

TRENDS

**U.S. Health Spending Projections For
2004–2014**

Shifts in funding for prescription drugs and lower private health insurance premium growth are expected over the next ten years.

**by Stephen Heffler, Sheila Smith, Sean Keehan, Christine Borger,
M. Kent Clemens, and Christopher Truffer**

ABSTRACT: National health spending growth is anticipated to remain stable at just over 7.0 percent through 2006, the result of diverging public- and private-sector spending trends. The faster public-sector spending growth is exemplified by the introduction of the new Medicare drug benefit in 2006. While this benefit is anticipated to have only a minor impact on overall health spending, it will result in a significant shift in funding from private payers and Medicaid to Medicare. By 2014, total health spending is projected to constitute 18.7 percent of gross domestic product, from 15.3 percent in 2003.

THE SLOWDOWN IN national health spending growth is expected to continue into 2004, with growth edging downward to 7.5 percent from 7.7 percent in 2003 (Exhibits 1 and 2).¹ Over the next ten years, growth is expected to slow to 6.7 percent between 2013 and 2014, well below the peak of 9.3 percent growth that occurred between 2001 and 2002. Despite the anticipated deceleration, these growth rates outpace the milder inflationary experience of the mid-1990s, when growth averaged 5.3 percent from 1993 through 1998. Over the 2003–14 period, national health spending is forecast to continue growing faster than gross domestic product (GDP). The consequence is a projected increase in health's share of GDP from 15.3 percent in 2003 to 18.7 percent by 2014.

Unlike previous projections, this year's forecast includes our expectation of the effects associated with the introduction of Medicare

Part D in 2006.² This new prescription drug benefit is expected to result in a substantial shift in funding from Medicaid and the private sector to Medicare in 2006. In part because of this funding shift, our projection calls for public funding of health care to exceed 49 percent by the end of the projection period—a record share that could have important implications for the budget as a whole (Exhibit 3). However, the introduction of the Medicare Part D benefit is expected to have only a minor effect on total prescription drug spending. We estimate that price discounts associated with the new benefit will nearly offset the increased usage associated with extending drug insurance coverage to the Medicare population.

While private spending growth is expected to slow in 2004, public spending growth is expected to move in the opposite direction. We forecast that private spending growth will be 7.4 percent in 2004, down from 8.6 percent

The authors are in the Office of the Actuary, Centers for Medicare and Medicaid Services, in Baltimore, Maryland. Stephen Heffler (sheffler@cms.hhs.gov) is the director of the National Health Statistics Group. Sheila Smith, Sean Keehan, and Christine Borger are economists in that group; Kent Clemens and Chris Truffer are actuaries.

EXHIBIT 1
National Health Expenditures (NHE), Aggregate And Per Capita Amounts, And Share Of Gross Domestic Product (GDP), Selected Calendar Years 1993–2014

Spending category	1993	1998	2002	2003	2004 ^a	2005 ^a	2006 ^a	2014 ^a
NHE (billions)	\$888.1	\$1,150.9	\$1,559.0	\$1,678.9	\$1,804.7	\$1,936.5	\$2,077.5	\$3,585.7
Health services and supplies	856.3	1,112.6	1,499.8	1,614.2	1,735.5	1,862.5	1,997.8	3,451.3
Personal health care	775.8	1,009.8	1,342.9	1,440.8	1,549.0	1,663.6	1,781.3	3,067.0
Hospital care	320.0	378.5	484.2	515.9	551.8	588.6	623.5	1,007.2
Professional services	280.7	375.7	503.0	542.0	581.2	623.6	667.4	1,161.3
Physician and clinical services	201.2	256.8	340.8	369.7	397.2	425.7	453.8	782.5
Other professional services	24.5	35.5	46.1	48.5	52.2	55.6	59.6	102.3
Dental services	38.9	53.2	70.9	74.3	79.1	84.1	90.0	146.9
Other personal health care	16.1	30.2	45.3	49.5	52.8	58.2	63.9	129.7
Nursing home and home health	87.6	123.1	143.1	150.8	160.6	170.9	181.9	290.5
Home health care ^b	21.9	33.6	36.5	40.0	45.2	50.0	54.8	95.9
Nursing home care ^b	65.7	89.5	106.6	110.8	115.4	121.0	127.1	194.6
Retail outlet sales of medical products	87.5	132.5	212.6	232.1	255.4	280.5	308.5	608.0
Prescription drugs	51.3	87.3	161.8	179.2	200.5	223.5	249.3	521.3
Durable medical equipment	12.8	16.9	19.6	20.4	21.2	21.7	22.4	31.6
Nondurable medical products	23.4	28.4	31.1	32.5	33.7	35.3	36.8	55.1
Government administration and net cost of private health insurance	53.3	64.9	105.7	119.7	128.2	135.4	147.3	252.9
Government public health activities	27.2	37.9	51.2	53.8	58.3	63.6	69.2	131.4
Investment	31.8	38.3	59.2	64.6	69.2	74.0	79.7	134.4
Research ^c	15.6	20.5	36.5	40.2	43.1	46.4	50.5	90.7
Construction	16.2	17.7	22.7	24.5	26.1	27.6	29.1	43.6
NHE per capita	\$3,353.9	\$4,097.9	\$5,317.4	\$5,670.5	\$6,039.8	\$6,423.1	\$6,830.2	\$11,045.8
Population (millions)	264.8	280.8	293.2	296.1	298.8	301.5	304.2	324.6
GDP, billions of dollars	\$6,642.3	\$8,747.0	\$10,487.0	\$11,004.0	\$11,719.3	\$12,375.5	\$13,019.1	\$19,179.9
Real NHE ^d	\$1,009.4	\$1,192.9	\$1,497.6	\$1,583.8	\$1,665.8	\$1,752.5	\$1,843.2	\$2,623.8
Chain-weighted GDP index	0.88	0.96	1.04	1.06	1.08	1.11	1.13	1.37
Personal health care deflator ^e	0.82	0.94	1.08	1.12	1.16	1.20	1.25	1.68
NHE as percent of GDP	13.4%	13.2%	14.9%	15.3%	15.4%	15.6%	16.0%	18.7%

