

# TRENDS

## Tracking Health Care Costs: Growth Accelerates Again In 2001

Hospital costs have secured their place as the leading driver of health care cost increases, for the second straight year.

by **Bradley C. Strunk, Paul B. Ginsburg, and Jon R. Gabel**

**ABSTRACT:** For the first time in more than a decade, health care spending per capita rose at a double-digit rate in 2001, growing 10 percent. Spending on hospital services (both inpatient and outpatient) surged by 12 percent in 2001, reflecting increases in both hospital payment rates and use of hospital services. Hospital spending was the key driver of overall cost growth, accounting for more than half of the total increase. Prescription drug spending growth declined for the second straight year and was overtaken by spending on outpatient hospital services as the fastest-growing component of total spending. Driven by these cost trends and other factors, premiums for employment-based health insurance increased 12.7 percent in 2002—the largest increase since 1990. But taking account of the sizable amount of “benefit buy-down” in 2002, the true increase in the cost of health insurance for employers and employees was about 15 percent. Early evidence from 2002 suggests that health care cost trends are now beginning to slow, possibly setting the stage for more moderate premium growth in the future.

TRENDS IN health care spending returned to the national spotlight during the past year. One year ago in this journal, we reported that growth in health care costs underlying private health insurance reached its highest level in a decade in 2000, driving rising premiums.<sup>1</sup> The effect of rapidly rising costs on premiums was exemplified more recently by the announcement of the California Public Employees Retirement System (CalPERS)—the nation’s second-largest purchaser of health insurance after the federal government—that premiums for its health maintenance organization (HMO) and two preferred provider organization (PPO) offer-

ings would rise by 25 percent, 22 percent, and 19 percent, respectively, in 2003.<sup>2</sup> As other employers across the country face large premium increases, cost control has become the top priority of employee benefit managers.<sup>3</sup> Meanwhile, health care affordability has quickly become one of the top health issues on the minds of the nation’s voters.<sup>4</sup>

Health care cost trends not only drive long-term premium trends but also influence the types of health insurance products employers offer their employees, benefit design, and workers’ out-of-pocket costs. Cost trends also affect employers’ decisions to offer any insurance at all and employees’ decisions to take up

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coverage. For these reasons, rapid growth in health care costs threatens to undercut health coverage in America from a number of fronts.

The problem of rising costs intensified in 2001. Using the most recent cost trend data available, we report that annual growth in health care spending accelerated yet again, reaching double digits for the first time in more than a decade. Growth in spending on hospital services was by far the largest contributor to overall cost growth. Employers' health premium trends accelerated to their highest level since 1990, although the cost of insurance to employers and employees was even higher because of widespread "benefit buy-down," or reduced benefits and increased employee cost sharing.

### Data Sources

We use a variety of data sources to examine the health care cost trends that underlie private health insurance and the implications for employer coverage premiums and consumers' out-of-pocket spending. We chose data sources based on a given source's ability to provide reliable estimates with a short time lag, as we have done in prior analyses.

■ **Cost trend data.** To examine recent cost trends, we used the Milliman USA Health Cost Index (HCI), which measures the health care spending increases that underlie private health insurance premiums.<sup>5</sup> Milliman USA constructs this index from both publicly available and proprietary data on provider revenues (a proxy for spending on services) gathered through surveys of providers. Since the index is designed to reflect claims expenses experienced by private insurers for a typical policy, the HCI is limited to measuring health services that tend to be insured: inpatient and outpatient hospital services, physician services, and prescription drugs.<sup>6</sup> Because these provider revenue data reflect all patients, Medicare payments to providers are removed in an effort to arrive at a series more closely representing the population covered by private health insurance. Milliman USA is unable to remove revenues attributable to Medicaid and uninsured patients, which is a limitation in the

HCI's ability to track spending for privately insured patients.

Because the HCI contains proprietary data, Milliman USA does not release detailed information about how the index is constructed. However, we assessed its ability to measure cost trends by comparing it with the National Health Accounts (NHA) maintained by the Centers for Medicare and Medicaid Services (CMS), which is widely considered to be the "gold standard" for tracking health spending. More specifically, we compared the HCI with the private personal health care spending series, minus spending for services not usually covered by the HCI, such as dental and nursing home care. We found that the HCI tracks this NHA series closely. Over the ten-year period 1990–2000, both the HCI and the NHA series grew by an average annual rate of 4.8 percent. In any given year, growth in the two health care spending measures differs by an average of 1.2 percentage points. Therefore, the HCI is a good measure of health care costs, and we use it because it is available with a shorter time lag than is true for the NHA data.

