TRENDS

Health Spending Projections Through 2015: Changes On The Horizon

Stable trends through 2015 likely mask important changes to the U.S. health care system across payers and types of care.

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ABSTRACT: Growth in national health spending is projected to slow in 2005 to 7.4 percent, from a peak of 9.1 percent in 2002. Private health insurance premiums are projected to slow to 6.6 percent in 2005, with a rebound expected in 2007. The introduction of Medicare Part D drug coverage in 2006 produces a dramatic shift in spending across payers but has little net effect on aggregate spending growth. Health spending is expected to consistently outpace gross domestic product (GDP) over the coming decade, accounting for 20 percent of GDP by 2015. [*Health Affairs* 25 (2006): w61–w73 (published online 22 February 2006; 10.1377/hlthaff.25.w61)]

THIS YEAR'S OUTLOOK for national health spending calls for growth to average 7.2 percent over the coming decade—2.1 percentage points faster than projected average annual growth in gross domestic product (GDP) over the same interval. At this aggregate level, this year's projection does not differ notably from last year's projection, despite substantive revisions to historical data and the use of a new model for private personal health care spending.[1] The lack of change in the aggregate conceals the fact that there are substantial differences in the projection in various sectors, particularly prescription drugs and hospitals.

In 2005 national health spending growth is expected to decelerate to 7.4 percent from 7.9 percent in 2004 (Exhibits 1 and 2).[2] This is the third consecutive year of slowing spending growth since 2002. Underlying the projected 2005 slowdown is a projected dip in personal health care spending growth resulting from an anticipated slowdown in medical price inflation (personal health care deflator, Exhibit 2). We project that personal health care spending will edge down slightly in 2005 and 2006 and then will slow to 7.0 percent in 2007 as legislated Medicare payment adjustments are implemented. Projected growth rebounds immediately to 7.5 percent in 2008, and then gradually decelerates for the remainder of the forecast, as health spending reacts to a slowdown in income. Despite the cyclical nature of the projection, national health spending growth is forecast to outpace GDP growth each year during the next decade, causing health's share of GDP to rise from 16 percent in 2004 to 20 percent in 2015 (Exhibit 3).[3]

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EXHIBIT 1
National Health Expenditures (NHE), Aggregate And Per Capita Amounts, And Share Of Gross Domestic Product (GDP), Selected Calendar Years 1993–2015

Spending category	1993	2002	2003	2004	2005[a]	2006[a]	2010[a]	2015[a]
NHE (billions)	$916.5	$1,607.9	$1,740.6	$1,877.6	$2,016.0	$2,163.9	$2,879.4	$4,031.7
Health services and supplies	853.5	1,499.2	1,624.5	1,753.0	1,882.2	2,020.3	2,688.1	3,762.8
Personal health care	773.6	1,341.4	1,445.7	1,560.2	1,677.8	1,801.9	2,386.9	3,342.1
Hospital care	317.2	488.6	525.5	570.8	616.1	662.5	882.4	1,230.9
Professional services	280.7	503.2	543.3	587.4	631.3	680.0	903.4	1,261.4
Physician and clinical services	201.2	337.9	367.0	399.9	429.9	463.3	610.7	849.8
Other prof. services	24.5	45.7	49.1	52.7	55.8	59.7	78.5	109.4
Dental services	38.9	73.3	76.9	81.5	87.4	94.3	124.9	167.3
Other PHC	16.2	46.3	50.4	53.3	58.1	62.7	89.2	134.8
Nursing home and home health	87.3	140.0	148.6	158.4	170.6	181.5	232.8	320.5
Home health care[b]	21.9	34.3	38.1	43.2	48.9	53.1	72.3	103.7
Nursing home care[b]	65.4	105.7	110.4	115.2	121.7	128.4	160.5	216.8
Retail outlet sales of medical products	88.4	209.5	228.3	243.7	259.8	277.9	368.4	529.3
Prescription drugs	51.0	157.9	174.1	188.5	203.5	219.2	299.2	446.2
Durable medical equipment	13.5	20.8	22.1	23.0	23.7	24.9	29.5	36.2
Nondurable medical products	23.9	30.9	32.1	32.3	32.6	33.8	39.6	46.9
Program admin. and net cost of private health insurance	53.0	106.1	124.9	136.7	142.4	151.5	210.6	289.8
Government public health activities	26.8	51.7	54.0	56.1	62.0	67.0	90.7	130.9
Investment	63.0	108.8	116.1	124.6	133.8	143.6	191.3	268.9
Research[c]	16.4	32.5	35.6	39.0	42.0	45.2	60.2	81.0
Structures and equipment	46.6	76.2	80.5	85.7	91.8	98.4	131.1	187.9
NHE per capita	$3,461.3	$5,485.0	$5,879.4	$6,280.3	$6,683.0	$7,110.3	$9,147.7	$12,320.4
Population (millions)	264.8	293.2	296.1	299.0	301.7	304.3	314.8	327.2
GDP, billions of dollars	$6,657.4	$10,469.6	$10,971.2	$11,734.3	$12,450.1	$13,134.8	$16,026.4	$20,197.9
Real NHE[d]	$1,041.7	$1,543.2	$1,637.3	$1,721.0	$1,801.0	$1,889.7	$2,284.7	$2,827.4
Chain-weighted GDP index	0.88	1.04	1.06	1.09	1.12	1.15	1.26	1.43
PHC deflator[e]	0.81	1.08	1.12	1.16	1.20	1.25	1.45	1.75
NHE as percent of GDP	13.8%	15.4%	15.9%	16.0%	16.2%	16.5%	18.0%	20.0%

SOURCES: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group; and U.S. Department of Commerce, Bureau of Economic Analysis and Bureau of the Census.

NOTE: Numbers might not add to totals because of rounding. 1993 marks the beginning of the shift to managed care.

[a] Projected.

