medicaid, the impact of the Affordable Care Act—stemming from the expansion of Medicaid, subsidies associated with exchanges, and administrative costs associated with implementing and operating the various provisions—is projected to increase federal, state, and local governments' estimated share of total health spending to near 50 percent in 2020. At the same time, households and private businesses are anticipated to pay for a smaller portion of the nation's health bill than they would have without the Affordable Care Act, but still will face a growing burden on their respective limited resources. ■

The opinions expressed here are the authors' and not necessarily those of the Centers for Medicare and Medicaid Services. The authors thank Richard Foster, Stephen Heffler, John Shatto, Kent Clemens, Liming Cai, Tristan Cope, and Cathy Curtis. [Published online July 28, 2011.]

NOTES

- 1 Under the alternative Medicare projection scenario in which physician payment increases are based on growth in the Medicare Economic Index, national health spending would grow 6.0 percent per year over the projection period, resulting in a health share of gross domestic product of 20.1 percent. For more information on the Medicare projection scenarios, see the "Model And Assumptions" section of this article.
- 2 Martin A, Lassman D, Whittle L, Catlin A. Recession contributes to slowest annual rate of increase in health spending in five decades. *Health Aff (Millwood)*. 2011;30(1):11–22.
- 3 For comparing national health spending and gross domestic product, nominal levels and growth rates are used. Gross domestic product is often measured in real, inflation-adjusted terms; real gross domestic product growth was –2.6 percent in 2009 and 2.9 percent in 2010.
- 4 Claxton G, DiJulio B, Whitmore H, Pickreign J. Health benefits in 2010: premiums rise modestly, workers pay more toward coverage. *Health Aff (Millwood)*. 2010;29(10):1942–50.
- 5 The Medicare Economic Index is a price index that measures the price changes of the inputs physicians require in order to provide services.
- 6 Other things being equal, the availability of coverage would cause a sizable decrease in out-of-pocket costs for affected individuals. The new coverage, however, typically induces greater use of health care services, thereby increasing out-of-pocket costs in many instances.
- 7 Boards of Trustees. 2011 annual report of the boards of trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds [Internet]. Baltimore (MD):CMS; 2011 May [cited 2011 May 13]. Available from: <http://www.cms.hhs.gov/ReportsTrustFunds/downloads/tr2011.pdf>
- 8 The full effects that a 29.4-percent reduction in physician reimbursement would have are difficult to predict. No secondary effects of the reduction in physician payment rates are modeled in these projections. For more information, see Clemens MK, Shatto JD. Projected Medicare expenditures under an illustrative scenario with alternative payment updates to Medicare providers [Internet]. Baltimore (MD): Centers for Medicare and Medicaid Services; 2011 May [cited 2011 May 13]. Available from: <http://>

- www.cms.gov/ReportsTrustFunds/downloads/2011TRAlternativeScenario.pdf
- 9 Sisko AM, Truffer CJ, Keehan SP, Poisal JA. National health expenditure projections: the impact of reform through 2019. *Health Aff (Millwood)*. 2010;29(10):1933–41.
 - 10 Centers for Medicare and Medicaid Services. Summary of national health expenditure account 2009 comprehensive revisions [Internet]. Baltimore (MD): CMS; 2011 Jan [cited 2011 Jun 27]. Available from: <http://www.cms.gov/NationalHealthExpendData/downloads/benchmark2009.pdf>
 - 11 Centers for Medicare and Medicaid Services. Accuracy analysis of the short-term (11 year) national health expenditure projections [Internet]. Baltimore (MD): CMS; [cited 2011 Jun 28]. Available from: <http://www.cms.gov/NationalHealthExpendData/downloads/ProjectionAccuracy.pdf>
 - 12 Foster RS. Estimated financial effects of the “Patient Protection and Affordable Care Act,” as amended [Internet]. Baltimore (MD): Centers for Medicare and Medicaid Services; 2010 Apr 22 [cited 2010 Dec 1]. Available from: http://www.cms.gov/ActuarialStudies/Downloads/PPACA_2010-04-22.pdf
 - 13 Buchmueller T, Grumbach K, Kronick R, Kahn J. The effect of health insurance on medical care utilization and implications for insurance expansion: a review of the literature. *Med Care Res Rev*. 2005;62(1):3–30.
 - 14 Boorady C, Giacobbe R, Santangelo G, Carter C. Making sense of the utilization downtrend. New York (NY): Credit Suisse; 2010.
 - 15 Centers for Disease Control and Prevention. Morbidity and Mortality Weekly Report (MMWR): Update: influenza activity—United States, 2010–11 season, and composition of the 2011–12 influenza vaccine [Internet]. Atlanta (GA): CDC; [cited 2011 Jun 8]. Available from: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6021a5.htm>
 - 16 Johnson A, Rockoff J, Mathews A. Americans cut back on visits to doctor. *Wall Street Journal*. 29 July 2010.
 - 17 Carollo K. Lipitor among top drugs coming off patent. *ABC News*, 9 March 2011 [cited 2011 Jul 11]. Available from <http://abcnews.go.com/Health/top-selling-drugs-coming-off-patent-paving-cheaper-story?id=13048629>.
 - 18 SDI/Verispan. 2010 top 200 branded drugs by retail dollars [Internet]. *Drug Topics*; 14 June 2011 [cited 2011 Jul 11]. Available from: <http://drugtopics.modernmedicine.com/drugtopics/data/articlestandard/drugtopics/252011/727252/article.pdf>
 - 19 Smith L. Pharma’s reform bounce: how big a boost will \$80 billion buy? [Internet]. Rockville (MD): The RPM Report; 21 Sep 2009 [cited 2011 Jul 6]. Available from: <http://therpmreport.com/Free/db79ab7c-1c40-4fe6-bb90-9b3ee1f65b9b.aspx>
 - 20 Medco. 2011 drug trend report: healthcare 2020. Franklin Lakes (NJ); Medco;2011.
 - 21 As Medicare’s private health plan payment rates and spending are affected by changes in Medicare’s fee-for-service payment rates, the decrease in physician payment rates in 2012 under current law would also result in slower growth in Medicare private health plan payments across most service categories.
 - 22 Kaiser Commission on Medicaid and the Uninsured. Medicaid matters: understanding Medicaid’s role in our health care system. Menlo Park (CA): Kaiser Family Foundation; [cited 4 Mar 2011]. Available from: <http://www.kff.org/medicaid/upload/8165.pdf>
 - 23 Abelson R. Health insurers making record profits as many postpone care. *New York Times*. 13 May 2011.
 - 24 Out-of-pocket spending consists of direct spending by consumers for health care goods and services including coinsurance and deductibles; enrollee premiums for private health insurance and Medicare are not within this funding category.
 - 25 Kaiser Family Foundation. Focus on health reform. Explaining health care reform: questions about health insurance subsidies. Menlo Park (CA): KFF; 2010 Apr [cited 2011 Jul 6]. Available from: <http://www.kff.org/healthreform/upload/7962-02.pdf>
 - 26 To access the Appendix, click on the Appendix link in the box to the right of the article online.