To gain insight into the factors driving growth in spending on hospital services, we broke down the HCI's hospital spending trend into price and quantity components. We used the Bureau of Labor Statistics (BLS) Producer Price Index (PPI) for hospitals to measure changes in hospital prices. More specifically, we used the "all other payers" series for "general medical and surgical hospitals" (hereafter referred to as the "hospital PPI"), to exclude the direct effect of changes in Medicare and Medicaid reimbursement rates. The hospital PPI series we used reflects negotiated payment rates rather than billed charges. When collecting baseline price quotes at each hospital in its sample, the BLS randomly selects hospital patient bills for a predetermined set of diagnosis-related groups (DRGs) and outpatient services. Using these patient bills, the BLS then records the nature of the hospital stay or outpatient service, the reimbursement method and payer type, and the full reimbursement of the stay or service (that is, the base period price quote). When the BLS re-

turns in future periods to obtain new price quotes, it attempts to reprice the original patient bills. Since the sample of patient bills (and therefore the characteristics of those bills in terms of what services are delivered, length-of-stay, method of reimbursement, and so on) remains constant over time, the hospital PPI is not usually affected by changes in length-of-stay.<sup>7</sup> However, depending on the method of reimbursement, the PPI is vulnerable to being influenced by changes in resource intensity.<sup>8</sup>

We calculated a hospital “quantity” index as the residual of the Milliman HCI for hospital services (inpatient and outpatient combined) and the hospital PPI. This component is driven by factors that influence the quantity and mix of services used by consumers and, therefore, measures the impact of changes in hospital use and length-of-stay on spending.

We analyzed the trend in spending on physician services in similar fashion. We used the BLS’s “offices of physicians” PPI series (hereafter referred to as the “physician PPI”) to measure changes in the price of physician services. This series includes the effect of changes in Medicare reimbursement rates; however, we used data on Medicare updates for physicians to remove this effect so that the series was more reflective of price changes that affect the privately insured population. The physician PPI methodology is similar to that of the hospital PPI. The quantity index is again calculated as the residual of the HCI for physician services and the physician PPI.

We used data on payroll costs for hospitals to understand changes in their largest input cost factor. These data, compiled monthly by the BLS and known as the Employment, Hours, and Earnings (EHE) series, are useful for their reliability and very short time lag. Both private and public employers are in the sample, which excludes nonsalaried health professionals, such as physicians or contracted workers from temporary agencies. Payroll costs are the product of total production (nonsupervisory) workers, average weekly hours per worker, and the average hourly wage. We report BLS payroll data per capita. This is the most relevant measure for policy-

makers; it is directly comparable to the HCI data and to data on premiums (what is charged to cover an individual or family).<sup>9</sup>

■ **Premiums and cost sharing.** Data on premiums and consumer cost-sharing requirements for employment-based health insurance come from the Henry J. Kaiser Family Foundation/Health Research and Educational Trust (HRET) Survey of Employer-Sponsored Health Benefits and its predecessor surveys. The 2002 Kaiser/HRET survey is based on a stratified random sample of 2,014 employers with three or more workers selected from Dun and Bradstreet’s listing of private and public businesses that have entered the credit market. Kaiser/HRET surveyors collected data through telephone interviews with employee benefit managers conducted during January–May 2002. Respondents were asked to report premium information that was in effect at the time of the interview. The survey continues the health benefit surveys conducted since 1987 by the Health Insurance Association of America (HIAA) and KPMG Peat Marwick. The core questions in these surveys are virtually identical. For the years 1991, 1992, 1994, and 1997, only firms with 200 or more workers were sampled.

## Health Care Spending Trends

Total health care spending per capita increased 10 percent in 2001—2.2 percentage points higher than in 2000 (Exhibit 1). This marked the fifth straight year that growth in spending exceeded the previous year’s rate. This long period of accelerating annual spending growth is in stark contrast to the mid-1990s, when annual spending growth was low and decreased from one year to the next. With the economy in recession during the last three quarters of 2001, health care spending growth for the year exceeded that of gross domestic product (GDP) per capita by more than eight percentage points.

■ **Hospital spending.** Growth in hospital spending now stands out as the key driver of growth in total spending. Spending on hospital inpatient services increased 7.1 percent in 2001—nearly three times the 2000 rate of in-

**EXHIBIT 1****Annual Percentage Change Per Capita In Health Care Spending And Gross Domestic Product, 1991–2002**

Year	Spending on type of health care service					Gross domestic product (GDP)
	All services	Hospital inpatient	Hospital outpatient	Physician	Prescription drugs	
1991	6.9%	3.5%	16.8%	5.4%	12.4%	1.8%
1992	6.6	2.8	13.9	5.9	11.7	4.2
1993	5.0	4.8	8.9	3.3	7.1	3.8
1994	2.1	-2.0	8.7	1.7	5.2	4.9
1995	2.2	-3.5	7.9	1.9	10.6	3.7
1996	2.0	-4.4	7.7	1.6	11.0	4.4
1997	3.3	-5.3	9.5	3.4	11.5	5.2
1998	5.3	-0.2	7.5	4.7	14.1	4.3
1999	7.1	1.6	10.2	5.0	18.4	4.4
2000	7.8	2.5	11.5	6.3	14.5	4.7
2001	10.0	7.1	16.3	6.7	13.8	1.4
2002 <sup>a</sup>	8.8	6.2	13.6	5.7	13.0	1.8

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

**NOTES:** GDP is in nominal dollars. Milliman USA HCI data reflect the August 2002 revision. As a result of this revision by Milliman USA, some estimates for 1998–2000 changed from what we have reported in the past.

