

Improving Incentives in Health Care Spending

Health care spending in the United States has increased rapidly over the past several decades, rising 44 percent in real per capita terms in the past ten years alone. Some of the reasons for this marked rise reflect higher-quality health care, such as improved technological options for enhancing the health and quality of life of the American people. However, other factors, such as poorly functioning markets for health care, may have led to excessive spending and inefficient patterns of medical care utilization. Furthermore, whether this increased spending is of high value or not, it has put tremendous pressures on individuals and the institutions that finance health care spending. Family budgets are being strained as health care costs take up an increasing share of incomes. Government health care expenditures have also been increasing rapidly, burdening both Federal and state budgets. If not curtailed, the increased costs to governments will eventually lead to large tax increases, sharp cuts in nonhealth spending, or both.

This chapter reviews the causes and consequences of health care spending growth and discusses how spending can be more efficient and of higher value in the context of a consumer-driven, market-based system. The emerging consumer-driven health care movement aims to empower consumers with improved information and ability to make choices about their own health care, which in turn can result in increased provider competition to better serve patients' needs at lower costs. The key points of this chapter are:

- Growth in spending on health care has been much more rapid than general inflation, straining consumers, employers, and government budgets.
- Perverse tax and insurance incentives have led to inefficient levels and composition of spending on health care. Some increased spending has produced valuable health improvements, but in a better-functioning health care market these improvements could be attained at lower cost.
- Promoting a stronger role for consumers is a promising strategy for improving health care value and affordability.

The Growth in Health Care Spending

Spending in the health care sector has steadily grown from under 6 percent of GDP in 1965 to 16 percent of GDP in 2004. If current trends continued, health care spending would be projected to reach 19 percent of GDP by 2014

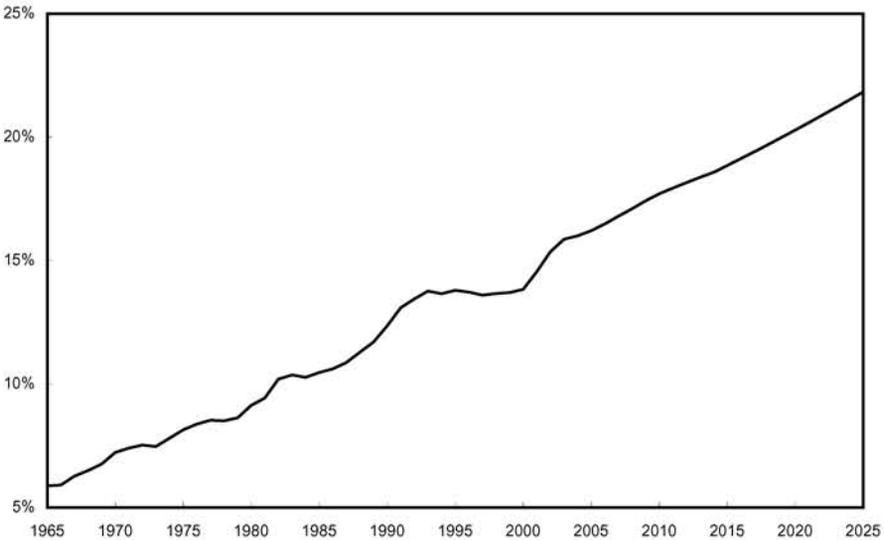
and 22 percent by 2025 (Chart 4-1). Since 1965, the government share of total health spending has risen from 25 percent to over 45 percent, mainly due to increased eligibility and generosity of Medicare and Medicaid. (Medicare is a Federal government program that pays for health care for senior citizens and those with certain disabilities. Medicaid, financed by both Federal and state governments, is focused on providing health care for the poor.) Medicare spending alone is projected to increase from 2.6 percent of GDP in 2006 to 4.3 percent by 2025. Among those without access to Medicare or Medicaid, most expenditures are financed by private health insurance (64 percent), provided mainly through employers (91 percent of those with private insurance). The rising costs of health care are reflected in premiums (employer plus employee share) for employer-provided insurance that in 2005 averaged almost \$11,000 for a family (Chart 4-2), up from \$6,700 in 1999 (in 2005 inflation-adjusted dollars). Per capita health care spending in the United States has risen from about \$4,500 ten years ago to about \$6,500 today (in 2005 dollars).

The United States today spends roughly twice as much per capita on health care as other industrialized countries, such as the other members of the Organization for Economic Cooperation and Development (OECD). This large difference in part reflects higher levels of per capita income and output

Chart 4-1 National Health Expenditures as a Percentage of GDP

National health expenditures have risen dramatically and are projected to continue rising.

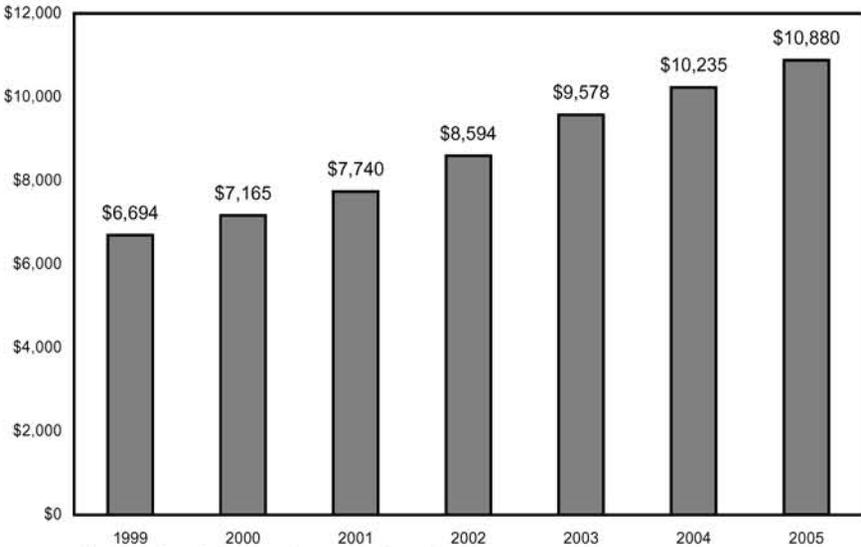
Percentage of GDP



Source: Department of Health and Human Services (Centers for Medicare & Medicaid Services) and Council of Economic Advisers.

