CHAPTER 4

The Fiscal Challenges Facing Medicare

Social Security, Medicare, and Medicaid are three vital entitlement programs in the United States that provide people with important economic security against the financial risk associated with retirement, disability, and medical expenses. In 2006, the Federal Government spent $1.1 trillion on these entitlement programs; this amount is projected to grow to $1.5 trillion by 2012. In the absence of reforms to either raise more revenue or restrain future spending, excess growth in entitlement spending will need to be offset by reductions in discretionary spending, putting significant pressure on other important programs. As history has shown, there is no uncontroversial way to reform these entitlement programs. Reforms to increase tax revenue will have negative effects on the economy. At the same time, it is crucial that any spending reforms preserve the protection against financial risk that these programs provide. Thus, improving the efficiency of these programs is crucial to slowing the growth of entitlement spending.

This chapter focuses on Medicare. It begins with a brief overview of the program and then examines the main reasons for the projected financial pressures facing Medicare. It concludes with a discussion of ways to improve the efficiency of Medicare spending and thus the long-term financial outlook of this important program. The key points in this chapter are:

- The projected long-term growth in entitlement spending, including Medicare, is unsustainable because of the pressures it places on future Federal budgets and by implication, on the economy.
- Medicare spending is growing quickly, primarily because of the demographic shift to an older society and the increases in per-beneficiary medical spending driven largely by new technologies.
- Rewarding providers for supplying higher quality care and improving incentives for patients to choose higher value care can both increase the efficiency and slow the growth of Medicare spending.

Entitlement Spending and Medicare

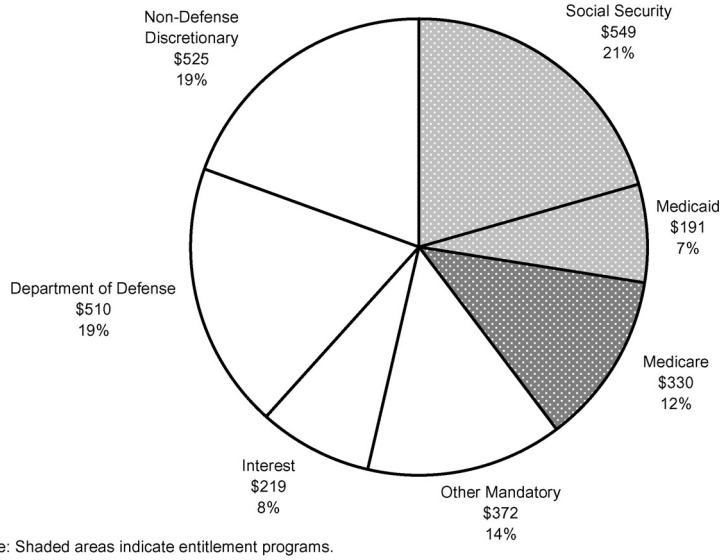
Social Security, Medicare, and Medicaid are *entitlement programs;* that is, individuals who are eligible for these programs are entitled to particular benefits. Social Security provides income to seniors, the disabled, and surviving spouses and dependents. Medicare provides health insurance to retirees and the disabled. Medicaid provides health insurance to certain lower income

groups. Workers and their spouses are entitled to receive Social Security and Medicare benefits if they make sufficient payroll contributions while working, and citizens and qualified aliens are entitled to Medicaid benefits if they meet certain income and other demographic criteria.

Chart 4-1 shows spending on Social Security, Medicare, and Medicaid in 2006 as a percent of the total Federal budget. The $549 billion in Federal spending on Social Security benefits was 21 percent of total Federal outlays. The $330 billion in federal spending on Medicare benefits was 12 percent of outlays. The $191 billion in federal spending on Medicaid was 7 percent of outlays. Because Medicaid is jointly funded by the Federal and State governments, State governments also spent about $139 billion on Medicaid.

For those not covered by Medicare or Medicaid, the federal government also helps with the purchase of private health insurance coverage in a variety of ways, including the exclusion of employer contributions towards health insurance premiums from personal income taxes. These tax expenditures are included in the Federal budget and are estimated to equal $133 billion in 2006. The President's 2008 budget includes a proposal to replace the existing exclusion for employer-provided health insurance with a flat standard deduction to all families who purchase health insurance that meets minimum requirements for catastrophic coverage, in order to improve the efficiency and equity of these tax expenditures. The President's policy proposal is described in Box 4-1.

Chart 4-1 **2006 Government Outlays**
Entitlement spending consumes 40 percent of Federal Government outlays.
Billions of dollars



Note: Shaded areas indicate entitlement programs.
Source: Office of Management and the Budget.

Box 4-1: The President's Proposal to Improve the Tax Treatment of Private Health Insurance

The current tax treatment of private health insurance coverage is both inequitable and inefficient. Employer contributions (and in most cases, employee contributions) toward private health insurance coverage are exempt from income and payroll taxes. This is inequitable because it does not offer the same tax break to families that do not have access to employment-based insurance and instead purchase a private plan in the individual health insurance market. It is also inefficient because it provides a larger tax break to families with more generous health insurance policies, which in turn can drive the inefficient use of medical care of low value. For more detail about these inefficiencies, see Chapter 4 of the 2006 *Economic Report of the President*.