<sup>a</sup>Data through June 2002, compared with corresponding months in 2001.

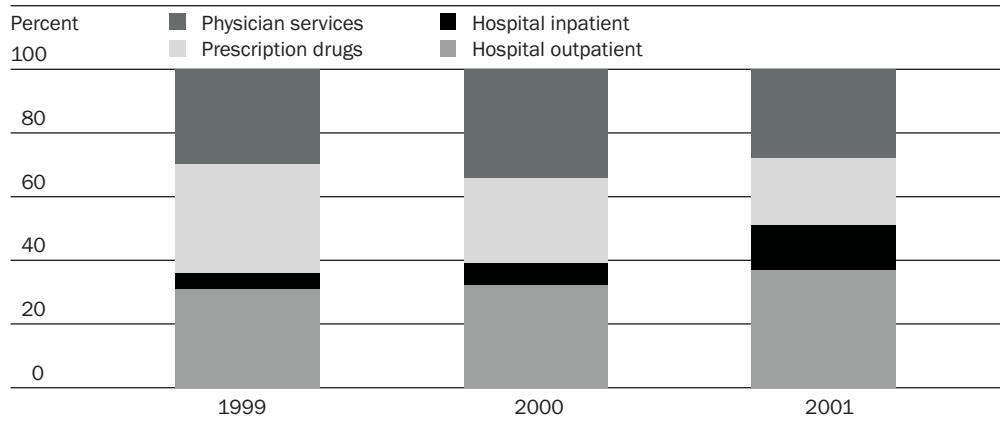
crease and by far the largest increase in more than a decade. Moreover, the 2001 growth rate represented a remarkable reversal compared with five years ago, when spending on inpatient services actually declined by 5.3 percent. Meanwhile, spending on outpatient services grew at such a high rate—16.3 percent in 2001—that it overtook prescription drug spending as the fastest-growing component of total spending. Taken together, growth in spending on hospital inpatient and outpatient services accounted for more than half of the growth in total spending (Exhibit 2).

The accelerating trend in hospital spending is attributable in part to higher prices being paid for hospital services. Growth in hospital prices (for both inpatient and outpatient services, as measured by the hospital PPI) has, like hospital spending, accelerated each year since 1997, reaching 3.6 percent in 2001 (Exhibit 3). This represents a reversal of the trend from 1994 to 1997, when annual hospital price increases slowed steadily from 4.0 percent to 1.7 percent.

Over the past few years hospitals have regained a sizable amount of negotiating leverage over health plans and have used it to demand large payment rate increases.<sup>10</sup> The shift in the balance of power between hospitals and health plans is the result of consumers' demand for broad networks, consolidation in the hospital industry, and recent hospital capacity shortages. Hospitals' subsequent "pushback" for higher payment rates reflects, in part, an effort to reverse the effect of agreeing to increasingly discounted payment rates during the mid-1990s. A recent surge in hospital wage rates is likely another factor driving hospitals to demand large payment rate increases (see below). Finally, hospitals may be attempting to gain higher rates for privately insured patients to make up for a recent decline in margins for Medicare patients.<sup>11</sup>

The other, and indeed more important, factor driving up hospital spending is rapid growth in the use of hospital services. During the mid-1990s hospital utilization (as measured by our residual hospital quantity index)

## EXHIBIT 2 Shares Of Overall Health Care Spending Growth, 1999–2001



**SOURCE:** Milliman USA Health Cost Index (HCI), zero deductible.

**NOTES:** Milliman USA HCI data reflect the August 2002 revision. As a result of this revision by Milliman USA, some estimates for 1999 and 2000 changed from what we have reported in the past.

declined from year to year by as much as 2.8 percent, probably reflecting efforts by managed care to reduce hospital admission rates, lengths-of-stay, and outpatient procedures. Since that time, however, the utilization trend has increased steadily, and in 2001 it surged by an annual rate of 8.0 percent. The 2001 increase in hospital use accounted for about two-thirds of the total increase in hospital spending.