Chart 4-2 Family Health Insurance Premiums 1999-2005

Annual premium (2005 dollars)



Note: Premiums include employer and employee share.

Deflated by the Consumer Price Index Research Series.

Source: Kaiser Family Foundation Employer Health Benefits Survey 1999-2005.

in the United States, since richer countries tend to spend proportionately more on health care, but the United States spends a substantially larger share of GDP on health care than other wealthy countries do. For example, the United Kingdom spends about 8 percent of its GDP on health care, compared with the United States' 16 percent. The U.S. expenditure as a percent of GDP is more than six percentage points higher than the average in OECD countries. Rates of spending *growth*, however, are much more similar across countries. For example, from 1998 to 2003, average real health care spending increased 4.6 percent per year in the United States as compared to 4.5 percent in the OECD as a whole. This suggests that many of the underlying international spending differences stem from longer-term factors.

When looking at these statistics, it is also important to remember that buying more health care is not necessarily equivalent to buying more health. Health care is one of many different determinants of health status, and for many people marginal increases in health care consumption may be less cost-effective than marginal increases in spending on other determinants such as a healthier lifestyle (exercising, not smoking, eating a healthier diet). Evaluating the relative cost-effectiveness of spending on different health determinants can be challenging, however, in part because it is difficult to measure the quality of health services consumed.

Where Health Spending Has Grown

There have been significant increases over time in all major spending categories, including outpatient, acute inpatient, long-term care, and pharmaceuticals. Both personnel costs and goods costs have increased. Spending has grown for both privately and publicly financed and delivered care.

One might guess that the aging of the U.S. population would explain an important part of the increase in health care costs, especially since about one-quarter of health care in a given year is spent on those who die that year. Research suggests, however, that less than 10 percent of the growth in health spending over the last several decades can be attributed to this factor. Another contributing factor might be America's rising prosperity, because richer individuals and nations demand more health care, but again this factor can only account for a relatively small portion of the health care spending growth. Various studies have speculated about the contribution of other factors such as rising obesity, but there is as yet no consensus on the importance of these factors. There is general agreement, however, that the rapid growth in development and use of expensive new health care treatments accounts for a large share of overall health care spending growth over time.

A useful framework for understanding increases in medical spending breaks these spending increases into three components: (1) changes in the quantity demanded of existing health-related goods and services, (2) changes in the prices of those existing goods and services, and (3) the effects of technological advances that change the available set of health-related goods and services. The next part of this section looks at each of these three factors.

Quantity of Health Care Demanded

Do we demand higher volumes of health care today than in the past? While we clearly consume more of some types of care (based on higher incomes, changing medical needs, etc.), health care visits per capita have not increased. The biggest components of health care spending are physician and hospital services. Doctor visits per capita dropped somewhat from 1980 through the mid-1990s, and have increased only modestly since then. The number of hospital discharges per capita and the average hospital length-of-stay, however, have declined dramatically—they were 50-percent higher in 1980 than in 2000. Growth in spending within the United States does not seem to be explained by increased visits to the doctor or hospital.

Moreover, international differences in spending cannot be explained by differences in the quantity of physician and hospital visits. In fact, doctor visits and hospital nights per capita in the United States are lower than in many OECD countries. For example, in 2000 the United States had 0.7 hospital nights per capita, compared to 0.9 nights in the United Kingdom, 1.3 nights in Switzerland, and 1.9 nights in Germany. Service *intensity* in the

United States is very different, however, with U.S. hospital staffing levels at double the OECD median. Thus, while Americans have fewer health care contacts, they appear to receive more services at each contact. This difference explains in part why the average U.S. hospital night costs three times the OECD average.

Health Care Prices

The official medical consumer price index (medical CPI), which measures price increases for medical goods and services and is published by the Department of Labor's Bureau of Labor Statistics, indicates that health care prices over the last few decades have grown more rapidly than prices of other goods and services in the economy. From 2000 to 2004, the health care component of the CPI grew 19 percent compared to only 10 percent for the general CPI, indicating 9 percent real growth in health care prices. Thus of the 33 percent growth in total per capita health spending over this period, one-quarter apparently derived from increases in the prices of health care relative to other goods and services.

Why would health care prices rise so rapidly? One possible explanation for these recent price increases is that supplier consolidation has led to reduced competition among health care providers, enabling hospitals and physician groups to leverage market power to raise prices. For example, there were about 900 hospital consolidations during 1994-2000 (from a base of roughly 6,000 hospitals). Some of these mergers have appeared to result in monopolistic price increases, and even some major metropolitan areas have become dominated by just two or three hospital systems. It is not clear how important such trends will be in the future, however, in the face of vigorous antitrust enforcement.

Part of the apparent increase in relative prices may, however, be the illusory result of measurement problems. Standard price indices such as the medical CPI may overestimate price growth in health care if they do not adequately account for improvements in health care quality. Price indices are supposed to reflect price changes for a given product. However, because health care quality is constantly increasing, rising prices for a given health care visit may reflect improved quality, rather than just higher costs for a given level of care. For example, the coronary artery bypass graft that the average patient receives today may result in fewer complications and longer and higher quality of life afterward than would have been the case for a patient receiving the procedure 10 years ago—so the higher price paid for the procedure reflects in part the fact that the patient is receiving more “health,” not just paying more for the same service.

That said, higher prices for medical services do appear to be an important part of the explanation for why the United States spends more on health care than other OECD countries do. For example, one study of Australia,

Denmark, France, Canada, Germany, and the United Kingdom found that physician wages in the United States are 77 percent higher than the average across those countries. This does not mean, however, that those countries provide a model that should be emulated: Heavy price regulation in some countries has led to long waiting lists for certain types of medical services. One recent survey found that over half of patients in Canada and the United Kingdom had to wait longer than a month for a specialist appointment, compared to less than a quarter of patients in the United States. Similarly, more than a third of patients had to wait longer than four months for elective surgeries in Canada and the United Kingdom, compared to fewer than 10 percent in the United States.

