

# **COMMISSION ON A HIGH PERFORMANCE HEALTH SYSTEM**

## **RECENT GROWTH IN HEALTH EXPENDITURES**

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**ABSTRACT:** U.S. health expenditures have continued to grow faster than the gross domestic product (GDP). While technological change is considered the primary driver of health care costs, growth of health insurance and decline in cost-sharing, income growth, lagging productivity in health services, provider and insurer consolidation, and increases in the prevalence of certain high-cost diseases also are considerations. It is likely that attempts to constrain health expenditure growth will be pursued with increasing intensity over the next few years. In addition to previously tried approaches, such as government price-setting and managed care, new strategies, such as consumer-directed health plans, pay-for-performance, and chronic care management, are being evaluated to constrain cost growth and improve outcomes.

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### INTRODUCTION

Between 1993 and 2003, health expenditures in the United States grew from roughly \$900 billion to \$1.7 trillion, increasing from 13.3 percent of gross domestic product (GDP) to 15.3 percent. U.S. per-capita health expenditures rose to \$5,670 by 2003, from \$3,354 a decade earlier. Data from the last 25 years indicate that the share of GDP spent on health in the United States has been considerably higher than that spent in Canada, Japan, Germany, or the United Kingdom, and that this difference has widened (Figure 1).<sup>1</sup> This issue brief reviews trends in health expenditures in the United States over the past decade, examines differences between public and private spending, and considers explanations for the growth in spending and strategies intended to contain it.



### TRENDS IN HEALTH EXPENDITURES

Between 1993 and 2003, overall U.S. health expenditures rose at an average annual rate of 6.6 percent, while nominal GDP grew 5.2 percent annually (Figure 2). During this period, annual public spending expanded slightly more rapidly than did private spending (7% vs. 6.3%, respectively). Rates of change in overall public and private spending may be the result of many different influences, making them difficult to compare. Spending growth may differ across the two sectors because of changes in the number of people

covered by public and private insurance, choices made about service coverage, payment policies related to public programs, and market forces. For example, some of the excess growth of public, rather than private, spending is because enrollment in public programs such as Medicare and Medicaid was growing faster than overall population growth.<sup>2</sup>



In Figure 2, data are presented for four periods: the years before the Balanced Budget Act (BBA) was passed, when managed care was taking hold (1993–1997); the three years following passage of the BBA (1997–2000); the most recent three years for which data are available (2000–2003); and the decade as a whole (1993–2003). Overall health expenditure growth accelerated between 1993 and 2003, increasing from 5.3 percent between 1993 and 1997 to 6.2 percent between 1997 and 2000 to 8.6 percent during the most recent period.

Differences between public and private expenditure growth during the past decade seem to track policy choices and market transformations. Between 1993 and 1997, the expansion of managed care slowed the average annual growth in private spending below the growth in GDP, while public spending continued to increase. Medicare spending controls put in place in the BBA and the backlash against managed care produced a reversal in this pattern between 1997 and 2000. Between 2000 and 2003, both public and private spending grew at rates above 8 percent annually, although enrollment in private health insurance was falling while enrollment in public programs—Medicaid, in particular—was expanding.<sup>3</sup>

Data in Figure 3 show rates of growth in spending for a selected set of major health care services as well as program administration and the net cost of private health insurance.<sup>4</sup> By a large margin, prescription drug spending grew more rapidly than other services. The growth in drug spending was consistently above the double-digit mark during each of the periods examined. Spending on hospital care—the largest component of health care spending—grew most slowly for the entire decade but accelerated after 2000. Spending on physician and clinical services grew at increasing rates and was growing faster than any service other than prescription drugs by the 2000–03 period. The most dramatic variation in spending growth occurred in nursing home and home health care. Provisions in the BBA led to a slowdown in spending on these services, pulling the growth rate down to 2 percent annually between 1997 and 2000.



Expenditures for program administration and the net cost of private health insurance grew slowly between 1993 and 1997 but accelerated substantially in the subsequent periods. In fact, this category of spending was growing as fast as prescription drug expenditures between 2000 and 2003. More recently, program administration and the net cost of private insurance was actually the fastest-growing component of national health expenditures since 2001.<sup>5</sup>

Projections suggest that there will not be a slowdown in health spending, with overall growth remaining in excess of 7 percent annually.<sup>6</sup> Public sector spending is expected to grow more rapidly than private spending as a result of the implementation of the new Medicare prescription drug benefit, which shifts spending responsibilities from the private to the public sector. This is a clear instance in which an explicit policy choice will change the relative growth in spending across the two sectors of the economy without necessarily affecting overall health spending.

## UNDERSTANDING TRENDS IN HEALTH EXPENDITURES

Table 1 outlines the major, important, and minor factors explaining trends in health expenditures and presents new factors for consideration.

