

CHAPTER

1

---

**Context for Medicare  
payment policy**

---



# Context for Medicare payment policy

## Chapter summary

The Medicare program faces powerful upward pressures on health spending that policymakers will find difficult to staunch. Health care spending has been rising much more rapidly than growth in national income for many decades, and all indications suggest that it will continue to do so into the future. Analysts attribute this general trend to the interaction between broad use of new medical technologies and health insurance coverage, which keeps patients from facing the full cost of health care services. The continuation of this trend, combined with the retirement of the baby boomers and Medicare's new prescription drug benefit, will lead the Medicare program to require an unprecedented share of federal financing. Moreover, other federal programs such as Social Security and Medicaid will also require greater resources at the same time that Medicare spending expands. For Medicare's beneficiaries, premiums and cost sharing will require increasing shares of their Social Security benefits. The introduction of the drug benefit is expected to offset some of beneficiaries' spending on drugs, however.

## In this chapter

- Medicare's long-term picture
- The broader U.S. health care system
- The U.S. health care system compared with those of other countries
- Changing Medicare policy within the broader U.S. health care system

Policymakers need to take steps to slow growth in Medicare spending sooner rather than later because taking measures earlier would permit more gradual changes to the program. Strategies to address Medicare’s long-term sustainability include constraining payments to health care providers, limiting benefits, increasing the program’s financing, and encouraging greater efficiency from health care providers. The last strategy—increasing efficiency—is the most desirable because it would enable the Medicare program to do more with its resources. Evidence suggests that we do not currently use Medicare’s considerable resources as wisely as we should. Even if policymakers succeed at moving providers towards greater efficiency, they may still need to make other policy changes to help ensure that the program’s financing is sustainable into the future.

Medicare and its beneficiaries are not alone in facing the challenges of rapid growth in health spending—many stakeholders in the U.S. health care system are confronting similar pressures. Medicare relies on providers and health plans that care for the entire population, not just Medicare beneficiaries, and thus broad trends in the health care system affect the environment in which the program operates. In some health care sectors, Medicare can and should take the lead in initiating certain changes. In other situations, Medicare must often work in collaboration with other payers to make lasting changes. ■

In this year's Report to the Congress on Medicare payment policy, the Medicare Payment Advisory Commission (MedPAC) asks policymakers to look to the program's future. Medicare fills a critical role in our society—ensuring that the elderly and disabled have good access to medically necessary care. Along with other payers in the U.S. health care system, the program has helped to finance important strides in medical technology. For the sake of its beneficiaries, we must preserve these aspects of the Medicare program. However, we should also use Medicare's considerable resources more wisely. The program rewards increases in the volume and the specialized nature of services, but not necessarily the value of services. Provider practices vary widely by geographic region, often with an inverse relationship between quality and spending. Some stakeholders view the program as one in which all providers are entitled to payment, regardless of the quality, efficiency, or sometimes even the need for their services. Unless these aspects of Medicare change, the burden on beneficiaries and future taxpayers will be more onerous.

The program's financial outlook is a strong impetus for change. As is true for other purchasers of health care services in the United States, Medicare's spending is growing much faster than the U.S. economy overall. Analysts often attribute this general trend to the interaction between broad use of new medical technologies and health insurance coverage. In addition, CMS began Medicare's new outpatient prescription drug program, Part D, in January 2006. This program adds an important benefit to the Medicare package but greatly expands the program's need for resources. The leading edge of the baby boomers will become Medicare beneficiaries beginning in 2010, which will also accelerate Medicare spending. Taken together, these factors will lead Medicare to require an unprecedented share of our national income.

Moreover, because of the retirement of the baby boom generation, other federal programs such as Social Security and Medicaid will also require greater resources at the same time that Medicare spending expands. Some analysts point out that growth in our nation's economy has historically been large enough to finance expansion of both health and nonhealth spending (Chernew et al. 2003). Future growth in the economy may be able to support Medicare's financing needs, particularly if policymakers take steps to slow growth in health care spending or to reallocate federal revenues towards health programs. Other analysts disagree, saying long-term economic growth alone will not be sufficient to bring the country's fiscal

position into balance. According to this point of view, fiscal stability will likely require a sizable slowdown in the growth rate of health spending and may also require a substantial increase in taxes as a share of our nation's economy (CBO 2005b).

Because the projected shortfall in Medicare's financing is so large, policymakers will need to use a variety of policy approaches. The best strategy is to make changes that would lead to efficient payments so that Medicare would pay no more than what is required to obtain quality services and good access to care for beneficiaries. However, Medicare relies on providers and health plans that care for the entire population, not just Medicare beneficiaries, and broad trends in the health care system affect the environment in which the program operates. Such trends include methods of paying providers, prevailing rates of reimbursement, expectations among individuals about what their health benefits cover, and the degree to which other payers reward or deter more efficient delivery of care and higher quality services. Medicare can and should take the lead in initiating changes. To be fully effective, however, Medicare must begin collaborating with other payers in creating incentives for providers to improve their efficiency.

The rest of this chapter outlines Medicare's long-term financial situation, describes the broader U.S. health care system, and compares the U.S. health care system with the systems in other countries. The chapter also discusses general approaches to help put Medicare on a more financially sustainable path.

---

## Medicare's long-term picture

---

For many years, the Medicare trustees, MedPAC, and numerous other organizations have been pointing to a large projected mismatch between the Medicare program's future levels of revenues and expenditures. Some analysts believe that reductions in the share of spending devoted to other federal programs cannot plausibly cover the program's projected shortfall (Aaron and Meyer 2005). Rapidly growing health costs also mean that Medicare beneficiaries will see increases in premiums and cost sharing that will require an increasing share of their Social Security checks and other sources of income.<sup>1</sup>

## Projections of Medicare's long-term financing needs

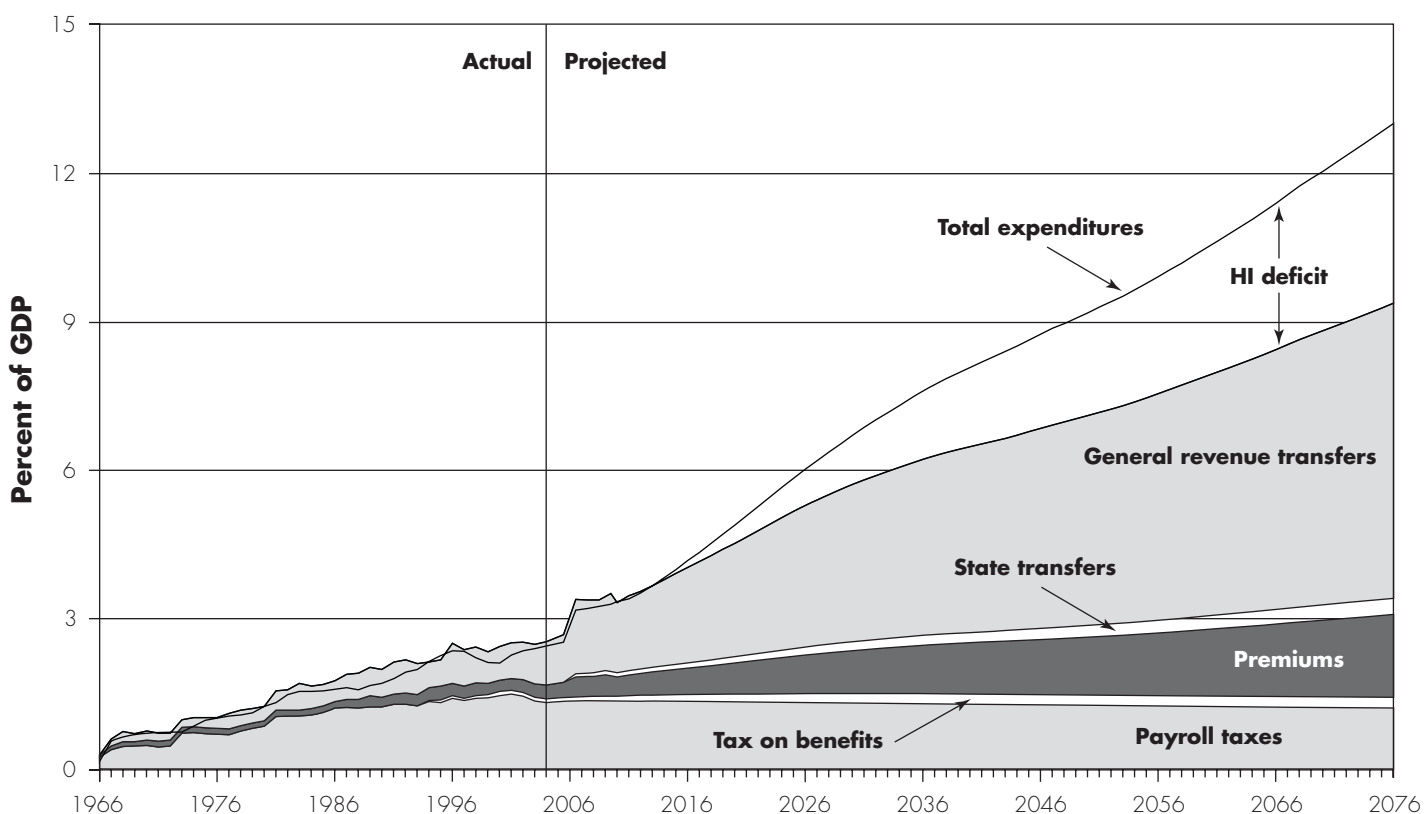
Under an intermediate set of assumptions, the Medicare trustees project that program spending will grow rapidly (Figure 1-1). Although federal program spending for Medicare currently makes up less than 3 percent of gross domestic product (GDP), spending is projected to grow to about 8 percent by 2036 and nearly 14 percent by 2078. Putting 14 percent in perspective, that amount is comparable to the current percentage of GDP spent on food, clothing, and fuel oil.

Even though these projections may seem high, some analysts consider them optimistic because they are based on the assumption that health care spending per person will grow only 1 percentage point faster than growth in GDP per person (see text box). Historically, health

spending has risen over 2 percentage points more than growth in per capita GDP. In addition, the trustees describe their own near-term projections of payments for Part B services as “unrealistically constrained due to multiple years of physician fee reductions that would occur under current law” (Boards of Trustees 2005). This statement alludes to the fact that under the sustainable growth rate (SGR) system, physician updates would be cut by 4 percent to 5 percent annually for 6 consecutive years, beginning in 2006. Under the Deficit Reduction Act of 2005, the physician payment rate for 2006 was kept at its 2005 level—in other words, the cut scheduled to take place under the SGR was not included and thus Medicare payments to physicians will be higher than previously anticipated.

**FIGURE 1-1**

**Medicare expenditures are projected to require a growing share of GDP**



Note: GDP (gross domestic product), HI (Hospital Insurance). These projections are based on the trustees' intermediate set of assumptions. Tax on benefits refers to a portion of income taxes that higher-income individuals pay on Social Security benefits that is designated for Medicare. State transfers (often called the Part D “clawback”) refer to payments called for within the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 from the states to Medicare for assuming primary responsibility for prescription drug spending.

Source: 2005 annual report of the Boards of Trustees of the Medicare trust funds.

## Projecting growth in Medicare spending

In making long-term projections of Medicare's costs, one of the most critical assumptions is the growth rate in program spending per person, after adjusting for the age and gender mix of the population.<sup>2</sup> Prior to their 2001 report, the Medicare trustees assumed that long-range spending would grow at the same rate as gross domestic product (GDP) per person. Growth rates vary depending on the time period over which one calculates them. Nevertheless, on average, real rates of increase in our nation's health expenditures have risen faster than real growth in the economy over the past six decades—even during the 1990s when managed care techniques and expanded use of prospective payment methods slowed spending increases (2004 Technical review panel on the Medicare Trustees Report). In recognition of this, the Medicare trustees began using an assumption that long-range Medicare program spending per person would grow at a rate of GDP plus 1 percentage point, excluding effects resulting from the population's age and gender mix (which they model separately). The trustees continue to use this assumption today.<sup>3</sup>

A higher assumption is more in keeping with experience. Between 1970 and 2003, for example, the inflation-adjusted growth rate in our nation's health spending per person was more than 2 percentage points higher than real GDP growth per person (CBO 2005b). Thus, the GDP plus 1 percentage point assumption in the trustees' intermediate scenario assumes unknown policy changes or other unspecified forces will slow the growth rate in future health spending.