There is a common perception that drug prices are unduly higher in the United States than in other OECD countries, perhaps due to aggressive price negotiation by European governments, but recent research suggests that this may be misleading for several reasons. First, carefully accounting for manufacturer discounts to insurers in the United States shows price differences to be smaller than simple retail price comparisons would suggest (U.S. prices are discounted by about 8 percent on average). Second, U.S. consumers use a much higher proportion of generic drugs than do consumers in other countries (e.g., 58 percent of units in the United States versus 28 percent in France). When comparing average prices paid for each active ingredient (whether generic or name brand), rather than only prices for selected name brand drugs, the international price differences are further narrowed.

Furthermore, some experts suggest that wealthier countries such as the United States should pay a larger share of drug development costs than should less-wealthy countries, because of both equity and efficiency arguments. Thus, observing lower drug prices in developing countries than in the United States does not generate great controversy. Many people do not recognize, however, that the United States is also substantially richer than most other OECD countries. For example, per capita income in the United States is 22-percent higher than in the United Kingdom. After adjusting for differences in manufacturer discounts, use of generics, and per capita income, average drug prices are in fact higher in many other OECD countries. Research has found that U.S. drug prices relative to income are 7-percent lower in France, but 4-percent higher in Canada, 10-percent higher in Germany, and 25-percent higher in the United Kingdom. Thus, the United States' higher health care spending as a share of GDP does not appear to be explained by higher drug prices.

Technological Change

Research suggests that, over time, a major source of health care spending increases has been adoption of new, technologically intensive health care goods

and services. For example, one study found that average spending per heart attack case in the United States increased in real terms from \$12,000 in 1984 to about \$22,000 in 1998, and that about half of this spending increase could be attributed to the adoption of more-sophisticated technologies. This does not mean that the higher spending is not of very high value: post-heart attack life expectancy over this same period increased from five years to six years, with 70 percent of that increase attributable to the adoption of better technology.

The United States appears to use some expensive technologies more intensively than do other countries. For example, the United States has more than 50-percent more MRI units per capita than do other OECD countries on average. The United States' more-intensive use of technology partly reflects its higher rate of innovation and earlier adoption of technology. For example, angioplasty was relatively rare outside the United States in 1990, with the U.S. utilization rate three times higher than the next-closest country; Germany finally reached the U.S. level by about 1998, while adoption in other countries continued to lag.

It is worth noting that the adoption of new technologies does not inevitably raise costs. New technologies regularly reduce costs in many other sectors of the economy, such as the semiconductor industry. In the U.S. health care industry, however, the combination of technological change along with muted consumer incentives to demand lower costs is responsible for a significant portion of rising health care spending.

First-Dollar Insurance Inhibits Consumer Cost-Consciousness

In most markets outside of health care, consumers decide what to purchase by comparing the price of a good or service against the benefit it brings them. By contrast, in the health care sector, consumers often do not learn the prices of goods and services consumed until bills are received weeks or months later, if ever. Instead, physicians are expected to make health care consumption choices for patients, despite the fact that physicians frequently lack the incentive to match the benefits of care with its costs, and may even lack information about the costs themselves. A major reason for this lack of consumer incentive is the fact that many health insurance policies provide close to “first-dollar coverage” of health care costs. That is, people with health insurance typically pay only a relatively small portion of the total cost—or in some cases, literally none of the cost—of the health care services they receive. This section reviews the causes and consequences of first-dollar insurance coverage.

Causes of First-Dollar Insurance Coverage

Unlike most other types of insurance, health insurance in the United States often includes first-dollar coverage of the cost of even routine, predictable services. By contrast, most other forms of insurance focus on protecting the insured from large and unexpected losses. If automobile insurance had the first-dollar coverage of even routine services that many health insurance policies offer, it would cover the costs of oil changes and new tires, rather than just protecting against unpredictable catastrophes such as automobile accidents.

Health insurance policies have this unusual first-dollar coverage feature in large part because the tax code makes it cheaper for people to purchase health care indirectly through insurance than directly through out-of-pocket payments (see Box 4-1). Another factor underlying first-dollar coverage is the increased use of managed care programs, which spread rapidly during the 1990s. Most managed care plans are characterized by minimal cost sharing, relying instead on gatekeepers to regulate use of resources. Interest in managed care programs has decreased recently, because of public backlash against the cost-containment measures used in these programs.

Box 4-1: Tax Preferences for Employer Health Insurance Premiums

Since the 1940s, the tax code has excluded employer payments for health insurance premiums from the portion of workers' compensation subject to taxation (both payroll and personal income taxes). The total value of the tax exclusion is quite large, reducing Federal taxes by over \$200 billion in 2006 (\$133 billion for the income tax exclusion and \$80 billion for the payroll tax exclusion), which is equivalent to about 10 percent of actual Federal tax receipts. This exclusion of health insurance premiums from taxation was a by-product of wage-control legislation during World War II (which established a precedent for treating employee benefits differently from regular wages), and was not intentionally designed to promote health insurance coverage. But this tax treatment of employer-provided health insurance premiums has had important consequences for insurance markets.

