

# Behind the numbers\*

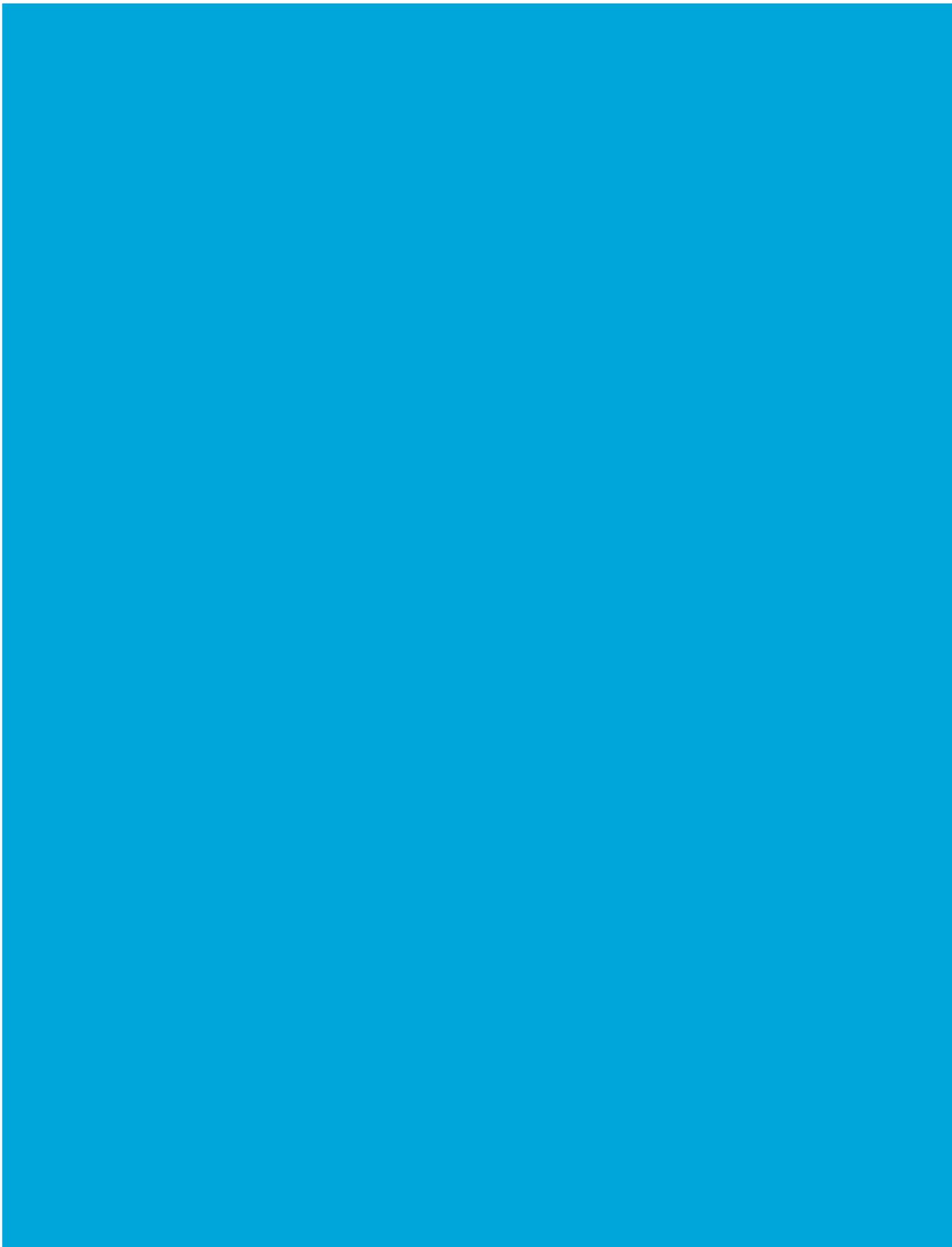
Healthcare cost trends for 2008





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# Executive summary

Healthcare cost trends in the private sector tend to be cyclical, and the health industry is currently in a period of decelerating growth. For 2008, this is expected to mean a return to single-digit increases in benefit expenses for employers and employees. For private payers, the medical trend is expected to be lower in 2008 compared with 2007. Based on discussions with private insurers, medical costs are expected to rise by 9.9% for preferred provider organizations (PPOs), 9.9% for health maintenance organizations (HMOs)/point of service plans (POSs)/exclusive provider organizations (EPOs), and 7.4% for consumer-directed health plans. This compares with estimates of 11.9%, 11.8% and 10.7%, respectively, in the prior year.

