CHAPTER 1

Context for Medicare payment policy

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Chapter summary

The Medicare program and other United States health care payers are on an unsustainable financial path. For most of the post-World War II period, health care costs have risen faster than the economy has grown for both the public and private sectors (2000 Technical Review Panel on the Medicare Trustees Report 2000). Medicare's share of the nation's gross domestic product (GDP) rose from slightly less than 1 percent in 1975 to about 3 percent in 2009. Health care's total share of the economy increased from 7 percent in 1970 to an estimated 17 percent in 2009 (Centers for Medicare & Medicaid Services 2009). This high rate of growth is projected to continue, absent meaningful financing and delivery reforms.

A number of factors are responsible for the sustained high rates of growth in health care costs for public and private programs. Advances in medical technology, national wealth, and the consumption-increasing effects of insurance are cited as major contributors to historic and projected growth (Congressional Budget Office 2007). Other factors include changes in demographics and disease burden, rising personal incomes, and increases in prices charged by providers.

Rising spending places an increased burden on those who fund health care programs. As most individuals under age 65 receive health care through an employer, higher premiums for health care benefits have resulted in employee

In this chapter

benefit costs eclipsing wage increases (Claxton et al. 2007). In effect, workers are receiving smaller increases in cash salaries in exchange for increases in noncash insurance benefits. For Medicare beneficiaries, rising spending means that a growing share of their income must be used to pay Medicare premiums and cost sharing. Finally, for taxpayers the rising cost of Medicare and other federal health programs will require higher taxes and reduce the resources available for other federal priorities.

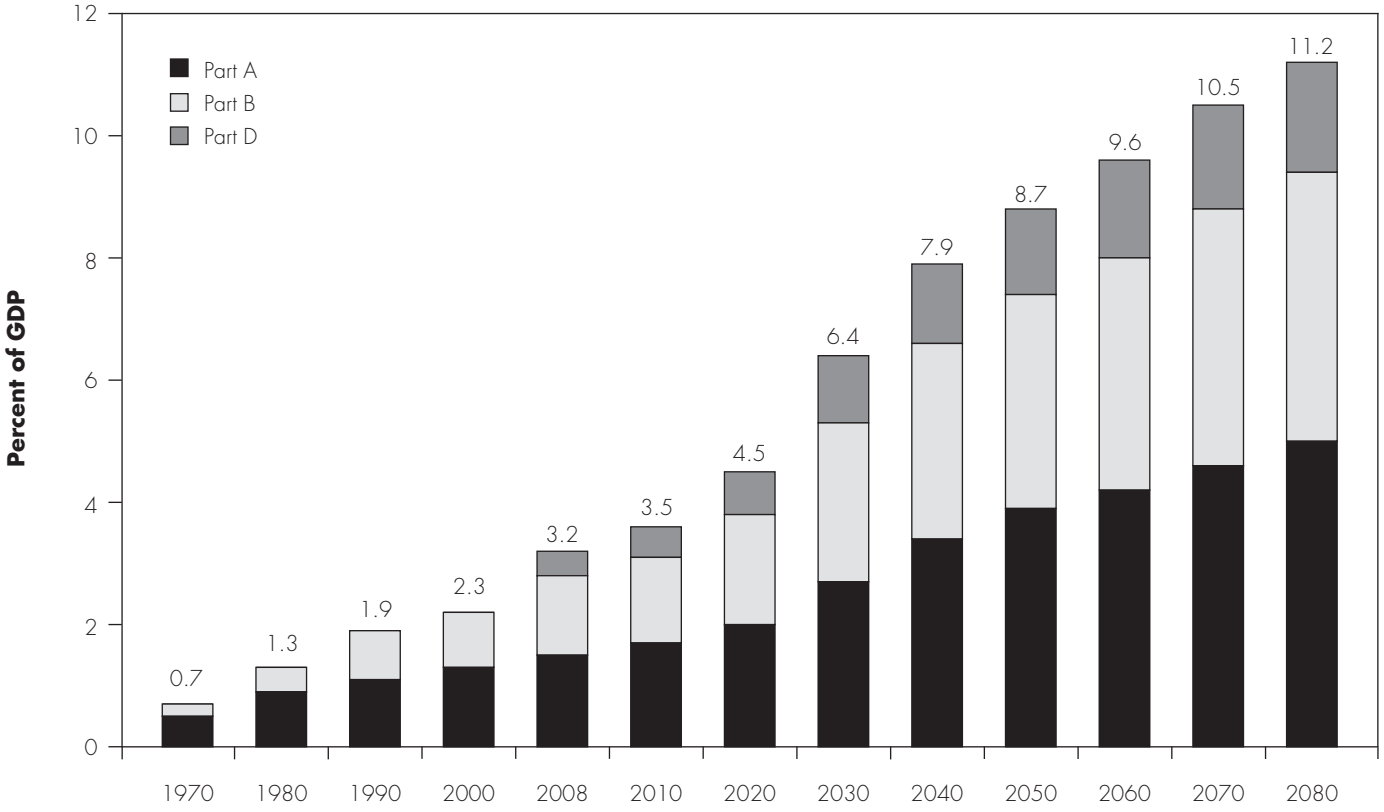
Studies show that much of the increase in health care spending is not explained by improvements in health status, clinical outcomes, or quality of life; studies also indicate that recommended clinical services are not always provided (Baicker and Chandra 2004, Fisher et al. 2003a, McGlynn et al. 2003). These findings, combined with the projected increases in health spending, represent the core challenges for policymakers: how to increase quality, improve the efficiency of the delivery system, and find the resources to finance care.

Many of the barriers that prevent Medicare from improving quality and controlling costs stem from the incentives in Medicare's payment systems, which are primarily fee-for-service (FFS) and provide incentives that reward more services instead of better quality. Furthermore, Medicare's payment rates for individual products and services are not always accurate, leading to overpayments that do not encourage efficiency and may cause providers to prefer delivering overpriced services relative to others. Payments are based on the type and volume of services provided, and providers are not accountable for the quality of care they provide. Also, within the piecemeal FFS payment system there is no incentive for providers to coordinate care. Each provider may treat one aspect of a patient's care with little regard to what other providers are doing, which can result in duplicate efforts or gaps in care. Finally, Medicare providers and beneficiaries do not have the information they need to improve quality and use resources efficiently.