First, it has caused the private insurance system to become predominantly employment-based. More than 91 percent of privately insured individuals under age 65 receive their health insurance through their employers. Except for the self-employed, those who purchase insurance on the individual market (that is, not through their employers) must do so with after-tax dollars. The self-employed receive an "above-the-line" income tax deduction for health insurance premiums (equivalent to the income-tax exclusion for employer insurance), though they still owe full payroll taxes on the income used to buy premiums. For someone in the

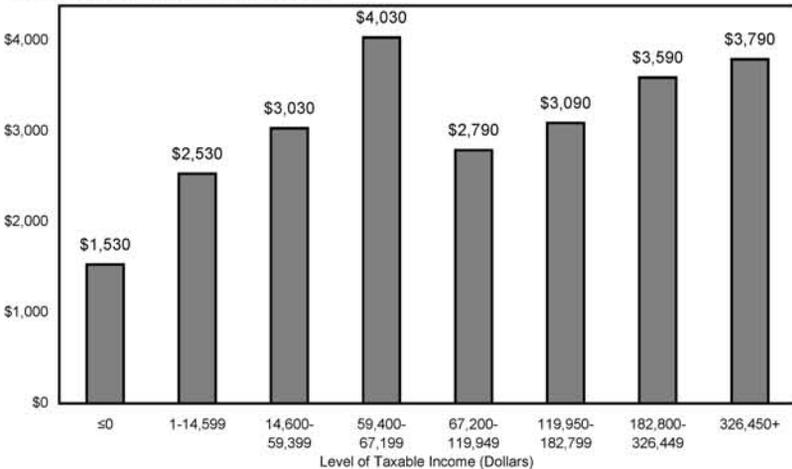
15-percent income tax bracket and subject to the 15.3-percent payroll tax, a policy with a \$10,000 premium would cost roughly \$7,000 if purchased through an employer, \$8,500 if the person were self-employed, and the full \$10,000 if the person were not self-employed and purchased the policy individually. This tax treatment has created a strong financial incentive for individuals to purchase health insurance through their employer, even if their first choice of insurance product is not offered by the employer. In addition, as an incentive to buy health insurance, this tax subsidy is larger for people in higher tax brackets (as shown in the chart), despite the fact that a given subsidy amount would reduce uninsurance much more among lower-income households.

Furthermore, the employer premium tax exclusion promotes low-deductible insurance coverage with minimal out-of-pocket cost sharing. In most cases, while insurance premiums are paid with pretax dollars, out-of-pocket health spending must be paid for with after-tax dollars. For example, \$1,000 of health care services covered by full insurance costs the person with employer-provided insurance only about \$700 in after-tax dollars (assuming a 15-percent income tax bracket and 15.3-percent payroll tax), whereas those same services would cost \$1,000 if paid out-of-pocket. Because of the tax penalty for out-of-pocket spending relative to insurance premiums, there is a strong incentive for employers to provide and employees to select first-dollar coverage, even if they would have preferred higher deductibles and lower premiums in the absence of the tax provision. This has, in turn, diminished the role of consumers as guardians against wasteful spending and unduly high prices.

Annual Value of Employer-Provided Health Insurance Tax Exclusion by Income

The tax exclusion provides the greatest benefit to those in higher tax brackets.

Value of tax exclusion for \$10,000 annual premium



Note: Includes federal income and payroll taxes for a hypothetical family of four. Calculations are imprecise for incomes within \$10,000 of tax bracket ceiling.

Source: Council of Economic Advisers.

Consequences of First-Dollar Insurance Coverage

The original purpose of health insurance, like other forms of insurance, was to protect individuals from catastrophic and unexpected costs by spreading risk across a larger population. However, as discussed, health insurance in the United States has now also become a vehicle for financing relatively low-cost, routine expenditures. This use of insurance as “prepaid medical care” has three important consequences: (1) It encourages consumers to overuse certain types of health care. (2) It gives little incentive for consumers to search for the lowest-price providers. (3) It distorts incentives for technological change. Rather than focusing research incentives on cost-effective technology, it induces adoption of technologies for which costs exceed incremental benefits, while undermining the development of cost-saving technologies. We discuss each of these points.

First, heavily insured individuals, being insulated from most health care costs, have the incentive to overconsume certain types of care, a phenomenon referred to as *moral hazard*. An allergy drug may have great value for patient A who has serious symptoms, but little value for patient B who has only mild symptoms. If the two patients faced the market price of \$100/month, then A might decide the drug is worth the cost but B might forgo it, given its negligible benefit for him. With first-dollar insurance coverage, however, B might instead choose to continue taking the drug as long as the expected benefits to him were greater than zero. In this case, B’s decision would inefficiently drive up health care spending at a loss to society, since the benefit of the drug would be less than the real cost.

Some would argue that such scenarios are rare because physicians should not prescribe the drug for person B if it would be wasteful or of little practical use in improving his health. But in fact physicians may not have enough information to fully evaluate the benefit to patients, and often have little incentive to limit inappropriate care to highly insured patients. Providing extra services increases their incomes and protects them from the charge that they did not take every action with conceivable benefit to the patient. Box 4-2 discusses the role of medical malpractice liability in increasing medical expenditures.

In order to quantify the moral hazard effects of first-dollar insurance coverage, the RAND Health Insurance Experiment randomized individuals into health insurance plans with different *co-insurance* levels. (Co-insurance refers to the percentage of health insurance spending above the deductible an individual must contribute.) A higher co-insurance level gives both the patient and the doctor greater incentive to avoid the use of drugs or procedures that are costly and have low expected benefit. The study found that changing the structure of health insurance does affect the behavior of patients and their

Box 4-2: Medical Liability Costs

Substantial costs in the U.S. health care system are associated with the medical liability system. This affects health care spending in several ways. First, the cost of malpractice damage awards, the legal costs of malpractice lawsuits, and the costs of underwriting malpractice insurance policies are passed on to providers through malpractice insurance premiums and then to patients through out-of-pocket payments and insurance premiums. Second, defensive medicine—ordering tests and procedures solely to guard against potential malpractice claims—may have an even bigger effect on health care spending than the direct costs associated with malpractice suits.