Much of this growth in hospital use is likely associated with the recent retreat from tightly managed care. Recent evidence from the Center for Studying Health System Change's Community Tracking Study (CTS) site visits suggests that health plans have reduced their reliance on various tools, such as precertification requirements, to tightly manage utilization and are introducing new, less restrictive products, such as those that allow "direct ac-

## EXHIBIT 3 Decomposition Of Hospital Spending Trends, Annual Percentage Change, 1994–2002

	Spending on hospital services	Hospital prices	Quantity <sup>a</sup>
1994	1.8%	4.0%	-2.2%
1995	0.8	3.7	-2.8
1996	0.5	1.8	-1.2
1997	1.3	1.7	-0.4
1998	3.4	1.9	1.5
1999	5.8	2.5	3.2
2000	7.1	3.3	3.6
2001	12.0	3.6	8.0
2002 <sup>b</sup>	11.2	4.1	6.8

**SOURCES:** Data on hospital spending are from the Milliman USA Health Cost Index (HCI), zero deductible, and include both hospital inpatient and outpatient services. Hospital prices are from the Bureau of Labor Statistics' "other payers" Producer Price Index (PPI) series for general and surgical hospitals.

<sup>a</sup> Calculated as the residual of the hospital spending and hospital price trends.

<sup>b</sup> Data through June 2002, compared with corresponding months in 2001.

cess” to specialists.<sup>12</sup> There also has been a retreat from provider risk contracting, which may have reduced incentives for providers to control utilization.<sup>13</sup> Data from the Kaiser/HRET employer survey corroborate these findings.<sup>14</sup> For example, the percentage of employees in indemnity, PPO, and point-of-service (POS) plans who are subject to concurrent review of hospital stays has fallen from 79 percent in 1996 to 62 percent in 2002. Also, the percentage of workers who are enrolled in HMO and POS plans that require a referral from a primary care doctor to see a specialist and are subject to utilization review to obtain diagnostic tests (such as magnetic resonance imaging, or MRI) declined by eleven percentage points over the past three years. It is possible that the hospital utilization trend may also reflect a more difficult case-mix (sicker patients), but this is unlikely to have had such a large impact in such a short time.

■ **Prescription drug spending.** The Milliman HCI indicates that for the second year in a row, the rate of increase in prescription drug spending slowed compared with the previous year. Spending on prescription drugs in 2001 increased 13.8 percent—0.7 percentage points lower than the rate of increase in 2000 and 4.6 percentage points below the 1999 growth rate. Moreover, the 2001 increase in drug spending accounted for only about 21 percent of the growth in overall spending, compared with 34 percent two years earlier, although much of this change is attributable to the higher growth in hospital spending. The continuing increase in the use of three-tier drug copayment structures in health benefit offerings has likely been an important factor in slowing drug spending growth.<sup>15</sup> Other important factors in the slowdown likely include a continuing decline in the number of “blockbuster” drugs that have been brought to market in recent years and a number of recent and important drug patent expirations (most notably for the drug Prozac).<sup>16</sup>

**“For the second year in a row, the rate of increase in drug spending slowed compared with the previous year.”**

■ **Spending on physician services.**

Spending on physician services increased 6.7 percent in 2001, which was 0.4 percentage points higher than the 2000 increase. Like spending on hospital services, spending on physician services has been trending upward since the mid-1990s, but at a much slower pace. The 2001 increase in spending on physician services accounted for about 28 percent of the growth in overall spending.

Breaking the trend in spending on physician services into price and quantity components reveals that both components have contributed to physician spending growth. Over the three-year period 1998–2001, spending on physician services grew by an average annual rate of 6 percent. During this period the price of physician services (that is, payment rates) grew by an average annual rate of 1.7 percent, and quantity factors, by 4.2 percent. In contrast to the hospital sector, however, neither physician prices nor use of physician services has exhibited a clear change in trend.

■ **Early evidence for 2002.** Although total spending per capita grew at a double-digit rate in 2001, this may prove to be a peak in the cost trend. Through the first six months of 2002 (compared with the same months in 2001), the increase in total spending per capita, while still high, slowed to 8.8 percent. This reflects a slowdown in the trends for all four spending components.

Two potential mechanisms may explain this slowing of cost trends. One, which is examined later in this paper, is a sharp increase in cost sharing for employer coverage plans in 2002 over 2001. Increased cost sharing slows the rate of growth in use of services. A second potential mechanism is the completion of the adjustment to more loosely managed care. If the retreat from tightly managed care has in fact been responsible for an important portion of higher usage trends, then completion of this transition will lead to a return to more moderate trends in the longer term.

■ **Role of aging.** Many people assert that the aging of the U.S. population, largely a result of the baby-boom generation, is a major driver of health care cost growth for people under age sixty-five. However, two of the authors (Strunk and Ginsburg) have analyzed this and found that population aging has less impact than is popularly believed.<sup>17</sup> This analysis estimated that aging of the population under age sixty-five contributed about 0.7 percentage points to the cost trend in 2001. Viewed in relation to the 2001 overall cost trend of 10 percent, the impact of population aging is small.