To begin to address these problems, the Commission has recommended a number of changes, such as rewarding providers for improving quality and holding providers accountable for the quality of care beneficiaries receive and the resources expended to provide it. Current payment systems do not encourage the coordination of care or efficient use of resources in an episode. To address this problem, the Commission is assessing approaches that revise the splintered single-setting "silos" that are the unit of payment for most FFS payment systems. These changes, with other changes to the delivery system that the Commission has recommended, aim to improve the quality of care and health outcomes by creating incentives for providers to work together. ■

FIGURE 1–1

Trustees project Medicare spending to increase as a share of GDP



Note: GDP (gross domestic product). These projections are based on the trustees' intermediate set of assumptions.

Source: 2009 annual report of the Boards of Trustees of the Medicare trust funds.

Introduction

Medicare fills an important role by ensuring that the elderly and disabled have access to medically necessary care and that they have some financial protection against health costs. Medicare is credited with doubling the share of seniors who have health insurance and reducing the out-of-pocket burden beneficiaries would otherwise face (Moon 2000). A consensus exists among Americans that these beneficial aspects of the Medicare program must be preserved. At the same time, however, Medicare costs have grown substantially over the last decade and will continue to grow in the future, placing an increasing burden on taxpayers and beneficiaries (Figure 1-1).

Medicare and the United States health care system

In 2008, Medicare spending was estimated to be $468 billion (Boards of Trustees 2009). The program is just one part of an expansive and growing United States health care system that includes a broad array of private and public purchasers, insurers, providers, manufacturers, and suppliers (see text box on public and private financing of care, p. 22). In 2007, combined expenditures on health care services in the United States totaled nearly $2.2 trillion, or 16 percent of our economy (Hartman et al. 2009) (Table 1-1, p. 6, and Figure 1-2, p. 10).

Medicare and most other health care payers share a common set of providers to deliver services to their

Spotlight issue: Effects of payment levels on hospitals' costs

Since Medicare is not the only program most providers serve, the adequacy of payments from other payers can influence provider costs and financial performance. Intrinsic to this concept is the notion that providers' costs are partially within providers' control and subject to change given the proper incentives. Medicare attempts to encourage providers to control costs through its payment mechanisms, but revenue from other payers can influence how providers manage costs.

Some hospitals and private payers have argued that hospitals must charge private insurers high rates to compensate for what they perceive as inadequate reimbursements from their public payers—Medicare and Medicaid. They assert that low Medicare rates force hospitals to shift a portion of the costs of providing care to Medicare patients onto private payers. However, this theory makes several assumptions about hospital costs that are inconsistent with the economic incentives of providers and payers and does not take into account relationships between payers and providers that vary among health care markets. In some markets—especially those that have experienced significant provider consolidation and integration—providers may have sufficient market power to negotiate high rates from payers. In other markets, however, payers may be more dominant and generally define the payment rates that providers are obligated to take. Further, the Commission's analysis of variability in hospitals' costs as a function of payer mix and payment rates suggests that an alternative explanation for cost variation may be more appropriate.

With respect to the assertion that providers charge private payers higher prices because of lower Medicare payments, it is not clear why providers and payers seeking to maximize financial performance would consider the level of Medicare payment in their negotiations. Typically, reimbursement rates would reflect each party's market power. If a hospital seeking to maximize profit or revenue had sufficient

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TABLE 1–1

Public and private sources of funds for health care, 2007

Category	Spending (billions)	Percent
Private funds:	**$1,206**	**54%**
Consumer out-of-pocket	269	12
Private health insurance	775	35
Other private funds	162	7
Public funds:	**1,035**	**46**
Medicare	431	19
Other federal programs	137	6
Medicaid	329	15
Other state and local programs	138	6
Total	**2,241**	**100**

Source: Centers for Medicare & Medicaid Services, Department of Health and Human Services 2009. National health accounts. http://www.cms.hhs.gov/NationalHealthExpendData/02_NationalHealthAccountsHistorical.asp#TopOfPage.

beneficiaries. Linked in this way, the policies of one payer can affect others (see text box). But our delivery system is not a true system, under which payers and providers act in concert to ensure that high-quality care is efficiently delivered. Rather, providers usually act independently of one another, concerned with the patient only as long as he or she is in their care. Similarly, payers may act independently of each other, with payers adopting the policies of others when it is in their interest to do so, but often working implicitly or even explicitly at cross purposes (as exhibited in the tension between Medicare and Medicaid in paying for care provided to beneficiaries eligible for both programs).

Over the last several years, the Commission has expressed serious concerns about persistent gaps in care coordination for beneficiaries enrolled in traditional fee-for-service (FFS) Medicare (Medicare Payment Advisory Commission 2004, Medicare Payment Advisory Commission 2006, Medicare Payment Advisory Commission 2007). Providers

Spotlight issue: Effects of payment levels on hospitals' costs (cont.)

market power to do so, the hospital would seek the highest price it could achieve, regardless of the level of Medicare payment. Conversely, the rate a private payer is willing to set should reflect its market power and its ability to pay, and it should seek the lowest rate possible to minimize its cost. If providers can negotiate higher prices with non-Medicare payers, it is because of their market power and not the level of Medicare payment.

It should not be surprising that private-payer payment rates are higher than Medicare's rates in many markets, as there is evidence that the consolidation in the supply of hospitals in many markets has given them significant market power over private payers. This leverage means that, unlike a competitive market, hospitals will be able to demand payments in excess of an efficient provider's costs. The leverage to secure higher rates from non-Medicare payers may result in less fiscal pressure to control costs.

The idea that hospitals must shift some of Medicare patients' costs to private payers also assumes that hospitals' costs are static, and Medicare payments are too low to cover them. The Commission found significant variation among hospitals in cost per discharge, even when controlling for differences such as patient severity, wages, and prices (Medicare Payment Advisory Commission 2009c). This variation for equivalent patients suggests that costs for some hospitals may not reflect an optimum level of efficiency, and some hospitals are better at controlling costs than others. For those with significant losses on Medicare, these losses may be a result of their relatively high costs.