The President's 2008 Budget has proposed reforming the current open-ended tax exclusion for employment-based health insurance coverage, effective in 2009, with a flat $15,000 standard deduction for health insurance to all families (or $7,500 for individuals), whether that insurance was obtained through their employer or on their own. The amount of this standard deduction would be independent of the actual amount spent on the premium, so families who obtain insurance policies for less than $15,000 (but satisfying a set of minimum requirements for catastrophic coverage) would still be able to exempt the full $15,000 of compensation from income and payroll taxes. The annual increase in the standard deduction for health insurance would be linked to the Consumer Price Index, and the policy would be roughly budget neutral.

This policy would reduce inequity in the tax code by providing the same tax treatment of health insurance purchases to families with or without access to employment-based health insurance. Those who are currently insured in the individual health insurance market would see a reduction in taxes commensurate with those insured in the group market, and those who are currently uninsured would be given a strong incentive to purchase coverage. For instance, for an uninsured family of four with $50,000 in income facing a 15 percent marginal income tax rate and a 15.3 percent total combined payroll tax, the value of the $15,000 exclusion would be worth about $4,500, and would thus offset the cost of roughly half of a health insurance plan costing $9,000.

This policy would also reduce the inefficiency of the current tax treatment of employment-based health insurance. An insured wage-earning family of four with $50,000 in income currently receives a tax break of about $3,000 toward a $10,000 policy but about $6,000 toward a

continued on the next page

Box 4-1 — *continued*

$20,000 policy, because the current value of their exemption equals their roughly 30.3 percent marginal tax rate times the actual amount of the premium. The advantage of the standard deduction policy is that it provides the same tax treatment to all types of health insurance plans. While it would provide a strong incentive to obtain at least some basic level of coverage, it would not encourage families to obtain inefficiently expensive health insurance that covers low-value services.

Spending on Social Security, Medicare, and Medicaid is projected to increase and claim an even more significant share of the federal budget in the future. Examining total spending as a fraction of gross domestic product (GDP) is especially relevant because this measures the portion of the overall economy devoted to each particular program. For instance, Social Security spending was 4.2 percent of GDP in 2005 and is projected to be 6.3 percent of GDP in 2080. Total Medicare spending was 2.7 percent of GDP in 2005 and is projected to be 11.0 percent of GDP in 2080. Total health care spending in the United States by private and public sources combined was 16.0 percent of GDP in 2005, equaling almost $2.0 trillion or $6,697 per person. Although national health expenditures have grown at a slower rate than the previous year for the prior 3 years, health spending has still consistently grown at a faster rate than general inflation.

While Social Security, Medicare, and Medicaid share some common features, each also poses its own opportunities and challenges, warranting detailed specific analysis. Chapter 5 of the 2002 *Economic Report of the President* examined Medicaid coverage for low-income families, Chapter 6 of the 2004 *Economic Report of the President* examined Social Security, and Chapter 4 of the 2006 *Economic Report of the President* examined health care spending generally. This chapter focuses primarily on Medicare.

The Basics of Medicare

A primary motivation behind the passage of Medicare in 1965 was that many of the elderly at the time had no health insurance. Medicare was structured to mimic the prevalent form of private health insurance at the time, Blue Cross and Blue Shield. Blue Cross plans covered inpatient hospital services, and Blue Shield plans covered physician and hospital outpatient services. The "Blues" were the basis for separate Part A and Part B plans that reimburse hospitals and physicians on a fee-for-service basis, respectively. Seniors who have worked at least 40 quarters in qualified employment are automatically

enrolled in Part A at age 65. Seniors who lack 40 quarters of employment can buy into Part A by paying a monthly premium. People under the age of 65 with certain disabilities or end-stage renal disease are also eligible for Medicare. Enrollment in Part B is optional and requires a premium contribution, although there is a penalty for not immediately enrolling and the amount is higher for individuals making more than $80,000 per year. The Centers for Medicare and Medicaid Services (CMS) administers the Medicare program by implementing the statutes that determine the form of payments to hospitals, physicians, and outpatient providers.

Most outpatient prescription drugs were not covered by Medicare until the implementation of the Medicare Modernization Act (MMA) of 2003, which created Part D of Medicare. Like Part B, Part D is optional, requires a premium contribution, and has a penalty for late enrollment. Unlike Part B, however, Part D is administered by private health insurance plan sponsors. Seniors have the alternative option of enrolling in a private Medicare Advantage insurance plan if one exists in their region. These are private health insurance plans that provide Part A, Part B, and, in most cases, Part D services. These plans often provide additional benefits to seniors at lower costs. The Medicare Advantage program is described in more detail in Box 4-2.

Box 4-2: The Medicare Advantage Program

Approximately 16 percent of Medicare beneficiaries are enrolled in private managed-care health plans, including primarily health maintenance organizations (HMOs) but also preferred provider organizations (PPOs) and private fee-for-service plans. These Medicare Advantage plans contract with Medicare to provide the services covered by Part A and Part B and usually offer additional benefits such as relatively lower cost sharing and additional covered services. Enrollment into these plans is voluntary but requires that a local plan is available. As of 2006, all Medicare beneficiaries had the option of enrolling in a Medicare Advantage plan, including plans that provide prescription drug coverage.