Insurance companies use medical cost trends to estimate what the same plan would cost in the next year. For example, a 10% trend indicates that a medical plan that costs \$8,000 per employee one year would cost \$8,800 the next year. Those costs, along with other factors, help determine health insurance premium increases.

The annual increase in medical costs is one that holds widespread interest in both business and government circles. While the increase in healthcare costs continues to warrant concern as healthcare trends continue to outpace inflation, the trend is declining, reinforcing a longer trend pattern of deceleration.

The deceleration in the medical cost trend is influenced by a number of short- and long-term factors. For 2008, our research has identified those factors as:

- Slower spending growth for prescription drugs
- Increased transparency and cost sharing with employees
- Total-health-management approach to benefits
- Broadening of the digital backbone in healthcare

# Background

Increases in health spending are continuing sources of pressure on business profitability. Businesses are faced with the annual challenge of analyzing, estimating, and managing their employee benefit plans' cost. The keys to the process are analysis of cost drivers and prediction of the medical cost trend for the upcoming year.

## What is medical cost trend?

For private payers, medical cost trend is the direction in which medical costs are heading. It is influenced by several factors that go into future cost increases. The factors include:

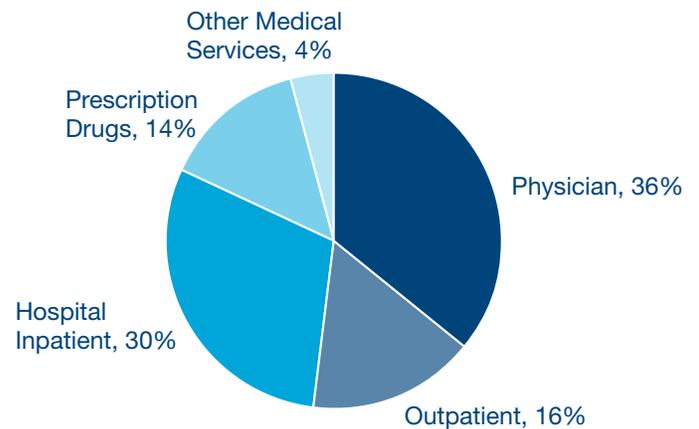
- Medical cost inflation, or change in the unit price of medical products and services
- Utilization increases, or changes in the volume of services used because of health status, demographic changes, advertising and the use of new technology
- Deterioration in the value of co-pays and deductibles, or co-pays that remain at a flat rate despite a rise in inflation and medical costs
- Government cost-shifting away from entitlement programs, such as Medicare and Medicaid, and toward the private sector

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## What is included in medical cost trend?

In evaluating medical cost trend, employers and insurers analyze the source of spending, with specific focus on the key components driving healthcare costs. As shown in Chart 1, physician services, accounting for 36% of costs, is the largest single component in 2007, and hospital inpatient is the second largest, at 30%. Outpatient services, including ambulatory surgical centers and diagnostic centers, were third at 16%.<sup>1</sup>

**Chart 1: 2007 Share of Benefit Premiums**



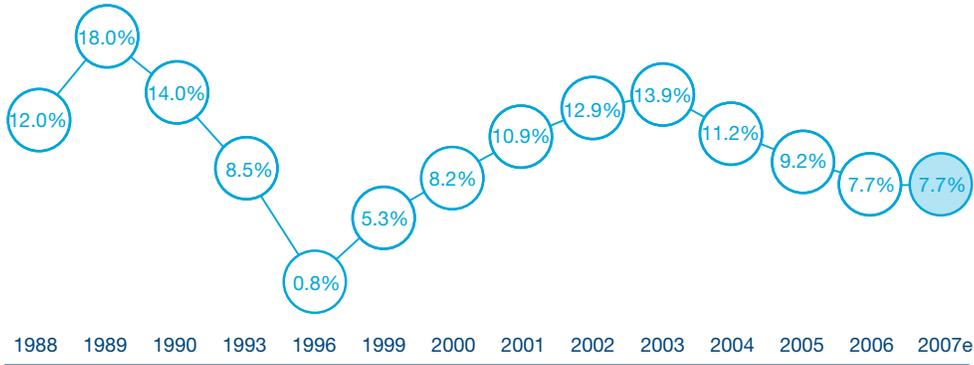
Source: Milliman Medical Index 2007

## What have increases in medical cost premiums been?

An increase in medical cost trend does not automatically correlate to an increase in premiums. In general, employers tend to be cutting back the benefits levels of their plans so health insurance premium increases tend to be lower than medical cost trends. To mitigate the increase in medical cost trends, employers have choices they can make. They can increase premiums or co-pays. They can change benefit plan design to a lower cost plan. Furthermore, health insurance premiums can be affected by a multitude of additional factors unrelated to medical cost trends, such as rising uninsured.