### Payroll Trends For Hospitals

Data on payroll costs from the BLS (which, unlike the Milliman HCI, reflect services for patients covered by all payers, including Medicare) illustrate that hospitals are facing large increases in their most important input cost factor (Exhibit 4). Hospitals' payroll costs grew by 8.6 percent in 2001—more than double the increase in the previous year.

Hospital workers' average hourly wages rose substantially and were a major factor behind the steep acceleration in the hospital payroll cost trend. In 2001 these wages grew by 6.1 percent—nearly double the annual rate of increase in 2000 and much higher than growth in wages for all industries combined. In contrast, the wage trend changed little from 1997 to 2000.

The surge in hospital wage rates is likely attributable to the severe labor shortage—particularly of nurses—that has plagued the hospital industry for a number of years.<sup>18</sup> Hospitals have been forced to offer much higher wages to attract nurses and other skilled personnel. The magnitude of the increase likely exceeded what hospitals expected when they signed contracts with health plans for payment rates in 2001. As a result, hospitals will likely seek even larger rate increases in 2002 to cover sharply higher wage rates.

The trend in hospital workers' total number of hours worked also accelerated in 2001. In particular, total hours worked increased 2.4

#### EXHIBIT 4

#### Annual Percentage Change In Hospital Payroll Costs, Hours Worked, And Underlying Wage Rates, 1991–2002

Year	Payroll <sup>a</sup>	Total hours worked <sup>b</sup>	Average hourly wage	
			Hospitals	All industries
1991	8.2%	2.1%	6.0%	3.1%
1992	6.4	2.2	4.2	2.4
1993	3.4	0.1	3.3	2.5
1994	1.2	-1.5	2.7	2.7
1995	2.4	-1.0	3.4	2.8
1996	2.5	-0.3	2.8	3.4
1997	4.2	1.9	2.3	3.9
1998	4.1	1.2	2.9	4.1
1999	2.6	-0.6	3.2	3.6
2000	3.7	0.4	3.3	3.9
2001	8.6	2.4	6.1	4.1
2002 <sup>c</sup>	7.9	2.4	5.3	3.4

**SOURCE:** U.S. Department of Labor, Bureau of Labor Statistics, Employment, Hours, and Earnings series (data accessed 9 August 2002).

**NOTE:** Data are calculated on a per capita basis.

<sup>a</sup> Product of total hours worked and average hourly hospital wage.

<sup>b</sup> Product of total production workers (excludes executives and managers) and average hours per week of production workers.

<sup>c</sup> Data through June 2002 compared with corresponding months in 2001.

percent compared with 0.4 percent in 2000. This surge in hours worked was likely connected to growth in hospital use associated with the retreat from tightly managed care, as discussed in the previous section.

Although the increase in payroll costs in 2001 was very large, it may actually understate the true increase. The BLS data do not reflect the impact of hospitals' increased contracting for temporary nurses or other personnel. From 1996 to 2000 the number of temporary agency nurses working in hospitals rose from about 15,000 (1.2 percent of all registered nurses) to about 26,000 (2 percent).<sup>19</sup> More recent anecdotal evidence suggests that the use of nurses from temporary agencies has increased further.<sup>20</sup>

Early evidence for 2002 suggests that the nursing shortage and other factors may still be exerting pressure on hospital payroll costs. Through the first half of 2002 the trends of both average hourly earnings and hours worked continued as payroll costs grew by another 7.9 percent compared with the same months in 2001.

### Health Insurance Premium Trends

Premiums for employment-based insurance increased 12.7 percent from 2001 to 2002 (Exhibit 5). This was the largest increase in premiums since 1990 and the sixth consecutive year of accelerating premium increases. Small firms (those with fewer than 200 workers) had increases similar to those of large firms (13.2 percent versus 12.5 percent). Since 1998, premiums for different types of plans have increased by remarkably similar amounts, ranging from 39.4 percent for POS plans to 44 percent for HMOs. The retreat from tightly managed care has probably affected HMOs' ability to control costs more than it did other plans.

During the past few years the health insurance underwriting cycle, along with underlying cost trends, has played an important role in premium increases.<sup>21</sup> For a few years insurers have been raising premiums more rapidly than underlying costs have been rising; this is known as "catch-up pricing." Catch-up pricing is one characteristic of the "hard" phase of the underwriting cycle, when insurers focus

**EXHIBIT 5**  
**Annual Percentage Change In Employment-Based Insurance Premiums And Underlying Health Care Spending, 1991-2002**

Year	Premiums		Underlying health care spending
	Large firms <sup>a</sup>	All firms	
1991	11.5%	- <sup>b</sup>	6.9%
1992	10.9	- <sup>b</sup>	6.6
1993	8.0	8.5%	5.0
1994	4.8	- <sup>b</sup>	2.1
1995	2.1	2.3	2.2
1996	0.5	0.8	2.0
1997	2.1	- <sup>b</sup>	3.3
1998	3.3	3.7	5.3
1999	4.1	4.8	7.1
2000	7.5	8.3	7.8
2001	10.2	11.0	10.0
2002	12.5	12.7	8.8 <sup>c</sup>

**SOURCE:** Health care spending data are from the Milliman USA Health Cost Index (HCI), zero deductible. Premiums are from the Henry J. Kaiser Family Foundation/Health Research and Educational Trust Survey of Employer-Sponsored Health Benefits for 1999-2002 and from the KPMG Survey of Employer-Sponsored Health Benefits for 1991-1998.

