TRENDS

Tracking Health Care Costs: Continued Stability But At High Rates In 2005

The cost trend continues to pose affordability problems for U.S. workers.

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ABSTRACT: Health care spending per privately insured person increased 7.4 percent in 2005, marking the third year that the cost trend hovered between 7 and 8 percent following double-digit trends in 2001 and 2002. Data for the first quarter of 2006 suggest continued stability. The trend for 2005 reflected increased growth in spending for hospital and physician care, offsetting a sharp drop in spending growth for prescription drugs. Hospital utilization trends accelerated, while price trends decelerated in 2005. In contrast to stable spending trends in 2005, premium trends continued to decline in 2006, likely reflecting the lagged effects of earlier years' slowing in cost trends and perhaps signaling a turn in the insurance underwriting cycle. [*Health Affairs* 25 (2006): w486–w495; 10.1377/hlthaff.25.w486]

FOR THE THIRD consecutive year, surveys of employers in 2006 point to a deceleration in premium growth for employment-based coverage—this time to 7.7 percent—following the peak increase of 13.9 percent in 2003. Nevertheless, premium growth continues to outpace growth in the economy (5.9 percent) and workers' earnings (3.8 percent) by a wide margin, making health care benefits increasingly unaffordable for employers and employees alike.[1] High premium increases derive from rapid growth in spending on health care services covered by private health insurance. Consequently, rising health care costs remain a focus of current policy debates. This paper aims to inform these debates by examining trends in the cost of health care services covered by private insurance and the long-term premium trends that they underlie.[2]

In June 2005 we reported that cost trends underlying private health insurance in 2004 were virtually unchanged compared with 2003; this reflected stable trends in each of the major health care service categories except prescription drugs, which decelerated for the fifth year in a row.[3] This paper updates that analysis and reports that the trend for 2005 again remained stable. While growth in total health care spending in 2005 was virtually unchanged compared with 2004 and 2003, spending trends varied among the major health service categories. Meanwhile, the slowdown in health insurance premium

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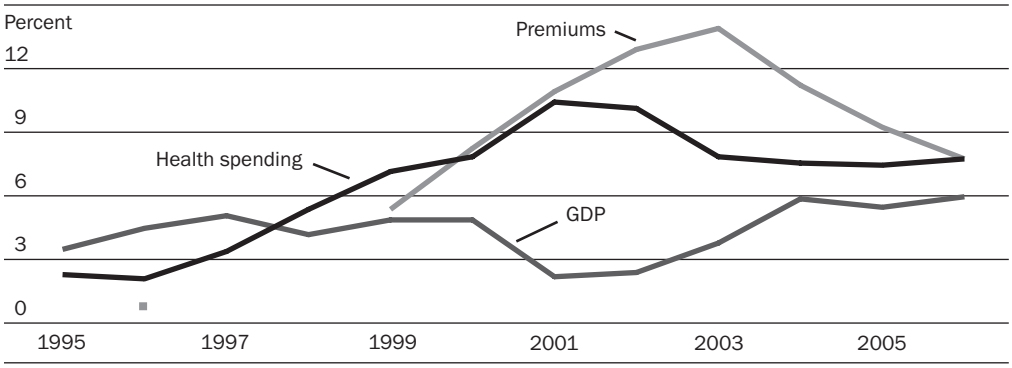
growth continued in 2006, although premium growth slowed less from 2005 to 2006 than it did from 2004 to 2005. This likely reflects the lagged relationship between underlying cost trends and premium trends. The stabilization of the cost trend at a relatively high rate—in relation to incomes—may foreshadow a similar development for premiums in the near future (Exhibit 1).