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

NOTES: Numbers may 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 of this type 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 of the remaining PHC components (2000 = 100.0).

EXHIBIT 2
National Health Expenditures (NHE), Average Annual Percentage Growth From Prior Year Shown, Selected Calendar Years 1993–2014

Spending category	1993 ^a	1998	2002	2003	2004 ^b	2005 ^b	2006 ^b	2014 ^b
NHE	11.5%	5.3%	7.9%	7.7%	7.5%	7.3%	7.3%	7.1%
Health services and supplies	11.7	5.4	7.7	7.6	7.5	7.3	7.3	7.1
Personal health care	11.5	5.4	7.4	7.3	7.5	7.4	7.1	7.0
Hospital care	11.2	3.4	6.3	6.5	7.0	6.7	5.9	6.2
Professional services	12.0	6.0	7.6	7.8	7.2	7.3	7.0	7.2
Physician and clinical services	12.3	5.0	7.3	8.5	7.4	7.2	6.6	7.0
Other professional services	16.4	7.7	6.7	5.3	7.5	6.5	7.3	7.0
Dental services	9.7	6.5	7.5	4.8	6.4	6.4	6.9	6.3
Other personal health care	11.7	13.4	10.7	9.2	6.6	10.3	9.8	9.2
Nursing home and home health	14.1	7.0	3.8	5.4	6.5	6.4	6.4	6.0
Home health care ^c	22.1	8.9	2.1	9.5	13.0	10.5	9.6	7.3
Nursing home care ^c	12.7	6.4	4.5	4.0	4.2	4.8	5.1	5.5
Retail outlet sales of medical products	9.7	8.7	12.5	9.2	10.1	9.8	10.0	8.8
Prescription drugs	10.2	11.2	16.7	10.7	11.9	11.4	11.6	9.7
Durable medical equipment	9.3	5.7	3.9	4.0	3.8	2.5	3.5	4.4
Nondurable medical products	8.9	3.9	2.3	4.4	3.7	4.8	4.2	5.2
Government administration and net cost of private health insurance	13.7	4.0	13.0	13.2	7.1	5.6	8.8	7.0
Government public health activities	13.9	6.8	7.8	5.1	8.5	9.1	8.9	8.3
Investment	7.7	3.8	11.6	9.1	7.1	6.9	7.6	6.8
Research ^d	9.4	5.7	15.5	10.0	7.4	7.6	8.9	7.6
Construction	6.5	1.8	6.4	7.7	6.5	5.9	5.6	5.2
NHE per capita	10.4	4.1	6.7	6.6	6.5	6.3	6.3	6.2
Population	1.0	1.2	1.1	1.0	0.9	0.9	0.9	0.8
GDP	8.4	5.7	4.6	4.9	6.5	5.6	5.2	5.0
Real NHE ^e	5.9	3.4	5.9	5.8	5.2	5.2	5.2	4.5
Chain-weighted GDP index	5.2	1.9	1.9	1.8	2.2	2.0	2.0	2.4
Personal health care deflator ^f	7.3	2.9	3.5	3.6	3.8	3.6	3.6	3.8

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

NOTES: GDP is gross domestic product. Numbers may 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 Accounts methodology. For example, the 2014 growth rate above is equal to the level of 2014 expenditures over the level of 2006 expenditures; 2014 growth rate is shorthand for 2006–2014 growth rate.

^a For year-to-year growth rates, see www.cms.hhs.gov/statistics/nhe/projections-2004.

^b Projected.

^c Freestanding facilities only. Additional services of this type 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.

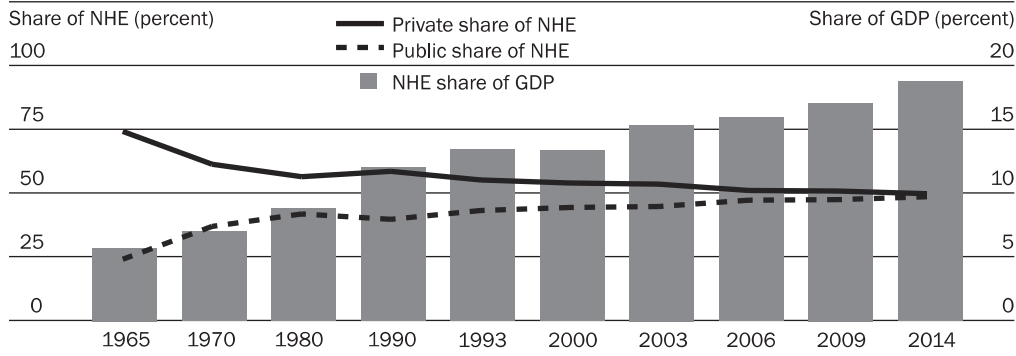
^e Deflated using GDP chain-type price index (2000 = 100.0).