The President has called on Congress to pass liability reforms to make the system fairer and more predictable while reducing wasteful costs. The trend toward greater consumer decision making in health care may have complementary effects in reducing liability costs associated with defensive medicine. Consumers with first-dollar insurance coverage have little incentive to decline many of the tests and procedures suggested by physicians, even if they and their physicians understand that there may be very little health benefit from the increased spending. But as consumers pay for a greater portion of noncatastrophic care, they may decide to forgo expensive and unnecessary tests and procedures suggested by physicians primarily to avoid lawsuits rather than to improve patients' health.

doctors. Specifically, individuals with first-dollar coverage had 45-percent higher health expenditures than individuals who were randomly assigned insurance plans with 95-percent co-insurance up to a catastrophic out-of-pocket maximum level (the out-of-pocket maximum was about \$3,500 in today's dollars). Importantly, the extra care received in the first-dollar coverage plans produced no discernible extra health benefits in the studied sample as a whole. There were, however, some health benefits for select subpopulations of low-income and chronically ill individuals, suggesting that care should be taken not to expose lower-income families to excessively high cost sharing relative to their income, and that certain preventive measures such as chronic-disease management are important to exempt from cost sharing. For most services consumed by the majority of the population, however, the RAND study showed that higher cost sharing can be a powerful tool to induce consumers to take responsibility for focusing their health care spending on only those products and services with the highest value.

A second consequence of first-dollar insurance coverage is that consumers are less sensitive to the prices of health care consumed, an outcome that dulls the competitive forces that keep prices down in most other markets. Many insurers attempt to reduce the range of choices available to enrollees through mechanisms such as selective contracting and preferred provider networks, but such practices are even more effective when the consumer is also price-sensitive. Imagine two hospitals that provide the same service, but hospital A charges \$1,000 and is located in an older facility while hospital B charges \$2,000 but is located in an updated facility with a wide array of amenities and equipment on site. Given these choices, a consumer facing the actual price may prefer hospital A, but in a world of first-dollar coverage, most people would choose hospital B, even if the extra amenities of hospital B provided only modest benefit. As a result of this structure of incentives, health care providers may compete for patients by providing greater convenience or amenities with little incentive to control costs. This lack of price sensitivity on the part of the consumers of health care is one of the major forces underlying the rapid growth of health care costs.

A third consequence of first-dollar insurance coverage is distorted incentives for technological development. One type of distortion is that new technologies may be developed and marketed even when they are of low incremental cost-effectiveness relative to other available options. For example, if a new drug is even slightly more effective than an existing drug, a person with first-dollar insurance coverage may demand the new drug even if it is priced well above existing satisfactory and effective alternatives. When consumers have dulled price incentives pharmaceutical companies will invest in bringing a new drug to market even if it provides little new value. In a world in which most consumers had high-deductible insurance and were sensitive to the full cost of drugs, the pharmaceutical company might choose not to spend the large amount of resources necessary to complete clinical trials and bring the drug to market if they knew its incremental improvement over existing drugs would be small.

Likewise, dulled price sensitivity on the part of consumers reduces the incentive to develop cost-reducing technologies. In many other sectors of the economy, such as computer memory chips, technological progress results in cheaper and more cost-effective products each year as producers look for more-efficient manufacturing processes and product innovations to keep them ahead of their competitors. In health care, this type of technological innovation is much rarer, since few consumers have the incentive to adopt a cheaper product, particularly if it has even slightly lower effectiveness. If more health care consumers were to become price sensitive, the health care sector would have the incentive to pursue more such cost-reducing technologies that could, over the long term, help reduce the rate at which health care spending is growing.

Some observers have expressed concern that changes to the current system might be harmful if they result in reduced innovation, but these observers have often failed to distinguish cost-effective from cost-ineffective innovations. Life expectancy at birth has increased from 70 to almost 78 years since 1962. In addition to living longer, we are also enjoying more years in better health and with fewer disabilities. While some of these health improvements have been due to lifestyle changes, some can clearly be traced to medical technologies, such as those that have reduced infant mortality, improved survival rates after heart attacks, improved treatment of depression and other mental illnesses, and improved the management of chronic illnesses. Research suggests that *on average* our spending on new medical technology has indeed been cost-beneficial. This indicates that, as a society, we would not want to return to the health spending levels of 1960, for example, if doing so also meant returning to the types of medical care available in 1960. But economic efficiency depends on each (“marginal”) individual new technology being cost-beneficial, not just the average of all technologies. The fact that on average our investment in medical technology has paid off does not preclude the possibility that our system contains significant inefficiencies, and that some of the new technology may have contributed little compared to the amounts spent on it. If consumers were given the information they need about the actual costs and benefits of various treatments, as well as the incentives to compare those costs and benefits, it might be possible to eliminate some of that wasteful spending.

Consequences of Inefficient Health Care Spending

Rising health care spending is a burden to employers, consumers, and taxpayers. Employers who offer insurance complain that rising premiums strain their labor relations and threaten their balance sheets. Rising premiums make health insurance less affordable, contributing to the ranks of the uninsured. Those who are insured face rising out-of-pocket costs and lower cash wage growth. And taxpayers must finance the rapidly increasing costs of publicly provided health care for seniors, the disabled, and the poor.

Private Spending

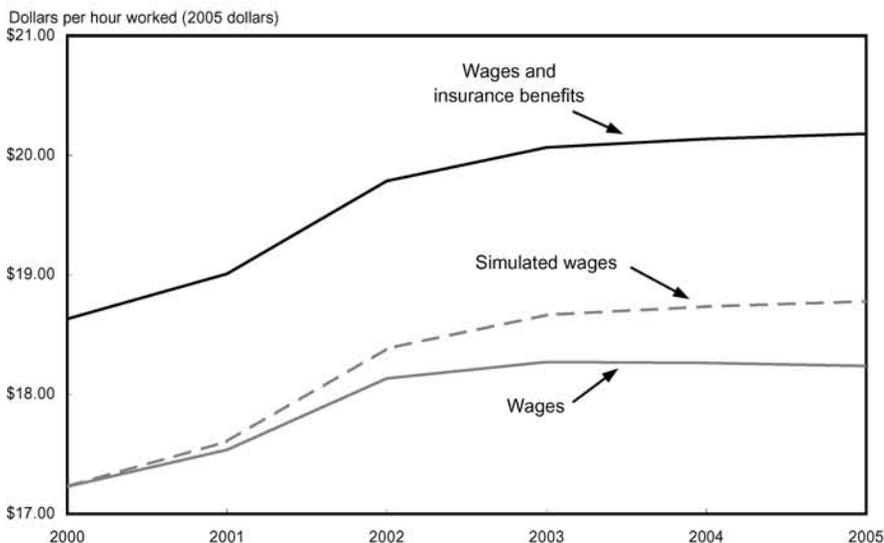
As consumers spend more of their budgets on health care, they must spend less on other goods and services. Since 1980, for example, the share of consumer spending that has gone to medical care has increased from 10 percent to 17 percent, while the shares of spending on items such as food and clothing have decreased. Of the \$7.5 trillion increase in personal income