Contrary to the trend during the late 1990s and early 2000s, growth in health insurance premiums has been declining since 2003. (See Chart 2.)

**Chart 2: Percent Increase in Private Health Insurance Premiums, 1988-2007e**



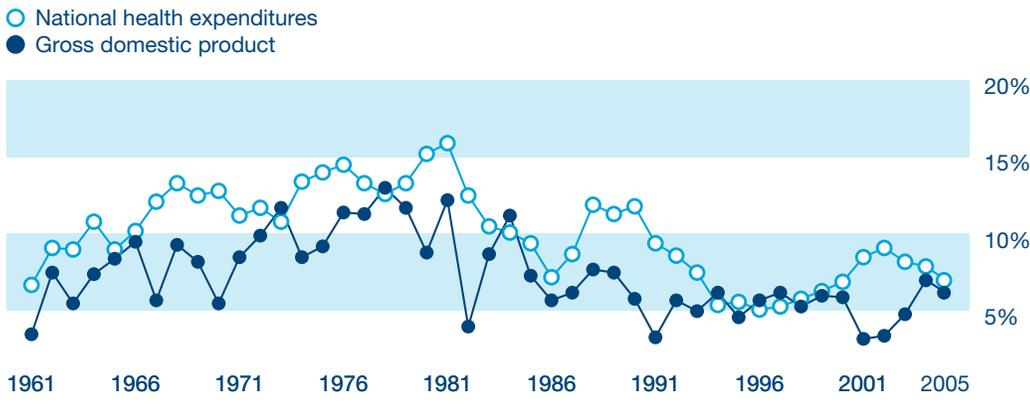
Source: The Kaiser Family Foundation and Health Research and Educational Trust for 1988-2006; PricewaterhouseCoopers estimate for 2007

Note: Percentages shown are net of plan changes

### How have medical costs trended relative to GDP?

Typically, national health spending races ahead of the overall economy, which is measured by gross domestic product (GDP). However, in recent years, the gap between the two measures has narrowed significantly. (See Chart 3.)

**Chart 3: Percent Growth of GDP and National Health Expenditures**



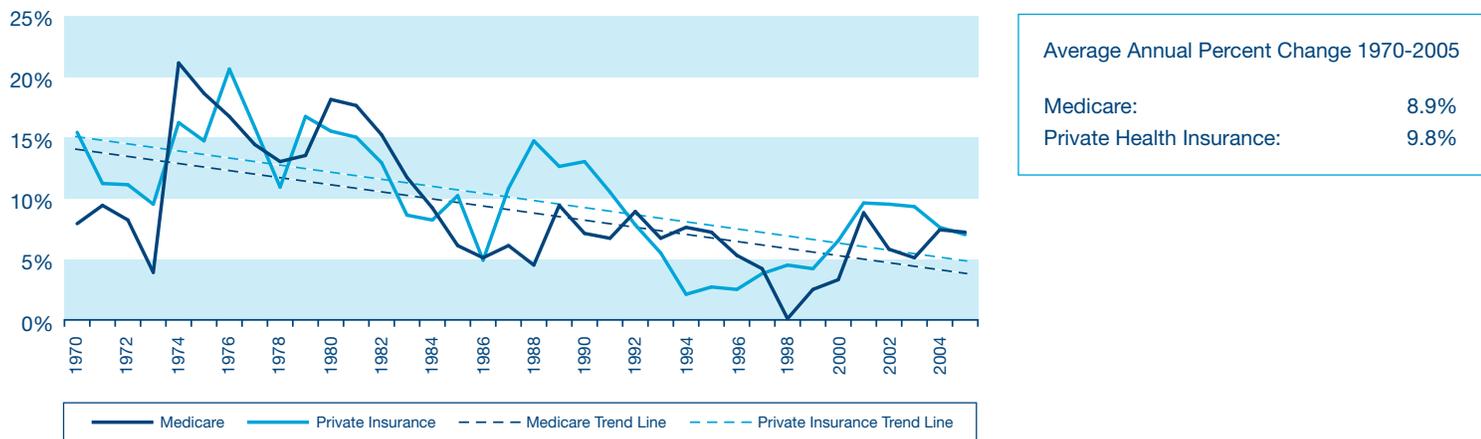
Source: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics group