<sup>a</sup>Firms with 200 or more workers.

<sup>b</sup>Survey covered only firms with 200 or more workers in this year.

<sup>c</sup>Data through June 2002, compared with corresponding months in 2001.

on restoring and solidifying their profitability rather than gaining market share.

It appears that the health insurance industry continues to be in the hard phase of the underwriting cycle. Second-quarter 2002 earnings reports from managed care organizations indicate that profits continue to rise at rates exceeding analysts' estimates.<sup>22</sup> Such strong profitability reflects insurers' continuing ability to raise prices more rapidly than their costs are rising. In addition, there is little evidence that insurers are entering new markets. The absence of entry into new markets is another characteristic of the hard phase of the underwriting cycle, whereas active entry would signal a turn toward the "soft" phase of the cycle, when insurers engage in fierce price competition to increase membership.

**"While employers increased cost-sharing amounts, they did not change the proportion of the total premium that employees are required to pay."**

### Implications For Consumers

To control rising health insurance premium expenses, many employers "bought down" the price of health insurance in 2002 by reducing benefits and increasing patient cost-sharing requirements.<sup>23</sup> According to calculations performed at our request by John Bertko, vice-president and chief actuary of Humana, Inc., using data on employee cost-sharing requirements from the Kaiser/HRET employer survey, benefit buy-down in 2002 was 2-3 percent.<sup>24</sup> Therefore, the increase in the cost of health insurance for employers and employees was actually in the area of 15 percent. Bertko reported that his informal discussions with other industry actuaries indicate that this buy-down was notably larger than it was in 2001.

Changing economic conditions made buy-downs possible. Between 1996 and 2001 a tight labor market had insulated employees from rising health insurance premiums. The economy fell into recession during the spring of 2001, however, and the unemployment rate rose from 4.1 percent to 6.0 percent in April 2002. With looser labor markets and lower

profits, employers became more aggressive in reducing the richness of their health benefit plans.

The large benefit buy-down in 2002 was driven by two cost-sharing changes in particular: (1) a large increase in in-network PPO deductibles, and (2) increases in drug copayment amounts. From 2001 to 2002 the average in-network deductible among PPO plans increased from \$201 to \$276, or about 37 percent. More employers used tiered drug copayments,

and the average copayment requirement for a brand-name drug with a generic substitute rose from \$20 to \$26. Many other forms of employee cost sharing, such as provider copayments and co-insurance, rose as well, but the effect of each was much less important than

the two discussed above.<sup>25</sup>

While employers increased cost-sharing amounts to control rising premiums, they did not change the proportion of the total premium that employees are required to pay. In both 2001 and 2002 employees paid about 15.5 percent of the cost of single coverage and 27.3 percent of the cost of family coverage. More importantly, these figures remained well below the peak of employee contributions in 1993, when employees contributed 20 percent and 32 percent of single and family coverage, respectively.

### Outlook For The Future

The most recent trends in private health care costs provide new and more concrete evidence that costs are back to where they were before managed care began to dominate the health insurance landscape. In retrospect, one of the most important effects that the managed care revolution had on health care costs was its success in slowing the growth in hospital spending. Managed care did this by getting providers to accept discounted payment rates, reducing admission rates and lengths-of-stay, and controlling growth in the rate at which

certain outpatient procedures were performed. It is clear, however, that managed care's ability to constrain payment rates for and use of hospital services has diminished. Meanwhile, hospital wages are rising, presumably to address shortages of nurses and other skilled workers, and hospitals' prices will likely reflect these increases.

There appear to be few innovative approaches to cost containment being discussed to take the place of the managed care techniques that are being abandoned. Some now single out disease management programs as an innovative new way to control costs, but little evidence of the impact of these programs exists. Moreover, there is little information about what proportion of people who could benefit from these programs are actually enrolled in them, nor is it clear the extent to which disease management principles can be applied to other diseases beyond the few now targeted by these programs, such as asthma, diabetes, and heart disease.