since 1980, \$1.5 trillion has been devoted to health care. Similarly, of the \$2.19 real increase in hourly compensation over the past five years, \$0.54 (25 percent) has gone toward higher health insurance premium costs. Thus, take-home pay has grown more slowly than total compensation (including health insurance and other benefits) (Chart 4-3).

The costs of health care would be of less concern if most health care spending reflected optimal decisions by consumers weighing the costs and benefits of the services they buy. For example, the fact that consumer spending on DVDs increased 31 percent in 2004 alone has not alarmed anyone nor led to calls for government intervention. But spending on private health care is different, because health care is considered a “merit” good deserving of government support for those that cannot afford it, because of the government’s extensive role in the health care market, and because of the forces that interfere with the efficient allocation of resources.

Employers have also been affected by increasing health care costs. In particular, firms that have promised generous health benefits to retirees have borne increasingly heavy costs. The economic consequences of this may include the need for restructuring of some of these firms, loss of expected benefits for some retirees, and potential costs to taxpayers if some of these retirees increase their reliance on public health insurance. Rising costs for current employees have also affected employer behaviors. Some employers have tried to reduce their insurance costs by hiring more part-time workers (who are generally

Chart 4-3 Real Hourly Compensation of the Civilian Population
Health insurance spending growth exerts downward pressure on wages.



Note: Middle line shows simulated wages if health insurance premiums grew at rate of inflation.
Includes workers in the private nonfarm economy excluding household employees and the public sector.
Source: Department of Labor (Bureau of Labor Statistics).

ineligible for insurance benefits), asking employees to contribute more to premiums, reducing the generosity of the plans they offer, or discontinuing health insurance benefits altogether.

In the long run, however, it is not the employers but rather the workers who bear the burden of rising health insurance costs. Economists have shown that even though employers may make the bulk of the payments to cover the health insurance premiums of workers, these payments are treated just like wages or any other component of workers' total compensation. This total compensation depends on worker productivity and labor-market supply and demand. Rising insurance premiums may thus change the mix of workers' compensation by increasing health benefits and decreasing wages, but if they do not affect workers' productivity they will not lead firms in competitive markets to raise total compensation. Institutional factors such as minimum-wage laws and sluggish wage adjustment may mean that health insurance premiums affect employer profits in the short run, but in the long run most or all of increases in health insurance costs are shifted to employees in the form of wages that are lower than they otherwise would have been.

Public Spending

When per capita spending on health care rises rapidly, the pressures on government programs become particularly intense. First, if the standard of care received by enrollees in government programs is not to differ too radically from that of the general public, the costs of helping those already enrolled in the programs will rise as well. Second, rising insurance premiums may cause some people to drop private insurance and to rely instead on public insurance such as Medicaid or on safety-net providers (e.g., uncompensated hospital care) subsidized by taxpayers. Not only does rising uninsurance lead to higher government costs, but uninsured people often consume health care resources inefficiently—for example, by failing to obtain preventive care, delaying necessary care, or overusing emergency rooms relative to less-costly clinic settings.

The largest government programs that finance health care for those not otherwise insured are Medicare and Medicaid. These programs are becoming increasingly expensive to taxpayers. For example, according to projections, if current trends were to continue unchecked, Medicare costs would increase from the current share of 2.6 percent of GDP to 6.9 percent by 2050. Medicaid, jointly financed by the Federal and state governments, is also becoming an increasingly large share of budgets, with just the Federal portion of spending projected to increase from 1.5 percent of GDP today to 2.5 percent by 2050. The costs of these public programs are unsustainable under any reasonable projections. Closing the currently projected 75-year deficit in just the Hospital Insurance (HI) portion of Medicare would require

tax increases of 107 percent or benefits reductions of 48 percent. Ultimately, the benefits paid by these programs must be significantly pared back, the taxes dedicated to their support must be increased, or major reforms must be enacted that slow the rate of growth in health care spending.

Strengthening the Role of Health Consumers Through Public Policy

This chapter has discussed the central role of first-dollar insurance coverage in dulling the incentives for consumers to shop carefully for cost-effective health care. By giving consumers both the incentives and the information needed to become better shoppers for health care, public policy can help control the growth in health care costs and improve the efficiency of the use of health care resources.

The President has proposed a wide-range of measures to help make health care more efficient and accessible, such as improving community health centers, reforming medical liability laws, creating Association Health Plans for small businesses, allowing insurance to be more portable and purchased more easily across state lines, and many other reforms. This section will focus specifically on proposals that help improve incentives for consumers.

An important policy advance has aimed to reduce the bias toward first-dollar insurance coverage by allowing more out-of-pocket health care expenditures to be paid with pretax dollars through the innovative mechanism of Health Savings Accounts (HSAs). Complementary initiatives to improve information available to consumers for making appropriate health care choices can help facilitate the movement toward HSA-based consumer-directed health care.

The potential benefits of reforms that slow spending growth could be great. Consider a scenario in which new policies successfully reduce future national health spending by one percentage point per year, through a combination of short-run quantity decreases, medium-term price decreases, and long-run increases in cost-reducing technological change. If spending were to grow by 6 percent per year, instead of by 7 percent per year as currently projected, by 2025 the expected health share of GDP would be reduced from 22 percent to 18 percent, a substantial difference.