[b] Freestanding facilities only. Additional services are provided in hospital-based facilities and counted as hospital care.

[c] Research 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.

[d] Deflated using GDP chain-type price index (2000 = 100.0).

[e] Personal health care (PHC) chain-type index is constructed from the producer price index for hospital care, nursing home input price index for nursing home care, and consumer price indices specific to each remaining PHC component (2000 = 100.0).

The anticipated slowdown in medical care price growth is expected to be transitory; we expect medical price inflation to rebound slightly to 3.8 percent in 2006. Our outlook for medical inflation for the remainder of the projection period includes sustained growth that

EXHIBIT 2
National Health Expenditures (NHE), Average Annual Percentage Growth From Prior Year Shown, Selected Calendar Years 1993–2015

Spending category	1993[a]	2002	2003	2004	2005[b]	2006[b]	2010[b]	2015[b]
NHE	11.5	6.4	8.2	7.9	7.4	7.3	7.4	7.0
Health services and supplies	11.7	6.5	8.4	7.9	7.4	7.3	7.4	7.0
Personal health care	11.5	6.3	7.8	7.9	7.5	7.4	7.3	7.0
Hospital care	11.2	4.9	7.5	8.6	7.9	7.5	7.4	6.9
Professional services	12.0	6.7	8.0	8.1	7.5	7.7	7.4	6.9
Physician and clinical services	12.3	5.9	8.6	9.0	7.5	7.8	7.2	6.8
Other prof. services	16.4	7.2	7.5	7.4	5.9	6.9	7.1	6.9
Dental services	9.7	7.3	4.8	6.1	7.2	7.9	7.3	6.0
Other PHC	11.8	12.4	8.7	5.8	9.1	7.9	9.2	8.6
Nursing home and home health	14.3	5.4	6.1	6.6	7.7	6.4	6.4	6.6
Home health care[c]	22.1	5.1	11.1	13.3	13.2	8.6	8.0	7.5
Nursing home care[c]	12.9	5.5	4.5	4.3	5.6	5.5	5.7	6.2
Retail outlet sales of medical products	9.7	10.1	9.0	6.7	6.6	7.0	7.3	7.5
Prescription drugs	10.2	13.4	10.2	8.2	8.0	7.7	8.1	8.3
Durable medical equipment	9.6	4.9	6.4	4.0	3.3	5.1	4.3	4.1
Nondurable medical products	9.0	2.9	4.2	0.4	1.1	3.5	4.1	3.4
Program admin. and net cost of private health insurance	13.7	8.0	17.7	9.4	4.2	6.4	8.6	6.6
Government public health activities	13.7	7.6	4.4	4.0	10.5	8.0	7.9	7.6
Investment	9.4	6.3	6.7	7.3	7.4	7.3	7.4	7.0
Research[d]	9.7	7.9	9.5	9.3	7.9	7.7	7.4	6.1
Structures and equipment	9.3	5.6	5.5	6.5	7.1	7.2	7.5	7.5
NHE per capita	10.4	5.2	7.2	6.8	6.4	6.4	6.5	6.1
Population (millions)	1.0	1.1	1.0	1.0	0.9	0.9	0.8	0.8
GDP, billions of dollars	8.4	5.2	4.8	7.0	6.1	5.5	5.1	4.7
Real NHE[e]	5.9	4.5	6.1	5.1	4.7	4.9	4.9	4.4
Chain-weighted GDP index	5.2	1.9	2.0	2.6	2.6	2.3	2.4	2.5
Personal health care deflator[f]	7.3	3.2	3.7	4.1	3.5	3.8	3.8	3.8

SOURCES: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group; and U.S. Department of Commerce, Bureau of Economic Analysis and Bureau of the Census.

NOTES: GDP is gross domestic product. Numbers might not add to totals because of rounding. 1993 marks the beginning of the shift to managed care. Growth rates are calculated consistent with the National Health Expenditure Accounts methodology. For example, the 2015 growth rate above is equal to the level of 2015 expenditures over the level of 2010 expenditures raised to the one-fifth power (the average growth over five years).

[a] Average annual growth from 1970 through 1993.

[b] Projected.

[c] Freestanding facilities only. Additional services are provided in hospital-based facilities and counted as hospital care.

[d] Research 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.

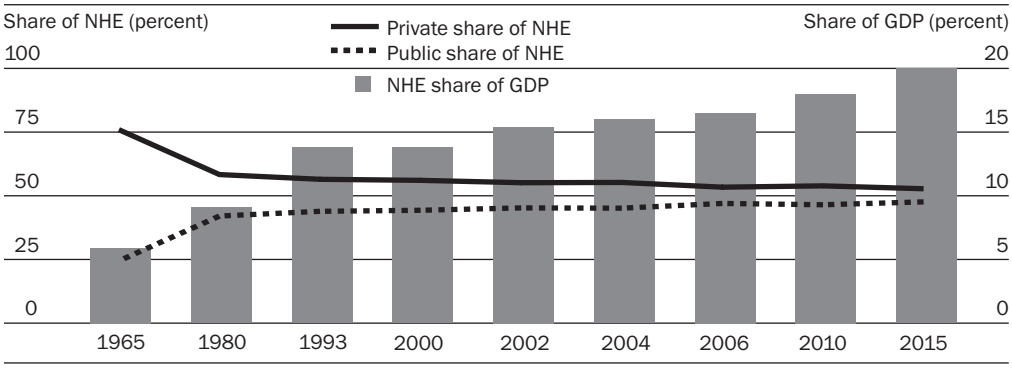
[e] Deflated using GDP chain-type price index (2000 = 100.0).

[f] Personal health care (PHC) chain-type index is constructed from the producer price index for hospital care, nursing home input price index for nursing home care, and consumer price indices specific to each remaining PHC component (2000 = 100.0).

averages 3.8 percent per year between 2007 and 2015. The trend over the past three years is mixed following unusually slow growth in the mid-1990s and rapid acceleration during 1998–2001. This pattern tracks closely with measures of health-sector input prices, with a lag of one to two years.