In our March 2009 report, the Commission conducted an empirical analysis to identify the factors affecting hospital financial performance under Medicare and private payers. Contrary to the theory professed by some hospital advocates, we did not find that hospitals must shift costs to private payers to compensate for inadequate Medicare payments. Rather, we found that hospitals' profitability under Medicare is a function of their costs and that their costs varied as a function of the level of their non-Medicare payments (see Chapter 2A). Specifically, hospitals under high financial pressure (that is, hospitals with low non-Medicare profit margins) tended to control their costs, and thus have better financial performance under Medicare, whereas those under low financial pressure (those with relatively high non-Medicare profit margins) had higher costs and lower or negative Medicare margins. As revenue rises from non-Medicare payers, the financial pressure the hospital is under declines, costs increase, and Medicare margins fall, putting pressure on policymakers to increase Medicare rates. Rather than reflecting inadequate Medicare payments, these losses may reflect inadequate cost control. ■

may provide quality care to uphold professional standards and to have satisfied patients, but Medicare does not hold them accountable for the quality of care they provide. Moreover, providers are not accountable for the full spectrum of care a beneficiary may use, even when they make the referrals that dictate resource use. For example, physicians ordering tests or hospital discharge planners recommending post-acute care do not have to consider the quality of outcomes or the financial implications of the care that other providers may furnish. This fragmentation of care puts quality of care and efficiency at risk.

A case also exists for coordination among payers in addressing common reform challenges. For example, coordination of Medicare and Medicaid in the care of dual-eligible beneficiaries would reduce the incentives for one payer to push costs onto the other (e.g., through state strategies to maximize Medicare reimbursements for dual eligibles). Payers control the incentives faced by providers and beneficiaries, and achieving the full potential of some reforms may require cooperation among payers (see text box, pp. 8–9). Given that payers are responsible for different populations, not all of payers' interests may overlap. However, when common interests can be

Spotlight issue: Need for greater coordination among payers

Though each sector can affect the other, Medicare and other payers have not developed mechanisms for coordinating efforts to improve the health care system. In some areas, it may be possible to achieve better results if Medicare and other large purchasers of care cooperate in the development of reforms. Cooperation could include payers sharing data on health care service use and clinical outcomes. This type of analysis could be used to identify effective and ineffective treatments, and pooling data from multiple payers would provide a larger sample and permit more rigorous analysis.

Coordination may also be necessary to ensure that delivery system reforms are coherent and effective. For example, uncoordinated pay-for-performance reforms from multiple payers could result in conflicting incentives, with providers disregarding them. Many payers' shares of individual provider revenues are too small for them to significantly influence provider behavior. For example, Medicare accounted for only 20 percent of expenditures for physician services, while private insurers accounted for 50 percent divided among numerous separate insurers.

Accountable care organizations (ACOs) are one example of a policy that may benefit from coordination with private payers (Medicare Payment Advisory Commission 2009a). ACOs are organizations of providers that agree to be at risk for the cost and quality of care they provide to their patients, with their payments adjusted through a system of bonuses and penalties that are applied depending on whether the ACO achieved or failed to meet specified performance. If Medicare established ACOs, but private payers continued to pay based on fee-for-service, the incentives for ACOs to lower costs by restraining the volume of services would be diminished. Conversely, incentives for providers in the ACO could be strengthened if private payers joined Medicare in paying based on ACO performance. By coordinating incentives, payers can ensure consistency in the care expected of providers and reap the financial leverage of involving multiple payers.

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identified, joint efforts at reform by payers may have more impact than separate uncoordinated efforts.

Comparing spending levels in the United States and other countries

Health care spending in the United States is far higher than in other countries—about $7,290 per person in 2007, or more than twice the median of member countries of the Organisation for Economic Co-operation and Development (OECD) (Organisation for Economic Co-operation and Development 2009).[1] The United States spends significantly more than other high-spending OECD countries, with the next highest spending nation spending 35 percent less per capita.

Various studies seek to explain higher United States spending relative to other nations. Some have suggested that the rates of diagnosis and treatment for many common conditions are much higher in the United States (Thorpe et al. 2007), while others contend that lower prices in other countries are a major reason for higher United States spending (Anderson et al. 2003). Still another study found that the United States has higher spending even after adjusting for differences in wealth and disease prevalence (McKinsey Global Institute 2007).

Comparisons of quality of care and spending have generally found that the United States does not achieve better outcomes than other industrialized nations, even though it spends more (Organisation for Economic Co-operation and Development 2004, Schoen et al. 2008). For example, surveys that have compared quality of patient care in the United States and six other countries found that patient satisfaction and access to care varied, and no country clearly outperformed the others (Schoen et al. 2007). Among clinical conditions, the results are mixed

Spotlight issue: Need for greater coordination among payers (cont.)

Another advantage of coordination would be to minimize the burden of reforms on providers. Common approaches to defining conditions and quality measures would reduce the cost and administrative complexity of collecting performance information. The Commission has suggested that Medicare establish a formal process composed of private and public sector participants to streamline, update, and improve measures sets. This process should help decrease the burden of quality reporting by coordinating Medicare's efforts with other payers seeking similar information (Medicare Payment Advisory Commission 2005b).

Identifying areas of mutual concern is critical to realizing coordinated approaches among payers. Because payers finance care for different populations payers' needs are not always the same. For example, Medicare serves mostly elderly patients, and quality measures that are most relevant for this population may not be the best for the populations served by other payers. Payers may differ on how to use some incentives and reforms. The use of pooled data to study clinical outcomes could be undermined if payers reach different conclusions because of different analytic methodologies.