Health Savings Accounts (HSAs)

HSAs are tax-favored accounts to which individuals can contribute funds they can then use to pay current and future out-of-pocket medical expenses. These accounts were signed into law by the President in 2003 and went into

effect in 2004. HSAs represent a major improvement over previous tax-preferred medical spending accounts such as Flexible Spending Arrangements (which must be exhausted each year, a factor that limits their use) and Health Reimbursement Accounts (which are owned by employers, not consumers). In contrast, HSAs are owned by individual consumers regardless of employer, and unused account balances can be retained and grow from year-to-year without penalty. HSAs are designed to be used in conjunction with high-deductible health plans, defined as plans having minimum deductibles (currently \$1,050 for individuals and \$2,100 for families) with annual out-of-pocket limits (currently no more than \$5,250 or \$10,500 for individuals and families, respectively). Deductibles and out-of-pocket limits are indexed to adjust over time with inflation. Certain types of preventive care may be provided with first-dollar coverage if deemed appropriate by the insurer.

HSA enrollees with qualifying insurance plans may contribute annually up to the lesser of the plan deductible or \$2,700 (individuals)/ \$5,450 (family). These contributions are excluded from income taxes both at the time of deposit and at the time of “qualifying” withdrawal; the funds may be used to pay for out-of-pocket medical expenditures, rolled over indefinitely, or withdrawn after age 65 (in which case they are taxed as ordinary income if not used for health expenditures).

A key benefit of HSAs is that they lower the previous tax bias toward low-deductible or first-dollar health insurance relative to higher-deductible policies with higher out-of-pocket spending. To illustrate this point, consider a sample health insurance purchaser facing the choice of a low-, medium-, or high-deductible plan. Table 4-1 illustrates how this person’s premiums depend on the plans’ deductibles, according to actuarial estimates for a representative person. The premium for a \$250 (low) deductible policy with a \$2,000 out-of-pocket limit would be \$4,000, but that premium could be lowered by \$1,600 (or 40 percent) by moving to a catastrophic policy with a \$2,500 (high) deductible and an out-of-pocket limit of \$5,000. Suppose that this person had no health expenditures in the first year of coverage, but a \$15,000 catastrophic event in the second year. How is her total two-year spending on health care under these plans affected by the tax code?

- *If there are no tax preferences:* If she buys the traditional (low deductible) plan, her spending is \$4,000 in premiums in each year plus \$2,000 out-of-pocket in year two, totaling \$10,000. If she buys the catastrophic (high deductible) plan, her spending is \$2,400 in premiums in each year plus \$5,000 out-of-pocket in year two, totaling \$9,800. Thus, she would be slightly better off financially under the catastrophic plan in the absence of tax preferences.
- *If insurance premiums (but not out-of-pocket spending) are tax-preferred:* Under the traditional plan, if she is in the 30-percent marginal tax

TABLE 4-1.— *The Premiums Charged for Three Sample Health Insurance Plans with Different Patient Cost Sharing*

	Examples of Three Insurance Plans		
	Low Deductible	Medium Deductible	High Deductible
Premium	\$4,000	\$3,500	\$2,400
Cost Sharing			
Deductible.....	\$250	\$1,000	\$2,500
Coinurance after Deductible.....	20%	20%	20%
Out-of-Pocket Maximum.....	\$2,000	\$3,000	\$5,000

The premiums in this table represent the actuarial value of each plan for a representative enrollee.

bracket, she receives a \$2,400 tax subsidy (over two years), but under the catastrophic plan she only receives a \$1,440 tax subsidy. Thus, the tax subsidy makes her prefer the traditional plan where she might otherwise have preferred the catastrophic plan.

- *If tax-preferred HSAs are available:* If she contributes the maximum \$2,500 to the HSA in both years, she would receive a new \$1,500 tax subsidy by using the HSA to pay her out-of-pocket expenses in year two with tax-free dollars. This mitigates the previous tax-induced bias against catastrophic plans, again making her better off financially under the catastrophic policy.

This illustration of course simplifies many dimensions of the comparison between policies. For example, it ignores the fact that catastrophic events are rare, so that most people would be able to accumulate many more years of premium and HSA savings, further increasing the attractiveness of the HSA-qualified plans. In addition, the example ignores the moral hazard effect of reduced health care utilization in the catastrophic plan, as the patient now has increased incentive to shop carefully for health care.

Not all individuals will benefit equally from moving to a high-deductible policy. First, some poorly informed consumers may forgo recommended care, such as preventive services—care that they might have received under a traditional low-deductible policy. The HSA provision that allows plans to waive the deductible for preventive care is designed to mitigate this possibility. Second, some chronically ill individuals with persistently high spending may be relatively worse off, to the extent that high-deductible policies lead to less cross-subsidization from healthier people in their risk pool. This could be mitigated while preserving the beneficial effects of cost sharing, for example, through improved insurance benefits for the chronically ill, differential premium cross-subsidies in employer insurance, or targeted high-risk-pool subsidies in the individual market. Third, credit-constrained enrollees and

those in lower tax brackets will benefit less from provisions allowing tax-free HSA contributions and accumulation. This is also true of the tax exclusion for employer health insurance premiums. These concerns must be balanced against the potential benefits of greater price sensitivity by health care consumers: As more consumers shift into high-deductible plans, there is greater potential for slowing price growth and long-run increases in cost-reducing technology, which could benefit even consumers in traditional insurance plans.

Since the inception of HSAs in 2004, the number of people enrolled in high-deductible HSA-qualified plans has increased rapidly. The new tax benefits that further lower health costs for high-deductible plans have made them attractive not only to the uninsured and small businesses, but to large firms as well. Although HSAs are new enough that comprehensive data are difficult to obtain, as of January 2006, at least 3 million people were covered by HSA-qualified plans sold by insurance company members of the industry group America's Health Insurance Plans (AHIP). Of the people covered by AHIP-related plans, about half purchased their plans in the individual market and 14 percent through small businesses.