Projected to be 8.0 percent in 2005, growth in public spending on personal health care is expected to continue to outpace growth in private spending.[4] The 2005 growth rate reflects the effects of the Medicare Prescription

EXHIBIT 3
National Health Expenditures (NHE) Share Of Gross Domestic Product (GDP) And Private And Public Shares Of NHE, Selected Years 1965–2015

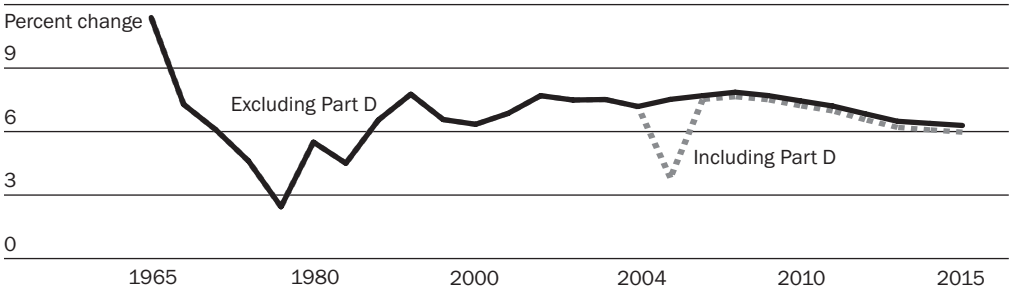


SOURCE: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group.
NOTES: The left axis (public and private spending's share of NHE) relates to the two line graphs. The right axis (NHE share of GDP) relates to the gray-shaded bars. Data for 2006, 2010, and 2015 are projections.

Drug, Improvement, and Modernization Act (MMA) of 2003 that are distinct from the addition of Medicare drug coverage (Part D).[5] The introduction of Part D in 2006 causes the growth rate of public personal health care spending to jump to 11.8 percent, because Part D is anticipated to primarily represent a shift of spending to the public sector.[6] In 2007, projected public personal health care spending growth is expected to be slightly below trend at 6.5 percent. From 2008 to 2011, growth rates average 7.2 percent. In the last four years of the forecast, growth averages 7.8 percent, driven primarily by the expiration of legislated Medicare payment cuts to physicians.

Growth in personal health care spending from private sources is expected to slow from 7.5 percent in 2004 to 7.2 percent in 2005, driven by the anticipated slowdown in medical price inflation. Projected growth falls to 3.9 percent in 2006 because of a shift in the source of payments for prescription drugs with the start of Part D. Excluding the effects of Part D, projected private growth would have edged upward slightly in 2006, reflecting increased rates for growth in both utilization and medical price inflation (Exhibit 4). Private personal health care spending growth is projected to accelerate between 2006 and 2008—peaking at 7.7 percent—and then decelerate for the rest

EXHIBIT 4
Private Personal Health Care Spending, Excluding And Including The Impact Of Medicare Part D, 1990–2015



SOURCE: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group.
NOTE: Data from 2005 through 2015 are projections.

of the period, ending at 6.0 percent in 2015. From 2007 onward, the cyclical pattern is driven by the projection for real per capita spending (volume and intensity of services), which slows in lagged response to changes in real income.

Hospital spending growth is expected to exceed growth in personal health care spending in 2005, just as it did in 2004 (Exhibit 2). This year's projection is noticeably higher than last year's, reflecting an upward revision to anticipated growth in use. As a result, hospital spending is now expected to roughly keep pace with personal health care spending over the coming decade. On the other hand, our outlook for prescription drug spending growth is noticeably lower than last year's, because we revised downward our projection for growth in use. The net effect is that the hospital share of total health spending is flat, instead of declining as it did in last year's projection, and drugs' share rises just one percentage point instead of almost four percentage points.

Noteworthy changes for both payers and providers may lie within the coming decade as our health care system responds to building pressure from such forces as the onset of Medicare Part D, the aging of our society, and the expensive (and unpredictable) nature of new technologies. With national health spending growth in excess of GDP growth each year over the next decade, these changes could force payers and providers to reexamine fundamental questions regarding the delivery and financing of health care services.

Factors Contributing To Growth

■ **Demand side.** Projections for aggregate national health spending reflect a range of underlying assumptions for factors influencing supply and demand. Demographic shifts, declining insurance coverage, and changes in the nature of insurance (such as the rise of health savings accounts, or HSAs) are some demand-side factors influencing this year's projected pattern of growth in health spending. Population aging accounts for a small but rising share during the next ten years: 0.4 percentage points of growth in 2004 and 0.6 percentage points in 2015. As the leading edge of the baby-boom generation becomes eligible for Medicare, the population over age sixty-five becomes proportionately younger, subtracting from growth in Medicare per beneficiary spending.

Changes in the structure of private insurance coverage are in early stages of implementation (for example, HSAs and the proliferation of disease management programs). However, the net impact on cost containment is likely to be far smaller than that seen from the massive shift toward managed care during the mid-1990s. Therefore, growth in medical spending is projected to continue at rates well above the lows of the mid-1990s.

■ **Supply side.** On the supply side, growth in input prices is expected to average below the peak of 2001, but somewhat higher than rates seen during the previous decade. In addition, we expect a gradual increase in the rate of medical price inflation relative to input price inflation following several years (1997–2004) when output prices generally grew at rates below input prices. This expectation is informed by the assumption that most of the recent reversal in the input-output price pattern is attributable to one-time improvements in efficiency.

The diffusion of new medical innovation is assumed to continue to drive spending upward. We expect that this factor will be tempered by continuing attempts to increase efficiency in the application of new technologies and to target them more appropriately to the populations most likely to benefit, as information is gathered and applied more quickly.