Note: Figures represents public and private spending

## What has been the long-term medical cost trend?

Medical costs have always tended to increase, but it's important to note that the past few years have shown decelerating growth. When viewed over the past three to four decades, a pattern of continuous deceleration emerges. The trend lines in Chart 4 illustrate the decreasing slope of the growth trend in both Medicare spending and private health insurance premiums since 1970. While the increase in healthcare costs certainly deserves continued concern, it appears that tools and methods developed to control these costs have had an effect over time. Some of the deceleration in trend may stem from lower inflation rates in recent years. Specifically, the Consumer Price Index grew at 7.1% annually from 1970 to 1979, but only 2.5% annually from 1996 to 2005. To remove this effect, PricewaterhouseCoopers estimated the trend using inflation-adjusted spending and premiums. Although the slope of this alternative trend line was lower, we still found a pronounced downward trend in the CPI-adjusted growth in both Medicare and private, third-party payer spending.

**Chart 4: Per Enrollee Percent Change in Medicare Spending and in Private Health Insurance Premiums, Calendar Years 1969-2005**



Source: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group

# Medical cost trend for 2008: Continued deceleration on the horizon

PricewaterhouseCoopers surveyed five of the largest carriers in the U.S. to find out which trend factors they are using in the development of premium rates. These carriers, which represent more than 30 million members, provide the full range of products on a national basis, and therefore their trends represent a national versus regional reflection of increases. It is noted that regional trend factors could vary. In addition, to understand the factors affecting these trends, we gathered information from 13 health plans.

Medical trend is expected to be lower in 2008 compared to 2007. (See Chart 5.) Specifically, based on PricewaterhouseCoopers surveys with these insurance carriers, medical costs are expected to rise 9.9% for preferred provider organizations (PPOs), 9.9% for health maintenance organizations (HMOs)/point of service plans (POSs)/exclusive provider organizations (EPOs), and 7.4% for consumer-directed health plans (CDHPs). This compares to 11.9%, 11.8% and 10.7% in the prior year.<sup>2</sup> The range of anticipated spending increases can vary by a number of factors including region, plan type and employer.

While too early to evaluate the long-term impact of consumer-directed health plans, it appears that their cost trend is running about 2.5 percentage points below cost trends in HMOs and PPOs. However, enrollment in these plans is still fairly low, and it's probably too early to determine whether these plans can lower medical costs long term. According to the Kaiser Family Foundation, for all large firms (firms with greater than 200 employees), 3% of employees were enrolled in high-deductible health plans, whereas 22% were enrolled in HMOs, 62% in PPOs, 9% in POS and the remaining percentage were enrolled in conventional plans.<sup>3</sup>

**Chart 5: 2007 and 2008 Expected Medical Cost Trend**

Payer	2007	2008
PPOs	11.9%	9.9%
HMO/POS/EPOs	11.8%	9.9%
Consumer-directed health plans	10.7%	7.4%

Source: PricewaterhouseCoopers estimates

The downward trend in medical spending growth is influenced by numerous factors, both short-term and long term. Following is a discussion of those factors.

# Factors influencing the deceleration of medical cost trends

In looking at the year ahead, PricewaterhouseCoopers identified four influences that are affecting the cost trend in the short-term (one to two years) and the long-term (three to five years):

## Short-term influences

- Slower spending growth for prescription drugs
- Increased transparency and cost sharing with employees