Major influence •	Technological change
Important influences	Growth of health insurance and decline in cost-sharing
Important initiences	Income growth
•	Lagging productivity in health services
Minor influences •	Aging of the population
•	Administrative expenses
•	Consolidation of the health care market
New factors to explore •	Direct-to-consumer advertising
•	Cost and prevalence of specific diseases

Table 1. Factors Explaining the Trends in Health Expenditures

Based on studies conducted since the early 1990s, a consensus has emerged that the factor most responsible for the growth in health spending is technological change.<sup>7</sup> After empirically accounting for a range of factors related to the demand for medical care and the supply of services, researchers have concluded that about one-half to two-thirds of the long-term spending growth is because of the so-called "march of science." Technological changes include new equipment (e.g., dialysis machines and sonogram machines), new procedures (e.g., laproscopic surgery), and new treatments (e.g., statins to control cholesterol).

Technology can increase total health spending either by increasing the costs of standard treatment or by lowering the unit cost of services so that more patients receive it.<sup>8</sup> Cardiac catheterization, for example, has added to the cost of standard treatment as it has become a more common treatment for heart attacks. Laproscopic gall bladder surgery, meanwhile, has lowered the unit cost of a service (including reduced recovery time) and led more patients to undergo the procedure than would have opted for the more invasive open gallbladder surgery.<sup>9</sup> In both cases, the effects of the technological changes resulted in higher health care spending.

Unlike most markets, health care purchasing decisions are made by individuals patients and physicians, for example—who are not directly responsible for the financial consequences of those decisions. As a result, both patient and physician have a strong incentive to use any technology that could have a positive effect, despite the availability of cheaper, and potentially just as effective, alternatives. However, it is not correct to assume that added technology costs are solely the result of the influence of insurance coverage.<sup>10</sup> Some patients would use new technologies even if they did not have health insurance. Still, there is little doubt that some insured patients use new technologies even though their benefits may be limited. It is an empirical question, albeit a difficult one, to determine how much of the growth in health technology is truly undesirable.<sup>11</sup>

Although decisions to utilize new technologies may result in accelerated health care spending, this does not imply that either the availability of more technology or public or private insurance has produced negative outcomes. Recent research has shown that technological change should be viewed as beneficial because it improves health outcomes.<sup>12</sup> For example, in one study, Cutler and McClellan analyzed five medical conditions (heart attacks, low-birthweight infants, depression, cataracts, and breast cancer) and found that for four of five conditions, the benefits of the health outcomes were greater than the cost of technology; the exception was the additional costs of detection and treatment of breast cancer.<sup>13</sup>

The conclusion that technology is the most important force behind the growth in health spending derives from the finding that few other factors seem to have a large impact over time. Looking back over the entire post–World War II period, there is no question that health insurance became more prevalent and cost-sharing decreased, but this had far less impact on spending than technology.<sup>14</sup> The role of insurance is not likely to change, even though cost-sharing is increasing, because many patients are still protected by out-of-pocket spending limits that are rapidly surpassed when they become seriously ill. This means that patients have little incentive—and, possibly, ability—to avoid incurring very high costs.<sup>15</sup>

Income growth is also an important determinant of spending growth.<sup>16</sup> Given the variation among estimates of the effects of income on health spending, this factor may be more or less important than the change in health insurance and cost-sharing. The aging of the population is another factor often assumed to be important, because the elderly demand and use more health care. However, a careful review of the evidence suggests that this trend does not explain much of the growth.<sup>17</sup>

On the supply side, the excess growth in health spending over GDP is possibly an outcome of lagging productivity gains in health services that result in increases in the relative price of medical care. The productivity factor is difficult to analyze, owing to serious measurement problems related to the medical care consumer price index.<sup>18</sup> Despite these difficulties, some estimates conclude that lagging productivity could partially explain the rapid growth of health spending relative to GDP.<sup>19</sup> Successful efforts to improve quality and patient outcomes may appear to drive down productivity and increase costs per unit of output. However, if the quality of each unit of output is improved, this should be considered to assess cost-effectiveness. Studies have found, for example, that imposing minimum nurse-to-patient ratios on hospitals through regulations would reduce measured productivity, while there was mixed evidence regarding the effect on patient outcomes.<sup>20</sup>

Administrative expenses have been estimated to account for about 30 percent of national health expenditures in the United States.<sup>21</sup> This estimate includes expenditures on program administration and the net cost of private health insurance, management of employer plans, and administrative costs of hospital and other providers. Actuaries at the Centers for Medicare and Medicaid Services concluded that administrative expenses do not have much of a role in explaining spending growth. However, given the rapid growth in spending on program administration and the net cost private health insurance—about 7 percent of total national health expenditures in 2003—further consideration seems warranted.