There are several potential areas for Medicare to attempt coordinated efforts at reform with private payers. Medicare frequently conducts demonstrations to test new approaches to paying for health care services; in the future the private payers could join in these efforts to provide greater leverage to Medicare's efforts. Another area of potential integration includes beneficiaries who are dually eligible for Medicare and Medicaid (Medicare Payment Advisory Commission 2008a). Financing care for these beneficiaries is split between state and federal governments, and delivering care more efficiently for this population could benefit the treasury of both groups. The Commission recommended that special needs plans (SNPs) in Medicare Advantage that enroll only dual eligibles be used as a means to integrate financing and care for this population. This integration could take several forms and would not necessarily require that the SNP accept capitated rates from Medicaid. ■

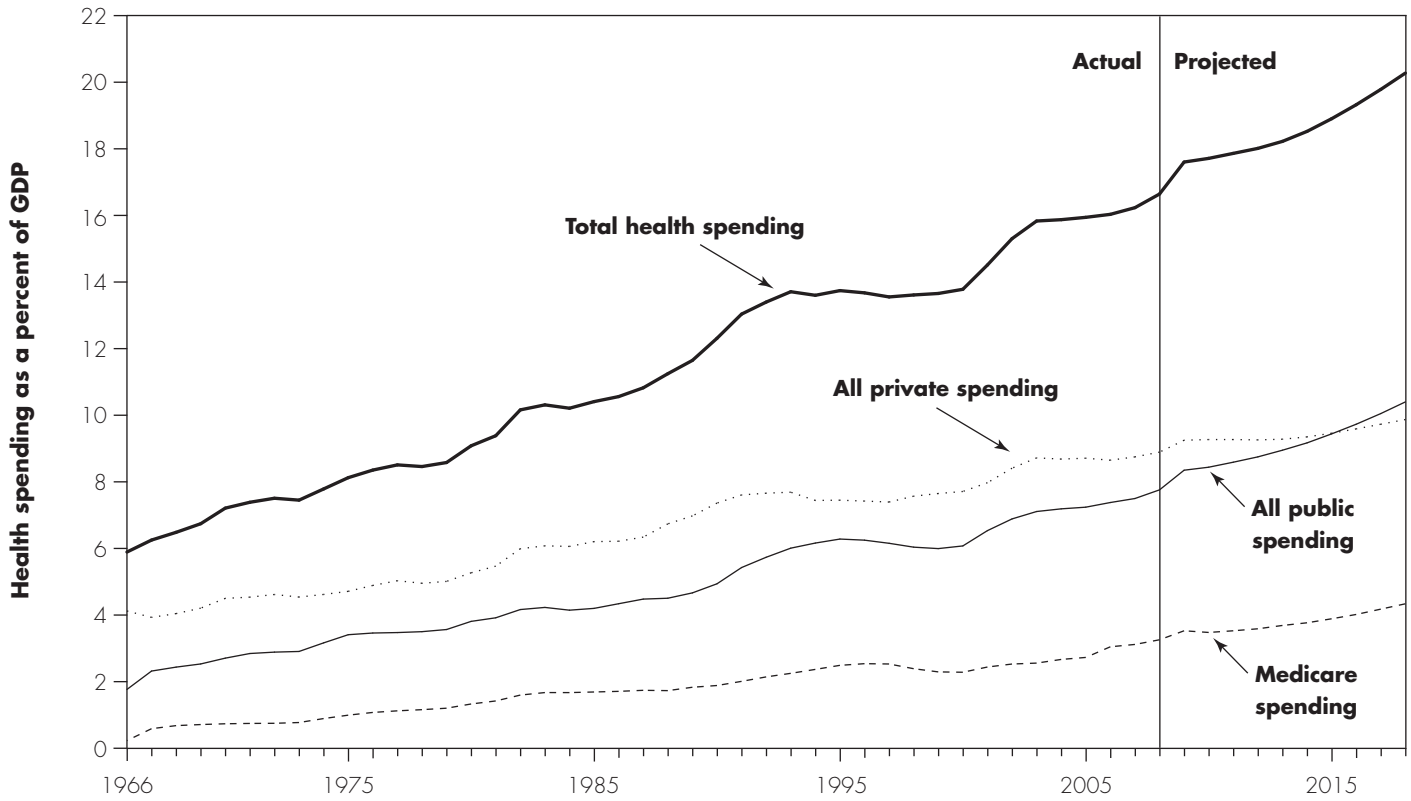
as well. For example, the survival rates for many types of cancers are higher in the United States than in Europe, while the rate of mortality for conditions considered amenable to prevention through effective care is higher in the United States (Docteur and Berenson 2009). Given that countries vary significantly in the design of their health care systems and patient needs, it should not be surprising that quality comparisons are sensitive to the measures compared. However, it is striking that the United States underperforms on many quality measures relative to nations that spend less (Schoen et al. 2008). The comparison of the United States with other countries suggests that, even when the strengths of the United States health care system are considered, a significant portion of the nation's health expenditures does not contribute to better care.

Trends in growth in United States health care spending

Since the end of World War II, health care spending has exceeded per capita growth in the nation's economy by more than 2 percentage points (2000 Technical Review Panel on the Medicare Trustees Report 2000). As for Medicare in particular, the Congressional Budget Office (CBO) found that, between 1975 and 2007, program expenditures per capita had exceeded gross domestic product (GDP) growth by 2.3 percent per year (Congressional Budget Office 2009). The consequence of this excess growth is that health care spending has consumed a growing share of the nation's income, and the CMS projects that, from 2007 to 2018, health care spending will increase from 16 percent to 20.3 percent of GDP (Centers for Medicare & Medicaid Services 2009).

FIGURE 1–2

Health care spending has grown more rapidly than GDP



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, National Health Expenditure Accounts, 2009.

Rapid growth in health care spending among all payers

While private and public programs differ in their coverage and financing, over the long term their rates of per capita growth have been similar (Pauly 2003) (Figure 1-3). Some analysts believe that, since the mid-1980s, Medicare, with its larger purchasing power, has had greater success than private payers at containing cost growth (Boccuti and Moon 2003). Others maintain that benefits offered by private insurers have expanded as cost-sharing requirements declined over the entire period and enrollment in managed care plans grew during the 1990s. The comparison is problematic, because Medicare's benefits changed little over the same period (Antos and King 2003). However, as Figure 1-3 indicates, both sectors have experienced substantial rates of growth per enrollee.