Study Data And Methods

■ **Cost trend data.** We used the Milliman Health Cost Index (HCI) to examine recent trends in health care spending underlying private health insurance premiums. Milliman constructs this index from both publicly available and proprietary data on provider revenues (a proxy for spending on services) gathered through various provider surveys. The index is designed to reflect the claims expenses experienced by private insurers for a typical policy.[4] Although Milliman removes spending by Medicare from these series, its inability to remove spending by Medicaid and uninsured patients is an important limitation of the HCI's ability to track spending trends underlying private insurance. Nevertheless, a past comparison of the HCI and the National Health Expenditure Accounts (NHEA), compiled by the Centers for Medicare and Medicaid Services (CMS), indicated that the HCI is a good proxy for private health care costs—its intended use.[5] We used the HCI instead of the NHEA because the HCI is available with a shorter time lag. Milliman made changes to the HCI in 2004, the details of which were described in last year's analysis.[6] Although the HCI adjusts data on drug spending to exclude the impact of spending under the new Medicare Part D program, the data for 2006 may be distorted somewhat as a result of the Part D eligibility confusion early in 2006 and to delayed enrollment (as late as the second quarter) into the plan by many seniors.

To gain insight into factors driving growth in hospital spending, we disaggregated the spending trend into its price and quantity components. We used the "all other payers" series of the Bureau of Labor Statistics (BLS) Producer Price Index (PPI) for general medical and surgical hospitals to proxy changes in hospital prices for privately insured patients.[7] This series (hereafter referred to as the "hospital PPI") reflects transactions prices rather than billed charges.[8] Changes in hospital quantity (that is, utilization, length-of-stay, and resource intensity per case) were calculated indirectly as the residual of the HCI for hospital services (inpatient and outpatient combined)

EXHIBIT 1
Annual Percentage Increases In Health Insurance Premiums, Gross Domestic Product (GDP), And Total Health Spending, 1995–2006



SOURCES: Premiums: G. Claxton et al., "Health Benefits in 2006: Premium Increases Moderate, Enrollment in Consumer-Directed Health Plans Remains Modest," *Health Affairs* 25 (2006): w476–w485 (published online 26 September 2006; 10.1377/hlthaff.25.w476). Health spending: Milliman Health Cost Index 2005 series (zero deductible). GDP: U.S. Department of Commerce, Bureau of Economic Analysis.
NOTE: Data on premium increases are not available for all years; they are shown for 1996 and then for 1999–2006.

and the hospital PPI. This quantity index is subject to the same limitation as the HCI: It includes changes in prices and use for Medicaid and uninsured patients. However, a past analysis has shown that the effects of this limitation are small and would not likely change our overall conclusions.[9]

We decomposed the trend in spending on prescription drugs in similar fashion. We used the Consumer Price Index (CPI) for prescription drugs and medical supplies to measure changes in the price of prescription drugs. Like the hospital PPI, the prescription drug CPI reflects actual transaction prices. It accounts for price changes for the existing roster of prescription drugs, as well as changes in prices paid by consumers from the increased use of generic substitutes or lower-price brand-name drugs.[10] We also calculated the residual of the HCI and CPI for prescription drugs. This residual is intended to capture the change in the total number of prescriptions written per person (that is, drug utilization), which itself reflects changes in (1) the proportion of the population that receives at least one prescription during the year, and (2) the average number of prescriptions among all people that receive at least one (that is, intensity). It also reflects changes in the therapeutic mix of drugs prescribed and the introduction of new drugs. When drugs move to over-the-counter status, the HCI, and hence our residual, reflects the reduced prescription drug spending but does not have an offset for what consumers spend for those drugs once they are not paid for by insurance.

Finally, we used data on payroll costs for private (nongovernment) hospitals to understand changes in hospitals' largest operating cost factor. Compiled monthly by the BLS through its Current Employment Statistics survey, these data are useful for their reliability and very short time lag. We report BLS payroll data per capita because this makes them directly comparable to the HCI and to data on premiums.