Even an assumption that health care spending will grow 2 percentage points above GDP growth could be too low. One recent study combined projections of the health status of future Medicare cohorts with a look at ten medical technologies that are likely to be adopted widely (Goldman et al. 2005).<sup>4</sup> Widespread use of some of those technologies could boost spending even more rapidly.

The Medicare trustees are tasked with projecting the program's future costs based on how benefits are currently structured—that is, the trustees do not

forecast specific policy changes to Medicare benefits or payment rates. Nevertheless, one argument for assuming that Medicare's costs will grow somewhat more slowly than before is that past rates of growth are unsustainable. Projections based on higher assumptions about growth imply that future spending on health care will make up unprecedented shares of our nation's economy. One could argue that our nation will not be willing to devote, say, nearly 40 percent of our national income to health care in 2075, because that would probably crowd out spending for other national priorities.<sup>5</sup>

How much Medicare spending is sustainable? Individual definitions of sustainability are subjective, but our society's answer depends on how much value our political and budget-setting processes place on the Medicare program relative to other spending priorities. One definition of affordability is an amount of health spending at which the United States would never reduce current levels of nonhealth spending, and would devote 100 percent of future growth in income to greater consumption of health care. Chernew and colleagues believe that under this definition, devoting 1 percentage point above GDP growth of our national income to health care is affordable because nonhealth spending would remain the same as current levels. They estimate that growth of 2 percentage points above GDP growth would lead to declines in nonhealth consumption by the middle of the century (Chernew et al. 2003).

A further question related to Medicare's financing is whether the federal government could feasibly raise the resources needed to fund the program's growth. One researcher argues that devoting ever-increasing shares of GDP to Medicare, Medicaid, and other federal programs will ultimately run into the "historical reluctance of American voters to allocate much more than 18 percent of the GDP to federal spending" (Newhouse 2004). In the future, Medicare beneficiaries may make up a growing share of voters, which could lead to changes from the historical pattern. On the other hand, beneficiaries will become even more dependent upon nonelderly workers for the program's funding and younger generations may not want to foot this bill. ■

To look at Medicare's financial picture, one must understand how Medicare is financed. Currently about 55 percent of Medicare's program spending is for Hospital Insurance (HI), called Part A. Dedicated payroll taxes on current workers finance Part A and are held in the HI trust fund. (This payroll tax rate is 2.9 percent of earned income.) General revenues and beneficiary premiums finance Supplementary Medical Insurance (SMI) services, such as physician visits (Part B) and Medicare's new prescription drug benefit (Part D). (General revenues are federal tax dollars that are not dedicated to a particular use, but are made up of income and other taxes on individuals and corporations.) Currently the SMI program's general revenue financing requires about 10 percent of all personal and corporate income tax revenue.

If Medicare benefits and payment systems remain structured as they are today, over time the program will require major new sources of financing for Part A and a much larger share of general tax revenues for Parts B and D (Boards of Trustees 2005). The trustees project that dedicated payroll taxes will make up a smaller share of Medicare's total revenue and a large deficit between spending for Part A and revenue from dedicated payroll taxes will develop (Figure 1-1, p. 6).<sup>6</sup> In order to finance the projected deficit through 2080, the trustees estimate that Medicare's payroll tax would need to increase immediately from 2.9 percent of earned income to nearly 6.0 percent. If income taxes remain at their historical average share of the economy, the Medicare trustees estimate that the SMI program's general revenue financing would rise from 10 percent today to 29 percent by 2030 and to more than 50 percent by 2070.

Medicare's problems with long-term financing will become more prominent to policymakers over the next few years because of a warning system established in the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA). Each year, the Medicare trustees are required to project the share of Medicare outlays that is financed with general revenues in the current and six succeeding fiscal years. Under the warning system, if two consecutive annual reports project that general revenue will fund 45 percent or more of Medicare outlays in any given year, then the President must propose and the Congress must consider legislation to bring Medicare's spending below this threshold. In their 2005 report, the Medicare trustees projected that the program would hit this 45 percent trigger in 2012—just outside the seven-year projection window (Boards of Trustees 2005). Given current trends,

projections could reach 45 percent within the seven-year window in the trustees' 2006 and 2007 annual reports. If so, policymakers will be called upon to consider broad changes to Medicare's benefits and financing in the spring of 2008.<sup>7</sup>

Addressing Medicare's long-term financing needs could involve a combination of approaches. Several broad strategies include constraining payments to providers, limiting benefits, increasing the program's financing by raising taxes, and improving the efficiency of health care delivery. Given the size of Medicare's long-term financing needs, policymakers will likely have to use many of these options.

Improving the program's long-term financing is difficult because Medicare faces competing challenges, including demands by beneficiaries and providers to expand benefits, cover new medical technologies, and raise payment rates, as well as increasing Medicare enrollment. Nevertheless, the longer policymakers wait to realign Medicare spending and financing, the more drastic the changes will need to be.

### **Increasing burden on beneficiaries**

Rapid growth in Medicare spending has implications for beneficiaries as well as taxpayers, since both groups finance the program. Although premiums paid by Medicare beneficiaries (primarily for Parts B and D) are projected to make up a steady 12 percent to 13 percent of total program revenue, the dollar amounts of those premiums will require growing shares of beneficiaries' income. Between 2003 and 2006, Medicare beneficiaries have faced average annual increases in the Part B premium of nearly 15 percent, to a 2006 level of \$88.50 per month (or \$1,062 for the year).<sup>8</sup> Meanwhile, monthly Social Security benefits, which averaged just over \$900 per month in 2005, have grown by about 3 percent annually over the same period.<sup>9</sup> Under current hold-harmless policies, Medicare Part B premiums cannot increase by a larger dollar amount than the cost-of-living increase in a beneficiary's Social Security benefit. Recent Part B premium increases have offset about 30 percent to 40 percent of the dollar increase in the average Social Security benefit. Part D premium increases are not subject to a hold-harmless provision.

The overall economic position of the elderly has improved over the past several decades. Still, most Medicare beneficiaries have limited incomes. In 2002, about half of non-institutionalized beneficiaries had incomes of



around \$20,000 or less (Kaiser Family Foundation 2005). Seventeen percent had incomes less than poverty (defined then as \$8,628 for people living alone and \$10,885 for married couples) and 46 percent had incomes of 200 percent of the poverty level or below (MedPAC 2005a). In 2003, for 60 percent of the elderly, Social Security benefits made up 75 percent or more of their total income (Kaiser Family Foundation 2005).

In the future, beneficiaries could spend less on outpatient prescription drugs: Most who enroll in Medicare's new Part D benefit will see lower out-of-pocket spending. One estimate suggests that in 2006, average out-of-pocket spending on drugs will be 28 percent lower for Part D enrollees, and 83 percent lower for recipients of Part D's low-income subsidies (Mays et al. 2004b). As a specific example, a beneficiary with no prescription drug coverage prior to enrolling in Part D and \$3,000 in annual out-of-pocket drug spending would pay an average of \$1,500 in 2006 for cost sharing plus an additional \$386 in premiums if she enrolled in a standard Part D plan.<sup>10</sup> The Medicare program would pay for the remaining \$1,114 of her drug spending. Her savings would be even greater if she qualified for and enrolled in Part D's low-income subsidy program, since the program would cover much of her standard plan's premiums and cost sharing. However, other enrollees could pay higher out-of-pocket spending under Part D—one in four is projected to face increases in 2006 of \$250 or less (Mays et al. 2004b).

Yet even with the expansion of Medicare's benefits to include prescription drugs, growth over time in Medicare premiums and cost sharing will continue to outpace growth in Social Security income. With the introduction of Part D, the average cost of SMI premiums and cost sharing for Parts B and D offsets more than 30 percent of Social Security benefits. SMI premiums and cost sharing will make up a lower percentage—just under 20 percent—for those beneficiaries who do not choose to enroll in Part D. For most Medicare beneficiaries who enroll in Part D, however, 30 percent is likely to be a smaller share of Social Security benefits than what those individuals spent on premiums and cost sharing for Part B and prescription drugs prior to 2006. Nevertheless, this percentage will grow over time because SMI premiums and cost sharing are projected to grow faster than Social Security benefits (Figure 1-2, p. 10).

---

## The broader U.S. health care system

---

The \$300 billion Medicare program is just one part of an expansive and growing U.S. health care system. That system includes a broad array of private and public purchasers, insurers, providers, manufacturers, and suppliers. Combined expenditures on health care services in the United States totaled nearly \$1.9 trillion in 2004, or 16 percent of our economy (Smith et al. 2006).

### Private versus public financing in the U.S. health care system

Currently, public financing—federal, state, and local programs—makes up about 46 percent of all U.S. health care spending, with private sources providing the rest. The public share will grow to nearly 50 percent by 2014 with Medicare's prescription drug benefit (Heffler et al. 2005). In 2004, employers were the largest source of health insurance, covering about 60 percent of individuals residing in the United States (Fronstin 2005).

The United States uses private health insurance so extensively due to our country's tax policies and economic development. During the World War II era, larger U.S. companies began providing health insurance to offer higher compensation to relatively scarce labor while avoiding wage and price controls. The Internal Revenue Service did not consider such fringe benefits subject to wage controls, and health insurance contributions paid by employers were not considered taxable income (Helms 2005). At the time, the health insurance industry was in its infancy. Since then, the use of employer-sponsored health insurance and the broader market for private insurance have grown substantially. For 2004, the exemption of employer-paid health insurance from payroll and individual income taxes reduced federal revenues by about \$145 billion (CBO 2005a).

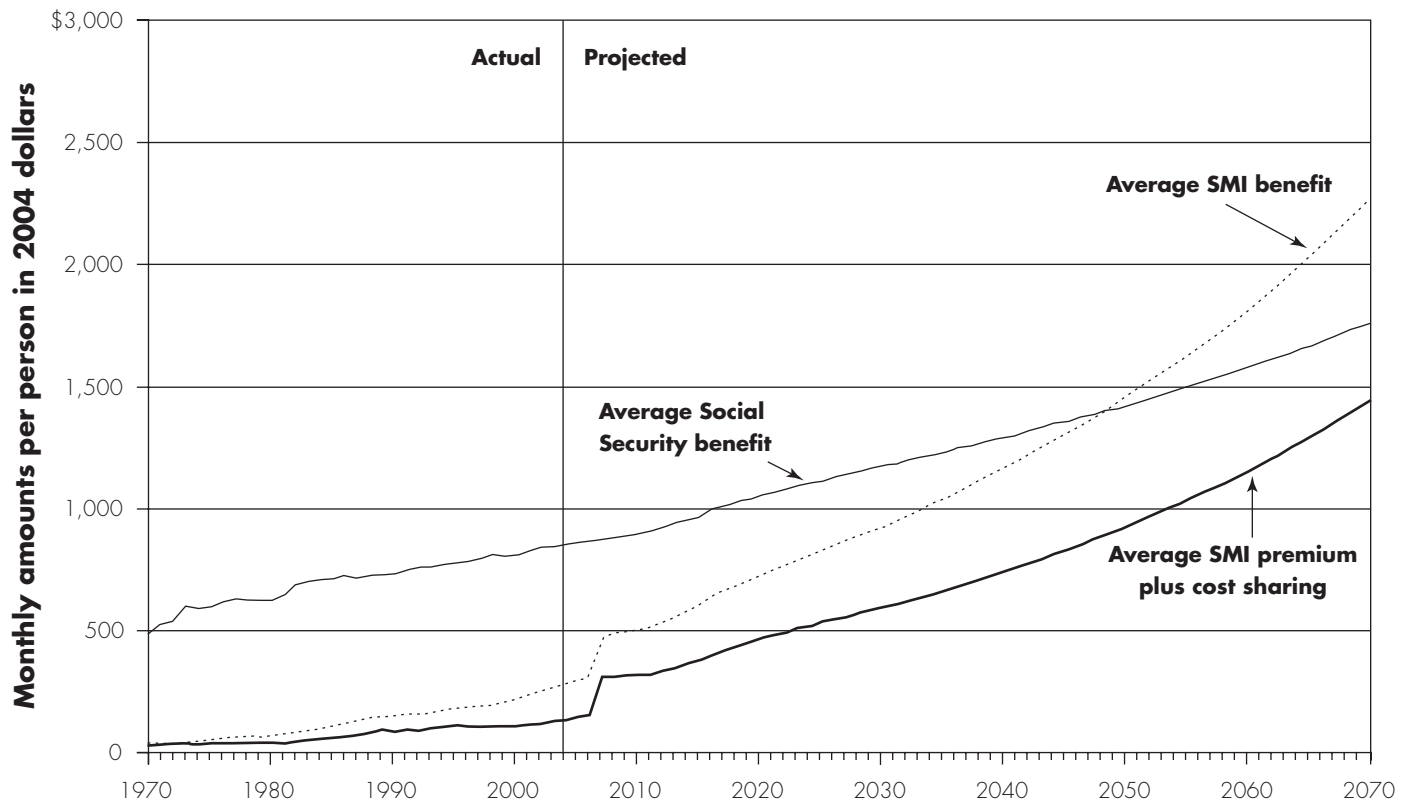
Even though nearly half of all U.S. health care spending is funded publicly, we rely on private plans and providers to deliver most of the country's care. Most publicly funded health care spending is through programs like Medicare and Medicaid that reimburse private providers.