^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 of the remaining PHC components (2000 = 100.0).

growth in 2003 (Exhibit 4). Medicare spending growth, on the other hand, is expected to accelerate 2.5 percentage points to 8.2 percent in 2004. The faster federal spending growth in 2004 primarily reflects changes associated

with the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003 that are distinct from the addition of a Medicare drug benefit. We forecast an acceleration in combined state and federal Medicaid

EXHIBIT 3
National Health Expenditures (NHE) Share Of Gross Domestic Product (GDP) And
Private And Public Shares Of NHE, Selected Years 1965–2014



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's share of GDP) relates to the gray-shaded bars. Data for 2006, 2009, and 2014 are projections.

spending growth, from 7.1 percent in 2003 to 7.9 percent in 2004, because some states did increase payments and expand services despite continued budgetary pressures.

After 2004, we anticipate that the deceleration in private-sector spending growth will continue through 2006. Projected slower growth in the use of care is the primary cause of the mild slowdown to 6.6 percent in 2005. The introduction of the Medicare drug benefit intensifies the private spending deceleration in 2006, with growth slowing to 3.1 percent that year. From 2006 to 2014, we expect that private health care spending will grow at an average annual rate of 6.7 percent.

Model And Assumptions

The national health spending projections are generated within a “current-law” framework that incorporates actuarial, econometric, and judgmental inputs. Projections for Medicare are mostly based on the 2004 Medicare Trustees Report; Medicaid spending projections are consistent with Trustees Report assumptions.³ For prescription drugs, we incorporated the latest cost estimates and assumptions that appear in the President's Fiscal Year 2006 Budget.⁴ Projections for private health spending are based on an econometric model that includes behavioral responses by employers, employees, and consumers to cost

trends and the general economy.⁵ The projections for both private and public spending use the economic and demographic assumptions from the 2004 Medicare Trustees Report, updated to reflect the latest historical data.⁶

Forecasting is contingent upon assumptions about macroeconomic conditions and their relationship to health care spending; thus, our projections are always subject to considerable uncertainty. As we have no historical experience with Medicare Part D, the uncertainty associated with this set of projections is greater than in previous years.

Prescription Drugs

The outlook for prescription drug spending has changed substantively since our last projection. A major deceleration in prescription drug spending growth in 2003 changed our outlook for 2004 and 2005, years in which MMA is projected to have a minimal impact on aggregate prescription drug spending levels. In 2006 our projections incorporate a large shift in funding for prescription drugs to Medicare from the out-of-pocket, private health insurance, and Medicaid sources of payment (Exhibit 5). We forecast a minor rise in spending after Part D begins, because of an increase in prescription drug use by Medicare beneficiaries, with this impact largely offset by lower prices.⁷ Over the 2007–14 period, we expect

EXHIBIT 4
National Health Expenditures (NHE), By Source Of Funds, Amounts, And Average Annual Growth From Prior Year Shown, Selected Calendar Years 1993–2014

Source of funds	1993	1998	2002	2003	2004 ^a	2005 ^a	2006 ^a	2014 ^a
NHE (billions)	\$888.1	\$1,150.9	\$1,559.0	\$1,678.9	\$1,804.7	\$1,936.5	\$2,077.5	\$3,585.7
Private funds	497.7	631.1	841.0	913.2	980.5	1,045.3	1,078.0	1,813.1
Consumer payments	445.0	560.3	763.7	831.1	892.7	952.3	979.7	1,655.7
Out-of-pocket payments	146.9	175.6	214.2	230.5	245.9	261.8	257.7	430.9
Private health insurance	298.1	384.7	549.5	600.6	646.9	690.5	722.0	1,224.8
Other private funds	52.7	70.8	77.4	82.1	87.7	93.0	98.3	157.5
Public funds	390.4	519.8	718.0	765.7	824.2	891.3	999.5	1,772.5
Federal	274.4	366.9	508.6	541.7	583.7	627.2	730.7	1,294.9
Medicare	148.3	208.8	267.7	283.1	306.2	332.3	424.8	746.9
Medicaid ^b	76.8	99.7	148.4	158.7	171.1	181.7	184.8	354.6
Other federal ^c	49.3	58.4	92.4	99.8	106.4	113.3	121.1	193.4
State and local	116.0	152.9	209.4	224.0	240.8	264.3	275.0	489.9
Medicaid ^b	44.8	71.9	102.4	109.9	118.8	134.5	136.8	263.9
Other state and local ^c	71.1	81.1	107.1	114.1	122.0	129.8	138.2	226.1
Average annual growth	1993 ^d	1998	2002	2003	2004 ^a	2005 ^a	2006 ^a	2014 ^a
NHE	11.5%	5.3%	7.9%	7.7%	7.5%	7.3%	7.3%	7.1%
Private funds	11.0	4.9	7.4	8.6	7.4	6.6	3.1	6.7
Consumer payments	11.0	4.7	8.1	8.8	7.4	6.7	2.9	6.8
Out-of-pocket payments	8.0	3.6	5.1	7.6	6.7	6.5	-1.5	6.6
Private health insurance	13.7	5.2	9.3	9.3	7.7	6.7	4.6	6.8
Other private funds	10.9	6.1	2.2	6.2	6.8	6.0	5.7	6.1
Public funds	12.2	5.9	8.4	6.6	7.6	8.1	12.1	7.4
Federal	12.7	6.0	8.5	6.5	7.7	7.5	16.5	7.4
Medicare	13.7	7.1	6.4	5.7	8.2	8.5	27.8	7.3
Medicaid ^b	15.4	5.4	10.5	6.9	7.8	6.2	1.7	8.5
Other federal ^c	8.8	3.5	12.1	8.0	6.5	6.5	6.9	6.0
State and local	11.2	5.7	8.2	7.0	7.5	9.8	4.0	7.5
Medicaid ^b	13.5	9.9	9.2	7.4	8.1	13.2	1.7	8.6
Other state and local ^c	10.2	2.6	7.2	6.6	7.0	6.4	6.4	6.3