■ **Premiums and cost sharing.** We examined findings from the 2006 Henry J. Kaiser Family Foundation/Health Research and Educational Trust (KFF/HRET) Survey of Employer-sponsored Health Benefits to glean insights into health insurance premium trends for 2006.[11] The KFF/HRET survey draws from a sample stratified by size and industry and, for 2006, includes responses from 2,122 employers representing approximately 3.3 million firms (with three or more workers) and employing 118 million workers. The response rate was 49 percent among all firms and 50 percent among firms offering health benefits. Respondents include both public- and private-sector firms, which range in size from three to hundreds of thousands of workers. Participating employers were asked to report changes in 2006 in enrollees' premiums for insured health plans and premium equivalents for self-insured plans.

Health Care Spending Trends

Total health care spending per privately insured person increased 7.4 percent in 2005 (Exhibit 2), a rate of growth that was virtually unchanged from 2004 (7.5 percent). This stabilization is a departure from the slowdown in 2002 and 2003, when spending growth declined by more than two percentage points from a peak increase of 10.4 percent in 2001. Health care spending outpaced overall economic growth by a wide margin again in 2005, despite a robust increase of 5.4 percent for the U.S. economy, as measured by nominal per capita gross domestic product (GDP). This stability continued through the first quarter of 2006 (compared with the corresponding quarter in 2005), when spending increased by 7.7 percent.

■ **Hospital spending.** Total hospital spending increases accelerated slightly, from 8.5 percent in 2004 to 9 percent in 2005 (data not shown). This composite value reflects a considerable acceleration in the hospital inpatient cost trend and a slight deceleration in outpatient spending trends. Growth in spending on hospital inpatient services per privately insured person increased to 7.1 percent in 2005, up from 5.3 percent in 2004. Although these growth rates are lower than in 2001, they remain very high relative to rates of growth in

EXHIBIT 2
Annual Percentage Change In Health Care Spending Per Privately Insured Person And Gross Domestic Product (GDP) Per Capita, 1995–2006

	Percent change in spending on type of health care service						
Year	All services	Hospital inpatient	Hospital outpatient	Physician	Prescription drugs	All other	Percent change in GDP
1995	2.2	−3.5	7.9	1.9	10.6	–[a]	3.4
1996	2.0	−4.4	7.7	1.6	11.0	–[a]	4.4
1997	3.3	−5.3	9.5	3.4	11.5	–[a]	5.0
1998	5.3	−0.2	7.5	4.7	14.1	–[a]	4.1
1999	7.1	1.6	10.2	5.0	18.4	–[a]	4.8
2000	7.8	4.1	9.8	6.3	14.5	–[a]	4.8
2001	10.0	8.7	14.6	6.7	13.8	–[a]	2.1
2001	10.4	8.5	14.6	7.7	13.5	8.5	2.1
2002	10.1	8.2	13.0	7.9	13.1	6.9	2.3
2003	7.8	6.1	11.1	6.3	8.9	4.1	3.7
2004	7.5	5.3	11.2	6.0	8.3	6.3	5.8
2005	7.4	7.1	10.4	7.1	4.8	12.0	5.4
2006[b]	7.7	5.1	10.3	7.7	7.2	10.8	5.9

SOURCE: Health care spending data are from the Milliman Health Cost Index 2005 Series (zero deductible). GDP is from the U.S. Department of Commerce, Bureau of Economic Analysis.

NOTES: GDP is in nominal dollars. Estimates may differ from past reports because of data revisions by Milliman and the Bureau of Economic Analysis. Data for 1995 through 2001 (first entry) use weights for a traditional comprehensive plan. Data for the second 2001 entry through 2006 use weights for a blend of that plan and one that has significant copays on a number of services and that is subject to aggressive medical management.

[a] Not available.