### Rapid growth in health care spending among all payers

For each of the past several decades, the United States has spent an expanding share of its resources on health care. In 1960, for example, national health expenditures made up about 5 percent of GDP. That share grew to 16 percent

**FIGURE  
1-2**

**Average monthly SMI benefits, premiums, and cost sharing are projected to grow faster than the average monthly Social Security benefit**



Note: SMI (Supplementary Medical Insurance). Average SMI benefit and average SMI premium plus cost sharing values are for a beneficiary enrolled in Part B and (after 2006) Part D. Beneficiary spending on outpatient prescription drugs prior to 2006 is not included.

Source: 2005 annual report of the Boards of Trustees of the Medicare trust funds.

by 2004, and CMS projects that it will make up nearly 19 percent by 2014 (Figure 1-3) (Heffler et al. 2005). All payers in the U.S. health care system—public (including Medicare and Medicaid) and private—are facing similar upward pressures on spending.

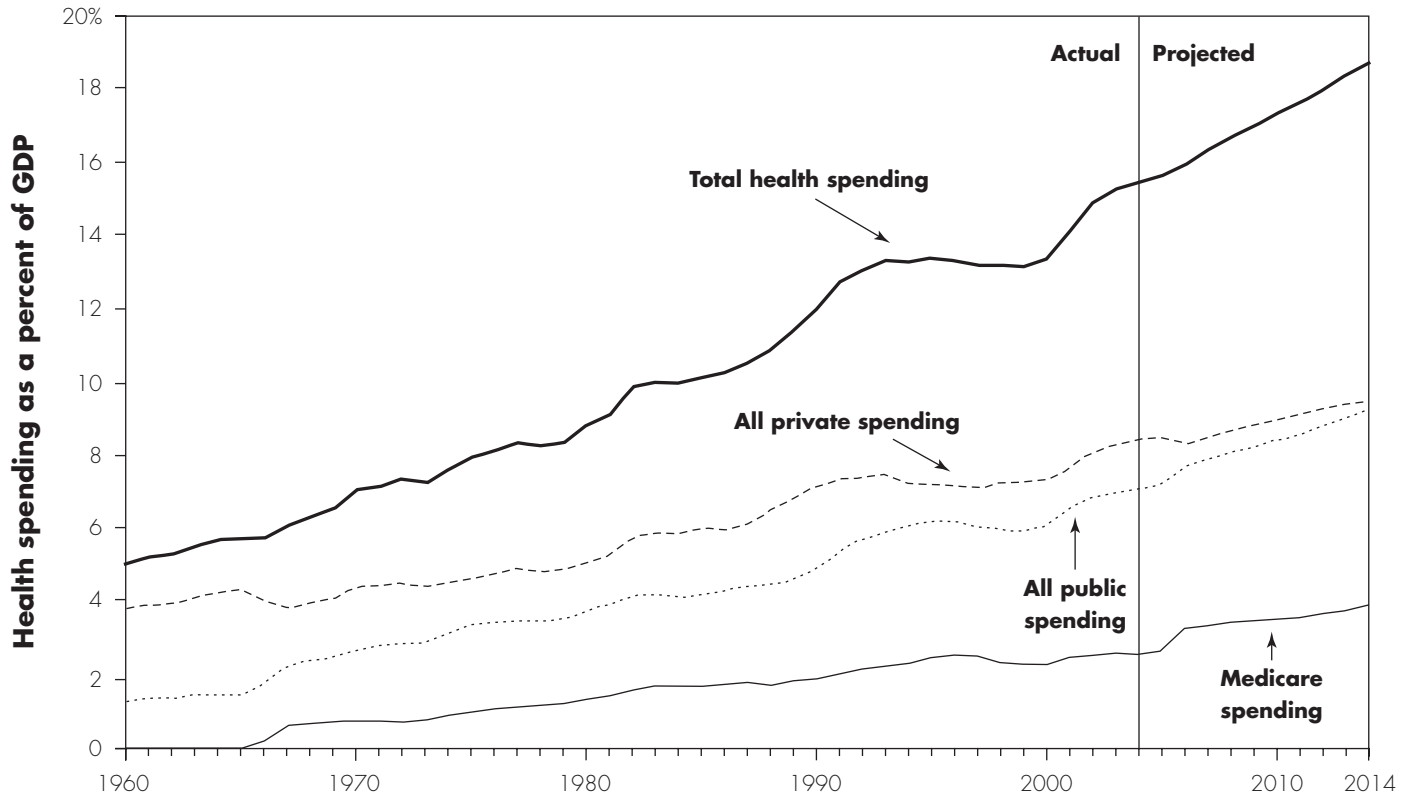
Many analysts point to the rates of development and diffusion of new technologies as the biggest long-term driver of growth in health care spending (Fuchs 2005, Newhouse 1992). Our use of health insurance fuels spending for new technology because patients do not face the full cost of their care. In addition, when providers recommend newer procedures, drugs, or devices, patients may not be able to evaluate independently whether those therapies would be of greater value to them than other therapies (see text box, p. 12). Although some medical technologies can lead to savings by reducing lengths of stays or avoiding hospitalizations, most technologies

tend to expand demand for health care. As improved health outcomes resulting from a new technology become more obvious, the technology's broader applicability becomes more apparent to providers and consumers. For example, as surgical techniques for cardiac care improved, angioplasty was used more widely among patients who had not yet experienced a heart attack. Many technologies also reduce the invasiveness, serious side effects, discomfort, or social stigma associated with therapies, thereby lowering nonmonetary obstacles to beneficiaries as they decide whether to seek treatment. In some cases, providers may also use new technologies inappropriately or more broadly than intended.

Our nation's underlying health status also affects growth in health spending. The prevalence of obesity has doubled since 1980 to about 30 percent of the adult population today, due to changes in health behavior such as

**FIGURE  
1-3**

**Health care spending has grown more rapidly than GDP, with public financing making up nearly half of all funding**



Note: GDP (gross domestic product). Total health spending is the sum of all private and public spending. Medicare spending is one component of all public spending.

Source: CMS, Office of the Actuary.

overconsumption of food and a more sedentary lifestyle. Obesity in the elderly is associated with increased risk of diabetes mellitus, cardiovascular disease, hypertension, stroke, lipid abnormalities, osteoarthritis, and some cancers.

Advances in medical technology have led, on average, to improvements in our health—improvements from which we as a society benefit. Still, research on the wide geographic variation in health care spending suggests that we use resources wastefully (Fisher et al. 2003). Some payment systems contribute to the problem of wasteful spending by rewarding inefficient or low-quality care as much if not more than high-quality care delivered by efficient providers. Patients often do not know what specific services they need from providers. This fact, when combined with the perverse incentives of some payment systems and the widespread use of insurance, often keeps patients from distinguishing between care of high and

low value. The organizational structure of providers and separate “siloe” payment systems also hinder providers from coordinating care for the same patient.

### **Consequences of rapid growth in health spending**

Rapid growth in health spending has had wide-ranging effects. The U.S. health care sector has produced many medical innovations that lengthen or improve quality of life. At the same time, some employers argue that the rising cost of health premiums affects their ability to compete in the world marketplace. Most economists contend that growth in health premiums paid by employers has no long-term effect on the competitive position of firms (Fuchs 2005). Instead, a firm’s costs for health premiums are a substitute for cash compensation that it would otherwise pay to workers, in the same way that retirement and other benefits substitute for higher

## Challenges of appropriate pricing for health care

Most sectors of the U.S. economy rely on market forces to ensure the efficient allocation of resources. Consumers buy a good or service if, at its price, the item has greater value to them than other items they could purchase. We rely on competition among producers and service providers to keep prices in check while they make the goods and services that society wants. Within most sectors of the economy, this interaction of demand and supply leads to prices that act as signals of how much society values a good or service relative to other uses and thus determines how resources are allocated.

Economists have long argued that the provision of health care differs from providing goods or services in other sectors (Arrow 1963). Problems with information and uncertainty, the use of insurance, and institutional details lead to prices for health services that are not necessarily good signals of value (Chernew 2005). Some of the unique challenges with health care are:

- Patients often do not know what specific health services they need or the relative benefits and costs of treatment options. They rely on physicians and other providers, in a principal-agent relationship, who help make decisions on their behalf. While professional codes of conduct should guide providers toward furnishing appropriate care, providers do not necessarily have the same motivations and preferences as their patients.
- Unlike sectors of the economy that produce standard products, health care providers must individually evaluate the symptoms and conditions of patients to tailor plans of care, and they must do so in the face of uncertainty about the best course of action. As a result, it can be difficult to evaluate the quality (including appropriateness) and efficiency of a

specific provider's care and build consensus among providers around standards of care.

- Health care is often financed with insurance. In the event of a health crisis, insurance spares patients from a catastrophic financial burden. When used in less urgent circumstances, insurance shields them from seeing the full cost of their care. This can lead patients, on the margin, to use more and higher-priced services than they would otherwise—particularly since they rely on providers to help decide what care they need.
- Lack of competition among certain types of suppliers can lead to relatively high prices for their products or services and little pressure to improve efficiency over time.

These general characteristics of health care can affect how well prices act as signals of value in all types of delivery systems and payment arrangements. All types of payers confront these challenges—including public programs such as traditional Medicare that use administratively set prices as well as private payers that negotiate rates with providers and health plans.

Mispricing of services can lead to misallocation of investment resources, which can have large effects on the organizational structure and cost of health care delivery over time. For example, the process for reassessing relative value units for physician services in Medicare's fee schedule does not do a good job of identifying services that may be overvalued. As a result, payments for some services may be too high. Such inaccurate payment rates may encourage inappropriate volume growth and, over time, may affect the supply of generalists and specialists by influencing physician decisions about whether to specialize (see Chapter 3). ■

wages. When total costs of labor compensation are high relative to a firm's productivity, that firm will not be competitive in the global economy. However, as would be the case with rapid growth in any other cost of firms, rapid growth in health premiums can make firms' need for greater productivity more apparent. In order to achieve

productivity gains quickly, firms sometimes take steps such as layoffs that are disruptive and that redistribute income and health coverage for workers and retirees.

Other distributional issues arise from rapid growth in health spending. In response to rapid increases in premiums, many employers have raised cost-sharing

requirements for their employees, asked them to contribute a larger share of premiums or, particularly for smaller firms, reduced the availability of coverage. The percent of individuals living in the United States that were covered by employer-based health insurance fell from 64 percent in 2000 to just under 60 percent in 2004. Analysts attribute this decline to smaller employers dropping coverage in the midst of a relatively weak labor market, as well as to workers declining offers of coverage (Fronstin 2005). Since required premium contributions by enrollees have risen faster than income, some workers choose to forgo coverage. During 2004, nearly 46 million people, or 15.7 percent of the U.S. population, were uninsured at any one point in time.