Nevertheless, developments are afoot that make it unlikely that cost trends will accelerate further, if at all. Lacking a new silver bullet to control costs, health plans and employers across the country are returning to familiar territory. They are now moving to shift a greater portion of the health care bill to patients and to create more powerful and transparent incentives that will influence where, with whom, and how often patients obtain health care. This movement is characterized by both basic increases in deductibles and copayments and more sophisticated innovations such as tiered provider networks and "consumer-driven" health plans.<sup>26</sup> Indeed, the increased cost sharing introduced for 2002 could explain almost half of the reduction in the trend in health spending in the first half of that year.<sup>27</sup>

There are other reasons to believe that the early 2002 slowdown in cost trends could continue. One reason—the completion of the transition to more loosely managed care—was discussed earlier. Also, the recent slowdown of the U.S. economy will surely slow the rate of growth in health care costs, albeit with a sub-

stantial lag. Reflecting these and other factors, the CMS recently forecast a slowdown in private personal health care spending growth starting in 2003.<sup>28</sup>

If health care cost trends continue to slow, premium trends will eventually reverse course as well. The increase in health insurers' profitability can go only so far before the underwriting cycle turns to its soft phase and insurers become more aggressive in attempting to expand their market share. We have not yet, however, seen many signs of insurers' shifting their strategic focus toward growing market share, entering new markets, and engaging in fierce price competition to attract new membership, so we would not expect to see much moderation in premium growth until the 2004 plan year.

Rapid growth in costs and premiums will make it difficult for the nation to continue the modest gains in insurance coverage achieved during 1999 and 2000. Research has shown that when health care spending exceeds growth in income, more people lack health insurance coverage.<sup>29</sup> Indeed, recent trends in spending are likely to be a powerful force against efforts to expand coverage.

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*The authors are grateful to John Cookson of Milliman USA for permission to use the Health Cost Index. They gratefully acknowledge the Robert Wood Johnson Foundation (Strunk and Ginsburg) and the Henry J. Kaiser Family Foundation (Gabel) for their financial support.*

## NOTES

1. B.C. Strunk, P.B. Ginsburg, and J.R. Gabel, "Tracking Health Care Costs," 26 September 2001, [www.healthaffairs.org/WebExclusives/Strunk\\_Web\\_Excl\\_92601.htm](http://www.healthaffairs.org/WebExclusives/Strunk_Web_Excl_92601.htm) (19 August 2002).
2. See, for example, R. Abelson, "Hard Decisions for Employers as Costs Soar in Health Care," *New York Times*, 18 April 2002.
3. Deloitte and Touche and International Society of Certified Employee Benefit Specialists (ISCEBS), "Deloitte and Touche and ISCEBS Announce Results of Annual Employee Benefit Survey," Press Release, 20 January 2002, [www.deloitte.com/vc/0,1029,sid=2283&cid=3633,00.html](http://www.deloitte.com/vc/0,1029,sid=2283&cid=3633,00.html) (20 May 2002).
4. According to a national survey conducted by Public Opinion Strategies and Greenberg Quinlan Rosner Research, Inc. for National Public Radio. See National Public Radio, "Poll Could Be a Warning to Republicans," 20 May 2002, [www.npr.org/news/specials/polls/may20/index.html](http://www.npr.org/news/specials/polls/may20/index.html) (20 May 2002).
5. Often the terms *cost* and *spending* are used 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 the Milliman HCI, reflect spending, or what is paid for health services by those who purchase them (or received by providers of health services). Costs and spending differ when the payment is greater or less than the resources that go into providing the services.
6. The index that Milliman USA provides to its clients is intended to assist insurers 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. The trend in such an index would slightly overstate the actual trend in spending because the standard policy would pay for a slightly higher proportion of expenditures each year. To avoid this problem, Milliman USA has provided us with a version of the index that reflects a hypothetical policy with no deductible.
7. The PPI would be vulnerable to picking up changes in length-of-stay if the original patient bill was paid with a case rate or capitation payment, because these methods of reimbursement are not dependent on length-of-stay. However, payments using these methods of reimbursement make up a small proportion of total payments to hospitals, so the impact of changes in length-of-stay on the PPI is probably minimal. For a more detailed discussion of the PPI's methodology, see B. Catron and B. Murphy, "Hospital Price Inflation: What Does the New PPI Tell Us?" *Monthly Labor Review* (July 1996): 24–31.
8. This would be the case for methods of payment that are not based on fee-for-service (FFS), such as per diems, case rates, and capitation. The BLS holds the method of reimbursement constant over time, and these reimbursement types are not dependent on the resources used to care for a patient with a particular diagnosis.
9. For additional discussion of this point, see P.B. Ginsburg and J.D. Pickreign, "Tracking Health Care Costs," *Health Affairs* (Fall 1996): 140–149.
10. B.C. Strunk, K. Devers, and R.H. Hurley, *Health Plan–Provider Showdowns on the Rise*, Issue Brief no. 40 (Washington: Center for Studying Health System Change, June 2001).
11. Medicare Payment Advisory Commission, *Report to the Congress: Medicare Payment Policy* (Washington: MedPAC, March 2002).
12. D.A. Draper et al., "The Changing Face of Managed Care," *Health Affairs* (Jan/Feb 2002): 11–23.
13. R. Hurley et al., "A Longitudinal Perspective on Health Plan–Provider Risk Contracting," *Health Affairs* (July/Aug 2002): 144–153.
14. J. Gabel et al., "Job-Based Health Benefits in 2002: Some Important Trends," *Health Affairs* (Sep/Oct 2002): 143–151.
15. Because the Milliman HCI focuses on aggregate spending per person rather than on costs borne by insurers or employers only, three-tier copayment structures would be expected to affect the growth rate of prescription drug spending only if they induce less use of drugs, switches to cheaper drugs, or lower prices based on purchasers' greater ability to shift demand to preferred drugs. Cost shifting to consumers alone would not be expected to affect the HCI.
16. The number of new pharmaceutical products approved in 2001 was the lowest since 1994. For a more detailed discussion of the effect of this trend and the trend in patent expirations, see F. Teitelbaum et al., *Express Scripts 2001 Drug Trend Report* (St. Louis: Express Scripts, June 2002).
17. B.C. Strunk and P.B. Ginsburg, *Aging Plays Limited Role in Health Care Cost Trends*, Data Bulletin no. 23 (Washington: HSC, September 2002).
18. See U.S. General Accounting Office, *Emerging Nurse Shortages Due to Multiple Factors*, Pub. no. GAO-01-944 (Washington: GAO, 10 July 2001); and GAO, *Adequacy of Pharmacy, Laboratory, and Radiology Workforce Supply Difficult to Determine*, Pub. no. GAO-02-137R (Washington: GAO, 10 October 2001).
19. See E.B. Moses, *The Registered Nurse Population, March 1996: Findings from the National Sample Survey of Registered Nurses* (Washington: Department of Health and Human Services, Health Resources