Prior to 1997, Medicare HMOs received a *capitated* payment based on 95 percent of the average Medicare beneficiary spending in the county, adjusted only for age, gender, Medicaid enrollment, and disability status. Studies suggest that healthier beneficiaries were more willing to enroll in these plans, because HMOs typically place restrictions on care. As a result, the program increased total Medicare expenditures because the payments to the HMOs were generally higher than the actual costs of their enrollees in the fee-for-service program.

continued on the next page

Box 4-2 — *continued*

The 1997 Balanced Budget Act eliminated the direct link between plan payment rates and local fee-for-service expenditures and sought to expand the types of plans available to beneficiaries beyond the urban areas where they had generally been available. The 1997 Balanced Budget Act also mandated the use of risk adjustment to vary the payments to insurers based upon the health status of its enrollees by 2000. As a result, incentives to engage in wasteful competition for relatively healthier enrollees were mitigated so that insurers would instead engage in competition to provide higher value care at a lower cost for all enrollees. Because of some of the limits on the growth in payments in the 1997 Balanced Budget Act, many private insurers withdrew from the Medicare market. Enrollment declined by about 25 percent from 1999 to 2003.

The 2003 Medicare Modernization Act expanded the Medicare Advantage program in two important ways (in addition to changing the name from "Medicare+Choice" to "Medicare Advantage"). First, the 2003 Medicare Modernization Act increased the payment levels to the plans to encourage participation across all Medicare Advantage plans. Second, the 2003 Medicare Modernization Act created new regional preferred provider organizations that offer a uniform deductible and an upper limit on out-of-pocket spending to increase both the number of choices available to Medicare beneficiaries (especially in rural areas) and special needs plans to target certain beneficiaries (such as those with dual eligibility, those with chronic conditions, and the institutionalized).

Medicare spending is financed by a combination of payroll taxes, general revenue, and premiums paid by beneficiaries. Part A of Medicare is financed by a Hospital Insurance (HI) payroll tax of 2.9 percent. The HI payroll tax is split evenly between employees and employers, but economists generally believe the employer tax is ultimately paid by workers in the form of relatively lower wages. Part A is a pay-as-you-go system in which payroll taxes on current workers' wages finance the benefits of those currently retired. If the payroll tax revenues exceed spending for the year, the difference is placed into the HI Trust Fund. If taxes are lower than spending, money is withdrawn from the HI Trust Fund. Parts B and D constitute the Supplementary Medical Insurance component of Medicare and are financed by general Federal government revenues and beneficiary premiums, which are set to equal approximately 25 percent of total Part B and Part D spending, respectively.

Nations around the world provide various forms of social insurance for their elderly populations. One of the purposes of health insurance is to ensure that people are protected against the financial risk associated with uncertain medical spending. Economists generally attempt to justify government intervention into private market outcomes by suggesting potential market failures that may exist in the absence of any government intervention. Many economists would justify the existence of Medicare (and its government provision of health insurance for the elderly and disabled) with three potential explanations. The first potential explanation is that many people may lack sufficient information to plan properly for the financial hardships that would otherwise arise from expensive medical treatment when they age or become disabled. Medicare requires workers to pay a premium during their working years toward future costs and thus the program can be considered a form of forced savings. In this way, Medicare is similar to Social Security, which requires people to set aside some of their wages now in exchange for a promise of income at retirement. But this reason alone is insufficient to explain the provision of health insurance as opposed to additional income.

A second potential explanation for government intervention in the provision of health insurance for seniors is to avoid having seniors in poor health pay considerably more toward their health care. In the United States, most people participate in health insurance plans through their place of employment. Most people lose these plans upon retirement. (Private retiree health insurance plans only cover what Medicare does not.) Because about 40 percent of people at age 65 have at least one serious preexisting chronic health condition, initiating coverage in a private individual health insurance market after retirement (under the assumption that the Medicare program did not exist) would force insurers to charge higher premiums to those in poor health. Younger people face uncertainty that they may develop a chronic condition in the future (and thus they would face variable premiums in the absence of Medicare). This suggests that there may be efficiency gains from providing future insurance coverage with pooled contributions. (Private health insurance markets handle this intertemporal uncertainty of developing a chronic health condition with "guaranteed renewal at class average rates" provisions that ensure that premiums do not vary with the onset of illness for those with coverage.)

A third potential explanation for government intervention in the provision of health insurance is related to the redistribution of resources toward low-income people. Economic theory suggests that unconditional transfers of wealth are generally more efficient than in-kind transfers of goods or services for achieving any desired redistribution. In an ideal world, the poor would use some of this transferred wealth to purchase health insurance. However, if the poor believe that society will provide them with additional resources in the

event of an uninsured loss, they may have an incentive to forego buying insurance. This precommitment problem, sometimes called the "Samaritan's Dilemma," has been demonstrated to be alleviated by the direct provision of health insurance rather than a direct transfer of wealth. This economic argument, however, justifies the subsidization of, or requirement for, insurance but does not justify a government-run plan.