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

NOTES: Numbers may 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 Accounts methodology. For example, the 2014 growth rate above is equal to the level of 2014 expenditures over the level of 2006 expenditures; 2014 growth rate is shorthand for 2006–2014 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).

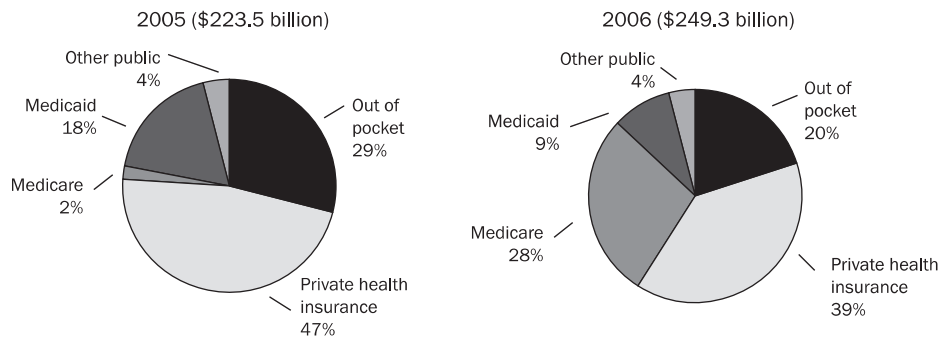
^d For year-to-year growth rates, see www.cms.hhs.gov/statistics/nhe/projections-2004.

aggregate prescription drug spending growth to decelerate despite the new Medicare drug spending.

The slowdown in prescription drug spending growth from 14.9 percent between 2001 and 2002 to 10.7 percent between 2002 and 2003 was caused not only by factors that we expect to persist in future years but also by one-time factors that we believe will not affect

the future trend. Examples of the latter include the switch to over-the-counter (OTC) status for the non-sedating antihistamine Claritin and the drop in consumption of estrogen products that occurred in 2003.⁸ Given these nonrecurring factors, we anticipate that spending growth will recover, as demand for drugs is expected to remain strong. We forecast 11.9 percent growth in 2004. This

EXHIBIT 5 Projected Prescription Drug Spending, By Payer, 2005 And 2006



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

reacceleration is tempered by factors that we believe will continue to constrain the overall trend, such as increased availability and consumption of lower-cost generic drugs and more people covered under tiered-copayment drug plans.⁹ The latter can dampen cost growth both by providing a financial incentive for people to purchase generic or other lower-cost drugs and by shifting costs to consumers by raising the copayments on each tier. Our expectation for 2004 drug spending growth is one percentage point lower than last year's forecast.

For 2005, we expect the dampening effect of factors discussed above to continue. In addition, the withdrawal of Vioxx from the market, as well as recent studies citing increased risks for other medications, could further slow drug spending growth in 2005.¹⁰ Partially offsetting these factors is projected Medicare spending of \$1.3 billion for transitional assistance for low-income beneficiaries with Medicare-approved drug cards.¹¹

Beginning in 2006, Medicare Part D will provide Medicare beneficiaries with prescription drug coverage as part of a Medicare managed care plan or through a drug-only private plan for enrollees in traditional Medicare. Beneficiaries can also continue to receive drug coverage through employer-sponsored retiree health plans, which will be eligible for Medicare financial assistance starting in 2006. Within the National Health Accounts (NHA)

classification system, nearly all Part D spending is classified as Medicare spending, with the exception of the employer subsidy amounts, which are in the category of private health insurance.¹²

For 2006, we project that total prescription drug spending will grow 11.6 percent, of which 0.5 percentage point is attributable to the implementation of Part D (Exhibit 6). This additional spending growth, which represents \$1.0 billion out of a \$249 billion industry, masks two dramatic changes within this sector: (1) a shift in funding from the private sector and Medicaid to Medicare, and (2) a shift in how price and utilization contribute to growth.