Model And Assumptions

The national health spending projections are generated within a "current law" framework that incorporates actuarial, econometric, and judgmental inputs. Medicare projections are primarily based on the 2005 Medicare Trustees' report; Medicaid spending projections are consistent with the report's assumptions.[7] For prescription drugs, we incorporated the latest cost estimates and assumptions that appear in the president's fiscal year 2007 budget.[8] The projections for both private

and public spending use the economic and demographic assumptions from the 2005 Medicare Trustees' report, updated to reflect the latest historical data.[9]

Each year we review our econometric models.[10] To produce this year's report, we revised our model for real per capita personal health care spending. The new model includes a constant term that is intended to capture the exogenous contribution of medical innovation and other nonspecified factors to growth. (The constant contributes 1.2 percentage points to growth in real per capita private personal health care spending over the projection period.) Coefficients on income and prices were affected by the model change: The model is less responsive to fluctuations in income and more sensitive to relative medical price inflation.

Forecasting is contingent on assumptions about macroeconomic conditions and their relationship to health care spending; thus, our projections are always subject to much uncertainty. The uncertainty associated with this set of projections is even greater because we have no historical experience with Part D.

Spending Outlook

■ **Medicare.** Total Medicare spending growth is expected to slow slightly in 2005 (Exhibit 5). Medicare hospital and physician spending growth rates are projected to be 8.5 percent and 8.3 percent, respectively, in 2005. Medicare spending growth is expected to spike to 25.2 percent in 2006, as the Part D benefit is implemented. Total Medicare spending growth is projected to slow again to 5.4 percent in 2007 because of adjustments to managed care payments but is expected to resume increasing thereafter, averaging about 7.5 percent between 2008 and 2015.

The pattern of Medicare spending growth for physician services is largely dictated by the Sustainable Growth Rate (SGR) system, which determines the payment updates for the physician fee schedule. The SGR requires that future physician payment updates be adjusted for past actual physician spending relative to a target spending level. In the absence of MMA, the SGR would have led to large negative physician updates in 2004 and 2005. However, MMA established minimum updates of 1.5 percent in 2004 and 2005, but it did not alter the target spending levels. Therefore, our projection includes payment cuts for physicians beginning in 2006 and extending through 2013, when legislated cuts expire and payment updates are increased, which causes total Medicare spending to accelerate. Although we view these projected reductions as unlikely to occur before changes in legislation intervene, our Medicare projections are made on a current law basis, so we do not assume a legislative change to the physician payment system. As a result, our Medicare physician spending projections are likely understated.

In 2004 and 2005, MMA increased payments to managed care plans. Beginning in 2006, our projection includes the assumption of a shift in enrollment from traditional fee-for-service (FFS) to managed care plans. To be consistent with assumptions in the Medicare Trustees' report, about 32 percent of Medicare enrollees are projected to be in managed care plans by 2015, compared with 12 percent in 2004.[11] In 2007, Medicare managed care plan payments are expected to be reduced because of revisions to risk adjusters. The adjustments are expected to be approximately −7 percent. Consequently, the pattern of projected Medicare spending growth includes a noticeable dip in 2007, which is clearly visible across several sectors. Medicare spending growth is expected to trend back upward, rising to 8.8 percent by 2015.

■ **Medicaid.** We project that combined state and federal Medicaid spending growth in 2005 will slow for the fourth consecutive year to 7.7 percent. Growth in Medicaid real per enrollee spending (volume and intensity of services) is projected to increase from 1.0 percent in 2004 to 2.8 percent in 2005. Enrollment growth is expected to decelerate, falling to 2.1 percent in 2005 from 4.2 percent in 2004. This slowdown is primarily attributable to improving economic conditions. Nonetheless, states still face budget troubles as Medicaid continues to grow. The temporary enhanced federal matching rate, part of the Jobs

EXHIBIT 5
National Health Expenditures (NHE), By Source Of Funds, Amounts, And Average Annual Growth From Prior Year Shown, Selected Calendar Years 1993–2015

Source of funds	1993	2002	2003	2004	2005[a]	2006[a]	2010[a]	2015[a]
NHE (billions)	$916.5	$1,607.9	$1,740.6	$1,877.6	$2,016.0	$2,163.9	$2,879.4	$4,031.7
Private funds	514.2	881.4	957.2	1,030.3	1,101.4	1,148.4	1,544.7	2,116.4
Consumer payments	442.3	763.0	829.7	894.2	955.2	991.2	1,334.1	1,818.1
Out-of-pocket payments	145.3	210.8	223.5	235.7	248.8	246.2	316.3	421.0
Private health insurance	297.0	552.2	606.3	658.5	706.4	745.0	1,017.7	1,397.1
Other private funds	71.9	118.4	127.5	136.1	146.2	157.1	210.6	298.3
Public funds	402.3	726.5	783.4	847.3	914.6	1,015.5	1,334.7	1,915.3
Federal	277.7	509.5	554.4	600.0	645.9	742.0	971.4	1,407.8
Medicare	148.4	266.3	283.8	309.0	335.5	420.1	536.0	792.0
Medicaid[b]	76.8	147.3	162.5	173.1	181.5	184.0	258.9	384.4
Other federal[c]	52.5	95.8	108.1	118.0	128.9	137.8	176.5	231.3
State and local	124.7	217.1	229.0	247.3	268.7	279.2	371.2	519.4
Medicaid[b]	45.6	101.7	108.7	119.6	133.6	136.0	191.5	285.3
Other state and local[c]	79.1	115.4	120.3	127.7	135.0	143.2	179.7	234.1
Average annual growth	**1993[d]**	**2002**	**2003**	**2004**	**2005[a]**	**2006[a]**	**2010[a]**	**2015[a]**
NHE	11.5%	6.4%	8.2%	7.9%	7.4%	7.3%	7.4%	7.0%
Private funds	11.0	6.2	8.6	7.6	6.9	4.3	7.7	6.5
Consumer payments	11.0	6.2	8.7	7.8	6.8	3.8	7.7	6.4
Out-of-pocket payments	8.0	4.2	6.0	5.5	5.6	−1.0	6.5	5.9
Private health insurance	13.7	7.1	9.8	8.6	7.3	5.5	8.1	6.5
Other private funds	11.1	5.7	7.7	6.8	7.4	7.5	7.6	7.2
Public funds	12.2	6.8	7.8	8.2	7.9	11.0	7.1	7.5
Federal	12.7	7.0	8.8	8.2	7.7	14.9	7.0	7.7
Medicare	13.7	6.7	6.6	8.9	8.6	25.2	6.3	8.1
Medicaid[b]	15.4	7.5	10.3	6.6	4.9	1.4	8.9	8.2
Other federal[c]	9.0	6.9	12.8	9.1	9.2	6.9	6.4	5.6
State and local	11.3	6.4	5.5	8.0	8.7	3.9	7.4	7.0
Medicaid[b]	13.6	9.3	6.9	10.0	11.8	1.8	8.9	8.3
Other state and local[c]	10.4	4.3	4.3	6.1	5.8	6.0	5.8	5.4