Increases in Medicare Spending over Time

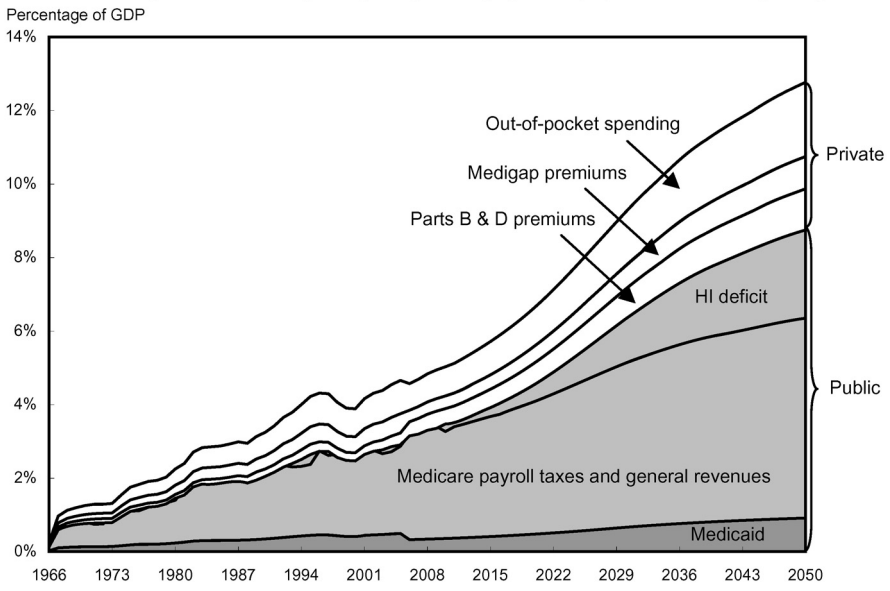
Projections of Future Medicare Spending and Revenue

Sources of Spending

Since Medicare was created in 1965, total spending on all of its programs has grown steadily. As noted above, total Medicare spending was 2.7 percent of GDP in 2005 and is projected to be 11.0 percent of GDP in 2080. These values for Medicare spending, however, actually understate the total spending for Medicare beneficiaries because the private payments for cost sharing are not included. For instance, in 2006, Part A requires individuals to pay $952 of the cost of each hospitalization (this $952 is called a *deductible*), and Part B generally requires them to pay 20 percent of the Medicare-approved payment (this 20 percent is called *coinsurance*) in addition to a deductible. Some beneficiaries pay Medicare deductibles and coinsurance amounts from their own pockets, while others obtain private insurance to cover these costs. Some of this private coverage is included in employer-sponsored retirement benefits, while some is provided by directly purchased Medigap plans. Some low-income Medicare beneficiaries are also eligible for Medicaid. For these *dually eligible* people, Medicaid covers most of these cost-sharing amounts required by Medicare.

Chart 4-2 shows historical and projected private and public spending for Medicare-covered services as a percentage of GDP for 1966 through 2050. Including private spending by Medicare beneficiaries and Medicaid spending on Medicare beneficiaries presents a more complete picture of beneficiaries' total consumption. In 2006, beneficiaries bore about 37 percent of Medicare-related spending, and about 63 percent was financed by payroll taxes and general revenues. However, these amounts shown here do not include the portion of Medicaid spending on long-term care services, such as nursing homes, because this type of care is not covered by Medicare. More detail about coverage of long-term care is provided in Box 4-3.

Chart 4-2 **Total Healthcare Spending by Medicare Beneficiaries, 1966-2050**
Government and private Medicare spending has grown rapidy and is projected to continue growing.



Source: Council of Economic Advisers analysis of data compiled from the 2006 Medicare Trustees' Report and the Medicare Current Beneficiary Survey.

Medicare Solvency

The Medicare program does not have enough projected revenue to cover projected future spending. Under current projections made by the Medicare Actuaries and presented in the 2006 Medicare Trustees Report, the Medicare HI Trust Fund is projected to be exhausted in 2018. The projected 75-year deficit for the Medicare HI Trust Fund is 3.51 percent of taxable payroll. That is, the Medicare HI payroll tax would have to be immediately increased from 2.90 percent to 6.41 percent to cover all projected spending over the next 75 years. Alternatively, a reduction in Medicare Part A expenditures by 51 percent would be necessary to make the Medicare Trust Fund solvent. As a comparison, this Medicare deficit is relatively larger in magnitude than the Social Security Trust Fund deficit. An increase in the Old Age, Survivors, and Disability Insurance (OASDI) payroll tax from 12.4 percent to 14.4 percent or a reduction in Social Security benefits by 13 percent is projected to make the Social Security program solvent over 75 years.

The Medicare Supplementary Medical Insurance (SMI) program is considered to be solvent by the Medicare Trustees only because Part B and Part D spending is required by law to be financed by general revenues. However, the consequences of increased spending on Medicare SMI may be

Box 4-3: Long-Term Care

Nine million people use long-term care (LTC) to alleviate the hardships accompanying old age or disability. LTC is medical care required over a long period of time by someone with a chronic illness or disability. An estimated 70 percent of people who reach the age of 65 will need some form of LTC before they die. Medicare does not have a large LTC component, as it only covers post-acute care in skilled nursing facilities and some home health care, which total less than 20 percent of all LTC. Private, noninsured spending covers about 25 percent of LTC expenditures, while private insurance pays for less than 10 percent. Many Medicare beneficiaries obtain LTC after they have depleted their assets and become eligible for Medicaid. Medicaid LTC eligibility is often tied to receiving Supplemental Security Income and having very few assets, but states have the discretion of easing eligibility criteria. Medicaid covers over 45 percent of all LTC expenditures. About one-third of Medicaid expenditures go to LTC.

The average price for 1 year in a nursing home is $70,000. This cost is high enough to strain even middle-income families, yet few people prepare financially for potential LTC expenses. Studies generally attribute failure to purchase LTC insurance to a lack of awareness about the potential costs of LTC, the benefits of coverage, and a misperception that Medicare covers all LTC. Adverse selection in the market (by those who expect to use long-term care being more likely to purchase insurance) results in very high premiums and relatively fewer insurance companies offering LTC policies. Many seniors forgo obtaining private coverage and instead become Medicaid-eligible by sheltering their assets through income annuities, trusts for their children, and asset transfers to family members. In response to these loopholes, States and the Federal government have tightened Medicaid eligibility. Because of the pressure LTC places on State budgets, many policymakers believe that changes should be made to LTC administration.