[b] Compares January–March 2006 with the same months in 2005.

the mid-1990s, when spending on inpatient care actually declined for four consecutive years. In contrast, the trend for spending on hospital outpatient care per privately insured person slowed slightly in 2005: It increased 10.4 percent compared with 11.2 percent in 2004. Although it has declined substantially from its peak rate of increase (14.6 percent) in 2001, with the exception of the small "All Other Services" category, whose spending rate grew 12.0 percent in 2005, outpatient hospital care was by far the fastest-growing health spending category. Using Milliman weights on proportions of private insurance claims by type of service, growth in spending on inpatient and outpatient hospital care accounted for 51 percent of the total increase in health care spending in 2005, which is greater than the share of spending attributable to hospital care.

The small acceleration of spending trends for hospital care conceals divergent trends for hospital utilization and unit prices (Exhibit 3). The trend for hospital utilization (as measured by our residual hospital quantity index) increased 4.5 percent in 2005, compared with an increase of only 1.3 percent in 2004 and 0.7 percent in 2003. This increasing utilization trend may be attributable in part to the recent economic recovery driving greater demand for hospital services, as well as to transitory factors affecting trends.[12] There was an especially severe flu season in 2005 and a shortage of vaccinations that might have contributed to increased hospital use.

At the same time, growth in unit prices for hospital services fell sharply to 4.3 percent in 2005, from 7.1 percent in 2004. Last year we reported the first slowdown in the hospital price trend in seven years, when the increase dropped from a peak of 8 percent in 2003.

We can only speculate about the reasons for this sharp drop. One factor might be increasing competition from physician-owned ambulatory settings, such as ambulatory surgery centers and imaging centers, and the in-

EXHIBIT 3
Decomposition Of The Hospital Spending Trend, 1995–2006

	Annual percent change per capita		
Year	Spending on hospital services	Hospital prices	Quantity[a]
1995	0.8	3.7	−2.8
1996	0.5	1.8	−1.2
1997	1.3	1.7	−0.4
1998	3.5	1.9	1.5
1999	5.8	2.5	3.2
2000	7.0	3.3	3.6
2001	11.8	3.6	7.8
2001	11.5	3.6	7.6
2002	10.7	5.2	5.2
2003	8.7	8.0	0.7
2004	8.5	7.1	1.3
2005	9.0	4.3	4.5
2006[b]	8.0	3.9	3.9

SOURCES: Data on hospital spending are from the Milliman Health Cost Index 2005 Series (zero deductible) and include both hospital inpatient and outpatient services. Hospital prices are from the Bureau of Labor Statistics "all other payers" Producer Price Index (PPI) series for general and surgical hospitals (data accessed 27 June 2006).

NOTE: Estimates may differ from past reports because of data revisions by Milliman and the Bureau of Labor Statistics. Data for 1995 through 2001 (first entry) use weights for a traditional comprehensive plan. Data for the second 2001 entry through 2006 use weights for a blend of that plan and one that has significant copays on a number of services and that is subject to aggressive medical management.

[a] Calculated as the residual of the hospital spending and hospital price trends.

[b] Compares January–March 2006 with the same months in 2005.

creased capabilities of some physicians' offices. The price trend might have slowed from the increasing share of services provided in non-hospital facilities as well as the effects of a more competitive market. Another possible factor is that some hospitals, after a few years of price trends exceeding the trends in their unit costs, might have achieved their goals in restoring operating margins to desired levels and are now seeking price increases that are more in line with their cost trends.

The slowdown in the hospital price trend also could reflect an easing of hospital labor shortages. After hospital wage rate trends peaked at 6.1 percent in 2001, trends have stabilized at 4–5 percent per year (Exhibit 4).[13] However, one would expect a sizable lag from changes in the trend in wage rates to changes in hospital price trends. When these are considered together, we doubt that the factors discussed above completely explain the sharp slowing in the price trend. Data from the first quarter of 2006 indicate continuation of the slowing price trend and a modest decline in the utilization trend as well, partly the result of a milder flu season.

■ **Prescription drugs.** The trend in prescription drug spending decelerated in 2005 for the sixth year in a row, with a particularly sharp drop from a 8.3 percent increase in 2004 to a 4.8 percent increase in 2005 (Exhibit 5). In 2005, growth in drug spending accounted for only 14 percent of the total increase in health care spending, well below its contribution in previous years, especially compared with the late 1990s, when it accounted for almost half.