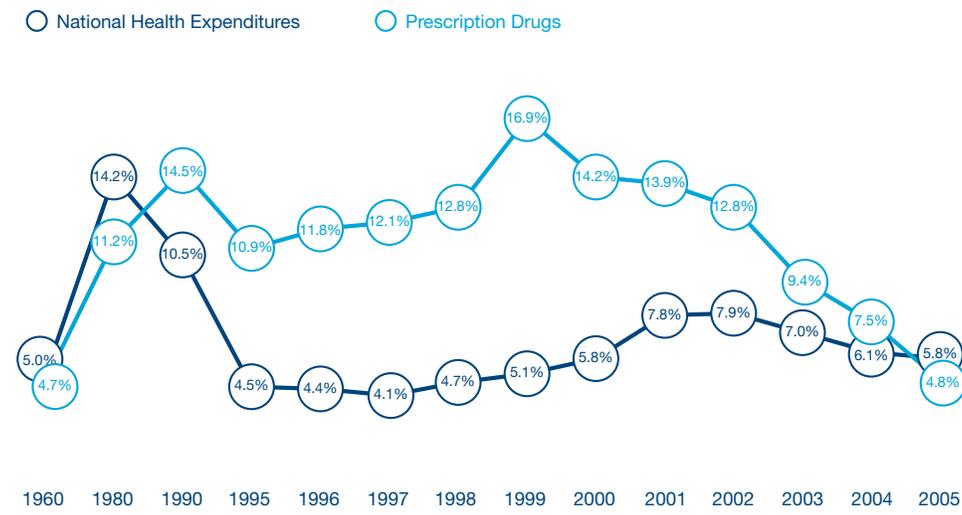
## Long-term influences

- Total health management approach to benefits
- Broadening of the digital backbone in healthcare

## Slower spending growth for prescription drugs

The recent slower growth in spending on prescription drugs stems from a number of converging factors: introduction of fewer blockbuster drugs, some blockbusters going off patent, transition of some drugs to over-the-counter status, the acceptance of tiered formularies, and a lower rate of price growth. As one indicator of slower growth, the percentage growth in per capita spending on prescription drugs recently dropped below the percentage growth in national health expenditures. (See Chart 6.)

**Chart 6: Per Capita Growth Rate for National Health Expenditures Versus Prescription Drugs**

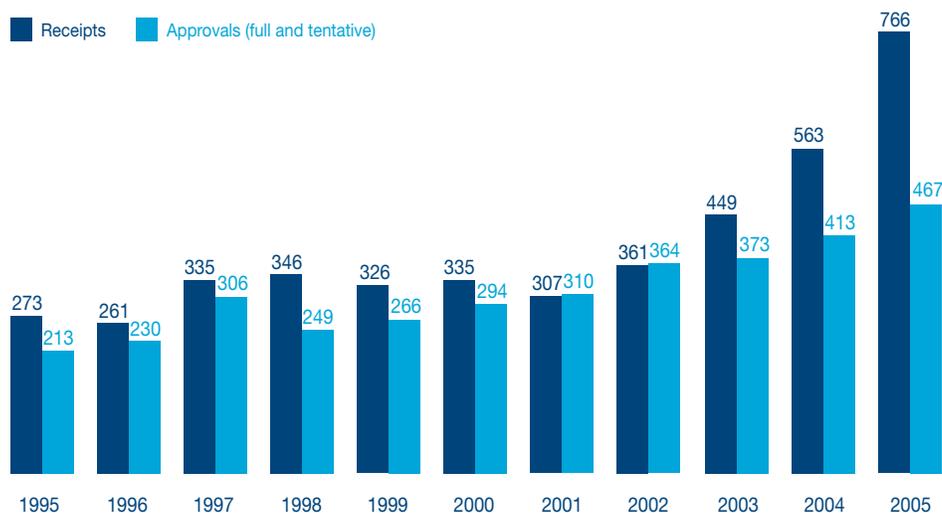


Source: National Health Expenditures by Type of Service and Source of Funds: Calendar Years 1960-2005, Centers for Medicare & Medicaid Services.

A key factor in the lower growth rate is the increase in generic dispensing. In 2005, generics accounted for 53% of all prescriptions dispensed in the US.<sup>4</sup> In addition, in 2006 prescription volume of unbranded generics grew by 13% over the prior year. For example, one pharmacy benefit management company reported that its generic prescriptions had increased from less than 40% in 2001 to more than 50% in 2006.<sup>5</sup> As described in our Behind the Number report last year, the widespread use of three-tiered formularies has resulted in more patients opting for generics when available because generics are cheaper. In addition, as drugs come off patent and formulary designs encourage generic substitution, generic utilization has been increasing.<sup>6, 7</sup>

Contributing to the increase in generic drugs dispensed is the number of generic drug applications filed and approved with the U.S. Food and Drug Administration. Chart 7 depicts that trend from 1995 through 2005.<sup>8</sup>

**Chart 7: Comparison of Receipts and Approvals of Generic Drug Product Applications**



Source: U.S. Food and Drug Administration

Higher rates of generic substitution and over-the-counter alternatives for prescription drugs are expected to depress the rates of increase over the next few years. For example, premiums for Medicare drug benefits have dropped, indicating that the cost of drugs is stabilizing, if not decreasing.