- and Services Administration, Bureau of Health Professions, Division of Nursing, September 1997), Table 20; and E. Spratley et al., *The Registered Nurse Population, March 2000: Findings from the National Sample Survey of Registered Nurses* (Washington: BHP, Division of Nursing, February 2002), Table 20.
20. See, for example, K. Olsen, "Contract Nurses Boost Expenses," *Vancouver Columbian*, 1 July 2002.
  21. The underwriting cycle is the interdependent pattern of profitability and pricing that has occurred historically in the health insurance industry. When insurers earn underwriting profits (profits before investment income), new insurers enter local markets and set off fierce price competition. This eventually leads to financial losses and the exit of insurers from these local markets. Remaining insurers aim to restore profitability, not by seeking larger market share but by raising premiums.
  22. R.W. Goodman and A.R. Urban, *Managed Care: The Hair of the Bear* (New York: Merrill Lynch, 14 August 2002).
  23. Benefit buy-down is usually accomplished by increasing copayments or coinsurance for physician visits, hospital stays, or prescription drugs; raising deductibles for both in-network and out-of-network care; or paring down or excluding benefits, such as hearing and vision or substance abuse services, from coverage. For more detailed discussions of the nature of benefit buy-down and the magnitude of its effects, see J.C. Robinson, "Renewed Emphasis on Consumer Cost Sharing in Health Insurance Benefit Design," 20 March 2002, [www.healthaffairs.org/WebExclusives/Robinson\\_Web\\_Excl\\_032002.htm](http://www.healthaffairs.org/WebExclusives/Robinson_Web_Excl_032002.htm) (19 August 2002); and J.S. Lee and L. Tollen, "How Low Can You Go? The Impact of Reduced Benefits and Increased Cost Sharing," 19 June 2002, [www.healthaffairs.org/WebExclusives/Lee\\_Web\\_Excl\\_061902.htm](http://www.healthaffairs.org/WebExclusives/Lee_Web_Excl_061902.htm) (20 August 2002).
  24. John Bertko, vice-president and chief actuary, Humana, Inc., personal communication, 21 June 2002.
  25. Ibid.
  26. See, for example, D. Lee, "Hospital Choice Grows Costlier," *Los Angeles Times*, 5 May 2002.
  27. To make this calculation, we used demand elasticities that are also used by the Congressional Budget Office (-0.1 for hospital/physician services and -0.3 for prescription drugs). Mark Miller, assistant director, Congressional Budget Office, personal communication, 20 August 2002. Since increases in both in-network PPO deductibles and prescription drug copayments were the dominant factors in the 2002 cost-sharing increase, we assumed an overall elasticity of -0.2. Coupled with a total buy-down of 2-3 percent, this would imply about a 0.5 percent reduction in utilization.
  28. S. Heffler et al., "Health Spending Projections for 2001-2011: The Latest Outlook," *Health Affairs* (Mar/Apr 2002): 207-218.
  29. R. Kronick and T. Gilmer, "Explaining the Decline in Health Insurance Coverage, 1979-1995," *Health Affairs* (Mar/Apr 1999): 30-47.