Virtually all of the slowing in the spending trend is attributable to a slowing in the growth of usage (shown as "quantity" in Exhibit 5)—from 4.8 percent in 2004 to 1.2 percent in 2005. An important portion of this appears to be associated with safety concerns

EXHIBIT 4
Hospital Payroll Costs, Hours Worked, And Underlying Wage Rates, 1995–2006

		Annual percent change per capita		
		Hospitals		
Year	Payroll[a]	Total hours worked[b]	Average hourly wage	All industries, average hourly wage
1995	2.5	−0.9	3.4	2.8
1996	2.3	−0.5	2.8	3.3
1997	4.0	1.7	2.3	3.9
1998	4.0	1.2	2.8	4.0
1999	2.2	−0.9	3.2	3.6
2000	3.5	0.2	3.3	4.0
2001	8.1	1.9	6.1	3.8
2002	6.6	1.3	5.2	2.9
2003	6.3	2.0	4.2	2.7
2004	5.8	1.0	4.8	2.1
2005	6.9	2.0	4.8	2.8
2006[c]	6.0	1.0	4.9	3.4

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, National Employment, Hours, and Earnings series for general medical and surgical hospitals (data accessed 27 June 2006).

NOTE: Estimates may differ from past reports because of data revisions by the Bureau of Labor Statistics.

[a] Product of total hours worked and average hourly wage.

[b] Product of total production workers (excludes executives and managers) and average hours per week of production workers.

[c] Compares January–March 2006 with the same months in 2005.

with COX-2 inhibitors. Vioxx and Bextra were removed from the market in September 2004 and April 2005, respectively, and sales of Celebrex, although increasing initially after the withdrawal of Vioxx, ultimately declined as well. COX-2 inhibitor sales declined from 2.7 percent of overall pharmaceutical sales in mid-2004 to 0.6 percent at the end of 2005.[14] Generally increased caution on the part of consumers and physicians in response to news about these drugs' unexpected side effects might also have affected the use of other classes of drugs.

In 2005, drug price trends, as measured by the CPI, remained relatively stable at a low rate of growth.[15] As in 2004, this likely reflects, in part, market responses to continuing growth in cost-sharing differences across the payment tiers for generic, preferred brand, and other brand drugs.[16]

Given the role that COX-2 inhibitors played in lowering the utilization trend in 2005 and lower rates of use in the baseline from which 2006 trends are calculated, it is not surprising that the utilization trend increased in the first quarter of 2006 to 2.5 percent. Price trends also increased. Medicare Part D might have played a role in this, either through data problems described above or through its many possible impacts on prices. At 7.2 percent, the trend in spending for pharmaceuticals in 2006 is not very different from the rate in 2004.

■ **Physician care and other services.** Spending on physician care per privately insured person increased 7.1 percent in 2005, compared with a 6 percent increase for 2004 (Exhibit 2). Decomposition into price and utilization factors (data not shown) indicates that all of the increase in the spending trend reflects utilization (5.1 percent versus 1.9 percent for price increase).[17] Some of the utilization increase might reflect expansions of ancillary services provided in physicians' offices.

EXHIBIT 5
Decomposition Of The Prescription Drug Spending Trend, 1995–2006

	Annual percent change per capita		
Year	Spending on prescription drugs	Prescription drug prices	Quantity[a]
1995	10.6	1.9	8.5
1996	11.0	3.3	7.4
1997	11.5	2.6	8.6
1998	14.1	3.8	9.9
1999	18.4	5.7	12.0
2000	14.5	4.4	9.6
2001	13.8	5.4	8.0
2001	13.5	5.4	7.7
2002	13.1	5.2	7.5
2003	8.9	5.2[b]	3.5
2004	8.3	3.3	4.8
2005	4.8	3.5	1.2
2006[c]	7.2	4.6	2.5

SOURCES: Data on prescription drug spending are from the Milliman Health Cost Index 2005 Series (zero deductible). Prescription drug prices are from the Bureau of Labor Statistics Consumer Price Index (CPI) for prescription drugs and medical supplies (data accessed 27 June 2006).