Increases in the number of people without private insurance coverage raise demand for public coverage, and may raise health care premiums for those who have insurance. The costs of caring for the uninsured do not fall equally on all providers, since the uninsured often postpone care until their conditions become more serious. In turn, providers that bear more of those costs sometimes seek public subsidies or limits on the competition they face. Rising costs put upward pressure on the financing needs of public and private health care programs for those beneficiaries who already have coverage. Some analysts believe that higher health care costs may also lead to greater fragmentation of risk pools in the health care market, as healthier people search for insurance alternatives that are less costly (Glied 2003).

New insurance products have emerged in response to rapid growth in health spending. For example, some employers are beginning to offer consumer-directed health plans that combine a high-deductible policy (often including a health reimbursement or savings account) with catastrophic protection. Enrollees in these newer products generally accept higher cost sharing at the point of service, making them more cost conscious when they seek care. In return, enrollees pay lower premiums (Tollen et al. 2004). The MMA allows employers to make nontaxable contributions to certain health savings accounts (HSAs), and contributions by individual account holders are tax deductible. Current Medicare beneficiaries cannot establish HSAs, but as individuals enroll in Medicare, they may use tax-free distributions from already existing HSAs to pay for Medicare premiums or the employee-share of premiums for employment-based retiree health insurance.

Consumer-directed health plans put greater responsibility for decision making on patients themselves. Some insurers

that offer consumer-directed products provide decision-support tools to help individuals understand treatment options and locate price information about providers. This type of insurance product assumes that consumers can weigh the costs and benefits of their alternatives. One limitation of consumer-directed health plans is that about 10 percent of people tend to account for about 70 percent of health care spending (Berk and Monheit 2001).<sup>11</sup> A strategy of raising enrollees' sensitivity to the costs of their care may reduce spending for some discretionary services, but it may not be as successful at constraining spending for patients whose use of services quickly pushes them beyond both the deductible and out-of-pocket spending limits.

Although enrollment in consumer-directed health plans has been low to date, they have attracted considerable attention. Larger numbers of employers are beginning to offer these products to their workers. Supporters of such plans believe that higher cost sharing will lead members to lower their use of unnecessary services, thereby slowing growth in health spending. Other analysts expect that this new type of product will encourage risk segmentation, since healthier enrollees might find lower premiums attractive while sicker individuals would likely stay with more comprehensive coverage. At this early stage, studies on the consequences of consumer-directed health plans are mixed (Rosenthal et al. 2005, Parente et al. 2004, Tollen et al. 2004).

---

## **The U.S. health care system compared with those of other countries**

---

Health care spending in the United States is far higher than in other countries—nearly \$5,300 per person in 2002, or almost twice the median of member countries of the Organisation for Economic Cooperation and Development (OECD).<sup>12</sup> Nevertheless, rates of growth have been similar among industrialized countries—in other words, most are facing upward pressure on spending (Newhouse 2004). By certain measures of health status, the United States does not compare favorably to other industrialized countries. We have higher rates of infant mortality, higher standardized rates of all-cause mortality, and our life expectancy is about the same (OECD 2005). By other measures, we compare more favorably. For example, many individuals may have readier access to more intensive care than is available in other countries. Our health care system differs markedly from those in other countries due to differences

## Competing policy goals for health care

Most countries have policy goals for their health care systems. These goals usually include ensuring good access to care for the nation's residents, striving for equity in that access, encouraging providers to deliver safe and high-quality care, and promoting efficiency and cost control so that the health care system has sustainable financing over time. However, many of these policy goals compete with one another, and different countries emphasize some goals over others.

The U.S. health care system emphasizes access to care—access to the provider of the patient's choosing and access to advanced medical technologies. Payers' continued use of fee-for-service (FFS) reimbursement reflects this emphasis, as does the public backlash against managed care organizations that used techniques such as prior authorization and restrictive networks to control costs in the 1990s. Enrollment in traditional FFS Medicare also continues to be higher than in Medicare Advantage (MA) plans. However, one should note that MA plans have not been available in all parts of the country, and Medicare policies have not always provided predictable payments to private plans. Several studies show the priority beneficiaries place on access to the provider of their choice. Polsky and colleagues found a preference among married workers for non-HMO coverage over HMO plans, which may be perceived as having greater restrictions on provider access (2005). An examination of retirees in the University of California's health system suggests that demand for FFS coverage increases with age because the nonmonetary costs of moving to managed care plans (such as disruption caused by changing physicians) are high (Buchmueller 2000).

Our preference for access to specific providers and technologies receives relatively more emphasis than other policy goals. Ensuring long-term sustainability of financing for our health system has received relatively less attention: Medicare and other payers have difficulty in controlling growth in health spending. As levels of health spending keep increasing, we also find that a relatively large number of people in the United States have limited or no insurance and thus could face problems with access to care. This equity problem is less severe for our elderly, since nearly all are covered by Medicare. Nevertheless, recent research on racial disparity in access to care among Medicare beneficiaries suggests some problems here as well (Jha et al. 2005).

Different countries use varied strategies for delivering and financing health care that reflect their policy choices. Governments in many other countries play a greater public role in delivering health care than in the United States. For example, the United Kingdom directly runs a large portion of the health care system through its National Health Service. Most other countries use public financing to a much larger degree; in 2002, the median public share of total health spending among member countries of the Organisation for Economic Cooperation and Development (OECD) was 75 percent, compared with 46 percent in the United States (OECD 2005). Countries such as Denmark and New Zealand set constraints on the public financing of privately delivered care through global budgets and regulation of prices and volume. Many countries use a combination of public funding for acute hospital care and primary care, with private health insurance to finance other services like access to private facilities, specialty care, amenities to hospital care, and sometimes outpatient prescription drugs. ■

in history, culture, and the mix of policy goals our society values (see text box). Thus, cross-national comparisons may have limited value. Such comparisons nevertheless raise questions for policymakers about whether we get as much value for our additional spending as we should strive for, particularly given important and competing alternative uses for those resources.

### **Greater market power of providers in the United States**

Because the organizational structure of financing health care is more fragmented in the United States, providers here may use their market power to negotiate more favorable payments than providers in other countries (Bodenheimer 2005a). By being more monopsonistic, other governments may lower or restrain growth in

payment rates for providers and prices for other services. The tactics of those governments include using a single purchaser approach, allowing multiple purchasers to bargain collectively, or using global budgets (Reinhardt et al. 2004).

The health care systems of other countries are not clearly preferable to ours. The drawbacks of other systems include longer waiting times for access to specialists and newer technologies—a cost not usually reflected in international comparisons (Danzon 1992)—as well as inefficiency and issues concerning quality of care. For example, in recent years the United Kingdom and other countries that provide health care directly have introduced reforms that try to inject more competition by separating the roles of payer and provider (Docteur and Oxley 2003). Global budgets are only as successful as each country's ability to stick with its budget, even when providers and patients pressure it to spend more. Another issue is the system of price controls some countries use to limit profits: Manufacturers and other stakeholders claim that such policies stifle investment in research and development, thereby slowing the pace of medical innovation.

Many industrialized countries have larger supplies of important inputs to health care than the United States. Our supply of acute care hospital beds, practicing physicians, and nurses per thousand of population was lower than in other OECD countries in 2002 (OECD 2005). These statistics do not necessarily mean, however, that the U.S. population has less access to care because they mask some important information. For example, average lengths of stay are lower in U.S. hospitals and physician visits per capita are higher.

Some analysts believe that the high levels of U.S. health spending are largely attributable to paying higher prices for the same services than other countries do. Data from the mid-1990s suggest that U.S. physicians had considerably higher incomes than physicians in other OECD countries (Reinhardt et al. 2002).<sup>13</sup> However, the United States has a wider distribution of compensation for all workers. Labor costs are higher for skilled health professionals because they would otherwise enter other fields that offer high compensation. The organizational structure of providers and the regulation of health services in other countries also affect the level of salaries. Countries with public systems that provide care directly often contract with general practitioners (GPs) at salaries negotiated centrally with physicians' associations. Other countries make risk-adjusted, capitated payments to GPs for each patient they

add to their list, thereby putting insurance risk on those physicians for the volume of care they provide. A few countries mix salary with capitated payments (Docteur and Oxley 2003).

### **Orientation toward specialists and specialized services**

Another theory about why we spend more on health care is that compared with other countries, we use more specialist care and specialized equipment and procedures. Health researchers have found that within the United States, the mix of specialist and generalist physicians varies markedly. U.S. counties with higher ratios of specialists to generalist physicians spend more per person on health care without higher quality (Baicker and Chandra 2004).

One must always be cautious with international comparisons because health needs as well as definitions and methods used for collecting data vary between countries. Nevertheless, OECD data suggest that the generalist-specialist mix in the United States is not too different from that in other industrialized countries. The current mix of physicians in the United States is about one-third generalists to two-thirds specialists. That mix is quite different from countries like Australia and Canada in which generalists make up about half of all physicians, but our ratio is not very different from the median of OECD countries for which we have data.

Still, important differences in the roles of generalists and specialists in the United States may help explain our higher spending. Some analysts contend that compared with other industrialized countries, a greater proportion of U.S. visits to physicians are to specialists (Starfield et al. 2005).<sup>14</sup> These analysts believe that because of their training, specialists suspect serious pathology more frequently than generalists, and conduct or order more diagnostic workups to rule out their suspicions. Others note that specialists in the United States provide a larger share of visits for evaluation and management (Fuchs 2005). Medical knowledge has expanded rapidly, and some researchers believe populations need specialists in order to provide quality care, as primary care physicians cannot be expected to stay up to date on everything (Salsberg 2005). A counterargument is that specialists may be less accustomed to acting as a patient's care manager and coordinating with other providers, with greater risk of duplication of tests and services.

Perhaps what matters more than the supply of specialists is whether they are used appropriately. In general,

**TABLE  
1-1****Comparisons of rates of selected inpatient procedures per 100,000 population in 2002**

	<b>Percutaneous coronary interventions*</b>	<b>Coronary bypass</b>	<b>Cardiac catheterization</b>	<b>Pacemakers</b>	<b>Hip replacement</b>	<b>Knee replacement</b>
Australia	130	82	303	62	142	119
Austria	N/A	54	519	78	240	168
Belgium	332	159	498	98	208	118
Canada	140	98	231	86	100	92
Czech Republic	N/A	71	N/A	N/A	N/A	N/A
Denmark	136	69	384	N/A	185	82
Finland	77	72	N/A	N/A	188	127
France	156**	41**	386**	25**	187**	85**
Germany	252	90	784	25**	N/A	N/A
Greece	63	N/A	302	N/A	N/A	N/A
Hungary	125	126	648	N/A	85	N/A
Iceland	198	55	301	38	138	82
Ireland	142	39	149	25	133	34
Italy	83	49	33	58	129	56
Luxembourg	155	72	390	96	212	120
Mexico	1	2	7	3	6	3
Netherlands	83	54	179	43	183	96
New Zealand	86	102	N/A	32	111	57
Norway	188	85	N/A	N/A	187	N/A
Portugal	59	23	118	42	87	29
Slovak Republic	N/A	N/A	N/A	31	N/A	N/A
Spain	68	19	139	48	84	71
Sweden	126	74	N/A	N/A	194	N/A
Switzerland	78	40	104	24	193	114
United Kingdom	86	58	14	52	167	89
<b>United States</b>	<b>417</b>	<b>181</b>	<b>455</b>	<b>69</b>	<b>120</b>	<b>145</b>
OECD median	126	70	302	43	154	89

Note: N/A (not available), OECD (Organisation for Economic Cooperation and Development). Rates are not adjusted for the health status or age and sex mix of each country's population.

\* Percutaneous transluminal coronary angioplasty and stenting.

\*\* Values are for 2001.

Source: OECD 2005.