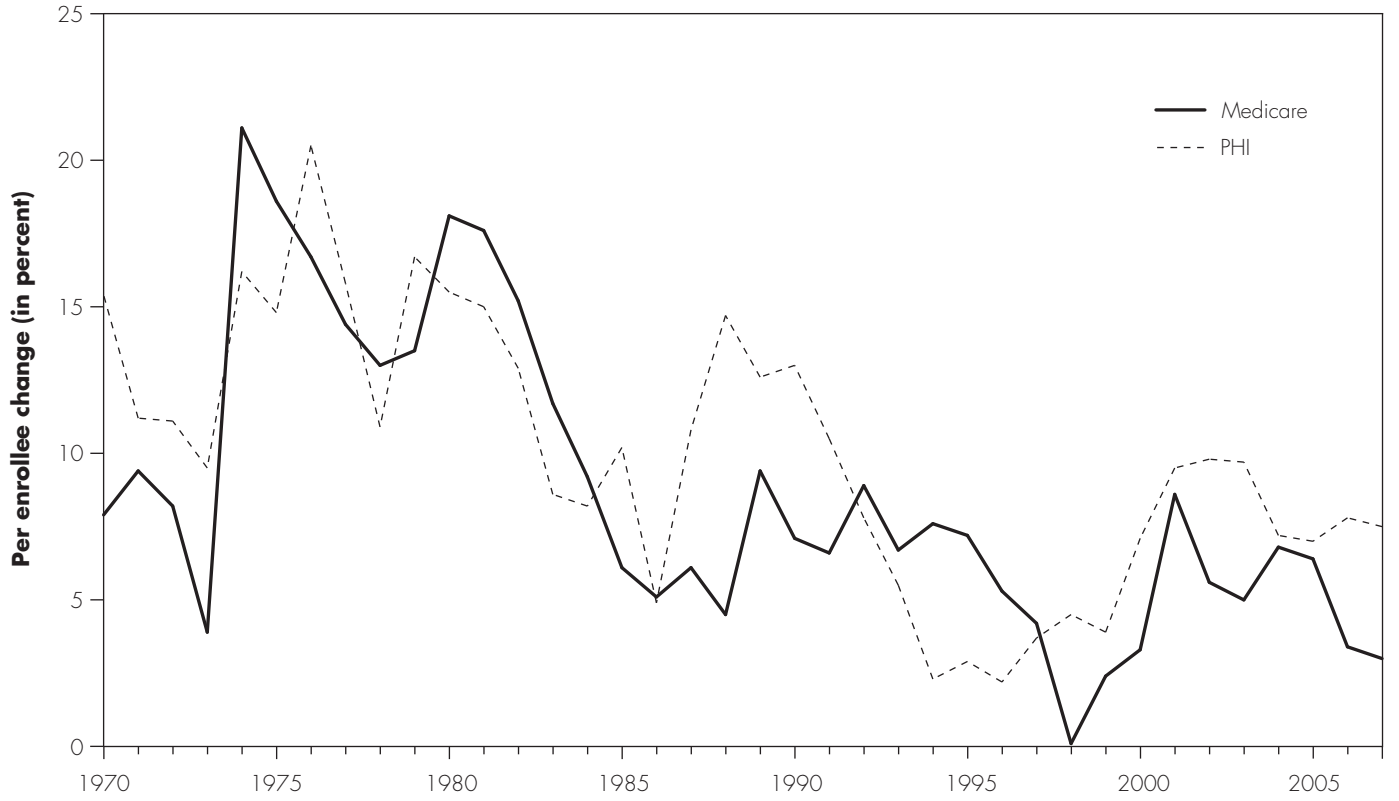
Multiple factors account for growth in health care spending

Many factors account for the rise in health care spending, including the rapid development and diffusion of new technology, changing demographics, the nation's income, the impact of health insurance, and rising prices. The nation's health status and health industry consolidation are additional, though smaller, factors that also contribute to increased spending. The ranges of estimates presented in this section reflect the variations in scope, method, and objective of different studies; they should be considered approximations and not precise estimates.

Technology

Most analysts attribute the majority of long-term growth in per capita spending to technology, and its use grows unabated for several reasons (2000 Technical Review

FIGURE 1–3 **Changes in spending per enrollee for Medicare and private health insurance**



Note: PHI (private health insurance). Chart compares services covered by Medicare and PHI, including hospital services, physician and clinical services, and durable medical products.

Source: CMS, Office of the Actuary, National Health Statistics Group, 2009.

Panel on the Medicare Trustees Report 2000, Chernew et al. 1998, Congressional Budget Office 2008b, Fuchs 2005, Newhouse 1992). First, many technologies—procedures, drugs, and devices—reduce the invasiveness, serious side effects, discomfort, or recovery time associated with the therapies they replace, making technology-based treatments highly attractive to patients. Second, although evidence may not exist to help providers decide how newer therapies compare with older or less expensive ones, many providers do not wait for evidence to become available before utilizing a new technology (Redburn and Walsh 2008). Third, when providers recommend newer therapies that are covered by Medicare or other insurance, patients do not face the full cost of their care and may not be concerned about the comparative value of those therapies. Even as some medical technologies lead to savings by shortening hospital stays or avoiding hospitalizations, most technologies tend to expand the demand for health care and increase spending. In some cases, providers use new technologies inappropriately or more broadly than intended.

More recent analysis has reexamined the role of technology and considered how other factors, such as insurance coverage and income, have changed over time (Smith et al. 2009). Factoring in the historic trends for income and insurance, Smith and colleagues conclude that technology remained significant, accounting for 27 percent to 48 percent of the change in spending since 1960. Although the lower bound of this estimate implies a smaller role for technology, even at 27 percent it remains a significant contributor.

The impact of new technology on spending is compounded under FFS payment systems. Because these

systems tie reimbursement to the volume of services provided, widespread use of new technologies can create opportunities for providers to increase their volume and revenues. Many of the additional services may be beneficial, but FFS payment encourages providers to use the technologies that result in higher volume and payment regardless of value. This practice can bolster an "arms race" mentality in which providers feel compelled to pursue the latest technologies to remain financially successful relative to their peers (Berenson et al. 2006). Under alternative systems, such as capitation and value-based approaches that tie payments to a measure of a procedure's clinical efficacy, the rewards for additional volume are diminished. Providers would have less financial incentive to pursue the volume opportunities associated with new technology.

National wealth

Growth in a nation's standard of living is associated with growth in health care spending (Hall and Jones 2007). As individuals become better off and their consumption increases, the incremental value of buying more commodities (e.g., another television or more clothing) falls. By contrast, the marginal value to them of an extended life span does not diminish as quickly. Similarly, the marginal value of procedures that are not life saving but that may improve the quality of life (e.g., joint replacements or cosmetic surgery) may increase relative to that of other goods. Estimates of the impact of rising incomes on health care vary, with one synthesis suggesting that growth in income accounts for 5 percent to 20 percent of the long-term rise in health care costs (Congressional Budget Office 2008b).