NOTES: Data for 1995 through 2001 (first entry) use weights for a traditional comprehensive plan. Data for the second 2001 entry through 2006 use weights for a blend of that plan and one that has significant copays on a number of services and that is subject to aggressive medical management.

[a] Calculated as the residual of the prescription drug spending and price trends.

[b] We used an adjusted estimate of drug price growth in 2003 rather than the published estimate (3.1 percent) because the prescription drug CPI continued to include Claritin and Prilosec in 2003, despite the fact that both had been reclassified to over-the-counter status. For further discussion, see Note 15 in text.

[c] Compares January–March 2006 with the same months in 2005.

Also, some of the increased spending on specialty pharmaceuticals—the fastest-growing component of drug spending—could be a factor in the physician services component, since many are administered in physicians' offices and are recorded as spending for physician services. The uptick in utilization could also reflect physicians' response to years of low payment rate increases from both private and public payers—the notion of physicians pursuing target incomes.[18] The trend in physician spending increased somewhat further during the first quarter of 2006.

Health Insurance Premium Trends

Findings from the KFF/HRET annual survey suggest that premium trends for employment-based insurance continue to slow in 2006 but remain high in relation to trends in earnings. The survey reports that premiums increased 7.7 percent on average in 2006, down sharply from the 9.2 percent increase in 2005.

However, after adjustments for changes in benefit structure, including increased deductibles, coinsurance, and copayments, referred to as "benefit buydowns," the decline in premium growth appears less meaningful. According to an analysis of premium pricing data compiled by Morgan Stanley and based on data from Hewitt Associates, large employers bought down benefits by 2.3 percent in 2006, compared with 0.7 percent in 2005 and 2.1 percent in 2004.[19] Benefit buydowns continued to be much larger for small employers but did not increase much in 2006. Small employers bought down benefits by 5.9 percent in 2006, compared with 5.5 percent in 2005 and 8.8 percent in 2004.[20] Although a shift to consumer-driven health plans accounts for a por-

tion of this trend, those plans' market share is still small enough to conclude that most of the change in benefit structure reflects increased patient cost sharing in mainstream health maintenance organization (HMO) and preferred provider organization (PPO) plans.[21] Incorporating this perspective, an important part of the slowing of the premium trend reflects benefit changes and indeed might not be providing much relief to consumers.

Since premium trends typically lag cost trends by eighteen months, and cost trends have been stable since 2004, one needs to raise the question about whether some of the decline in premium growth could signal a turn in the health insurance underwriting cycle—the insurance industry's interdependent pattern of profitability and pricing—toward its so-called soft phase.[22] During that phase, insurers engage in vigorous price competition, sometimes at the expense of profitability, to gain market share.

"An important part of the slowing of the premium trend reflects benefit changes and indeed might not be providing much relief to consumers."

We have noted that benefit buydowns have been a major factor since 2002. At the same time that patient cost sharing is increasing, employers continue to refrain from raising employees' share of premiums. In 2006, employees are paying, on average, 15 percent of the cost of single coverage and 26 percent of the cost of family coverage—percentages that have been relatively stable for several years now.[23]

Outlook For The Future

The question of when purchasers of health insurance might expect to see some relief from rapidly rising health care costs and insurance premiums has become a perennial one. The results of this study suggest that although premium trends could decline further as a result of the workings of the underwriting cycle, trends in underlying costs appear to have stabilized at a rate that well exceeds growth in incomes. Indeed, recognizing that over time premium increases cannot be lower than increases in underlying costs without continued buying down of the benefit structure, major relief from the problems in financing health care does not appear to be on the horizon.