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. 1993 marks the beginning of the shift to managed care. Growth rates are calculated consistent with the National Health Expenditure Accounts methodology. For example, the 2015 growth rate above is equal to the level of 2015 expenditures over the level of 2010 expenditures raised to the one-fifth power (the average growth over five years); 2015 growth rate is shorthand for 2010–2015 growth rate.

[a] Projected.

[b] Includes Medicaid and State Children's Health Insurance Program (SCHIP) expansion (Title XIX).

[c] Includes Medicaid SCHIP expansion (Title XXI).

[d] Average annual growth from 1970 through 1993.

and Growth Tax Reconciliation Act of 2003, ended in June 2004, and this is expected to exacerbate states' fiscal constraints. Because of the changes in matching rates, the 2005 state Medicaid spending growth rate is projected to be greater than its federal counterpart.

Ongoing budget constraints continue to pressure both the state and federal governments to seek a variety of cost containment measures. Every state is pursuing at least one such measure for either 2005 or 2006, and many are seeking more than one. The most popular of the states' strategies are focused on prescription drug costs, freezing or reducing provider payment rates, and new restrictions on benefits or enrollment.[12] The federal government is also pursuing strategies to control Medicaid spending growth. In 2005 a biparti-

san commission on Medicaid reform formed by Congress and the secretary of health and human services (HHS) recommended proposals designed to save $11 billion in federal Medicaid spending over the next five years.[13] The proposals generally targeted savings on drug spending and long-term care.

With the implementation of the Medicare Part D benefit in 2006, we expect that Medicaid drug spending will decrease, as drug spending for those who are eligible for both Medicaid and Medicare will shift from Medicaid to Medicare Part D. We anticipate an increase in Medicaid enrollment in 2006, as Part D enrollment efforts will likely reveal that some Medicare beneficiaries are also eligible for Medicaid; however, we expect that the assumed decrease in drug spending will dominate the overall Medicaid trend, with combined state and federal Medicaid spending growing only 1.5 percent in that year.[14] Beginning in 2007, Medicaid spending growth is projected to rebound to 8.5 percent and average 8.6 percent per year until 2015, with state and federal rates at fairly similar levels.

■ **Government public health.** We project that government public health spending growth will accelerate in 2005 to 10.5 percent, compared with 4.0 percent in 2004 (Exhibit 2). This acceleration is primarily the result of additional funding associated with the public health response to Hurricanes Katrina and Rita. Federal public health spending is projected to increase 24.3 percent to $11.3 billion in 2005, compared with 5.7 percent in 2004. Increased funding for disaster relief for the U.S. Centers for Disease Control and Prevention (CDC) is the primary cause of this acceleration.[15] State and local public health spending is expected to rise 7.9 percent in 2005, well above the 2004 growth rate of 3.7 percent.

Between 2006 and 2015, growth in government public health spending is projected to average 7.8 percent per year. In addition to disaster response, a sizable portion of this spending will be allocated to improvements in the U.S. public health system, including protections against bioterrorism. Also, the CDC budget is expected to be increased in an effort to prevent the spread of viruses such as the avian flu.[16] Despite strong growth, though, government public health spending's share of national health spending is projected to rise only slightly, from 3.0 percent in 2004 to 3.2 percent in 2015.

■ **Private health insurance.** Private health insurance premiums are expected to grow 6.8 percent in 2005, down from 8.4 percent in 2004. This is the third consecutive year in which premium growth will have slowed since its most recent peak of 11.5 percent in 2002. Private health insurance has historically exhibited a cyclical pattern (the underwriting cycle), where growth in premiums first undershoots and then overshoots growth in the underlying medical spending trend.[17] We expect a trough in the underwriting cycle in 2005, with growth in premiums per enrollee falling below growth in medical benefit spending per enrollee.

The 4.7-percentage-point slowdown in premium growth since 2002 is attributable to two factors, each of which accounts for about half of the cumulative deceleration. The first is the underwriting cycle. The second is slower growth in projected medical benefits per enrollee: Growth fell from 9.8 percent in 2002 to an estimated 7.4 percent in 2005. While medical price inflation edged downward over this period as input prices eased, the primary factor accounting for the slowdown was a deceleration in use. This reflects the sharp slowdown in drug usage, the reimposition of some elements of utilization management, the impact of rising copayments and deductibles on consumer demand, and the expectation of an increase in the uninsured population.[18]

With the implementation of Medicare Part D, 2006 is an anomalous year. Part D breaks the underlying trends, causing both premium and benefit growth to fall to approximately 5.0 percent. The slowdown in projected benefit growth is expected to be reversed in 2007 as utilization accelerates. A projected upturn in the underwriting cycle in 2007 will compound the forces pushing premium growth upward, peaking at 8.3 percent in 2009. Tighter labor markets in 2004 led to a slight rise in private

insurance coverage; however, we anticipate continued attrition in coverage rates throughout our projection period.