Recent changes in the health care marketplace and the incidence of various health conditions also could be contributing to the growth in spending. Consolidation of the health care market—both in terms of providers and commercial insurers—could be adding to the growth in health spending. Evidence suggests that providers pushed back against managed care to put themselves in better bargaining positions and that, in some markets, this led to increases in the prices paid by preferred provider organizations.<sup>22</sup> These high prices could be a problem for insurers, but it appears that they have also been consolidating and have been able to continue to increase premiums and operating margins.<sup>23</sup>

Despite the potential benefits of primary care, the increase in the number of physicians in primary care has been smaller than the increase in the number of specialists.<sup>24</sup> Studies focusing on the relationship between primary care and health care spending in a cross-section find that areas with more primary care physicians and fewer specialists have lower costs.<sup>25</sup> By extension, it seems reasonable to conclude that the increased number of practicing specialists has also contributed to the growth in health expenditures.

A factor that has some effect on one particularly fast-growing segment of health spending—prescription drugs—is direct-to-consumer advertising. The share of consumers who saw television, radio, or print advertising related to consumer drugs was 81 percent in 2002.<sup>26</sup> Based on econometric modeling, about 12 percent of the growth in drug sales between 1999 and 2000 was attributable to this form of promotion.<sup>27</sup> This highly visible factor is important, but not the primary force driving prescription drug or health costs.

Researchers have begun to explore the role of specific high-cost diseases on the overall growth in health spending.<sup>28</sup> Thorpe and his colleagues found that heart disease, pulmonary conditions, mental disorders, cancer, and hypertension—the five most expensive conditions—accounted for 31 percent of the growth in health spending between 1987 and 2000. For four conditions they studied (stroke and cerebral ischemia, mental disorders, diabetes, and pulmonary conditions), the treated prevalence of the disease was a more important determinant of total cost growth than either cost per treated case or population growth. Sturm showed that obesity adds to health care costs for adults and is a more costly condition than smoking.

Disease-specific costs may be increasing for the same reasons that overall spending is increasing (i.e., technological change, as well as other demand and supply factors). However, the underlying prevalence of certain conditions—and the occurrence of multiple chronic conditions, particularly among the Medicare population—is increasing, calling attention to efforts to more effectively prevent and manage specific conditions and combinations of conditions.<sup>29</sup> These efforts are intended to improve the quality of life as well as curtail spending growth. If underlying prevalence is changing slowly, however, the effect on spending growth could be small.

#### STRATEGIES FOR CONTAINING HEALTH EXPENDITURES

Interest in strategies for containing the growth in health expenditures is largely driven by the widespread conclusion that spending cannot grow faster than GDP indefinitely. For example, recent projections suggest that health spending as a share of GDP could grow to nearly 20 percent by 2015, with no real limit in sight.<sup>30</sup> Of course, if history is a guide, health spending growth tends to fluctuate—as does GDP growth—keeping the share of GDP spent on health within some limits.<sup>31</sup>

One of the reasons health spending has moderated at various times is that policymakers, as well as the behavior of employers, providers, insurers, and individuals, have made adjustments to address rapid spending growth. These adjustments are likely to continue in the future. Some strategies that seek to control health spending will rely on market forces, while others may lean on the public sector to put direct controls on payment rates; some may combine elements of both approaches. The result may be a onetime reduction in the level of spending, with no real change in subsequent growth rates or an actual slowdown in the rate of increased spending. In the end, cost containment must work by either lowering the growth in the prices paid for health care services or the volume and intensity of the services patients receive.

Historically, public payers have relied on setting provider payment rates and, when budgets get tight, freezing, cutting, or slowing the growth of those rates. The BBA of 1997 is an example of this approach applied to Medicare. In addition, in recent years, state Medicaid programs have adopted controls on payment rates as part of their approach to closing budget shortfalls.<sup>32</sup> The government's success with price strategies as a means of controlling spending may be the reason that many managed care plans relied on negotiating lower provider rates as one of their first lines of attack on private spending in the mid-1990s.<sup>33</sup>

Price controls as a strategy for controlling public or private costs will not lead to dollar-for-dollar savings, because providers can offset some of the effects by increasing the volume of services provided. Currently, Medicare assumes that 30 percent of the potential impact of any physician fee cut will be eliminated by increases in the volume and intensity of services that beneficiaries receive.<sup>34</sup> In addition, price controls are not likely to be a long-term solution, because it is not possible to cut provider fees indefinitely in the public or private sectors. However, periods of fee cuts, freezes, or slowdowns do produce short-run savings and may lower the level of spending from which growth occurs.