Looking at potential drivers of cost trends, we can identify both drivers likely to push cost trends higher and others likely to lower cost trends. Advances in medical technology are always the "wild card," since short-term changes in their contribution to rising costs cannot even be measured, let alone predicted. Many insurers are concerned with the growth of costly specialty drugs, such as biologics, which have grown much more rapidly than those of pharmaceuticals in general. A recent Medco report estimates that spending on specialty pharmaceuticals increased 16.9 percent in 2005, compared with an estimate of 5.4 percent for all pharmacy. Spending on this category is nearing 10 percent of drug spending, but Medco estimates that as much as 70 percent of spending on specialty pharmaceuticals may be billed under medical benefits (those administered by physicians) and not reflected in the pharmacy data.[24]

Two key factors will tend to drive cost trends higher. One is the rapid expansion of specialty facilities, including both hospital inpatient and outpatient facilities, freestanding centers, and additional ancillary service capability in physician offices.[25] The combination of supply creating demand and the effects of increased physician self-referral could mean that these expansions will increase spending.

The continuing rise in obesity in the United States is also a major cost driver. Kenneth Thorpe and colleagues estimate that 27 percent of real per capita growth in spending from 1987 to 2001 is attributed to increasing rates of obesity and increasing relative spending by those who are obese.[26]

Two factors stand out as having potential to lower spending trends. First, in the pharmaceutical sector, a number of important block-

buster drugs have either recently lost patent protection (Zocor) or are scheduled to lose patent protection in the near future (Zoloft). Second, the trend toward increased patient cost sharing has accelerated. To the degree that incentives are structured to encourage use of lower-cost providers or treatment alternatives, the impact of increased cost sharing could be larger than standard estimates of demand elasticity imply. And with many consumers responding to increased incentives at the same time, community-level effects could either amplify the impact—for example, learning from peers how to economize—or diminish it, if physicians recommend more services to take up their excess capacity.

When listening to discussions in policy circles about the potential for a slowing of health care cost trends, one does not hear much about the factors we have outlined in this paper. Instead, we are told by political leaders about the potential for health information technology (IT) to save money by increasing the quality of care and reducing duplication in diagnostic procedures, the potential of medical liability reform to reduce so-called defensive medicine, the potential of quality improvements motivated by pay-for-performance (P4P) to reduce costs, and the potential for increased price transparency to lower health services prices. All or some of these scenarios might come to pass, but the most likely outcome over the next few years is that costs will continue to outpace incomes and that private health insurance will become increasingly unaffordable for more Americans.

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NOTES

1. G. Claxton et al., "Health Benefits in 2006: Premium Increases Moderate, Enrollment in Consumer-directed Health Plans Remains Modest," *Health Affairs* 25 (2006): w476–w485 (published online 26 September 2006; 10.1377/hlthaff.25.w476). Calculation of growth in the economy refers to per capita GDP for the first quarter of 2006 as compared with the same months in 2005.
2. We use the terms "cost" and "spending" interchangeably. Conceptually, the primary interest is in costs, which reflect the resources devoted to health care that are not available to produce other goods and services. Practically, most available data, including those used in this report, reflect spending, or what is paid for health services by those who purchase them (or received by providers of health services).
3. B.C. Strunk, P.B. Ginsburg, and J.P. Cookson, "Tracking Health Care Costs: Declining Growth Trend Pauses in 2004," *Health Affairs* 24 (2005): w286–w295 (published online 21 June 2005; 10.1377/hlthaff.w5.286).
4. The index that Milliman provides to its clients—many of them insurers—is intended to assist them in forecasting their claims payments and comparing them with those of others. It simulates trends in claims for a "standard" private health insurance policy with a $250 deductible and various other types of cost sharing for physician office visits, hospital care, and prescription drugs. To avoid the bias of a fixed deductible becoming a smaller part of spending over time, we used a version of the index that reflects a hypothetical policy with no deductible. The 1995–2001 data reflect weights appropriate for a traditional comprehensive major medical plan. The more current data (2001–2006) reflect a blend of such a plan and a plan with sizable copayments on a number of services, which is subject to aggressive medical management. These are portrayed in Exhibits 2, 3, and 5 as two rows of data for 2001.
5. B.C. Strunk, P.B. Ginsburg, and J.R. Gabel, "Tracking Health Care Costs: Growth Accelerates Again in 2001," *Health Affairs* 21 (2002): w299–w310 (published online 25 September 2002; 10.1377/hlthaff.w2.299).
6. Strunk et al., "Tracking Health Care Costs: Declining Growth Trend Pauses in 2004." In this paper we use the "HCI 2005 Series," which uses weights to reflect the overall private health insurance market.
7. The "all other payers" series is limited for our purposes by the fact that it includes so-called self-pay patients as well as patients with private