Encouraging the purchase of private long-term care insurance may be a valuable step in reducing Medicaid spending on LTC while protecting seniors from poverty. For example, New York currently has a 20 percent tax credit available toward the purchase of LTC insurance. Such a subsidy should generally make LTC insurance more attractive to middle-aged people. Medicaid *spend-down insurance*, which permits people who purchased and used LTC insurance to keep some assets and still qualify for Medicaid, could also increase the attractiveness of private LTC coverage.

just as dire. Without large reductions in Medicare SMI spending or increases in taxes, either Federal budget deficits will grow rapidly or dramatic reductions in spending for other Federal programs will have to be made.

Spending on Medicaid is also funded by general revenues. The elderly and disabled covered by Medicare account for about one-quarter of Medicaid enrollees, but they account for about two-thirds of Medicaid spending, mainly because of spending on acute and long-term care. An additional challenge for funding Medicaid is the inverse relationship between the proportion of the population eligible for benefits and the tax base available to fund the program. During economic downturns, lower personal income causes State governments with balanced-budget requirements to face the strain of both a decrease in tax revenue and a higher number of residents who meet the low-income eligibility threshold and are thus in need of assistance.

Implications for Reform

In light of the mounting fiscal pressures on entitlement spending, it is critical to increase the efficiency of spending on benefits. Reforms of the Medicare program should aim to reduce the growth of spending by redirecting resources toward the highest value uses and away from inefficient care of low value. Controlling cost growth while preserving the vital financial and health protections offered by the program is particularly important in light of the large negative consequences of raising taxes. An increase in the payroll tax rate would decrease incentives to work, increase efforts to receive compensation in forms not subject to taxation, and be a drag on economic growth.

As noted above, Medicare taxes on current workers' wages essentially fund an insurance pool from which benefits are paid on behalf of retired or disabled workers. A pay-as-you-go system of intergenerational transfers is consistent with the basic idea behind insurance if the aggregate amount paid into the pool (in the form of taxes on workers) equals the aggregate amount of expected benefits to be paid from the pool. In private insurance markets, policyholders must have confidence that future claims will be covered by the insurer. To help alleviate consumer concerns, government regulations often place solvency requirements on insurers that require them to have enough assets to cover their liabilities. Thus, for Medicare's pay-as-you-go financing mechanism to function as a social insurance program, younger generations must have confidence that the government will indeed meet its future insurance obligations to them. The rapid increase in Medicare spending over time clearly threatens the confidence that younger generations have in the solvency of the program. Indeed, a recent survey found that almost two-thirds of workers are "not too confident" or "not at all confident" that Medicare "will continue to provide benefits of at least equal value to the benefits received by retirees today".

The next section of this chapter examines the reasons behind this projected growth in Medicare spending. The average annual growth rate of Medicare spending is projected to be 2.8 percentage points higher than GDP growth per year between 2006 and 2040. Part of this increase in spending is due to growth in the number of Medicare beneficiaries, and part of this increase in spending is due to growth in real (inflation adjusted) Medicare spending per beneficiary.

Reasons for the Changes in Medicare Spending over Time

Increases in the Number of Medicare Beneficiaries

The proportion of the United States population covered by Medicare has increased over time. This has resulted from the normal eligibility age remaining fixed at 65 combined with the aging of the population. The aging of the population is due to both increased life expectancy and decreased fertility. In 1965, 65-year-old retirees could expect to live for 14.7 more years; by 2006, they could expect to live for 18.6 more years. In 1965, the fertility rate was 96.3 births per 1,000 females aged 15 to 44; by 2004, it had fallen to 60.7 births. (These changes in demographics have a similar effect on Social Security.)

The worker-per-beneficiary ratio illustrates the portion of the population which provides revenue to cover the needed spending on Medicare beneficiaries. In 1965, there were about 4.6 workers for each Medicare beneficiary. In 2005, there were about 3.8 workers for each Medicare beneficiary. In 2050, there are projected to be only 2.2 workers for each Medicare beneficiary.

In addition to being affected by long-term increases in longevity and decreases in fertility, the worker-per-beneficiary ratio during the upcoming years is also affected by the aging of the baby boom generation, which is made up of those born between 1946 and 1964. (The baby boom generation can be viewed as a temporary change in fertility rates.) The baby boom generation explains the relatively steady worker-per-beneficiary ratio between 1975 and 2005 and the dramatically decreasing ratio between 2010 and 2040. After 2050, most benefits owed to the baby boom generation will have been paid, and the worker-per-beneficiary ratio is projected to be relatively steady though 2080 as long as current assumptions hold.

Unlike Medicare, the full retirement age for Social Security is 65 for those born in 1937 and earlier, and will rise slowly to 67 for those born in 1960 or later. However, the effect of increasing the eligibility age for Medicare would not have a very large effect on total Medicare spending, because Medicare

spending increases with age as people become less healthy. For instance, while people ages 65 and 66 represent about 9 percent of the Medicare population, they are the recipients of only about 4 percent of total Medicare spending.