■ **Out-of-pocket spending.** Growth in out-of-pocket payments is expected to remain virtually unchanged at 5.6 percent in 2005 as overall private spending growth slows (Exhibit 5). The rate of growth is expected to decrease sharply in 2006 with the advent of Part D. Throughout the period, growth in out-of-pocket payments is projected to remain below growth in private health insurance spending.

Rising out-of-pocket costs have received a great deal of attention. However, looking back over the past ten years, out-of-pocket spending increased faster than total private spending only between 1997 and 1998. Although the rate of increase in out-of-pocket payments might not quite match that of private premiums, it has been noticeable to consumers, who have historically been sheltered from much of the bite of rising health costs by a continuous decline in the out-of-pocket share of spending. During the coming decade, we expect that growth in out-of-pocket spending will continue to converge toward growth in overall private spending; nonetheless, the out-of-pocket share of personal health care spending is projected to decline from 15.1 percent in 2004 to 12.6 percent by 2015.[19]

HSAs and similar types of consumer-directed health plans continue to grow rapidly, but from a very small base, accounting for just 1 percent of all covered employees in 2005.[20] Despite their relatively small scale, HSAs are beginning to have an effect on health insurance plan characteristics, with a range of large insurers launching efforts to provide greater transparency in the pricing of medical services.[21] The goal of these new plans is to institute greater consumer awareness of the cost of various health care services.[22]

Spending Outlook, By Sector

■ **Hospitals.** Total hospital spending growth is projected to be 7.9 percent in 2005, more than 1.5 percentage points higher than GDP growth (Exhibit 2). On average, total hospital spending growth is expected to remain more than two percentage points higher than GDP growth between 2006 and 2015.

Public- and private-sector spending trends are quite different. For private payers, hospital spending growth is expected to slow from 9.6 percent in 2004 to 8.5 percent in 2005 because of a decline in hospital price inflation. After 2005, the projection climbs to 9.0 percent in 2006 and averages 7.9 percent for the remainder of the period, reflecting a projected slowdown in utilization. For public payers, hospital spending growth is expected to slow slightly from 7.9 percent in 2004 to 7.5 percent in 2005 and to 6.4 in 2006. This downward trend reflects a projected slowdown in Medicaid spending growth, as enrollment growth decelerates. Public hospital spending growth falls to 5.5 percent in 2007 because of legislated adjustments to Medicare managed care payments. After 2007, this growth accelerates, rising to 6.8 percent by 2015.

This year's projection for private real per capita hospital spending—a measure that captures volume and intensity of services—is much higher than last year's. It is expected to peak in 2006 at 4.1 percent and is then expected to average 2.8 percent each year between 2007 and 2015. The change in outlook reflects both revisions to the historical data and a new interpretation of the fundamentals underlying the ongoing urban hospital construction boom.[23] The latter years of the forecast reflect gradually slowing growth rates, as we expect that efforts to place more of the financial burden associated with the provision of hospital care on consumers will have a modest impact. Despite the slowdown, private hospital spending as a share of private personal health care spending is up four percentage points by the end of the projection period (33 percent in 2015, from 29 percent in 2004). Given the downturn in public spending growth, total hospital spending as a share of total personal health care remains flat at 37 percent over the entire forecast period.

■ **Prescription drugs.** The slowdown in drug spending continued in 2004 with growth at 8.2 percent—ten percentage points below the peak rate of growth in 1999 (Exhibit 2).[24]

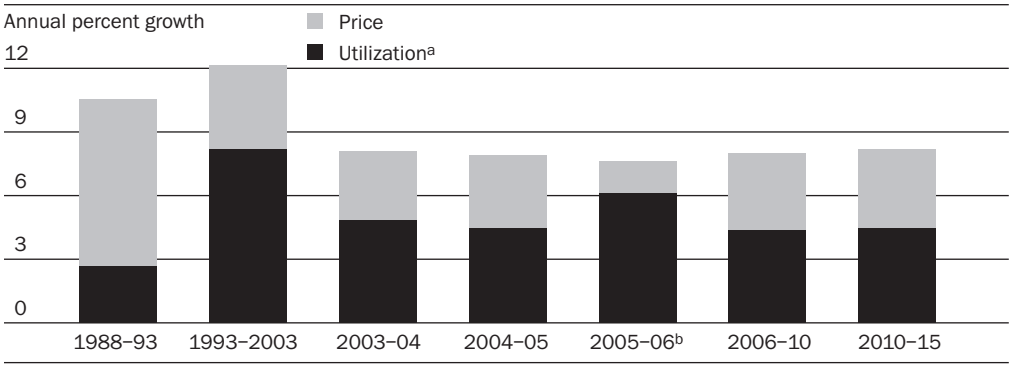
This historical estimate, along with data already received for 2005, has significantly changed the drug spending outlook. Average annual spending growth for the projection period is anticipated to be 8.2 percent, two percentage points below last year's projection.[25]

Despite our expectation of a mild acceleration in drug price growth in 2005, we project that the spending slowdown will continue, with growth forecast at 8.0 percent for 2005. This deceleration is driven by a slowdown in drug usage. Privately insured people are being subjected to further cost sharing in the form of higher copayments; moreover, employers are increasingly using coinsurance systems—in which the out-of-pocket share of the cost tends to rise faster than with copayments—to moderate spending trends.[26] Drug safety concerns likely played a role in continuing the slower spending growth in 2005.