The total amount of Medicare drug spending in 2006 is expected to be \$69.9 billion. Excluding the Part D benefit and other MMA prescription drug-related provisions, Medicare prescription drug spending would have been projected to be \$2.9 billion in 2006. This shift of approximately \$67.0 billion in funding on behalf of the projected 38.9 million enrollees in the Medicare Part D benefit comes from the two primary payers of prescription drugs in 2005: Medicaid and private payers. We project that Medicaid spending will account for 18.1 percent of prescription drug spending in 2005; this share is anticipated to drop to 9.4 percent in 2006, since all dual-eligible Medicare-Medicaid enrollees will receive drug coverage through Medicare beginning that year. States will be responsible for

EXHIBIT 6
Factors Contributing To Total Prescription Drug Spending Growth, Excluding And Including The Impact Of The Medicare Part D Benefit, 1988–2014

	Growth excluding the impact of Medicare Part D (%)			Growth including the impact of Medicare Part D (%)		
	Total	Price	Utilization, intensity, population	Total	Price	Utilization, intensity, population
1988–1993 ^a	10.8	8.0	2.7	– ^b	– ^b	– ^b
1993–2003 ^a	13.3	4.0	8.9	– ^b	– ^b	– ^b
2003–2005	11.7	4.4	7.0	– ^b	– ^b	– ^b
2005–2006	11.1	4.2	6.7	11.6	2.4	8.9
2006–2011	10.3	4.2	5.8	10.1	3.4	6.5
2011–2014	9.0	3.9	4.9	8.9	3.9	4.8

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

^a Denotes historical period.

^b Not applicable.

paying the Medicare program a declining portion of the drug costs that they would have incurred for the dual-eligible population; however, this state spending will be classified as Medicare spending.¹³

We project that private prescription drug spending will account for 76 percent of all drug spending in 2005. This share is expected to fall to 59 percent in 2006, a projected decline of \$23.0 billion. Both private health insurance and individuals’ out-of-pocket spending are forecast to fall in 2006. The fall in out-of-pocket spending is expected to account for roughly 57 percent of the anticipated decline in overall private spending. The reduction in out-of-pocket spending will primarily affect those Medicare beneficiaries who now lack drug coverage and those in Medigap plans that have high out-of-pocket payments.

Because prescription drug spending is anticipated to continue to represent the largest share of total out-of-pocket payments (24.0 percent in 2004), the shift in payment sources has an important effect on the overall out-of-pocket spending trend. Total out-of-pocket spending is expected to fall 1.5 percent in 2006. For private health insurance, we expect that a majority of retirees with employer-sponsored drug benefits will retain that coverage. However, many beneficiaries who have Medigap coverage are likely to choose the

Medicare benefit.¹⁴

Our forecast for drug spending in 2006 anticipates average price discounts of 15 percent for Medicare Part D enrollees. The combination of lower prices and expanded coverage for a substantial portion of beneficiaries is expected to spur an increase in use that will slightly offset the impact of price discounts on spending. Without the MMA effects, projected growth in drug prices accounts for 4.2 percentage points of the overall 11.1 percent growth in 2006. Medicare Part D enrollees are estimated to account for roughly 40 percent of all drug spending, and in 2006 many of them are expected to receive additional discounts.¹⁵ Therefore, we now project that drug price growth, including the Part D benefit, will account for only 2.4 percentage points of the 11.6 percent forecasted growth rate in 2006. Relative to the initial impact in 2006, the projected effect on drug price inflation of assumed further price discounts under Part D through 2011 will be small. Moreover, since MMA authorized penalties for late enrollment and because extensive outreach efforts are planned, we expect a major, one-time enrollment shift in 2006 to Medicare Part D. Accordingly, we do not expect that Part D enrollment growth will have a notable impact on the overall prescription drug growth rate after 2006.

Prescription drug spending growth is pro-

jected to decelerate in the later years of the forecast, reaching 8.7 percent by 2014, as we expect utilization increases to slow. Three phenomena underlie the forecasted usage slowdown. First, we anticipate that increased cost sharing and more drugs shifting to OTC status will reduce demand for prescription drugs. Second, we expect that pharmacy benefit managers (PBMs) will expand the use of successful plan management tools, such as prior authorization and step therapy.¹⁶ Third, we believe that most of the new drugs in the development pipeline will target niche diseases, and therefore we do not expect many to achieve blockbuster status.¹⁷ We note that despite its status as the fastest-growing sector, drug spending is projected to constitute less than 15 percent of national health expenditures in 2014, compared with 28 percent for hospital care and 22 percent for physician and clinical services.

Other Notable Medicare Trends

■ **Physician services.** The pattern of Medicare spending growth for physician services is 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 spending for physician services relative to a target spending level. As a consequence, the SGR would have led to large negative physician updates in 2004 and 2005 in the absence of MMA. MMA established minimum updates of 1.5 percent in 2004 and 2005, but without affecting the target spending levels. Therefore, we expect actual Medicare physician spending to continue to exceed target spending levels, leading to payment cuts beginning in 2006 and extending through 2012. However, these projected payment reductions are unlikely to occur before changes in the legislation intervene. Consequently, our current-law Medicare projections almost certainly understate actual future physician spending.¹⁸

■ **Managed care.** Medicare Advantage (MA) is a retooled version of Medicare's managed care program, Medicare+Choice (M+C).

MMA legislated payment increases to managed care plans in 2004 and 2005. Beginning in 2006, regional preferred provider organizations (PPOs) are allowed to participate in Medicare's managed care program. We expect that together, both changes will greatly increase enrollment, as those who now lack access to managed care plans may obtain it and as plans reduce supplemental premiums or increase benefit coverage, or both. Our forecast assumes a shift in enrollment from traditional fee-for-service (FFS) Medicare to MA plans. MA enrollees are expected to constitute about 30 percent of total Medicare enrollees by 2014, compared with 12 percent in 2003.

■ **Other changes.** Additional legislative changes of note prior to 2006 are higher inpatient hospital payments to rural hospitals beginning in 2004, and the further postponement of scheduled Medicare therapy caps from 2004 to 2006.¹⁹ These are a few of the reasons why Medicare spending growth is expected to accelerate in 2004 and 2005.