Additional tax-code changes could make high-deductible HSA-qualified plans even more attractive and affordable, further strengthening incentives for more consumers to be well-informed, cost-conscious health care decision makers. The President's 2007 budget aims to expand HSAs through proposals that include:

- *Raising the HSA contribution limits up to the plan out-of-pocket maximum.* Current law allows contributions only up to the deductible level, which is often less than half of the out-of-pocket maximum. This change would further limit the tax-induced bias against out-of-pocket spending for medical care. It would also increase the attractiveness of HSA-qualified plans, in particular for the chronically ill who have a higher probability of out-of-pocket spending above their deductible.
- *Further reducing disparities in tax treatment of HSA contributions versus insurance premiums.* Currently, individual contributions to HSAs are excluded from income taxes but not payroll taxes (employer contributions are excluded from both). The President proposes to provide a new income tax credit equal to the payroll taxes paid on the HSA contribution amounts. This will further remove distortions that have encouraged first-dollar insurance coverage. When combined with the first new proposal discussed above, Americans with HSAs would be able to pay all of their out-of-pocket expenses with pretax earnings.
- *Equalizing tax preferences for purchasing HSA-qualified insurance in the employer and individual markets.* The President proposes to exclude from income taxes the value of HSA-qualified insurance premiums if

purchased on the individual market. In addition, taxpayers purchasing these policies on the individual market would receive a new income tax credit equal to the payroll taxes paid on the premium amounts. Thus, all taxpayers would receive the same tax treatment of HSA-qualified insurance premiums, even if working for one of the 40 percent of employers that do not offer health benefits.

- *Helping the chronically ill.* In addition to allowing all out-of-pocket expenses to be paid tax-free through an HSA, the President also proposes allowing employers to make larger HSA contributions for their chronically ill employees so that employers can make HSA-qualified plans equally attractive to all employees regardless of health status. Finally, the President proposes \$500 million in annual grants to states to test innovative solutions to subsidize insurance for the chronically ill, in order to enhance the functioning of markets for individual insurance. For example, states could use the funds for risk-adjusted premium subsidy programs, or for creative enhancements of state high-risk pools such as funding HSA accounts for enrollees.
- *Enhancing affordability via a tax credit for low-income people purchasing HSA-qualified insurance in the individual market.* The credit would be worth up to \$1,000 for one adult, \$2,000 for two adults, or \$3,000 for families (not exceeding 90 percent of the premium). It would phase out at incomes of \$30,000 for individuals and \$60,000 for families. The credit would be advanceable, paid directly by the government at the time of insurance purchase.

Informed Consumers Are Better Consumers

It is important to provide incentives for consumers to choose health care providers and services sensibly, but providing those incentives does not guarantee that consumers will in fact be able to make good choices. Consumers must also have access to the information they need to make good health care decisions. Key information includes:

- *Provider prices.* Few medical providers today advertise their prices in a way that allows for comparison shopping. Several insurers have taken an important step by beginning to make available schedules of physician fees to their enrollees. Hospital fees raise more-difficult issues, since prices negotiated between hospitals and insurers are frequently subject to confidentiality agreements, despite the fact that consumers eventually observe the prices on bills presented to them after the fact. Of even greater use to consumers would be information on “package prices” for complete treatments of medical bundles or episodes. For example, a knee replacement without unusual complications might have ten major components of care, each of which is now billed separately. A package

price for the entire treatment would provide an estimated cost for the entire operation, hospitalization, and follow-up treatment. This information could be combined with revised billing procedures, which would allow patients to identify more easily the costs associated with the treatment they had received. The President strongly supports efforts to increase price transparency in the health care market. He has called for hospitals, physician groups, insurers, employers, and other health groups to cooperate in speeding the transition toward a market in which Americans can easily obtain user-friendly and comparable information on prices when shopping for health care.

- *Data on provider quality and value.* Price information by itself is not sufficient for good decision making in the absence of comparative quality data. There is growing interest in providing accurate and usable measures of the quality of care offered by individual health care providers such as hospitals and physician groups. Great progress has been made by researchers in improving the methodology for developing reliable measures, and insurers are now helping to improve the effective dissemination of such data. Measures that combine price and quality data into indicators of overall value are not yet as well developed, but would be another useful decision-making tool.

Better information would also be of use to providers of medical services, who would then be better able to help their patients make sound, cost-effective decisions. Examples include:

- *Practice guidelines.* One key barrier to more-efficient health care spending is the lack of a research base on the appropriate treatment in many medical situations. There is a clear role for government in this area. For example, the Agency for Health Research and Quality (AHRQ) is sponsoring comparative effectiveness research studies relating to medical practice, as authorized under the 2003 Medicare Modernization Act. Such research can produce high returns in terms of improved health care efficiency. Further work to translate such guidelines into educational materials for health care consumers would also greatly enhance the ability of consumers to make wise health care choices.
- *Cost-effectiveness studies.* If the usage of expensive but low-value technologies is to be reduced by the actions of better-informed consumers in consultation with their doctors, then more information is needed about the cost-effectiveness of various technologies and procedures, and about how cost-effectiveness depends on particular factors such as the patient's age and specific condition. Private insurers sponsor some such studies, but the private sector will tend to underinvest in this type of "public good" research. Government support for research in this area, such as the research being conducted by agencies such as AHRQ, has a strong economic justification.

Conclusion

As the United States grows richer and older and as new life-saving technologies develop, Americans are likely to continue to spend a rising share of their growing incomes on health. Indeed, our health care spending overall has returned good value, with Americans living longer and healthier lives. We could achieve this improved health at lower cost, however, by promoting a greater role for consumer decision making in health. Health Savings Accounts provide one tool for doing so, by leveling the playing field for people who prefer to save money by moving toward higher-deductible health insurance policies. As health researchers, the insurance industry, and government work to develop better consumer decision-making tools, more consumers will be able to benefit from moving to such plans. In the long run, the payoff to allocating health care resources toward higher-value and more cost-effective care would be great.