FFS payment systems, used widely here, give patients less restricted access to specialists than managed-care approaches that use primary care providers as gatekeepers. In one international comparison of health systems, countries that used primary care gatekeepers tended to have lower health expenditures (Oxley and MacFarlan 1994). Partly for this reason, many OECD countries have adopted gatekeeping systems. Another study that scored OECD countries on the degree to which their health systems were oriented toward primary care found that strong primary care systems were correlated with lower

overall mortality rates and death rates for a number of specific conditions (Macinko et al. 2003).

Comparing the use of specialized equipment is another way to look at the role of specialty care across countries. International comparisons of the supply of specialized equipment are problematic because widely reported data are not comparable.<sup>15</sup> Nevertheless, one recent study of treatment for ischemic heart disease across 17 industrialized countries found that in the mid-1990s, the United States had more facilities with at least one cardiac



catheterization laboratory per 100,000 population than the other countries. We were second only to Japan in the number of facilities with at least one cardiac surgery room (Moise and Jacobzone 2003).

Data suggest that compared with other nations, U.S. providers conduct many types of certain high-tech, acute procedures more frequently. For instance, rates of performing advanced coronary procedures like angioplasty and stenting, bypass, cardiac catheterization, and pacemaker insertion were higher in the United States than the median of OECD countries (Table 1-1). Rates of knee replacement were higher as well, but those for hip replacement were lower. Note, however, that these data are not adjusted for differences in the demographic mix or underlying health status of each country's population, or for when each country began using these procedures more broadly.

In order to constrain growth in health spending, many countries have sought to control the diffusion of new technologies. Some use explicit capacity constraints, such as Canada's restrictions on the number of revascularization facilities or the United Kingdom's limits on the numbers of certain procedures through its contracts with hospitals. Other countries, including Sweden and Italy, use targeted funding as an indirect means of slowing technology diffusion (Moise and Jacobzone 2003). Other countries regulate marketing of health products more tightly. For example, while some countries allow manufacturers to raise consumer awareness of certain health conditions through advertising, no other country in the world permits direct-to-consumer advertising of specific prescription drugs (Lurie 2005, Palumbo and Mullins 2002).<sup>16</sup> Although fewer restrictions generally apply in the United States, payers use varied approaches to manage the use of technology. For example, some managed care plans cover new technologies only after the weight of evidence suggests that they are both clinically and cost effective. Other payers leave most coverage decisions to the medical judgment of individual physicians.

---

## **Changing Medicare policy within the broader U.S. health care system**

---

Medicare faces powerful upward pressures on spending that will be difficult to staunch. The interaction between broad use of newer medical technologies and health insurance is thought to account for much of the long-term spending growth in the United States, and those forces

will likely push future spending higher. Additionally, the launch of Medicare's new outpatient prescription drug benefit places a substantial new financial responsibility on the program. As we near the end of this decade, Medicare will also have to grapple with the additional challenge of higher enrollment levels associated with retiring baby boomers, which will affect program spending levels as well as the demand for federal resources for other programs that benefit the elderly such as Social Security and Medicaid.

To finance Medicare as the program is now structured, policymakers would need to direct an unprecedented share of our nation's resources to the program. Projections suggest that federal program spending for Medicare could grow from less than 3 percent of GDP today to 8 percent by 2036 and nearly 14 percent by 2078 (Boards of Trustees 2005). Premiums and cost sharing will also require growing shares of beneficiaries' income. The financial pressures on both beneficiaries and the federal budget are likely to spark more policy debate about Medicare's future. Under the MMA's warning system, this debate could begin as soon as the spring of 2008.

Several strategies are available to Medicare policymakers, but none is easy. These include:

- constraining payments,
- limiting benefits,
- increasing the program's financing by raising taxes, and
- increasing the efficiency of health care delivery.

Policymakers will need to use a combination of these approaches. Strategies to constrain payments may be shorter term in nature since over time, continually restricting Medicare's payments below the cost of providing care could hurt beneficiaries' access to care. The last strategy, increasing efficiency, refers to doing more with a given level of resources without adversely affecting access to or quality of care. Encouraging greater efficiency is the most desirable of these four approaches because it would enable the Medicare program to do more with its resources. Much of the Commission's work focuses on encouraging greater efficiency.

The magnitude of savings from any of these approaches is difficult to characterize because it would depend on the details of individual policy proposals. In particular, the outcome of policies that try to improve the efficiency

## What is Medicare's market share?

To get a sense of how large a purchaser Medicare is, we turned to data from the national health accounts (CMS 2005b). These data are CMS's estimates of the total amount of national health care spending in the United States by source of financing and by type of service delivered.<sup>17</sup>

Medicare in 2003 accounted for 30 percent or more of the market for hospital services, freestanding home health, and durable medical equipment (Table 1-2).<sup>18</sup> Federal, state, and local health care financing combined

accounted for nearly 60 percent or more of spending for all types of hospital-based care, freestanding home health, and freestanding nursing home care. Private health insurance accounts for 50 percent of physician and clinical services while Medicare accounts for 20 percent. In 2003, Medicare financed only a small share (2 percent) of outpatient prescription drug spending. After the program launched Part D in 2006, however, CMS projects Medicare's market share will jump to 28 percent. ■

**TABLE  
1-2**

**Medicare's market share varies among health care sectors, 2003**

**Distribution of selected payment sources by spending categories:**

Spending category	Public programs <sup>a</sup>			Private health insurance	Out-of-pocket spending <sup>b</sup>
	Medicare	Medicaid	All public programs		
Hospital care <sup>c</sup>	30%	17%	58%	34%	3%
Physician and clinical services	20	7	33	50	10
Other professional services <sup>d</sup>	14	5	28	39	27
Home health care (freestanding only)	32	25	62	18	16
Nursing home care (freestanding only)	12	46	61	8	28
Prescription drugs (retail sales)	2	19	24	46	30
DME (retail sales)	32	<0.5	37	19	44

Note: DME (durable medical equipment). Percentages for all public programs, private health insurance, and out-of-pocket spending do not sum to 100 because some categories of payers (such as the Department of Defense and Department of Veterans Affairs) are not shown.

a. Medicare and Medicaid are subsets of all public programs. Some public programs are not shown.

b. Excludes out-of-pocket premiums paid for private health insurance.

c. All hospital-based services including inpatient and outpatient procedures, pharmacy, home health, and skilled nursing. Measured as total net revenue, which equals charges less contractual adjustments, bad debts, and charity care.

d. Covers services provided in establishments operated by health practitioners other than physicians and dentists. These include professional services by private-duty nurses, chiropractors, podiatrists, optometrists, physical, occupational and speech therapists, and ambulance services.

Source: CMS Office of the Actuary, National Health Accounts.

of health care delivery can be highly uncertain. Where available, we provide specific estimates of savings.

### Constraining payments

Policymakers can constrain annual growth in Medicare spending by limiting the annual updates or increases in payment rates to health care providers. To some extent, setting such limits is part of being a prudent purchaser; Medicare should try to pay no more than what is required

to obtain good access to care for beneficiaries. This point of view underlies the Commission's analysis of payment adequacy for various health care sectors each year. However, other analysts might argue that policymakers should use regulatory tools such as price controls, limits on service volume, and more restrictive conditions on participation to a greater degree as other countries do.

Two factors allow Medicare to limit payments to providers—government authority and the program's size.

The Medicare program regulates many aspects of health care delivery. In addition, constraining payment increases makes use of the Medicare program's status as the largest payer in the U.S. health care system by exerting its market power in setting prices (see text box). However, the existence of a large number of other payers may limit the effectiveness of this approach, and the extent of Medicare's influence varies across health sectors. Some analysts contend that even in situations where Medicare has been the dominant purchaser, policymakers lack a strong track record of using the program's market power. Even so, Medicare significantly influences how health care is organized and delivered in the United States through payment and coverage decisions. Medicare implicitly plays the role of market leader among private insurers that adopt the program's systems of reimbursing physicians, hospitals, and other facilities.

U.S. policymakers have constrained growth in payment rates on occasion, such as policies initiated in the Balanced Budget Act of 1997 (BBA). However, such policies can be difficult to sustain over time. Changing prices alone does little to address the underlying factors that lead to spending growth—the diffusion of newer technologies fueled by the use of insurance. In the wake of the BBA, providers convinced policymakers that the law had tightened payment rates too restrictively and would ultimately reduce access to care. A subsequent bill, the Balanced Budget Refinement Act of 1999, restored much of the growth in payment rates that had been constrained by the BBA.

Constraining payment rates alone will not lower spending if the volume of services furnished increases—as with Medicare's payment system for physician services among others. Nor has the payment system provided incentives for physicians to coordinate the care that they provide to beneficiaries. Instead, the Medicare program may need more fundamental changes in how it pays physicians to reward them differently based on the quality of services they provide and the degree to which they coordinate care with other providers. Investments by physicians in information technology and electronic medical records could help Medicare's ability to measure quality and make it easier for providers to coordinate with one another.

### **Limiting benefits**

This general approach could involve measures such as raising Medicare's age of eligibility, expanding the portion of program spending financed with beneficiary premiums,

increasing cost-sharing requirements, or limiting Medicare's coverage for specific benefits.

### **Raising the age of eligibility**

Policymakers could gradually raise the age of eligibility for Medicare from 65 to 67, making the program more consistent with eligibility rules for full Social Security benefits.<sup>19</sup> As average life expectancy increases in the United States, encouraging longer participation in the labor force by raising the age at which people qualify for Medicare coverage is reasonable. If individuals work longer and delay retirement, they may also retain access to private health insurance at group rates—if their employers offer it.

By itself, the eligibility approach is unlikely to reduce Medicare's program spending by much. Less than 10 percent of today's Medicare beneficiaries are age 65 or 66, and those individuals have lower average Medicare spending because of their relative youth. One researcher estimates that savings would be on the order of 4 percent to 5 percent if the eligibility age were raised to 67 (Johnson 2005). Similarly, others estimate that phasing in an increase in the eligibility age to 70 would equate to a 0.8 percent reduction in program spending relative to GDP (CBO 2005a). However, some of that reduced spending would be offset by higher spending under Medicaid and other programs.

A drawback of raising the eligibility age is that it would affect access to care for some individuals in an age group for which it is typically more difficult and expensive to obtain other health insurance coverage. Even though many of the younger elderly may find alternative sources of health coverage, one estimate suggests that 9 percent of 65- and 66-year olds would not, and another 11 percent would be underinsured (Davidoff and Johnson 2003).<sup>20</sup> If policymakers chose this approach, they could allow those individuals just under Medicare's eligibility age to buy into the program by paying the full premium for coverage at actuarially fair rates. (An alternative option would be to broaden the availability of disability coverage to the near elderly.) Allowing people to buy into Medicare would help to reduce the numbers of uninsured, but premiums would likely be expensive and perhaps financially burdensome to those with no other coverage options. For this reason, some proposals for this buy-in approach would also subsidize premiums for low-income individuals (Johnson 2005). That further step would reduce the number of near elderly who are uninsured but also reduce federal program savings.

## Increasing premiums and cost sharing

Policymakers could raise Medicare's premiums or cost-sharing requirements, approaches used widely in the private sector. Raising cost-sharing requirements could rein in spending for health care services that are more prone to overuse. Increasing the share of Medicare's costs borne by beneficiaries through premiums would reduce the federal government's share of Medicare spending. However, since many Medicare beneficiaries have limited incomes, indiscriminate increases could impose financial barriers to essential care or cause hardship. Policy changes should try to balance these two sets of concerns.

One specific option would lower the federal government's funding of Part B premiums from the current 75 percent to 70 percent of average SMI expenditures for elderly beneficiaries. The Congressional Budget Office (CBO) estimates that increasing Part B premiums in this manner would reduce Medicare program spending by about \$85 billion over the 2006 to 2015 period (CBO 2005a). The MMA introduced a variant of this approach: Beginning in 2007, the federal government will provide lower subsidies to Part B enrollees who have higher adjusted gross incomes. CBO estimated that this policy would lower Medicare program spending by less than half of 1 percent over the 2004 to 2013 period. Some analysts contend that lowering federal premium subsidies could reduce the numbers of individuals who choose to enroll in Medicare. However, even at a level of 70 percent for most beneficiaries, federal subsidies would remain quite high. Moreover, others argue that enrollment would remain high because Medicare has advantages that private insurance may not—for example, a community-rated premium with unlimited access to most providers.