Medicaid Spending

We project that combined state and federal Medicaid spending growth will accelerate to 7.9 percent in 2004 from 7.1 percent in 2003. While state budget situations have not greatly improved, the temporary enhanced federal matching rates over 2003–04, which provided about \$10 billion in additional federal funds, allowed some states to increase payments or expand services, or both.²⁰ We project an acceleration in total Medicaid spending despite slower projected enrollment growth—2.4 percent in 2004, down from 5.0 percent in 2003. After the introduction of Part D in 2006, we expect Medicaid spending growth to decelerate over the forecast horizon from 9.1 percent between 2006 and 2007 to 8.1 percent between 2013 and 2014, near the 8.3 percent average from 1993–2003.

With thirty-four states restricting benefits, Medicaid hospital spending growth slowed in 2003 to 4.9 percent, a 7.0 percentage point decline from the 2002 growth rate of 11.9 percent.²¹ We project that this spending will rebound to 9.9 percent in 2004, because of in-

creased payment rates and expanded services. For the remainder of the forecast interval, we project that Medicaid hospital spending will resemble the overall Medicaid spending trend, slowing to 6.9 percent by 2014.

In contrast to the acceleration in growth expected for aggregate Medicaid spending in 2004, we anticipate a dramatic deceleration in prescription drug spending and weak growth in nursing home spending in 2004. Medicaid drug spending growth is projected to decelerate to 7.1 percent in 2004 from 17.5 percent in 2003. This slowdown reflects states' efforts to reduce drug spending growth, including subjecting more drugs to prior authorization, use of preferred drug lists, supplemental rebates, and increased copayments.²² Nursing home spending is expected to grow a modest 3.4 percent in 2004, compared with 1.0 percent in 2003. This growth rate is, in part, a result of low enrollment growth among the elderly and disabled relative to nondisabled children and adults, and partly attributable to states seeking alternative forms of long-term care, such as home and community-based waivers.²³

Beginning in 2005, we expect Medicaid spending on nursing homes to accelerate to 6.1 percent and grow near that level through 2011. From 2011 onward, we forecast a gradual acceleration in spending growth, with the rate reaching 6.4 percent by 2014. This forecast reflects our expectation of a slight increase in nursing home use by an aging population.

Private Spending

Private health care spending growth is expected to slow to 7.4 percent between 2003 and 2004 from a peak rate of 9.0 percent between 2001 and 2002. This deceleration is driven almost entirely by slower growth in the use of medical care. Factors driving the slowdown include the quiet reimposition of selected tools of utilization management (or UM, such as preauthorization requirements and utilization review) and the increased use of cost sharing to dampen demand for discretionary services under private health insurance.²⁴ We project that private spending will slow to 6.6 percent in 2005 and sharply dip to

3.1 percent in 2006 with the introduction of Medicare Part D. The average annual growth projected for 2003–14 is 6.4 percent, well below the 1965–2003 average of 9.3 percent.

Recent data show medical price inflation remaining stable near its 2002 peak of 3.9 percent. Input price inflation for health care providers slowed slightly in 2003, and more substantially in 2004, following rapid acceleration from 1998 to 2002. The slowing of input price growth is expected to bring medical price inflation down slightly in 2005 and 2006. Over the whole forecast period, medical price inflation is expected to average 1.5 percentage points above economywide consumer price inflation. This differential is driven by provider consolidation and broader provider networks, which have resulted in greater provider leverage in pricing negotiations, and by continued tight supply in nursing labor markets. We note that the rate of growth is high only in comparison with the historically unusual period of the 1990s. The current medical price differential is well below the higher inflationary period of the 1980s, which averaged 3.3 percent above economywide consumer price inflation.

■ **Private health insurance.** We project that private health insurance premium growth per enrollee will slow from 9.9 percent in 2003 to 7.7 percent in 2004. Two major factors contribute to this deceleration. First, growth in the underlying costs of health benefits per enrollee is projected to slow from 8.9 percent in 2003 to 7.7 percent in 2004. Second, a modest downturn in the private health insurance underwriting cycle appears to be under way.

Private health insurance has historically exhibited a cyclical pattern, known as the underwriting cycle, in which growth in premiums first undershoots, and then overshoots, growth in the underlying medical trend.²⁵ We expect 2003 to have been a peak in the underwriting cycle. In 2004, we anticipate premium growth will slow to a rate similar to the medical cost trend. Factors influencing this predicted turnabout are pressures on Blue Cross/Blue Shield plans from state regulators in the face of rising reserves and reduced informational lags associated with ascertaining medi-

cal cost growth.²⁶

Between 1998 and 2003, private health insurance premiums per enrollee rose at an annual rate of 9.3 percent, while per capita disposable personal income grew by only 5.0 percent annually, a gap of more than four percentage points per year. We expect per enrollee premium growth to continue to exceed that of per capita disposable personal income by 1.4 percentage points from 2004 to 2014. This may further strain the current system of employer-sponsored health insurance coverage. Our projection calls for private health insurance enrollment growth to be below population growth each year over the projection period.

■ **Out-of-pocket spending.** Growth in out-of-pocket personal health care spending accelerated to 7.6 percent in 2003, up from 6.0 percent between 2001 and 2002. Private health insurance spending for personal health care grew 8.3 percent in 2003. Given these somewhat similar rates of growth in out-of-pocket and private health insurance spending in 2003, the downward trajectory of the out-of-pocket share of personal health care flattened.