insurance. But the proportion of self-pay patients relative to patients with private insurance is small and does not change rapidly over time.

8. For more information about the hospital PPI's methodology, see B. Catron and B. Murphy, "Hospital Price Inflation: What Does the New PPI Tell Us?" *Monthly Labor Review* 119, no. 7 (1996): 24–31. We considered the hospital portion of the CPI as an alternative to the hospital PPI, but the hospital CPI is less useful for our purposes because it uses billed charges for hospitals not responding to its survey. The PPI, in contrast, drops such nonresponders.
9. B.C. Strunk and P.B. Ginsburg, "Tracking Health Care Costs: Trends Turn Downward in 2003," *Health Affairs* 23 (2004): w354–w362 (published online 9 June 2004; 10.1377/hlthaff.w4.354).
10. Bureau of Labor Statistics, "Measuring Price Change for Medical Care in the CPI," 22 February 2006, http://www.bls.gov/cpi/cpifact4.htm (accessed 8 September 2006).
11. Claxton et al., "Health Benefits in 2006."
12. The literature on the impact of overall economic trends on health care spending suggests a relationship that has an extensive lag. So increased spending for hospital care in 2005 could be a reflection of the initial recovery from recession a few years earlier. For a discussion of these models, see Centers for Medicare and Medicaid Services, "Projections of National Health Expenditures: Methodology and Model Specification," 21 February 2006, http://www.cms.hhs.gov/NationalHealthExpendData/downloads/projections-methodology-2006.pdf (accessed 8 September 2006).
13. P.I. Buerhaus, D.O. Staiger, and D.I. Auerbach, "New Signs of a Strengthening U.S. Nurse Labor Market?" *Health Affairs* 23 (2004): w526–w533 (published online 17 November 2004; 10.1377/hlthaff.w4.526).
14. IMS Health and Goldman Sachs Research estimates; Christopher McFadden, managing director, Goldman Sachs, personal communication, 11 July 2006.
15. Based on discussions with the BLS, we report the 2003 prescription drug price increase as 5.2 percent rather than the published estimate of 3.1 percent because the prescription drug CPI continued in 2003 to include the nonsedating antihistamine Claritin and the proton-pump inhibitor Prilosec, even though these drugs were reclassified to over-the-counter status in December 2002 and September 2003, respectively. According to the BLS, the drug CPI would have grown by 2.1 percentage points more in 2003 had these two drugs been removed from the sample (Bureau of Labor Statistics, CPI Services Division, personal communication, 12 May 2005; estimates are calculations using the research index calculator).
16. Henry J. Kaiser Family Foundation/Health Research and Educational Trust, *Employer Health Benefits: 2006 Annual Survey*, 26 September 2006, http://www.kff.org/insurance/7527/index.cfm (accessed 26 September 2006).
17. Price data come from the BLS PPI for Offices of Physicians. Similar to other quantity measures in this paper, physician utilization is calculated indirectly as the residual of the HCI for physician services and the physician PPI.
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