Similar to the link between income growth and spending growth, some studies associate differences in income levels with differences in spending levels. As noted earlier, the United States outspends other nations on a per capita basis, and some attribute a portion of this difference to the nation's higher personal income.

Use of insurance

Research highlights the important role of health insurance in fueling growth in spending. Health insurance can drive up spending because it insulates beneficiaries from the full cost of their care. From 1960 to 2005, the share of health care costs paid out of pocket fell from about 47 percent to 12 percent (Centers for Medicare & Medicaid Services 2009). Lower out-of-pocket costs can contribute to the demand for health services and encourage the development of new technologies and additional treatments. CBO found that 5 percent to 20 percent of long-term growth in spending is due to the effect of insurance (Congressional Budget Office 2008b). One analysis found that Medicare had an even more pronounced effect on hospital spending (Finkelstein 2007). Finkelstein asserted that the broad increase in demand for hospital services that occurred after the start of Medicare led to greater incentives for hospitals to enter markets, purchase new equipment and facilities, and adopt new practice styles. Extrapolating from her Medicare findings, she suggested that about half of the increase in per capita health spending between 1950 and 1990 could be attributable to the spread of health insurance. Other analysts have noted that small changes in assumptions behind Finkelstein's extrapolation to all health care spending would lead to much smaller effects (Ellis 2006).

Some protection against high out-of-pocket spending is desirable but may reduce beneficiaries' sensitivity to costs. Individuals with first dollar coverage—insurance policies with little or no cost sharing before an insurer will pay for services—tend to use more services than those with similar health status and no supplemental coverage. A Commission-sponsored study found that Medicare spending was 17 percent to 33 percent higher for elderly beneficiaries with medigap insurance than for those who had no supplemental insurance (Hogan 2009).

In addition to growth over time, variations in the availability of insurance can also affect spending levels between insured and uninsured individuals. For example, in 2008 individuals insured for the full year are estimated to have received $4,463 in services on average per person, compared with $1,686 per person for the uninsured (Congressional Budget Office 2008a). The different levels of expenditure likely reflect differences in their use of and access to service.

Rising health care prices

A review by CBO concluded that between 10 percent and 20 percent of long-term growth in per capita spending was attributable to prices in health care growing faster relative to other prices due to lower productivity in the health sector (Congressional Budget Office 2008b). Measuring price change in health care is challenging because typical measures of health care prices can be misleading. For example, the price of some services, such as a day of inpatient hospital care, has risen from year to year. However, this increase includes changes that may also increase the value of the service to patients—for example

through improvements in the facilities or treatments the hospital provides. Changes in these prices do not provide an accurate indication of the change in prices because they do not account for improvements in outcomes or quality. For example, new technology may increase the costs of a laboratory test, but the new test may offer superior diagnostic information that leads to a better outcome. Simply tracking the price change without factoring in changes in quality offers an incomplete picture because the output of the test has improved quality.

Accuracy of health care prices

Prices that do not accurately reflect providers' costs can also contribute to higher total spending on health care. For example, in the case of imaging services the Commission concluded that a mispricing of these services had encouraged more providers to offer them, driving up the volume of services and total Medicare spending (Medicare Payment Advisory Commission 2009c). In another instance, the Commission examined home health services and found that the rates Medicare has set do not reflect the services provided (Medicare Payment Advisory Commission 2009c). In these instances, improving payment accuracy would result in lower spending and reduce the influence of profitability on the volume of services provided.

Aging and demographics

Changes in demographics also affect Medicare spending, but the magnitude of the impact is sensitive to the period examined. Analysts attribute about 2 percent of the increase in health care spending between 1940 and 1990 to aging of the population (Congressional Budget Office 2008b). However, aging is expected to be a significant factor in the future, although its prominence will fade once the baby boom population has retired (the first wave of which will become eligible for Medicare in 2010). CBO estimated that from 2009 to 2035, 64 percent of the growth in Medicare, Medicaid and Social Security costs would be attributable to aging, but that its role in cost growth would diminish to about 44 percent in 2080 (Congressional Budget Office 2009).

Health status

The nation's underlying health status and changes in clinical treatment thresholds also affect spending. In the Medicare population, chronic conditions are very common. The prevalence of the top four chronic conditions—ischemic heart disease, diabetes, cataracts, and arthritis—range from 20 percent to 32 percent, and it is typical for a beneficiary to have multiple conditions. In 2003, 94 percent of beneficiaries reported having at least one chronic condition and 57 percent reported having three or more (Centers for Medicare & Medicaid Services 2005b). Analysis by Thorpe and Howard suggests that, between 1987 and 2002, nearly all the growth in health care spending for Medicare beneficiaries could be attributed to spending for patients being treated for five or more conditions (Thorpe and Howard 2006). In 2002, about 50 percent of all Medicare beneficiaries were being treated for five or more conditions, compared with about 31 percent of beneficiaries in 1987. At the same time, a larger proportion of patients being treated for five or more conditions reported that they were in excellent or good health—60 percent in 2002 compared with 33 percent in 1987. The authors concluded that medical professionals are treating healthier patients, treatments are improving health outcomes, or both are occurring.

An analysis of osteoporosis provides another example of how changing clinical treatment thresholds—bounds within which treatment should be given and outside of which it should be withheld—have the potential to significantly increase costs with uncertain benefits (Herndon et al. 2007). The analysis reviewed a change to clinical guidelines that expanded certain osteoporosis treatments to individuals with denser bones. The review found that the new criteria expanded treatment to an additional 7 to 14 million women but suggested that this population would not substantially benefit because of their low-risk for hip fracture. This analysis indicates how new disease thresholds may result in higher rates of diagnosis and treatment but that questionable improvements in care may not warrant the additional expenditures.