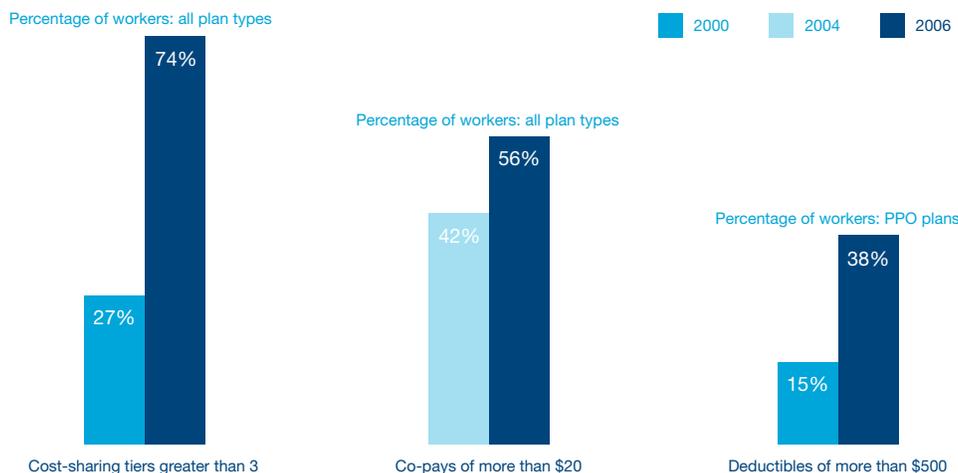
## Increased transparency and cost-sharing with employees

Increased transparency and broader cost-sharing is a cornerstone of the healthcare consumerism movement. Consumer-directed health plans have been the standard bearers of this movement. These plans are typically characterized by high deductibles and are often associated with certain side accounts such as health savings accounts (HSA) and health reimbursement arrangements (HRA). However, the healthcare consumerism movement is broad in spectrum and covers a number of different elements including increased price transparency, higher cost-sharing to discourage unnecessary utilization, and informational resources.

Only about 4% of the commercially insured population are enrolled in consumer-directed health plans. As indicated by this year's survey, early reports show a lower medical cost trend in these plans. Such lower trend numbers could increase adoption by employers and employees.<sup>9</sup> In addition, CDHPs have received certain tax advantages, which have fostered their growth. As a result, the market share of CDHPs is expected to triple by 2008.<sup>10</sup>

More broadly, employers continue to encourage more cost-sharing with their employees as an integral part of benefit design. Higher co-pays, higher deductibles, and an increase in cost-sharing tiers for health plans are all a part of this general trend. For example, the percent of workers with co-pays of more than \$20 increased from 42% to 56% from 2004 to 2006, according to the Kaiser Family Foundation. (See Chart 8.) The intention of consumerism is to reduce costs by eliminating unnecessary care and encourage higher value in healthcare consumption. At the same time, many plans are including preventive care at a lower cost-sharing level to avoid barriers to early detection.

**Chart 8: Increase in Cost-Sharing**



Source: Kaiser Family Foundation, Employer Health Benefits 2006 Annual Survey, September 26, 2006

## Total-health-management approach to benefits

Individuals who lead healthier lifestyles typically are more productive, file fewer medical claims, and have lower medical costs. More employers are investing in wellness and are developing incentives for employee adoption of healthier lifestyles. Research has shown that some employers have received a \$3 to \$1 return on investment for preventive services and health promotion.<sup>11</sup> In addition, early prevention and intervention are demonstrating long-term success in both cancer and heart disease. The risk of dying from cancer has been dropping steadily since the 1990s, a trend that the National Cancer Institute attributes to reductions in tobacco usage, increased preventive screenings, and more effective treatment.<sup>12</sup>

Despite success in the declining rate of tobacco usage, other risk factors that contribute to heart disease and cancer are increasing. They include rising levels of obesity and more sedentary lifestyles. As a response, employers are creating a more holistic approach to health benefits that considers lifestyle factors and prevention rather than just claims management. Employers are encouraging employees to “own” their health through a variety of incentives and programs such as nutrition counseling, weight-loss programs, and gym memberships. In a 2007 PricewaterhouseCoopers’ Health Research Institute survey of more than 100 top executives, at least 80% of employers agreed that employees should have adequate access to coverage, better support to manage their own health, and increased responsibility for their own health and healthcare costs. (See Chart 9.)