Increases in Spending per Beneficiary

Real growth in Medicare spending per beneficiary has averaged about 4 percent per year between 1996 and 2006, roughly 2 percentage points greater than real per capita growth in GDP. For the Medicare Trustees Report, the Medicare actuaries assume that the annual growth rate of Medicare spending per beneficiary during the period between 25 and 75 years from now will decrease to equal the growth rate of GDP per capita plus an average of 1 percentage point. In addition to this so-called "intermediate" assumption, these actuaries also consider a "low-cost" assumption, in which annual Medicare spending growth equals per capita GDP growth and a "high-cost" assumption, in which annual Medicare spending growth equals per capita GDP growth plus 2 percentage points.

One way to evaluate the affordability of these projected increases in Medicare spending is to consider the effect of applying this growth rate to overall medical spending in the United States and examine the resulting growth in consumption of all other goods and services in the future economy (that is, nonmedical consumption). One study estimated that applying the intermediate assumption of long-term medical spending growth, equal to the growth rate of per capita GDP plus 1 percentage point, would still result in positive real growth in the level of nonmedical consumption over the next 75 years. However, the high-cost assumption of long-term medical spending growth, equal to the growth rate of per capita GDP plus 2 percentage points (and, as noted above, roughly equal to the growth rate of Medicare spending in recent history), would cause the level of real nonmedical consumption to increase only until year 2040 and decrease thereafter. During the period between 2010 and 2040, an average of over 60 percent of the annual increase in income would be allocated toward health care spending.

Research suggests that most of the increase in medical spending over time has been driven by the advent of new technologies. New technologies make available new treatments, some of which are more effective than others. Research also suggests that the increased medical spending has, on average, resulted in improvements in health with additional value exceeding the additional costs. For instance, the real cost of treating heart attacks increased by about $10,000 for Medicare beneficiaries between 1984 and 1998, driven by technological advances such as catheterization and angioplasty. Life expectancy for heart-attack patients increased by about 1 year during this same period. Although it is difficult to measure the value of human life and

it is not clear that this relationship is causal, an estimate of the value of these added health benefits is about $70,000, far in excess of the added costs.

Economists have suggested that an increase in medical spending over time is not necessarily problematic, in and of itself, so long as the marginal benefits exceed the marginal costs. A simple cross-national comparison of the fraction of GDP devoted to health care spending suggests that the United States is a high-expense outlier relative to other developed countries. However, it is plausible that the marginal benefits of improved health are dependent on income, so that as a country's GDP increases, it may be rational for that country to devote a relatively higher share of its GDP to health care. This perspective suggests that it may make sense for the United States to spend more than other countries because it has higher per capita income and health care can be a valued use of those higher resources.

Improving the Efficient Allocation of Resources in Medicare

The remainder of this chapter considers ways to improve the efficiency of spending in the Medicare program, in order to slow the projected growth in spending. Policymakers face the challenge of enacting policies that limit inefficient health care spending but do not limit efficient health care spending or the development of beneficial new technologies. This section begins by providing several examples of sources of inefficiency in health care spending and concludes by suggesting several ways to improve the incentives that providers and Medicare beneficiaries face. Improving the efficiency of health care spending is critical to improving both the long-term fiscal strain on the Medicare program and the quality of care to patients, and it is likely that a multipronged approach will be necessary.

Inefficient Health Care Spending

While some of the greater health care spending may be attributed to technological improvements that enhance the quality of care and to increases in national wealth, there are also many findings that are consistent with some degree of inefficiency associated with relatively higher health care spending. Health outcomes in the United States are often not substantially better than those in other developed countries that spend far less on health care. The Rand Health Insurance Experiment found that increased medical spending led to only limited health improvements. The Dartmouth Atlas of Health Care shows wide variations in Medicare spending within the United States without associated variation in health or health outcomes.

It may, at first, appear to be difficult to reconcile the research findings that new technologies over time produce valuable health benefits with the research findings that higher spending does not yield better outcomes. It is likely that there is significant overconsumption of health care that provides little marginal benefit. Consider a costly new technology that provides very large health benefits to specific patients in need. Suppose, however, that it is also consumed by patients who benefit very little from the treatment. If the benefits to "appropriate" patients are very large, the increase in spending over time on both "appropriate" and "inappropriate" patients combined can still imply that the new technology is cost effective. However, because some "inappropriate" patients also receive the treatment, some of the variation in spending is due to inefficiency. If this characterization is accurate, the technology is not as cost effective as it should be.

This overconsumption of health care is frequently thought of as being caused by poor incentives such as overly generous health insurance coverage. That is, patients often face marginal prices for costly treatments that, due to insurance coverage, are lower than the true marginal costs of treatment. (More detail on optimal forms of private health insurance and the effect of increasing cost sharing by consumers is provided in Chapter 4 of the 2006 *Economic Report of the President*.) The presence of generous health insurance may also influence the research and development of certain technologies with questionable cost effectiveness.

There is also evidence of significant underuse of valued health care. For example, there is a large body of medical literature demonstrating the cost effectiveness of beta blockers for patients recovering from a heart attack. Due to their effectiveness, they are prescribed in over 90 percent of cases. However, studies have shown that persistence in use of beta blockers declines rapidly even in the first year of treatment. Moreover, the U.S. Preventive Services Task Force recommends that all women over 40 receive mammograms every 1 to 2 years, that all adults over 50 receive regular colorectal screenings to detect colon cancer, and that all adults over 50 receive annual immunizations against influenza. Compliance, however, is low: 68 percent of women receive recommended mammograms, 35 percent of adults receive recommended colorectal cancer screenings, and 65 percent of adults over 65 receive annual influenza vaccines.