Other than in 2006, when the introduction of Medicare Part D will produce a one-time downward shift in the out-of-pocket share of total health spending, we expect growth in out-of-pocket spending to keep pace with growth in private health insurance spending. This expectation represents a departure from the near-continuous historical decline in the out-of-pocket share that has sheltered many consumers from the impact of rising medical spending. We assume that the take-up of health savings accounts (HSAs) will be gradual and that further increases in all forms of cost sharing will continue at a pace similar to that of the last few years.

Hospitals

We project that total hospital spending growth will remain relatively strong over the projection period. We forecast that growth will peak at 7.0 percent in 2004 and slow thereafter, averaging 6.2 percent for the remainder of the forecast. The aggregate trend

masks diverging paths of the private and public sectors. We project that private hospital spending will decelerate over the near term, as UM tools and new cost-sharing requirements dampen spending. Medicare hospital spending growth, on the other hand, is projected to accelerate in 2004 and 2005—because of higher payments to rural hospitals—and to remain above private hospital spending growth through 2008. Medicaid hospital spending growth is also projected to accelerate sharply to 9.9 percent in 2004.

Both price and utilization contribute to the projected near-term deceleration in private hospital spending. Hospital price inflation peaked in 2002 at 4.9 percent and declined to 4.2 percent in 2003. We expect price growth in 2004 to equal that in 2003. Price inflation is forecast to slow to 3.9 percent in 2005. We anticipate that growth in private-sector use will slow from 3.0 percent in 2003 to 1.3 percent in 2004 and 0.8 percent in 2005.

The combination of continued input cost pressures and increased market power informs our outlook for hospital price inflation. Although hospitals appear to be maintaining tight cost discipline, struggles with the nurse shortage continue. Growth in average hourly earnings is up, while growth in hours remains flat. With compensation estimated to account for almost 62 percent of operating expenses, these data indicate continued inflationary pressure.²⁷ Additional input cost pressure comes from our expectation of continued high price growth for medical devices and pharmaceuticals, which account for approximately 8 percent of hospitals' operating expenses. Also driving price inflation is our belief that hospitals will be able to use their market power, strengthened by consolidations, to wrest payment increases from private payers.²⁸

We believe that the reintroduction of UM tools (such as preauthorization for some stays and increased use of disease management programs), as well as the incorporation of some patient cost sharing, explains the near-term slowdown in private hospital spending.²⁹ These tools are expected to restrain growth in use over the entire forecast horizon. The result

of this slowdown is a reduction in hospital spending as a share of total private spending to 22.7 percent in 2014, from 23.6 percent in 2003.

Home Health And Nursing Home

We project that home health spending growth will accelerate to 13.0 percent in 2004, from 9.5 percent in 2003. Public-sector spending drives this anticipated acceleration. Following a one-time legislated payment reduction in 2003, we expect Medicare home health spending growth to rebound to 15.9 percent in 2004, from 9.9 percent in 2003. Medicaid home health spending is projected to rise from 10.7 percent growth in 2003 to 17.7 percent in 2004. We forecast that private home health spending growth will remain stable at 8.0 percent in 2003 and 2004. Population aging contributes an additional 0.5 percent point to the projected home health spending trend over the latter half of the forecast period.³⁰

We project that nursing home spending growth will be 4.2 percent in 2004, a slight uptick from the 4.0 percent growth seen in 2003. The year 2003 marked the end of most states' upper payment limit (UPL) transition periods; thus, public spending growth slowed and the private sector fueled the total nursing home spending trend.³¹ Over the forecast horizon, Medicaid spending is projected to resume and to again dominate the trend.

We anticipate that the impact of population aging will be minimal in the nursing home sector. We forecast that demographic effects will be most apparent in Medicare nursing home spending, which accelerates from 5.3 percent growth in 2011 to 6.0 percent by 2014, and in Medicaid nursing home spending, which accelerates from 6.1 percent to 6.4 percent over the same period. We expect a slight increase in private nursing home spending in 2014 to 4.2 percent growth, after a steady fall in the growth rate from 2008 to 2013.

IN OUR PROJECTIONS, the most notable impact of Medicare Part D is the change in the sources of funding. We expect that the factors accounting for overall health care spending growth will be little changed by the

addition of the new benefit. Although our forecast does not contain dramatic changes in total health care spending or total prescription drug spending, the added public-sector commitment is significant. With its forecasted share approaching half of total health spending in 2014, the public sector will feel more deeply the financial burden associated with supplying health care benefits to Medicare and Medicaid enrollees. On the private side, a reevaluation of current forms of health insurance coverage may take place as growth in premiums continues to outpace growth in compensation. More broadly, our forecasted increases in both public and private spending presage heightened pressure to find ways to slow cost growth without compromising quality or access.

.....
The authors thank Rick Foster, Paul Spitalnic, Greg Savord, Debbie Chaney, John Shatto, and Art Sensenig for their assistance in producing these projections and Cathy Curtis and other peer reviewers for their helpful comments. The opinions expressed here are the authors' and do not necessarily represent those of the Centers for Medicare and Medicaid Services.