There is also a long history of use of strategies to address the growth in the volume of health services used. These strategies are based on the premise that some unknown share of health services is unnecessary and could be eliminated with virtually no adverse health consequences. Cost-sharing by patients (e.g., deductibles, copayments, and coinsurance) is one example of a method used to give patients a greater financial stake in utilization of services, with the expectation that patients will consume fewer services. The RAND Health Insurance Experiment established this finding, but it also found that as cost-sharing increased, patients were as likely to consume fewer necessary as unnecessary services.<sup>35</sup>

In recent years, the cost-sharing strategy has led to the development of highdeductible health plans that are combined with health reimbursement arrangements or health savings accounts (HSAs). Such consumer-directed health plans attempt to increase consumers' financial stake by having them pay for covered services—as well as uncovered services in the case of HSAs—from these accounts until a deductible is met. Consumerdirected health plans are new entities and many feel that they have promise. At this point, there is little research evidence to suggest how they will affect health spending or the types of health services patients receive. However, patients' incentives to seek less care will diminish when they get seriously ill, because spending will quickly exceed the deductible.

Managed care is another volume-oriented strategy that has evolved over the years. Early health maintenance organizations lowered costs, primarily by reducing hospital spending.<sup>36</sup> Now, managed care organizations are developing approaches to reduce the cost of chronic and acute care, increase patient compliance with preventive measures, and improve quality of care. These strategies include disease and case management to reduce waste among providers and patients, pay-for-performance to reward high-quality care and efficiency, and preferred provider networks built on information about provider quality and price. Although there is great interest in pay-for-performance strategies in both the private and public sectors, one early study suggests that it may have fewer benefits than hoped for with respect to achieving preset performance targets.<sup>37</sup>

Newhouse suggests that combining features of managed care with consumerdirected health plans could produce savings and avoid some of the reductions in needed care observed in the RAND experiment.<sup>38</sup> In fact, Robinson points out that insurers are less likely to try to influence provider behavior and are now looking to patients to play a much bigger role in management of the care they receive.<sup>39</sup>

These newer managed care strategies are not limited to the private sector, as government programs are going well beyond relying on price controls to limit spending. During the 1990s, many state Medicaid programs required enrollment in managed care plans for certain types of beneficiaries, in part to make costs more predictable. Medicare also has tried to increase enrollment in managed care, but a relatively small share of beneficiaries enrolled when given this option. Currently, the Medicare Payment Advisory Commission and a series of legislative proposals are exploring options such as pay-for-performance, disease management, and payment system incentives to yield more cost-effective patterns of care.<sup>40</sup>

Most of the new strategies considered by the public and private sectors build on the idea that evidence can guide health plans, providers, and patients along the most clinically effective paths of care. This body of evidence is gradually emerging, but it is far from complete.<sup>41</sup>

#### SUMMARY

The data presented in this brief show that health spending continues to grow more rapidly than GDP. The most important factor in this growth is the introduction and use of new technologies. Although the rapid growth in spending caused by new technologies may not be sustainable at the current rate, some new technologies create benefits that may exceed their costs. The choice of appropriate cost-containment strategies must balance two considerations: the desire for new technologies and the increasing benefits they represent, and the need to curtail the excessive cost growth that will leave a diminishing share of our economic resources available for other uses. One clear need is to distinguish technologies that provide the largest net benefits to the population from those that fail to justify the resulting increase in cost.

It is likely that attempts to constrain health cost growth will be pursued with increasing intensity over the next few years and that these attempts will continue to combine government price setting with consumer-directed health plans and evolving managed care approaches. These approaches will be undertaken by both public and private payers, with encouragement from Congress, which is concerned about federal budget deficits, and from employers, who are concerned about the effect on their bottom lines. Effective care management that reduces misuse and overuse of services not only would contain costs but also could improve quality of care. These goals may be hard to achieve, however, because efforts to reduce payment rates through direct controls or qualityrelated incentives may be met with resistance by fee-for-service providers, who will try to maintain their incomes by increasing the volume of care provided.

There is a difference between slowing the growth in overall health spending and slowing the growth in spending by an individual payer, or group of payers, in the system. Price controls may slow public spending and health plans with greater cost-sharing may lower premium costs for employers, but neither approach necessarily addresses the overall spending growth. These approaches may simply control spending in one part of the system and put a greater burden on other parts to make up the difference.

The process of searching for new and effective cost-containment strategies has been going on for decades. Altman and Levitt look at the history of cost containment in the United States and conclude that Americans seem willing to continually revisit the search for a solution, while shying away from "tough choices."<sup>42</sup> Success ultimately may be found not in sweeping reform but in a series of constantly evolving short-term strategies that draw on many different approaches.

#### NOTES

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