These data suggest that there are two main ways in which the efficiency of Medicare spending could be improved, because there is both a relationship between the insurer and beneficiaries and a relationship between the insurer and providers. One is to encourage the use of cost-effective care that is currently underconsumed. Medicare now covers an initial preventive physical examination and many preventive screenings, but there are still potential improvements to be made. Policies to achieve this goal should aim to improve

the incentives for health care providers and insurers to provide high-quality care. A second way to improve the efficiency of Medicare spending is to discourage the use of ineffective care that is currently overconsumed. Policies to achieve this goal should aim to improve the incentives that Medicare beneficiaries face regarding their consumption of care. More detail on these policies is provided in the next two sections.

Better Incentives for Health Care Providers and Insurers

Medicare generally pays providers of the same service the same fee, regardless of the quality of care. If hospitals and physicians were paid amounts that reflected objective measures of the quality of care provided, with differential payments tied to higher quality and more efficient care, ideally many problems of underuse and misuse of care could be reduced. In practice, while "pay for performance" holds a great deal of promise, it may be difficult to fully implement because of the complexity of producing objective measures of quality. For instance, tying payments to process measures—such as rewarding cardiac physicians based on the proportion of their heart attack patients using beta blockers—may cause providers to place too much emphasis on limited aspects of providing high-quality care. Alternatively, tying payments to outcomes measures—such as rewarding cardiac surgeons whose patients have lower post-discharge mortality rates—may cause providers to face perverse incentives to avoid treating high-risk patients most in need. Adequate pay-for-performance measures will require sophisticated techniques to control for underlying differences in patient health, which highlights the importance of developing systems to collect detailed information about the kind of care that patients receive. With the advent and adoption of better health information technology and the development of rigorous and well-tested measures, using pay-for-performance techniques to reimburse providers may become a vital contributor toward higher quality and more efficient care.

High-quality health care may also be encouraged by providing patients with valuable information so they may compare various providers to one another. Competition among health care providers may improve incentives to provide high-value care in two ways: higher quality and lower price. If patients have access to the providers' price and quality information, they will have incentives to choose those providers with the highest value of care, and physicians and hospitals will have strong incentives to reduce their fees and improve the quality of care to attract more patients. There are two parts of Medicare where this kind of information is available and these incentives are in place. Private Medicare Advantage plans have strong incentives to offer higher quality care at lower beneficiary premiums to encourage enrollment. The new Part D prescription drug benefit provides information about the

price of prescriptions by plan and by pharmacy, provides access to customer service information by plan, and also benefits from price competition among insurers. More detail on the structure of and experience with the new Medicare Part D benefit is provided in Box 4-4.

Box 4-4: Medicare Part D Prescription Drug Benefit

The Medicare Part D prescription drug benefit went into effect January 1, 2006, as a result of the 2003 Medicare Modernization Act. Prior to that date there was almost no coverage for outpatient prescription drugs in Medicare, except in Medicare Advantage plans. (Part B does cover drugs in certain instances.) Part D beneficiaries may now enroll in their choice of plans in their region. In 2007, the 34 regions will offer between 45 and 66 standalone prescription drug plans at different prices with varying levels of coverage at or above the minimum benefit package. If an individual seeks greater benefits, they will generally pay a higher premium. Individuals with incomes below 150 percent of the Federal Poverty Level who meet eligibility requirements receive additional assistance in the form of reduced premiums, deductibles, and coinsurance. The premium subsidies are on a sliding scale to better target those with the lowest incomes. By June of 2006, over 38 million Medicare beneficiaries had some form of prescription drug coverage.

One important feature of the Part D program is the competitive premium bidding process by insurers. Each year insurers submit premium bids for the following year to Medicare. These premium bids are weighted by enrollment to determine the weighted average bid; this amount is referred to as the *benchmark premium*. The basic premium that nonpoor Medicare beneficiaries pay for a specific plan is the difference between the plan's bid and 75 percent of the weighted average bid (that is, the federal direct subsidy). Some low-income beneficiaries are automatically enrolled in plans whose premiums are at or below the regional enrollment-weighted average. Thus, there are significant incentives for insurers to submit low bids. Early projections suggested that the average premium in 2006 would be $37 per month, but premiums ultimately averaged $24 per month. In 2007, the average premium is expected to remain about the same.

Competitive bidding appears to be a successful model for providing low costs to both beneficiaries and the government without government interference in determining drug prices. Satisfaction with the Part D program is high. Several surveys have shown that at least 75 percent of enrollees are pleased with the Part D benefit.

Better Incentives for Medicare Beneficiaries

In addition to the competition induced by the new Part D benefit, its pricing structure and associated subsidy for premiums provide good incentives for Medicare beneficiaries to obtain relatively more efficient forms of insurance coverage. Because the Federal subsidy toward the prescription drug plan is generally a fixed proportion of the average premium bid each year, beneficiaries receive the additional benefits of choosing plans that are less generous than the average benchmark plan. Thus, beneficiaries appropriately receive the full marginal benefits from either a higher amount of cost sharing or a more restrictive list of covered medicines. This mechanism for having Medicare beneficiaries pay lower amounts for less generous coverage therefore improves the incentives for insurers to design more optimal products.