For 2006, we project that total prescription drug spending will grow 7.7 percent (Exhibit 6). This projected growth rate is 0.4 percentage points below our forecast that excluded the effects of Medicare Part D. Including Part D lowers the forecast for total drug spending because discounts and rebates associated with the new program are larger than we had expected.[27] The major effect of this new benefit is still anticipated to be a shift in funding from private payers and Medicaid to Medicare: The Medicare share is forecast to rise from 2 percent in 2005 to 27 percent in 2006. Absent Part D, projected growth in drug prices would account for 3.8 percentage points of the overall 8.1 percent growth in 2006. Including the Part D benefit, drug price growth accounts for just 1.5 percentage points of the 7.7 percent growth rate forecast for 2006. Incorporating the effects of Part D lowers the growth rate of total spending, because we expect that drug prices for many seniors will fall as they gain access to discounted drug prices through private plans. These lower prices are nearly offset by higher assumed drug usage among seniors who had limited or no drug coverage before 2006.

Although the effect of Part D in 2006 is quite similar to our previous projection, we have the benefit of an additional data source: information provided by insurers that have contracted with the Centers for Medicare and Medicaid Services (CMS) to provide drug coverage to beneficiaries. Compared with our previous projection, our assumption regarding the level of discounts and rebates in 2006 has increased from 15 percent to 27 percent. Also, we have assumed that these discounts and rebates will remain constant throughout the projection period. The effect on spending of assumed higher discounts is greater than the effect of increased utilization, causing drug spending growth to decrease slightly when the

EXHIBIT 6
Factors Contributing To Total Prescription Drug Spending Growth, Various Time Periods 1988–2015



SOURCE: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group.
[a] Utilization also includes the effects of intensity and population growth.
[b] Without the effect of Medicare Part D, overall growth would be 8.1 percent (3.8 percent price, 4.3 percent utilization).

effects of Part D are incorporated.[28] We anticipate that Medicare drug coverage will not have a major impact on the overall drug spending growth rate after 2006.

The long-term outlook for prescription drugs contains factors that are expected to increase drug spending growth as well as factors that are expected to constrain growth. The former include practice patterns that involve prescribing existing drugs to a larger segment of the population and high-cost specialty drugs designed to treat rare conditions.[29] The latter include the increased use of generic drugs—which should increase over the next few years as generics replace certain blockbuster drugs whose patents will soon expire—and increased cost sharing in the form of rising copayments and additional deductibles or both.[30] Our current projection calls for these factors to mostly offset each other. As a result, we expect that drug spending growth will remain in the range of 8.0–8.4 percent from 2007 to 2015.

■ **Physician and clinical services.** We project that growth in total physician spending will decelerate from 9.0 percent in 2004 to 7.5 percent in 2005 (Exhibit 2). Both private and public spending growth rates are expected to decelerate—from 8.5 percent in 2004 to 7.1 percent in 2005 and from 9.9 percent in 2004 to 8.2 percent in 2005, respectively. We expect that private growth will rebound in 2006 to 7.8 percent and reach 8.3 percent by 2008, following the pattern in total private spending during the rest of the projection period. The 2005 slowdown is driven by an expected decrease in the growth of physician services prices, from 4.0 percent in 2004 to 3.4 percent in 2005, as well as an expected decline in real per capita spending growth, as the latter responds with a lag to the 2004 downturn in income. As discussed, the Medicare physician spending projection assumes no change to the SGR system; consequently, beginning in 2006, our forecast is likely to understate actual future spending.

■ **Long-term care.** We project that nursing home spending growth will accelerate in 2005 to 5.6 percent, from 4.3 percent in 2004 (Exhibit 2). Public spending drives the acceleration, with faster growth rates in both Medicare and Medicaid. We project that Medicaid spending will grow faster than either Medicare or private spending, averaging 7.0 percent per year during the projection period. By the end of the period, we expect Medicaid to pay for nearly half of all nursing home spending, compared with less than 45 percent in 2004. We also expect that the effects of an aging population will be most evident in nursing home spending by then, with a slight acceleration in public spending. Overall, we expect the one-year growth rates in nursing home spending to increase from 6.1 percent in 2011 to 6.3 percent by 2015. This contrasts with the slow deceleration in total personal health care spending over the same time period.

Home health spending is projected to grow 13.2 percent in 2005 (Exhibit 2). This continued strong growth is driven by increases in public spending, which now represents about three-fourths of home health spending and is projected to grow to more than 80 percent by 2015. Home health services, a relatively small percentage of total national health spending, are projected to again exhibit the fastest rate of growth among all sectors in 2005.

Growth in Medicare home health spending is expected to slow to 15.3 percent in 2005, from 19.0 percent in 2004. Despite this moderation in growth, the 2005 forecast marks the fifth consecutive year of double-digit increases. We expect growth to remain above 10 percent in 2006 and then to decelerate and settle to an average growth of 6.9 percent for the remainder of the projection period. The growth pattern in home health agency–based hospice care spending is a major driver of this deceleration. A shift in enrollment from FFS to Medicare managed care programs will also drive this trend. Nonetheless, Medicare is expected to remain a dominant payer for home health services.

Medicaid home health spending growth is expected to accelerate 2.4 percentage points in 2005, to 18.6 percent. We expect growth to decelerate in 2006 to 8.9 percent and then to average 10.7 percent through 2015. Medicaid's

share of home health spending is expected to increase 10.9 percentage points by 2015. This trend reflects a shift in care setting preferences by both beneficiaries and payers: the movement away from institutional care toward home care.[31] A return to normal federal/state cost sharing following the 2004 expiration of an enhanced federal matching rate drives the acceleration in the state and local share of Medicaid spending.

Finally, we expect private spending growth for home health care to accelerate to 4.2 percent in 2005, from 2.4 percent in 2004. Among private payers, private health insurance is expected to continue to constitute a higher share of spending than out-of-pocket payments and other private payers.