As structured today, Medicare's traditional benefit does not provide protection against catastrophic levels of out-of-pocket spending. Medicare's cost-sharing requirements are also complex and vary depending on the type of service provided and the site of care. About 90 percent of Medicare beneficiaries obtained supplemental coverage in 2002 through their former employers (32 percent), medigap policies (26 percent), Medicare Advantage plans (13 percent), Medicaid (16 percent), or other programs (2 percent) (MedPAC 2005a). Supplemental coverage often gives enrollees greater predictability of their out-of-pocket spending and, in return for paying an annual premium, first-dollar coverage policies (such as medigaps) reduce beneficiaries' cost sharing to near zero from the time they begin using health services each year. While

some protection against high out-of-pocket spending is desirable, lower cost sharing may reduce beneficiaries' sensitivity to the costs of care. Supplemental coverage that shields beneficiaries from FFS cost-sharing requirements leads to greater use of services and would temper any savings from policies that raised Medicare's cost sharing.

Policymakers might want to combine increases in Medicare's cost-sharing requirements with catastrophic protection and a ban on first-dollar coverage (CBO 2005a). A catastrophic cap on out-of-pocket spending could limit the financial burden on beneficiaries who need the most care. Restricting the ability of supplemental insurance to provide first-dollar coverage could lead to sizable savings for the Medicare program—large enough to finance some catastrophic protection (MedPAC 2002). As one specific example, CBO estimates that combining a ban on first-dollar medigap coverage with a restructuring of Medicare's benefit for all Parts A and B services could save more than \$130 billion between 2006 and 2015 (CBO 2005a). The proposed Medicare benefit for 2006 would include a combined deductible of \$500, 20 percent coinsurance for all Parts A and B services, and a catastrophic cap of \$4,500. (Proposed amounts would grow over time at the same rate as Medicare costs per capita.)

Although approaches that increase cost sharing could lower Medicare spending, they could also raise state and federal Medicaid spending. For example, beneficiaries who are dually eligible for Medicare and a state's full Medicaid benefit typically pay no Part B premium and low or no cost sharing on a package of medical services broader than Medicare's benefit. Eligibility requirements vary among states, but in general, individuals who qualify as full duals have very low incomes and assets, and they are a vulnerable and costly group of beneficiaries (MedPAC 2004b). Thus, if Medicare were to increase its premium and cost-sharing requirements, the Medicaid program would pay for some of those changes on behalf of dual eligibles.

Higher cost sharing might affect health outcomes. The RAND Health Insurance Experiment, which did not include elderly individuals, found no substantial differences in the health status of people who received free care versus those who faced higher cost sharing (Newhouse 1993).<sup>21</sup> This body of work suggests that although offsetting positive and negative effects, on average, are likely to exist, higher cost sharing might not

adversely affect health outcomes. RAND research also suggests that higher cost sharing discouraged the use of some necessary as well as unnecessary care. More recent literature that focuses on the elderly suggests that higher cost sharing impedes the use of appropriate services, particularly the use of outpatient prescription drugs (Rice and Matsuoka 2004). For certain beneficiaries, higher out-of-pocket costs could undermine patient compliance with recommended care, coordination of services, or the use of preventive services (Robinson 2002).

### **Limiting Medicare's coverage for specific benefits**

Policymakers could set greater limits on the types of services or the share of costs that Medicare would cover. For example, CMS could make national coverage decisions for new technologies to a greater degree than it does today, and the agency could base those decisions on analyses of both clinical and cost effectiveness. A variant of this approach would use information about clinical and cost effectiveness to set Medicare's payment rates and cost-sharing requirements.

An increasing number of countries have public and private agencies that evaluate new technologies (Bodenheimer 2005b). Some explicitly use cost-effectiveness analysis—a methodology in which one quantifies both the health outcomes and the costs of new technologies (MedPAC 2005c). Organizations such as the United Kingdom's National Institute for Clinical Excellence (NICE) measure health outcomes in terms of quality-adjusted life years (QALYs), the arithmetic product of life expectancy and a measure of the quality of the remaining life years. U.K. policymakers use NICE's analyses to help decide which treatments should be funded publicly, based on whether a technology's resulting QALYs are at or below certain ranges of cost effectiveness (Reinhardt et al. 2004). If a new technology has a QALY above certain thresholds, patients in the United Kingdom must use their own funds or private supplemental insurance to pay for treatment.

To support Medicare's national coverage decisions, policymakers have tended to use information from clinical-effectiveness analyses rather than cost-effectiveness or comparative-effectiveness analyses. The Medicare Coverage Advisory Committee evaluates whether an innovation is reasonable and necessary for Medicare beneficiaries, given available clinical evidence. In some cases, Medicare also considers clinical effectiveness when setting payment rates for new services. By focusing on clinical effectiveness, Medicare's process

could lead to coverage of technologies that other countries might not find to be of sufficient value.

Numerous stakeholders have raised concerns about incorporating cost-effectiveness analysis into Medicare's coverage decisions (MedPAC 2005b). For example, inconsistencies in cost-effectiveness methodologies can lead to results that vary from study to study. Some stakeholders question whether, under the Social Security Act that authorizes Medicare, the Secretary of Health and Human Services has authority to consider cost-effectiveness when deciding what to cover. Others fear that cost-effectiveness information would be used solely for cost containment rather than for promoting appropriate care.

Perhaps for similar reasons, private payers in the United States are also reluctant to incorporate cost-effectiveness analysis in their coverage and payment policies. Under these circumstances another useful approach is comparative-effectiveness analysis: evaluating the costs and benefits of alternative treatments for the same condition. Recently, CMS began linking national coverage under Medicare with participation in comparative clinical trials and data registries in order to determine the effectiveness of new services for Medicare beneficiaries. Over time, these measures could provide information that would enable the agency to refine coverage decisions based on evidence of comparative effectiveness.

### **Increasing program financing**

Under the Medicare trustees' projections, the program's need for resources would grow from less than 3 percent of GDP today to about 8 percent by 2036 and nearly 14 percent by 2078. Required resources would be even higher if future growth in health spending is closer to its historical average than the intermediate set of assumptions that the Medicare trustees used for their projections. In order to finance such growth in spending, decision makers face difficult choices.

Addressing how to finance Part A services is particularly important, since Medicare will no longer have authority to pay for claims once the HI trust fund is depleted. Currently, the trustees project that program spending will exhaust the HI trust fund in 2020.

In the short term, growth in spending for the entire Medicare program (Parts A, B, C, and D) could be financed by more borrowing. Under that scenario, the federal government would have to increase spending

to cover larger interest payments on the federal debt. However, given the magnitude of resources required to finance projected Medicare spending, this approach could put significant upward pressure on interest rates as the federal government competes with other borrowers for investment capital. Higher interest rates would, in turn, slow economic growth and fuel inflation.

For the longer term, the Congress could hold federal borrowing to manageable levels by allocating a greater share of resources toward Medicare and away from other federal programs. However, if growth in health care spending does not slow and tax revenues remain at their historic share of GDP, reallocating federal spending alone may not be enough to address the problem.<sup>22</sup> As the baby boom generation retires, the magnitude of resources needed for Medicare, Medicaid, and Social Security will reach unprecedented shares of GDP—even if some financing for those programs is offset with lower spending on other federal programs. Fiscal stability would require a sizable slowdown in growth rates in health spending and may also require a substantial increase in taxes as a share of our nation's economy (CBO 2005b).

A final financing approach is to raise federal taxes—payroll taxes on active workers or personal and corporate income taxes. Some analysts believe that relying on increases in payroll tax rates to meet at least some of Medicare's funding shortfall is a desirable policy approach, because the after-tax wages of workers will grow more rapidly than benefits net of taxes and out-of-pocket health costs for Medicare enrollees (Thompson 2000). Others say that the dependence of the elderly on succeeding generations is both undesirable and unsustainable, and that other approaches—such as encouraging individuals to work after age 65 and save a larger portion of their preretirement income for health care costs—may be more equitable (Fuchs 2000). Still other analysts caution that relying on tax increases alone to address Medicare's unfunded liabilities could lead to substantial job losses and lower growth in personal income and GDP (Foertsch and Antos 2005). The magnitude of tax increases needed depends on what priority policymakers give to financing Medicare relative to other priorities.

### **Increasing efficiency**

The Commission focuses much of its research agenda on identifying ways to improve efficiency. Taking steps to increase the efficiency with which Medicare's providers deliver health care is extremely important because such measures would lessen the need to limit benefits and raise

taxes. As policymakers carry out changes to increase efficiency, however, they will need to watch that such steps do not lower quality or access. About 84 percent of Medicare beneficiaries are enrolled in traditional Medicare, accounting for the bulk of program spending. For this reason, analysts point out that FFS Medicare needs to become more of a strategic purchaser than a payer of claims. Other researchers have proposed measures to expand the use of private plans to deliver Medicare benefits as a means of achieving greater efficiency.

### **Improving incentives within FFS payment systems**

Ideally, payment systems would give providers incentives to deliver quality care, to coordinate care among themselves and across health care settings, and to use resources judiciously. However, Medicare's FFS payment systems currently pay the same for lower-quality care as for higher-quality care, do not reward care coordination, and often give higher payments to providers that furnish more services even when those services are not of value.

Some past policies have simply constrained FFS payments to health care providers. Broader changes to Medicare's payment systems that affect providers' incentives may be harder to carry out, yet get more directly at the structural issues fueling growth in spending. Although imperfect, the inpatient prospective payment system (IPPS) is one example. By paying hospitals for larger bundles of similar services rather than for each specific input to care, the payment system leaves decisions about how best to produce health care services to providers. The prospective nature of the system puts providers at financial risk, thereby giving them an incentive to deliver care efficiently (with outlier payments to protect sicker beneficiaries from incentives to stint on care). In the case of inpatient care, the combination of these features appears to have lowered spending and reduced lengths of stay without adversely affecting quality of care.

However, reforms to FFS payment systems are not enough to ensure that Medicare does not waste or misdirect resources. Much of the literature on geographic variation in Medicare spending—the central body of work that analysts cite as proof of inefficiency—uses data more recent than the implementation of the IPPS (Fisher et al. 2003). Over time, inaccuracies and lags in timeliness of data that CMS uses to set payment rates can lead to unintended overpayment for certain services at the expense of others (Ginsburg and Grossman 2005). For example, certain diagnosis related groups within the IPPS are relatively more profitable than others and may provide

an incentive for growth in physician-owned specialty hospitals (MedPAC 2005d).

Innovative purchasing strategies emerging in the private sector suggest that FFS Medicare can become a better purchaser of health care (MedPAC 2004b). Last year the Commission recommended that the Secretary measure the resource use of physicians using Medicare FFS claims and report that information back to physicians on a confidential basis. The objective of this policy is to provide physicians an opportunity to assess their practice style relative to their peers and determine if they should make any changes. The need for such a tool is motivated by research on geographic variation in Medicare spending that suggests that the nation could spend less on health care, without sacrificing quality, if physicians whose practice styles are more resource intensive reduced the intensity of their practice. Today, some private payers draw on information about physicians' resource use to help them build networks, set payments under pay-for-performance programs, and design tiered cost sharing in order to steer beneficiaries toward more efficient providers. Last year the Commission also recommended that CMS take steps to improve safety standards for imaging equipment, make coding edits that adjust payment amounts for multiple imaging services, and restrict payment for some imaging services to physicians in certain specialties such as radiology and cardiology. Some private purchasers use such steps to control growth in the volume of imaging services. Another strategy used by private payers is to set payment rates for certain services through a competitive bidding process. CMS has begun to use this approach for purchasing durable medical equipment, prosthetics, and orthotics.