NOTES

1. C. Smith et al., "Health Spending Growth Slows in 2003," *Health Affairs* (Jan/Feb 2005): 185-194. Growth rates are displayed in a manner consistent with National Health Accounts (NHA) conventions. The 2003-2005 average annual growth rate is equal to the level of 2005 spending over the level of the 2003 spending raised to the one-half power (the average growth for the two years, 2004 and 2005). The "2004 growth rate" is shorthand for the "2003-2004 growth rate."
2. S. Heffler et al., "Health Spending Projections through 2013," *Health Affairs*, 11 February 2004, content.healthaffairs.org/cgi/content/abstract/hlthaff.w4.79 (13 January 2005).
3. Boards of Trustees, *2004 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds*, 23 March 2004, www.cms.hhs.gov/publications/trusteesreport/2004/tr.pdf (14 December 2004).
4. Office of Management and Budget, *Budget of the United States Government, Fiscal Year 2006*, www.whitehouse.gov/omb/budget (7 February 2005).
5. 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," 17 September 2004, www.cms.hhs.gov/statistics/nhe/projections-methodology (14 December 2004).
6. We use available historical data (as of November 2004) and updated near-term forecasts to transition to the 2004 Medicare Trustees Report assumptions. Overall, these assumptions are consistent with the most recent data and forecasts.
 7. A sizable proportion of Medicare beneficiaries now pay full retail prices for prescription drugs. Under MMA, private prescription drug plans for Medicare beneficiaries are expected to negotiate favorable prices with retail pharmacies and drug manufacturers.
 8. Smith et al., "Health Spending Growth Slows."
 9. Express Scripts, *Drug Trend Report: Featuring the Pharmacy Benefit Guide* (St. Louis: Express Scripts, 2004), 15–16; and Medco Health Solutions, *2004 Drug Trend Report: Navigating the New Health Economy* (Franklin Lakes, N.J.: Medco, 2004), 18–20.
 10. A. Barrett, "More Bitter Pills for Big Pharma," *Business Week*, 10 January 2005.
 11. OMB, *Budget of the United States Government*.
 12. We view the current classification as preliminary. Research is under way to determine the optimal categorization. The CMS Office of the Actuary is sponsoring a conference in April 2005, during which classifications will be reviewed.
 13. The "maintenance of effort" payments from the states are a source of program financing for Part D, similar to enrollee premiums. Therefore, such payments will not be included in Medicaid spending, just as enrollee premiums are not included in private health insurance or out-of-pocket spending.
 14. Companies cannot sell new Medigap policies that contain drug coverage after the introduction of the new Medicare drug benefit.
 15. M. Stagnitti et al., *Outpatient Prescription Drug Expenses, 1999* (Rockville, Md.: Agency for Healthcare Research and Quality, 2003), 8.
 16. Step therapy requires that a therapeutically equivalent lower-cost generic drug must be used before a more costly brand-name drug is authorized. Express Scripts, *Drug Trend Report*.
 17. C. Arnst, "The Waning of the Blockbuster Drug," *Business Week*, 18 October 2004.
 18. We do not have an alternative forecast showing what physician spending would be without the cuts. Such a projection would necessitate an assumed legislative change, thus violating our current-law framework.
 19. Other changes from MMA include frozen payment updates for lab services, ambulatory surgical center services, and durable medical equipment (DME); competitive bidding and Federal Employee Health Benefits Program pricing for DME; indexing the Part B deductible to the growth in the Part B financing rates; reduced payment updates for home health services; increased payments for ambulance services; temporary increased physician payments in rural areas; the addition of several preventive screening services; and reduced payments for physician-administered drugs and inhalants. For more detail, see the 2004 Medicare Trustees Report.
 20. V. Smith et al., "The Continuing Medicaid Budget Challenge: State Medicaid Spending Growth and Cost Containment in Fiscal Years 2004 and 2005," October 2004, www.kff.org/medicaid/7190.cfm (20 January 2005).
 21. Ibid.
 22. Ibid.
 23. Home and community-based waivers are captured in the "other personal care" sector and not in the nursing home sector of the NHA.
 24. G. Mays et al., "Managed Care Rebound? Recent Changes in Health Plans' Cost Containment Strategies," *Health Affairs*, 11 August 2004, content [.healthaffairs.org/cgi/content/abstract/hlthaff.w4.427](http://www.healthaffairs.org/cgi/content/abstract/hlthaff.w4.427) (14 December 2004).
 25. J. Gabel et al., "Health Benefits in 2004: Four Years of Double-Digit Premium Increases Take Their Toll on Coverage," *Health Affairs* 24, no. 5 (2004): 200–209; and A. Rosenblatt, "The Underwriting Cycle: The Rule of Six," *Health Affairs* 23, no. 6 (2004): 103–106.
 26. Ibid.
 27. Banc of America Securities LLC, "Health Care Facilities Industry Overview May 2004 Third Annual Nonprofit Hospital Survey" (New York: Banc of America Securities, May 2004); and Standard and Poor's, "U.S. Not-for-Profit Health Care 2004 Median Ratios" (New York: Standard and Poor's, 10 June 2004).
 28. A.E. Cuellar and P. Gertler, "Trends in Hospital Consolidation: The Formation of Local Systems," *Health Affairs* 22, no. 6 (2003): 77–87.
 29. Mays et al., "Managed Care Rebound?"
 30. S. Keehan et al., "Age Estimates in the National Health Accounts," *Health Care Financing Review*, 2 December 2004, www.cms.hhs.gov/review/web_exclusives/keeahan.pdf (14 December 2004).
 31. Smith et al., "Health Spending Growth Slows."