Industry consolidation

The consolidation of health care providers and health plans may result in new efficiencies that lower costs, but it can also lead to lower quality and higher prices (Vogt and Town 2006). The concern is that the primary motivation for much of this consolidation is for providers and insurers to capture more market share to achieve favorable payment rates. Such consolidation has resulted in some markets being served by a few dominant plans and providers; depending on the characteristics of the local market, it can result in cooperation to achieve system improvements or an accommodating détente (Ginsburg and Lesser 2006). On the one hand, consolidation may unify local delivery systems around common goals such as improving

Spotlight issue: Regional variation in Medicare service use

The significant differences in spending among regions of the United States raise questions about the efficiency of the United States health care system. Regional variation in Medicare spending per beneficiary reflects many factors, including differences in beneficiaries' health status, Medicare payment rates, service volume (number of services), and service intensity (e.g., MRI versus simple X-ray). However, unadjusted spending is an insufficient measure of the differences among regions because it includes other factors, such as regional differences in Medicare prices and special Medicare payments, beyond just the mix and amount of services provided. To better understand regional variation, the Commission created a measure of the regional variation in Medicare service use that focuses on differences in volume and service mix and controls for differences in Medicare prices, special payments, and other factors that could distort the comparison among regions. Even with these adjustments, there was substantial variation between the highest and lowest service use areas (Medicare Payment Advisory Commission 2009b).

The Commission implemented two adjustments to convert raw (unadjusted) Medicare spending to an index of service use. First, the Commission adjusted program spending for differences in Medicare payment rates. Removing these differences in payment rates is a necessary step to isolate differences in service use. It does not mean we accept payment rates as appropriate; in past reports, for example, we have recommended changing the way Medicare computes the hospital wage index and special payments to teaching hospitals (Medicare Payment Advisory Commission 2007, Medicare Payment Advisory Commission 2009c). Second, the Commission also adjusted for differences in beneficiaries' health status and several other nonpayment factors. This adjustment ensures that the

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quality. On the other hand, markets with few plans and providers may lack sufficient competition to spur needed improvements in efficiency and innovation. Some analysts have found that providers do not compete on price and efficiency in many markets; instead, they compete to increase market share for their most profitable business lines (Berenson et al. 2006). This situation can lead to an increase in the supply and volume of medical services while failing to address quality or efficiency concerns.

The trends in provider consolidation likely reflect the incentives of fee-for-service medicine, which reward higher volume and lower costs, not necessarily better care. The Commission has recommended exploring forms of organization that encourage collaboration between physicians and hospitals for care coordination and that strengthen the role of primary care (Medicare Payment Advisory Commission 2008b). For example, we recommended that Medicare experiment with bundling payments for all the physician, inpatient, and post-acute care associated with a hospitalization. We also recommended that Medicare experiment with medical homes to strengthen primary care. These organizational changes should be carefully designed to improve care and restrain costs and not provide inappropriate market advantage.

Quality and efficiency concerns remain despite high level of spending and rapid spending growth

Despite higher growth in spending, the health care system has not produced commensurate increases in quality or outcomes. The health services literature suggests that a substantial share of the health care delivered has little benefit for patients (Fuchs 2004, New England Healthcare Institute 2008). In Medicare specifically, spending per beneficiary varies significantly among regions, and not all of this variation can be explained by differences in prices and health status (see text box). In fact, studies of variation in Medicare spending have found that areas of the country where more care is provided do

Spotlight issue: Regional variation in Medicare service use (cont.)

service use measure is adjusted for differences among regions in the health status of beneficiaries. For this analysis, the Commission grouped beneficiaries by their residence or metropolitan statistical area (MSA) for urban residents. Beneficiaries in rural areas were grouped into a single rest-of-state nonmetropolitan area, one for each state. There is nearly a twofold difference between the area with the greatest service use (Miami–Dade County, Florida) and the area with the least service use (nonmetropolitan Hawaii). There was a 30 percent difference between the areas at the 10th and 90th percentiles of the distribution. This variation suggests that significant savings could be achieved if the patterns of care in higher service use areas could be altered to be similar to those in lower service use areas.

Differences in the incidence of Medicare beneficiaries with supplemental insurance among regions could be one factor that could account for some of the remaining variation. Supplemental insurance may contribute to regional variation because beneficiaries with this coverage have been found to consume more Medicare services than those who do not have supplemental coverage (Medicare Payment Advisory Commission 2009a). The types of services beneficiaries with supplemental insurance consume more of tend to be discretionary services. For example, average spending per beneficiary was 90 percent higher for elective hospital procedures for beneficiaries who had supplemental coverage. Spending per beneficiary for certain medical specialists was 89 percent higher for those with supplemental coverage. To the extent that supplemental coverage contributes to regional variation, changes in policy that reduce the higher spending by beneficiaries with this insurance would also address regional variation. However, the Commission did not assess the role of supplemental coverage in its analysis of regional variation and more research is needed to know how much it contributes to the regional differences identified. ■

not always have clinical outcomes that are better than lower spending areas and may even have poorer results (Baicker and Chandra 2004). These studies conclude that the volume of Medicare services provided in high-cost areas could be reduced without compromising care quality or beneficiaries' health status (Fisher et al. 2003a, Fisher et al. 2003b). However, because of the multiple factors driving variation, it is challenging to translate these studies' results into policy prescriptions (Potetz and Cubanski 2009).

It should not be surprising that quality problems remain in Medicare despite higher spending, as Medicare's payment systems do not hold providers accountable for the quality of care they deliver. Moreover, providers are not accountable for the full spectrum of care a beneficiary may use, even when they make the referrals that dictate resource use. This lack of accountability of care puts quality of care and efficiency at risk. The Commission has recommended that Medicare pursue pay for performance to improve quality and has also recommended that Medicare provide physicians with information about their resource use (Medicare Payment Advisory Commission 2005a, Medicare Payment Advisory Commission 2005b, Medicare Payment Advisory Commission 2008b).

Some studies show that quality care is not consistently delivered despite the United States' higher spending. For example, a study by RAND found that a national sample of patients with certain conditions received care consistent with recommended practices only about half the time (McGlynn et al. 2003).