**Chart 9: Employer Views on Benefit Design**



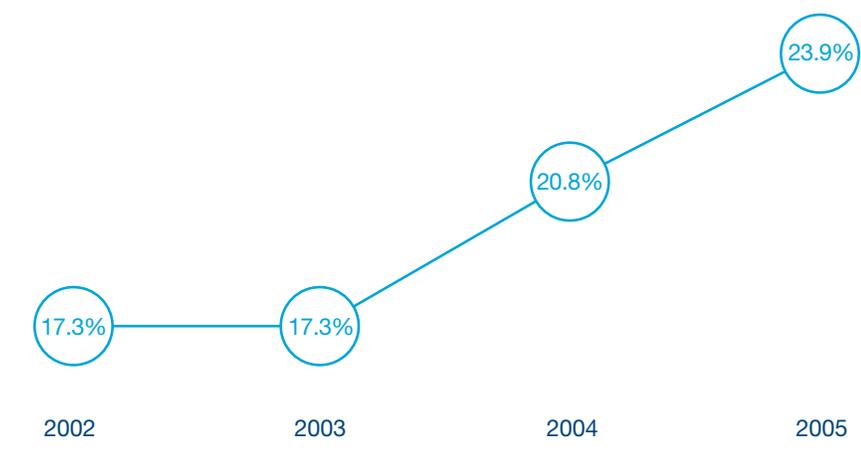
Source: PricewaterhouseCoopers 2007 Management Barometer Survey

## Broadening of the digital backbone in healthcare

The digital backbone that connects health providers, payers, and vendors is expanding. Connecting the health system electronically will aid payers in better managing both performance and compliance throughout the continuum of care. Technologies such as personal computers, electronic health records, wireless systems, biometric devices, and imaging software are increasingly being used by clinicians and business offices to coordinate and improve care, decrease duplication, and reduce cost. For example, widespread adoption of electronic medical records and other health information technology is estimated to save \$162 billion a year by improving care management, reducing preventable medical errors, lowering death rates from chronic disease, and reducing the number of employee sick days.<sup>13</sup>

Providers are beginning to invest substantially in their own health information technology (IT) systems. During the past few years, most hospital systems have been allocating an average of 25% of their capital spending on health IT, according to Fitch Ratings, a New York ratings agency.<sup>14</sup> While initial spending on IT has been shown to add to costs, the longer-term effect is one of reduction in costs. Health IT investment typically reaches a tipping point in terms of cost, according to PricewaterhouseCoopers' research released in 2007. That tipping point tends to reflect continued investment after which hospital operating costs are reduced.<sup>15</sup> Building the digital backbone requires connecting to physicians, and an increasing percentage of physicians themselves are doing business electronically as well.<sup>16</sup> (See Chart 10.)

**Chart 10: Physician Use of Electronic Medical Records**



Notes: Includes nonfederal office-based physicians who see patients in an office setting. Excludes radiologists, anesthesiologists, and pathologists

Sources: Center for Disease Control and Prevention, National Center for Health Statistics, National Ambulatory Medical Care Survey, 2001-05

Making the digital backbone a reality stems from progress on two issues that have long been cited as barriers to health IT adoption: lack of national standards and interoperability. Since the devastating hurricanes of 2005, which displaced patients and destroyed paper medical records, state and federal authorities began to recognize the importance of health information interoperability. The U.S. Department of Health and Human Services (HHS) recently published a framework of actions for both the public/private sectors to meet the objective of interoperability. In addition, an HHS-appointed, public-private consortium called the American Health Information Community has developed a process that harmonizes standards to move toward an interoperable community.

While still in its early stages, the potential to improve quality and reduce variation in provider practice patterns will be strengthened as the digital backbone continues to strengthen. As this movement becomes more prevalent, the potential of a “quality dividend” can also help to support reductions in healthcare cost trend over time.