A potential downside to this mechanism for determining beneficiary premiums, however, is that it could lead to relatively higher premiums for people with higher expected expenses due to chronic health conditions if these high-risk people gravitate toward plans with relatively more generous benefits. As a result, these plans' higher premiums would reflect a relatively sicker pool of people covered by the plan, in addition to the underlying value of more generous benefits. However, these potential problems can be alleviated by the use of *risk-adjusted* payments to plans, as described in Box 4-2.

This mechanism for determining the premium contribution toward different plans, currently in place for Part D, could potentially be applied to the entire Medicare program. Providing beneficiaries with a choice of comprehensive plans and having the premium contribution for each plan vary in relation to a benchmark plan has potential for improving the efficiency of overall Medicare spending. A key difference between Medicare Part D and the entire Medicare program, however, is the combination of the government-run fee-for-service and Medicare Advantage components of the latter. This benchmark mechanism is likely to be successful only if the same premium contribution is made toward both the fee-for-service component of Medicare and the private Medicare Advantage plans, putting them on equal footing. Just as described above, this mechanism for determining premium contributions would cause beneficiaries to receive the appropriate marginal benefits when choosing plans with levels of coverage that are less generous than the benchmark plan. It could therefore help to allow beneficiaries to determine the optimal forms of out-of-pocket cost sharing and the optimal adoption of new technologies over time. These two specific issues are explored below.

Premiums versus Out-of-Pocket Payments

The level of out-of-pocket cost sharing that would induce beneficiaries to consume the optimal level of care is difficult to determine. The share of out-of-pocket spending that will lead to an efficient amount of care would be set

at the level at which the marginal cost of being exposed to more financial risk through relatively more cost sharing is less than the marginal benefits from reducing the overconsumption of medical care resulting from relatively more cost sharing. In practice, it is difficult to quantify these competing interests. Nevertheless, Medicare currently may be missing this balance at both the high-cost and low-cost extremes. Medicare currently does not provide protection against certain catastrophic health care costs (except in some Medicare Advantage plans). For example, there is increased beneficiary cost sharing after a hospitalization exceeds 60 days, and a cessation of benefits after 120 days. While these upper limits on benefits presumably have the advantage of reducing incentives to over consume, they appear to expose beneficiaries to excessively high levels of financial risk.

While many seniors have private retiree health or Medigap plans to cover Medicare's gaps in catastrophic coverage, these plans also frequently cover the first-dollar cost sharing, such as the hospitalization deductible and the 20 percent of physician fees. These plans limit the cost-consciousness of consumers and therefore increase total spending. However, neither insurers nor consumers bear the full marginal costs of the increased spending induced by these generous Medigap plans, because Medicare covers most of the increased spending.

If beneficiaries were to receive the marginal benefits of less generous coverage in a way that puts the fee-for-service component and the Medicare Advantage component on equal footing, there would be improved incentives for private plans to offer and beneficiaries to select plans with more efficient levels and forms of cost sharing. Beneficiaries, rather than Medicare administrators, should be the ones to decide the optimal mix of deductibles, coinsurance, and out-of-pocket maximums that best meets their needs and preferences under neutral incentives.

Appropriate Levels of Spending Over Time

If Medicare beneficiaries were to receive the marginal benefits of choosing a more efficient plan, the incentives to adopt costly new technologies would be improved over time. As noted earlier, costly new technologies are efficient if the value of the additional benefits from improved health exceed the additional costs of that technology. People may not be willing to spend a great deal of money on new treatments with very minor benefits. If Medicare beneficiaries were to receive the marginal benefits when selecting less technology-intensive plans that delivered higher value care at lower cost, the adoption of new technologies by health plans over time would be driven by whether new technology delivers substantial enough health benefits. As a result, consumers, rather than the government, would decide the extent to which health care spending should increase over time.

Conclusion

Medicare has significant long-term unfunded obligations. Although Social Security spending is currently much greater than Medicare spending, the unfunded obligation for Medicare is much greater than that for Social Security. Eliminating the projected 75-year actuarial deficit for Medicare Part A would require an immediate 3.51 percent increase in the HI payroll tax or a reduction in projected Medicare expenditures by 51 percent. Projected increases in Medicare Supplementary Medical Insurance (SMI) funding may appear less transparent because they are funded out of general revenues, but the economic significance of these obligations for Medicare SMI is just as great.

Policymakers face the challenge of reducing the growth of Medicare spending while preserving access to life-saving health care and the important financial protections that Medicare provides, and they cannot do so without ensuring that Medicare funds are spent more efficiently. Increases in Medicare spending over time are driven by an increasing population of aged Americans and increasing per-beneficiary spending on health care. While much of the increase in medical spending over time is driven by valuable new technologies, there also appear to be significant inefficiencies in the system. Therefore, future policies to control the growth in Medicare spending should target the sources of inefficient spending but not discourage the use medical care that is costly but delivers greater health benefits. This tension is the primary dilemma that policymakers face.

Policymakers may want to consider restructuring Medicare so that the direct spending by Medicare beneficiaries, in the form of premium contributions and out-of-pocket spending for medical care, yields a more efficient allocation of resources. Revising the Medicare fee-for-service program and the Medicare Advantage program to be more like Part D with a fixed-dollar subsidy provided toward the premium, has the potential for improving incentives for Medicare beneficiaries to consume optimal levels of care. When individuals receive the full benefits of selecting less expensive coverage, they will be more likely to select plans with optimal arrangements that balance both financial protection and technological adoption.