Observers from other industries, economists, and researchers assert that health care providers could use information technology (IT) and systems engineering methods to increase efficiency while improving the safety and quality of their services (Reid et al. 2005). Systems engineering refers to methods for analyzing and improving the performance of complex systems such as hospitals and ambulatory care. These methods often rely on information technology to analyze detailed data on the process and outcomes of care delivery. Industries such as telecommunications, securities trading, retail, and general merchandising invested heavily in IT and systems engineering during the 1990s and reaped continued annual gains in productivity. Some analysts believe that if health care providers used IT-enabled systems engineering methods, including interconnected electronic medical

records, U.S. health care industries might also improve their efficiency (Hillestad et al. 2005). However, current use of systems engineering and health IT is low due to start-up costs, the difficulty of implementing unfamiliar systems, and the lack of return on investment to providers under FFS payment methods (MedPAC 2005c).

### **Using private plans to deliver Medicare benefits**

Some analysts believe that the best way to address high growth in Medicare spending is for competing plans to manage the delivery of benefits while assuming some or all insurance risk for their members. Proponents suggest that private plans could help stimulate price competition as plans compete for members, lead to greater cost-consciousness among enrollees, and improve quality of care. These views led to the Medicare Advantage program and the structure of Medicare's Part D, which relies on competing private plans to deliver outpatient prescription drug benefits.

Without good risk adjustment to payments, competing private plans have an incentive to enroll healthier individuals, avoid sicker ones, and stint on care. Nevertheless, researchers have improved risk adjusters by incorporating diagnosis information from claims data, and Medicare risk adjusts its payments to private plans in the Medicare Advantage and Part D programs (Pope et al. 2004). For competition among private plans to work well, beneficiaries must make informed choices among plans and understand the consequences of the plans' benefits and management tools.

In general, managed care plans may be able to constrain levels of health care spending relative to FFS by negotiating lower payment rates with preferred providers and applying management tools. However, in order to achieve savings relative to FFS, private plans must more than offset their administrative costs and profits (CBO 2004). Certain aspects of managed care proved unpopular in the latter part of the 1990s, such as provider networks and requirements for prior authorization that some members considered too restrictive. Nevertheless, many plans have reintroduced managed care techniques and tailored them toward the services that are most likely to be overused. Some plans have also begun measuring providers' utilization and quality, establishing tiers of providers that are subject to different cost-sharing requirements or payment rates depending on their track record of quality and resource use, and making greater use of disease management programs (Mays et al. 2004a).

A wide variety of Medicare Advantage plans exist today, with varying methods for promoting appropriate care and managing cost growth. Plans run by multi-specialty group practices largely require their members to seek care through their own physicians. Some such plans have been successful at encouraging quality care by fostering consensus among their physicians and developing evidence-based practice guidelines. Other plans negotiate discounts from network providers, monitor provider quality and resource use, and then try to steer members toward preferred providers. Still other types use relatively fewer tools for managing care.

One policy approach that some researchers point to as a way to address Medicare's financial situation is called premium support (Dowd et al. 1992). Under some versions of premium support, Medicare's FFS program would compete more directly with private plans than occurs today. The magnitude of savings achievable under premium support is difficult to predict and would depend on many details about how such competition would be carried out, as well as how plans and beneficiaries would respond (CBO 2005b). The MMA includes a demonstration of one approach to premium support beginning in 2010.

### **Collaborating with other payers**

Although making better use of Medicare's financial resources may be the most desirable strategy to policymakers, accomplishing this goal is far from certain. With many different payers in the U.S. health care system, driving gains in efficiency is difficult for any one payer.

In their attempts to make Medicare more efficient, policymakers will need to use a variety of strategies across different health care sectors. Medicare will also likely need to collaborate with other payers to carry out broader changes among U.S. health care providers. The following three examples use different policy tools to improve efficiency for the Medicare program:

- **Comparative-effectiveness analysis for new technologies**—In collaboration with other public and private payers, Medicare could advance the use of comparative-effectiveness analysis and work to develop consensus about appropriate uses for new medical technologies. The MMA set a precedent for such a federal role when it authorized the Agency for Healthcare Research and Quality to conduct and support research studying the outcomes, comparative

clinical effectiveness, and appropriateness of health care items and services. In a similar way, CMS could help facilitate greater consensus around methodologies and help build capacity for conducting analyses. For such analysis to be accepted and used widely, it would need to be authoritative and unbiased. In past national coverage decisions, CMS relied primarily on information about the clinical effectiveness of new technologies rather than the cost effectiveness. Given the widespread use of new technologies and medical practice patterns, policymakers may begin to incorporate comparative-effectiveness analysis in Medicare's coverage or payment policies if other payers are.

- **Paying differentially among providers based on measures of quality and resource use**—Medicare could collaborate with other payers, providers, and interested parties to agree on measures of quality and resource use for pay-for-performance programs. It is not always clear that a pay-for-performance strategy would lead to budgetary savings—it could even lead to higher spending. Nevertheless, this approach would improve the value that Medicare and other payers receive for their health spending. In its March 2004 and 2005 Reports to the Congress, the Commission recommended policy changes that would differentiate among providers and lead Medicare to pay more for higher quality services (MedPAC 2005c, 2004a). CMS, along with accreditation and provider organizations, has already begun to play a critical role in building the infrastructure to move to pay for performance. The agency has identified and developed quality measures, collected standard data on quality, and published information on the performance of some providers. It has also designed demonstration programs to test various aspects of paying for improved quality and efficiency. In order to ensure that a pay-for-performance strategy is successful for Medicare, CMS must continue to work with other payers and stakeholders so that the measures the agency uses are accepted widely. A common set of measures for quality and resource use across payers would also reduce the reporting burden on providers.
- **Competitive bidding**—Medicare could initiate change on its own in some circumstances. For example, the program is essentially using a competitive bidding approach among private plans for Medicare's new prescription drug benefit. Initial information about



first-year bids suggests that competitive pressure among many entrants kept bids low, but whether bidding will lead to similar results over time remains to be seen.

For many of these policy tools, Medicare would need to collaborate with other payers. Medicare relies on providers who also deliver care for the broader set of payers in the health care system. In some health care sectors, Medicare can and should take the lead in initiating certain changes. In many situations, Medicare must often work in collaboration with other payers to make lasting changes.

The chapters that follow reflect the Commission's efforts to help policymakers get the best value possible for Medicare's beneficiaries and for taxpayers. Chapter 2 describes the Commission's framework for updating Medicare payment rates and analyzes the adequacy of Medicare payments for major FFS sectors. Chapter 3 examines the current process for valuing physician services and makes recommendations to improve that process. Chapter 4 looks at the adequacy of payments for Medicare's post-acute care services. ■

## Endnotes

---

- 1 A hold-harmless policy limits each beneficiary's dollar increase in Part B premiums to no more than the dollar increase in their Social Security benefit. However, no hold-harmless provision applies to increases in Part D premiums or to Medicare's cost sharing. If a Part D enrollee receives low-income subsidies, those would mitigate much of the increase in premiums and cost sharing for prescription drugs.
- 2 The Medicare trustees make their projections in three phases. Short-term projections cover a 12-year period and reflect current Medicare policies by type of service as well as recent trends in growth of spending. For years 25 to 75 of the projection period, the trustees apply assumptions about long-term growth rates in health spending to projections of growth in the economy, growth in numbers of beneficiaries and their demographic mix, and the relative cost of demographic groups. For the intermediate period, the trustees gradually smooth the growth rate in per capita health spending between the short- and long-range assumptions (2004 Technical review panel on the Medicare Trustees Report).
- 3 The trustees characterize long-range growth rates in these terms to reflect the effects of technology on health spending. The GDP term reflects an income effect—broader use of technology as our nation's income increases. The 1 percentage point term reflects an increasing trend in the use of technology independent of income (2004 Technical review panel on the Medicare Trustees Report).
- 4 Even as the health status of people age 65 and older has been improving, the prevalence of chronic diseases and rates of disability among younger people has been rising. Researchers found that the combined effects of the changing health status of older and younger cohorts will lead to only modest upward pressure on aggregate health spending. However, the adoption rate of key technologies could affect spending levels more because some innovations are forecast to be very expensive. The 10 technologies considered include intraventricular cardioverter defibrillators, left ventricular assist devices, pacemakers to control atrial fibrillation, telomerase inhibitors, cancer vaccines, anti-angiogenesis, treatment of acute stroke, prevention of Alzheimer's, prevention of diabetes, and compounds that extend life span.
- 5 An implication of calculations made in the late 1990s for Medicare trustees' reports was that medical care services would make up 38 percent of GDP by 2075 (2004 Technical review panel on the Medicare Trustees Report).
- 6 In their most recent report, the Medicare trustees projected that, under intermediate assumptions, the HI trust fund will be exhausted in 2020. Prior to 2020, the trustees project that existing trust fund balances plus interest income will keep Part A in a solvent position.
- 7 Some analysts have criticized the level of 45 percent as arbitrary (Moon 2005). While true, lawmakers included the excessive funding provision in the MMA to spark debate on balancing national priorities between Medicare and other uses for general revenue financing.
- 8 CMS attributes the relatively steep increases in Part B's premium for 2006 to a number of factors, including the projected increase in physician spending, an increase in reserves to make up for past unanticipated updates in the physician fee schedule, and changes to Medicare Advantage payment rates. Medicare will also begin paying a larger share of outpatient costs as the program gradually lowers beneficiary coinsurance for services in hospital outpatient departments (CMS 2005a).
- 9 Social Security recipients received a 4.1 percent increase for 2006.
- 10 For a beneficiary with a total of \$3,000 in drug spending, this \$1,500 out-of-pocket spending calculation is the sum of the \$250 deductible, 25 percent coinsurance on the next \$2,000 in drug spending (\$500), and \$750 of out-of-pocket spending in the standard benefit's coverage gap.
- 11 The same degree of concentration applies for program spending in fee-for-service Medicare (MedPAC 2004b).
- 12 Dollar amounts are adjusted for purchasing power parity—differences in the cost of living across countries—by comparing prices for a fixed basket of goods. OECD's adjustment is a broad-based basket, not one specific to health costs.
- 13 Analysts raise a similar argument about the higher price of acute hospital days in the United States, but inpatients receive more intensive care per bed day than in many other countries (Bodenheimer 2005b).
- 14 According to the National Ambulatory Medical Care Survey, in 2002, nearly 63 percent of all U.S. office-based visits were to physicians categorized as being in primary care specialties. However, unlike the OECD definition of generalists, this statistic includes visits to obstetrician/gynecologists, which accounted for nearly 8 percentage points of the 63 percent. For half of all office visits, regardless of specialty, physicians indicated that they were the patient's primary care provider. Among these visits, 5 percent were to specialists (Woodwell and Cherry 2004).

- 15 In particular, statistics underreport the number of pieces of equipment such as MRI units and CT scanners in the United States—they reflect the number of hospitals reporting at least one of those pieces of equipment rather than the number of units in hospitals and in other locations (OECD 2005).
- 16 Countries of the European Union permit advertising of certain health conditions by pharmaceutical manufacturers, but do not permit advertisement of a specific drug therapy. New Zealand allowed direct-to-consumer advertising for a time but subsequently discontinued that policy.
- 17 Note that values for Medicare include spending for Medicare Advantage, in which private plans negotiate payment rates with providers rather than following payment systems of the traditional fee-for-service program. Offsetting this effect is the fact that other public and private payers use Medicare's payment rates as their own, thereby broadening Medicare's influence.
- 18 National health expenditure data group services by the type of establishment. So, for example, data on hospital spending include all types of services provided at hospitals—inpatient and outpatient care, pharmacy, home health, skilled nursing, services for end-stage renal disease patients, and others.
- 19 Retirees can obtain a reduced level of Social Security benefits beginning at age 62, but only obtain full benefits if they wait until age 65. Under current law, Social Security's normal retirement age is increasing gradually from 65 to 67.
- 20 This study defines the underinsured as those individuals who, given their health status, would have purchased more extensive coverage but had insufficient income to do so. The authors used simulation models to predict the purchase of nongroup health insurance policies among the near elderly based on their health status, then constrained the type of insurance those individuals could purchase to policies that would cost no more than 20 percent of their income.
- 21 One should note that each of the Health Insurance Experiment's insurance alternatives included a cap on out-of-pocket spending, which could have affected behavior.
- 22 Over the past 50 years, federal tax revenues have ranged between 16 percent and 21 percent of GDP, averaging 18 percent (CBO 2005b).