# Conclusion

The medical cost trend is expected to be lower in 2008 compared with 2007. While many factors affect premium increases, it is likely that premium increases will be lower in 2008 as well. The causes for the current deceleration are complex, but it's clear that the movement into consumerism is real and is affecting medical costs. Rewards for maintaining healthy lifestyles, for use of nurse coaches, for transparency of cost of care, and for digitization of the medical industry will continue to affect medical costs. Enhancements to employee Internet tools and the use of employee data to educate, inform, and assist in behavior modification are critical factors in the eventual success of healthcare consumerism.

## Endnotes

- 1 PricewaterhouseCoopers, Behind the Numbers: Medical Cost Trends for 2007, Chart 4, page 5.
- 2 The figures in Chart 4 are what carriers are reporting for medical cost trends for preferred provider organizations (PPOs), health maintenance organizations (HMOs), point of service (POS), exclusive provider organizations (EPOs), and consumer-directed health plans (CDHPs). (CDHPs are defined as high-deductible health plans linked to health savings accounts.)
- 3 Kaiser Family Foundation, Employer Health Benefits 2006. Annual Survey, September 26, 2006, Chart 5.2.
- 4 "Pharmaceutical World Review Commentary," IMS Health 2005 World Outlook.
- 5 Medco Health Solutions Inc. 10-K for the year ended December 30, 2006 for years 2002 through 2006; Medco Health Solutions Inc. 10-K for the year ended December 27, 2003 for the years 2001 through 2003.
- 6 Press release, IMS Health, March 8, 2007.
- 7 For additional information regarding consumer comfort levels with generics, download the Health Research Institute report, Top Seven Health Industry Trends in '07, at [www.pwc.com/hri](http://www.pwc.com/hri).
- 8 US Food and Drug Administration, Center for Drug Evaluation and Research.
- 9 Employer Health Benefits, 2006 Summary of Findings, Kaiser Family Foundation and Health Research and Educational Trust, April 2006.
- 10 PricewaterhouseCoopers, How Pharmaceutical Manufacturers Can Identify, Adapt to and Influence Trends in Consumer Directed Health Plans, page 1, from The Forrester Wave: CDHP Platforms Q3 2006, September 20, 2006.
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- 12 Quality and Patient Safety Spending in the Not-for-Profit Hospital Sector, FitchRatings, May 17, 2006.
- 13 CIO Insight, Studies Show Electronic Medical Records Make Financial Sense, article dated September 14, 2005.
- 14 Quality and Patient Safety Spending in the Not-for-Profit Hospital Sector, FitchRatings, May 17, 2006.
- 15 The Economics of IT and Hospital Performance: A Population Study Reveals Challenges and Opportunities, PricewaterhouseCoopers, Tech Center, 2007.
- 16 Electronic Medical Record Use by Office-Based Physicians: United States, 2005, by Catharine W. Burt, Ed.D.; Esther Hing, M.P.H.; and David Woodwell, B.A., Division of Health Care Statistics.

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## About PricewaterhouseCoopers

Committed to the transformation of healthcare through innovation, collaboration and thought leadership, PricewaterhouseCoopers Health Industries Group offers industry and technical expertise across all health-related industries, including providers and payers, health sciences, biotech/medical devices, pharmaceutical and employer practices.

The firms of the PricewaterhouseCoopers global network ([www.pwc.com](http://www.pwc.com)) provide industry-focused assurance, tax and advisory services to build public trust and enhance value for clients and their stakeholders. PricewaterhouseCoopers has aligned its professional service offerings around the future direction of the health system. By applying broad understanding of how individual, specialized sectors work together to drive the performance of the overall health system, the Health Industries Group is positioned to help clients, industry and governments address changing market forces of globalization, consumerism, consolidation and expansion, regulation, technology, workforce and margin compression. More than 130,000 people in 148 countries across our network share their thinking, experience and solutions to develop fresh perspectives and practical advice.

## About the Health Research Institute

PricewaterhouseCoopers Health Research Institute provides new intelligence, perspective, and analysis on trends affecting all health-related industries, including healthcare providers, pharmaceuticals, health and life sciences, and payers. The Institute helps executive decision makers and stakeholders navigate change through a process of fact-based research and collaborative exchange that draws on a network of more than 4,000 professionals with day-to-day experience in the health industries. The Institute is part of PricewaterhouseCoopers' larger initiative for the health-related industries that brings together expertise and allows collaboration across all sectors in the health continuum.



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