Concluding Comments

The relatively stable trends we expect through 2015 likely obscure dramatic changes to our health care system during the next decade. With the advent of the prescription drug benefit in 2006 and the oldest baby boomers enrolling during the next decade, Medicare is expanding quickly. The continued growth of Medicaid spending makes this source of health care funding an increasingly important issue for both the states and the federal government. Employers, meanwhile, are facing key decisions about the level and types of benefits to offer their employees and retirees, given rising health care costs and premiums. Private insurers continue to create new cost-sharing measures while also offering high-deductible health plans, both of which could change the dynamic of who pays for health care. With the continuing advancements in medical technology and treatments, the costs of and demand for health care are expected to increase. Given this confluence of changes for both public and private payers and our projection that health care spending growth will outpace the growth of the economy, we anticipate that society will again need to confront the underlying questions about the supply of and demand for health care services, as we anticipate that one in every five dollars will be devoted to this sector by 2015.

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NOTES

1. S. Heffler et al., "U.S. Health Spending Projections for 2004–2014," *Health Affairs* 24 (2005): w74–w85 (published online 23 February 2005; 10.1377/hlthaff.w5.74).
2. C. Smith et al., "National Health Spending in 2004: Recent Slowdown Led by Prescription Drug Spending," *Health Affairs* 25, no. 1 (2006): 186–196.
3. The National Health Expenditure Accounts (NHEA) benchmark for the 2004 accounts changed the methodology for construction (renamed "structures") and added equipment purchased by the health sector. As a result, structures and equipment for 2003 are $56 billion higher in the most recent NHEA than in the 2003 NHEA. This change results in national health spending being a higher share of GDP in all years and 0.5 percentage points higher in 2003.
4. Relatively faster growth in Medicare spending reflects enrollment growth; however, projected growth in private health insurance spending per enrollee exceeds both per beneficiary Medicare and per enrollee Medicaid spending for 2005.
5. These include Transitional Assistance associated with the Medicare prescription drug discount card program and increased payments to physicians, rural hospitals, and managed care plans.
6. For a more detailed discussion of the shift in funding expected with the beginning of the Part D benefit, see Heffler et al., "U.S. Health Spending Projections for 2004–2014."
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8. Office of Management and Budget, *Budget of the United States Government, Fiscal Year 2007*, http://www.whitehouse.gov/omb/budget (accessed 6 February 2006).
9. We used available historical data (as of November 2005) and updated near-term forecasts to transition to the 2005 Medicare Trustees' report assumptions.

10. The results of our aggregate model of overall private personal health care spending are reconciled with separate models for private spending in each sector. For a more complete description of our projections model, see Centers for Medicare and Medicaid Services, "Projections of National Health Expenditures: Methodology and Model Specification," 11 March 2005, http://www.cms.hhs.gov/NationalHealthExpendData/downloads/projections-methodology.pdf (accessed 20 January 2006).
11. Per capita spending for managed care enrollees is projected to be slightly higher than that for FFS enrollees over the entire projection period.
12. V. Smith et al., *Medicaid Budgets, Spending, and Policy Initiatives in State Fiscal Years 2005 and 2006*, 18 October 2005, http://www.kff.org/medicaid/7392.cfm (accessed 20 January 2006).
13. Bipartisan Commission on Medicaid Reform, *The Medicaid Commission: Report to the Honorable Secretary Michael O. Leavitt*, September 2005, available at http://www.cms.hhs.gov/FACA/10_mc.asp (accessed 20 January 2006).
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15. Congressional Budget Office, "The Macroeconomic and Budgetary Effects of Hurricanes Katrina and Rita: An Update," 29 September 2005, http://www.cbo.gov/ftpdocs/66xx/doc6669/09-29-EffectsOfHurricanes.pdf (accessed 20 January 2006).
16. Homeland Security Council, "National Strategy for Pandemic Influenza," November 2005, http://www.whitehouse.gov/homeland/nspi.pdf (accessed 20 January 2006).
17. A. Rosenblatt, "The Underwriting Cycle: The Rule of Six," *Health Affairs* 23, no. 6 (2004): 103–106. Reduced informational lags in ascertaining the trend in medical cost growth are expected to result in a milder, shorter underwriting cycle during the projection period.
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19. A decline in the out-of-pocket share for 2005 is consistent with the results of the Henry J. Kaiser Family Foundation/Health Research and Educational Trust (HRET) survey, which shows that average annual deductibles across all plan types have not greatly increased and that among covered workers in health maintenance organizations (HMOs), the changes in the distribution of required copayments were not statistically significant, for a period when private health premiums increased an average of 9.2 percent. Kaiser/HRET, *Employer Health Benefits: 2005 Annual Survey* (Menlo Park, Calif.: Kaiser/HRET, 2005).
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25. In our previous projection, average annual growth in prescription drug spending for the 2003–2014 period was 10.2 percent.
26. Mercer Human Resource Consulting, *National Survey of Employer-Sponsored Health Plans.*
27. In last year's projection, the assumed effect of drug discounts resulted in a 2006 growth rate that was 0.5 percentage points above our forecast excluding the effects of Part D.
28. Last year, assumed utilization increases slightly offset discounts, which resulted in a slight increase in overall drug spending when Part D was incorporated into that projection.
29. Drugs that treat chronic conditions like high cholesterol and high blood pressure could be prescribed to more people as diagnosis improves and thresholds for treatment change. National Center for Health Statistics, *Health, United States, 2005, with Chartbook on Trends in the Health of Americans* (Hyattsville, Md.: NCHS, 2005); and C.D. Mullins et al., "Variability and Growth in Spending for Outpatient Specialty Pharmaceuticals," *Health Affairs* 24, no. 4 (2005): 1117–1127.
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31. Such a trend is evident in other public payers, as well as the proliferation of state programs offering home care funded through Medicaid home and community-based waivers.