## References

---

- 2004 Technical review panel on the Medicare Trustees Report. 2004. *Review of the assumptions and methods of the Medicare trustees' financial projections*. [http://aspe.hhs.gov/health/medpanel/2004/2004\\_Technical\\_Review\\_Panel\\_on\\_the\\_Medicare\\_Trustees\\_Report.pdf](http://aspe.hhs.gov/health/medpanel/2004/2004_Technical_Review_Panel_on_the_Medicare_Trustees_Report.pdf)
- Aaron, H. J., and J. Meyer. 2005. Health. In A. M. Rivlin and I. Sawhill, eds. *Restoring fiscal sanity: Meeting the long-run challenge*. Washington, DC: Brookings Institution Press.
- Arrow, K. J. 1963. Uncertainty and the welfare economics of medical care. *The American Economic Review* 53, no. 5 (December): 941–973.
- Baicker, K., and A. Chandra. 2004. Medicare spending, the physician workforce, and beneficiaries' quality of care. *Health Affairs Web Exclusives* (April 7). <http://www.healthaffairs.org>.
- Berk, M. L., and A. C. Monheit. 2001. The concentration of health care expenditures, revisited. *Health Affairs* 20, no. 2 (March/April): 9–18.
- Boards of Trustees, Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds. 2005. *2005 annual report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds*. Washington, DC: Boards of Trustees.
- Bodenheimer, T. 2005a. High and rising health care costs. Part 2: Technologic innovation. *Annals of Internal Medicine* 142, no. 11 (June 7): 932–937.
- Bodenheimer, T. 2005b. High and rising health care costs. Part 3: The role of health care providers. *Annals of Internal Medicine* 142, no. 12 (June 21): 996–1002.
- Buchmueller, T. C. 2000. The health plan choices of retirees under managed competition. *Health Services Research* 35, no. 5, part I (December): 949–976.
- Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2005a. Analysis of 2006 Part B premium rate increase. <http://www.cms.hhs.gov/media/press/files/2006PartBpremiumanalysisstable.pdf>.
- Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2005b. National health accounts for 1960–2003. <http://www.cms.hhs.gov/statistics/nhe/default.asp>.
- Chernew, M. E. 2005. Achieving value in healthcare. *The American Journal of Managed Care* 11, no. 3 (March): 138–139.
- Chernew, M. E., R. A. Hirth, and D. M. Cutler. 2003. Increased spending on health care: How much can the United States afford? *Health Affairs* 22, no. 4 (July/August): 15–25.
- Congressional Budget Office. 2005a. *Budget options*. Washington, DC: CBO. February.
- Congressional Budget Office. 2005b. *The long-term budget outlook*. Washington, DC: CBO. December.
- Congressional Budget Office. 2004. *CBO's analysis of regional preferred provider organizations under the Medicare Modernization Act*. Washington, DC: CBO. October.
- Danzon, P. M. 1992. Hidden overhead costs: Is Canada's system really less expensive? *Health Affairs* 11, no. 1 (Spring): 21–43.
- Davidoff, A. J., and R. W. Johnson. 2003. Raising the Medicare eligibility age: Effects on the young elderly. *Health Affairs* 22, no. 4 (July/August): 198–209.
- Docteur, E., and H. Oxley. 2003. *Health-care systems: Lessons from the reform experience*. Paris: Organisation for Economic Cooperation and Development. December.
- Dowd, B., J. Christianson, R. Feldman, et al. 1992. Issues regarding health plan payments under Medicare and recommendations for reform. *Milbank Quarterly* 70, no. 3: 423–453.
- Fisher, E. S., D. E. Wennberg, T. A. Stukel, et al. 2003. The implications of regional variations in Medicare spending. Part 2: Health outcomes and satisfaction with care. *Annals of Internal Medicine* 138, no. 4 (February 18): 288–298.
- Foertsch, T. L., and J. R. Antos. 2005. *The economic and fiscal effects of financing Medicare's unfunded liabilities*. Heritage Center for Data Analysis, CDA05–06. Washington, DC: Heritage Foundation (October 11).
- Fronstin, P. 2005. *Uninsured unchanged in 2004, but employer-based health coverage declined*. Employee Benefit Research Institute Notes 26, no. 10. Washington, DC: EBRI. October.
- Fuchs, V. R. 2005. Health care expenditures reexamined. *Annals of Internal Medicine* 143, no. 1 (July 5): 76–78.
- Fuchs, V. R. 2000. Medicare reform: The larger picture. *Journal of Economic Perspectives* 14, no. 2 (Spring): 57–70.

- Ginsburg, P. B., and J. M. Grossman. 2005. When the price isn't right: How inadvertent payment incentives drive medical care. *Health Affairs Web Exclusives* (August 9). <http://www.healthaffairs.org>.
- Glied, S. 2003. Health care costs: On the rise again. *Journal of Economic Perspectives* 17, no. 2 (Spring): 125–148.
- Goldman, D. P., B. Shang, J. Bhattacharya, et al. 2005. Consequences of health trends and medical innovations for the future elderly. *Health Affairs Web Exclusives* (September 26). <http://www.healthaffairs.org>.
- Heffler, S., S. Smith, S. Keehan, et al. 2005. U.S. health spending projections for 2004–2014. *Health Affairs Web Exclusives* (February 23). <http://www.healthaffairs.org>.
- Helms, R. B. 2005. *Tax reform and health insurance*. Health policy outlook. Washington, DC: American Enterprise Institute. January.
- Hillestad, R., J. Bigelow, A. Bower, et al. 2005. Can electronic medical record systems transform health care? Potential health benefits, savings, and costs. *Health Affairs* 24, no. 5 (September/October): 1103–1117.
- Jha, A. K., E. S. Fisher, Z. Li, et al. 2005. Racial trends in the use of major procedures among the elderly. *New England Journal of Medicine* 353, no. 7 (August 18): 683–691.
- Johnson, R. W. 2005. *Raising the Medicare eligibility age with a buy-in option: Can one stone kill three birds?* Washington, DC: Urban Institute. November 14.
- Kaiser Family Foundation. 2005. *Medicare chartbook, third edition* (Summer). Washington, DC: Henry J. Kaiser Family Foundation.
- Lurie, P., Public Citizens' Health Research Group. 2005. The impact of direct-to-consumer advertising on seniors' health and health care costs. Oral testimony before the Special Committee on Aging, U.S. Senate. 109<sup>th</sup> Cong., 2nd sess. September 29.
- Macinko, J., B. Starfield, and L. Shi. 2003. The contribution of primary care systems to health outcomes within Organization for Economic Cooperation and Development (OECD) countries, 1970–1998. *Health Services Research* 38, no. 3 (June): 831–865.
- Mays, G. P., G. Claxton, and J. White. 2004a. Managed care rebound? Recent changes in health plans' cost containment strategies. *Health Affairs Web Exclusives* (August 11). <http://www.healthaffairs.org>.
- Mays, J., M. Brenner, T. Neuman, et al. 2004b. *Estimates of Medicare beneficiaries' out-of-pocket drug spending in 2006*. Washington, DC: Henry J. Kaiser Family Foundation. November.
- Medicare Payment Advisory Commission. 2005a. *A data book: Healthcare spending and the Medicare program*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2005b. *Report to the Congress: Issues in a modernized Medicare program*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2005c. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2005d. *Report to the Congress: Physician-owned specialty hospitals*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2004a. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2004b. *Report to the Congress: New approaches in Medicare*. Washington, DC: MedPAC.
- Medicare Payment Advisory Commission. 2002. *Report to the Congress: Assessing Medicare benefits*. Washington, DC: MedPAC.
- Moise, P., and S. Jacobzone. 2003. OECD study of cross-national differences in the treatment, costs and outcomes of ischaemic heart disease. OECD Health Working Papers, no. 3. Paris: Organisation for Economic Cooperation and Development. April 22.
- Moon, M. 2005. *The policy implications of Medicare's new measure of financial health*. Policy brief. Washington, DC: Henry J. Kaiser Family Foundation. October.
- Newhouse, J. P. 2004. Financing Medicare in the next administration. *New England Journal of Medicine* 351, no. 17 (October 21): 1714–1716.
- Newhouse, J. P. 1993. *Free for all? Lessons from the RAND Health Insurance Experiment*. Cambridge, MA: Harvard University Press.
- Newhouse, J. P. 1992. Medical care costs: How much welfare loss? *Journal of Economic Perspectives* 6, no. 3 (Summer): 3–21.
- Organisation for Economic Cooperation and Development. 2005. *Health data 2005*. Paris: OECD.

- Oxley, H., and M. MacFarlan. 1994. *Health care reform: Controlling spending and increasing efficiency*. Working paper no. 149. Paris: Organisation for Economic Cooperation and Development.
- Palumbo, F. B., and C. D. Mullins. 2002. The development of direct-to-consumer prescription drug advertising regulation. *Food and Drug Law Journal* 57, no. 3: 423–443.
- Parente, S. T., R. Feldman, and J. B. Christianson. 2004. Evaluation of the effect of a consumer-driven health plan on medical care expenditures and utilization. *Health Services Research* 39, no. 4 (August): 1189–1209.
- Polsky, D., R. Stein, S. Nicholson, et al. 2005. Health insurance and employee enrollment decisions. *Health Services Research* 40, no. 5 (October): 1259–1278.
- Pope, G. C., J. Kautter, R. Ellis, et al. 2004. Risk adjustment of Medicare capitation payments using the CMS–HCC model. *Health Care Financing Review* 25, no. 4 (Summer): 119–141.
- Reid, P. P., W. D. Compton, J. H. Grossman, et al., eds. 2005. *Building a better delivery system: A new engineering/health care partnership*. Washington, DC: National Academy of Engineering and Institute of Medicine.
- Reinhardt, U. E., P. S. Hussey, and G. F. Anderson. 2004. U.S. health care spending in an international context. *Health Affairs* 23, no. 3 (May/June): 10–25.
- Reinhardt, U. E., P. S. Hussey, and G. F. Anderson. 2002. Cross-national comparisons of health systems using OECD data. *Health Affairs* 21, no. 3 (May/June): 169–181.
- Rice, T., and K. Y. Matsuoka. 2004. The impact of cost sharing on appropriate utilization and health status: A review of the literature on seniors. *Medical Care Research and Review* 61, no. 4 (December): 415–452.
- Robinson, J. C. 2002. Renewed emphasis on consumer cost sharing in health insurance benefit design. *Health Affairs Web Exclusives* (March 20). <http://www.healthaffairs.org>.
- Rosenthal, M., C. Hsuan, and A. Milstein. 2005. A report card on the freshman class of consumer-directed health plans. *Health Affairs* 24, no. 6 (November/December): 1592–1600.
- Salsberg, E. 2005. The need for real evidence in physician workforce decision making. *Health Affairs Web Exclusives* (March 15). <http://www.healthaffairs.org>.
- Smith, C., C. Cowan, S. Heffler, et al. 2006. National health spending in 2004: Recent slowdown led by prescription drug spending. *Health Affairs* 25, no. 1 (January/February): 186–196.
- Starfield, B., L. Shi, A. Grover, et al. 2005. The effects of specialist supply on populations' health: Assessing the evidence. *Health Affairs Web Exclusives* (March 15). <http://www.healthaffairs.org>.
- Thompson, L. H. 2000. *Sharing the pain of Social Security and Medicare reform*. The Retirement Project. Policy brief no. 11. Washington, DC: Urban Institute. August.
- Tollen, L. A., M. N. Ross, and S. Poor. 2004. Risk segmentation related to the offerings of a consumer-directed health plan: A case study of Humana Inc. *Health Services Research* 39, no. 4 (August): 1167–1188.
- Woodwell, D. A., and D. K. Cherry. 2004. National ambulatory medical care survey: 2002 summary. *Advance Data From Vital and Health Statistics*, no. 346. Hyattsville, MD: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics. August 26.