A lack of information for providers and beneficiaries may cause some of the inefficiency and inadequate quality in Medicare. For example, Medicare lacks quality data from many settings of care, does not have timely cost or market data to set accurate prices, and does not generally provide feedback on resource use or quality scores to providers. Individually, providers may have clinical data, but they may not have those data in electronic form,

leaving them without an efficient means to process the information or an ability to act on it. Crucial information on clinical effectiveness and standards of care either may not exist or may not have wide acceptance. In this environment, it is difficult to determine what health care treatments and procedures are needed—and thus what resource use is appropriate, particularly for Medicare patients—many of whom have multiple comorbidities. In addition, beneficiaries are now being called on to make complex choices among delivery systems, drug plans, and providers. But information for beneficiaries that could help them choose higher quality providers and improve their satisfaction is not always available.

Value of gains to health from new technology has diminished over time

Advances in medical technology have led, on average, to improvements in our health and gains in life expectancy. Recently, Cutler and colleagues concluded that, on average across all ages, increases in medical spending between 1960 and 2000 (attributed largely to advances in medical care) provided reasonably good value, with an average cost per life-year gained of $19,900 (Cutler et al. 2006).

However, when focused on real spending adjusted for inflation and life expectancy for individuals age 65 or older, the same research found that the incremental cost of an additional year of life rose from $46,800 in the 1970s to $145,000 in the 1990s. These estimates suggest that the value of health care spending for the elderly has been decreasing, and the authors suggested that their estimates for the 1990s would fail many cost–benefit criteria (Cutler et al. 2006).

Other recent research suggests that survival gains have stagnated since 1996 for patients with acute myocardial infarction (AMI) (Skinner et al. 2006). Skinner and colleagues found that the survival rate for AMI has not improved since 1996, even though spending for patients with this condition has increased. These trends suggest that higher spending is not yielding better outcomes. These authors also compared regional differences in spending for AMI and found that areas with higher spending did not have better health outcomes.

Quality and access are worse for some populations

Numerous measures indicate that low-income individuals and some minority groups have greater difficulty in obtaining appropriate care (Agency for Healthcare Research and Quality 2009). For example, black and Hispanic seniors were less likely to receive influenza vaccine in 2007. Linguistic barriers and lack of insurance were associated with additional difficulty in achieving access to care. These barriers can result in disadvantaged groups lacking access to health care services. Insurance plays a role in some of these trends, but having coverage does not eliminate disparities. Black and Hispanic adults are less likely to have a usual source of care, even when controlling for differences in the incidence of insurance and other individual characteristics (Escarce and Goodell 2007).

In many instances quality may be lower for minorities and low-income groups even when they receive care. In an analysis of six common, high-risk surgical procedures among Medicare beneficiaries, researchers found that patients of lower socioeconomic status experienced significantly higher rates of adjusted mortality than patients of higher socioeconomic status (Birkmeyer et al. 2008). Like racial and ethnic disparities in hospital and surgical care, the socioeconomic outcome disparities seem to be driven by differences in the hospitals where patients of different socioeconomic status tend to receive treatment. At hospitals with the lowest average socioeconomic status, all patients (both lower and higher socioeconomic status) are more likely to die. Conversely, at hospitals with the highest average socioeconomic status, all patients (both lower and higher socioeconomic status) are less likely to die.

Researchers have found that when they control for socioeconomic status health disparities are reduced but not eliminated (Barr 2008, Cohen et al. 2003). This finding suggests that remaining factors, such as ethnicity and race, may be associated with trouble accessing health care even for members of these groups who are not economically disadvantaged.

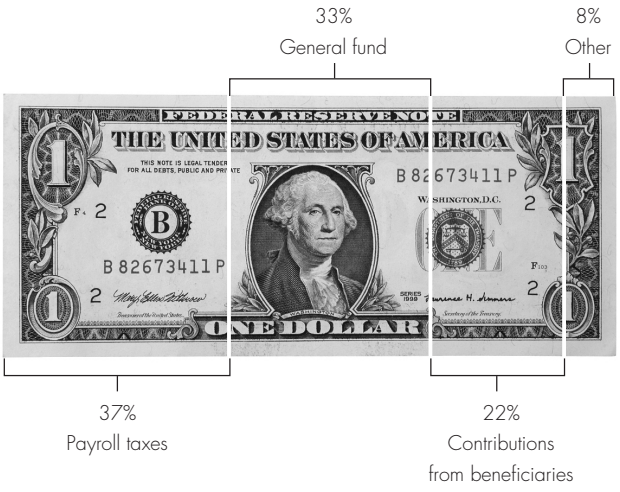
Consequences of rapid growth in spending for Medicare and health care system

The status of the Medicare trust funds shows the imminent adverse consequences of rapid growth in health care spending. In their most recent report, the Medicare Trustees project that, under intermediate assumptions, the assets of the Hospital Insurance (HI) trust fund—which covers Part A benefits—will be exhausted in 2017. Income from payroll taxes collected in that year would

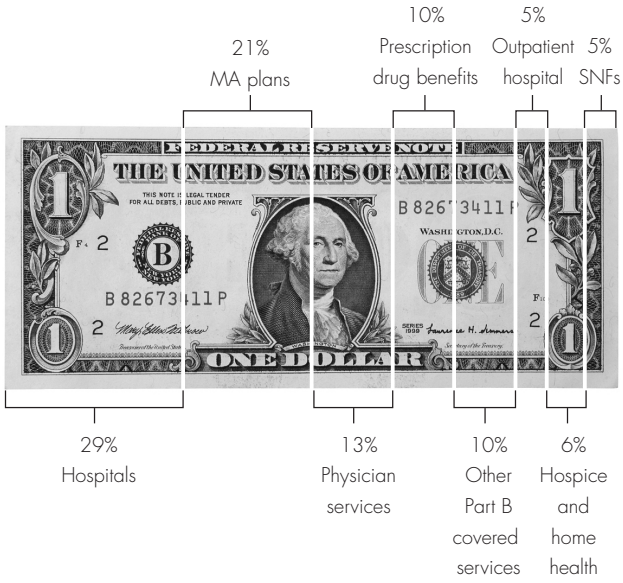
FIGURE 1–4

Comparing the sources and uses of funds for Medicare expenditures

Sources of funds for Medicare expenditures



Uses of funds for Medicare expenditures



Note: MA (Medicare Advantage), SNF (skilled nursing facility). Sources of funds graphic includes beneficiary premiums and cost sharing. Uses of funds graphic does not include expenditures funded by beneficiary cost sharing. Totals may not sum to 100 percent due to rounding.

Source: 2009 annual report of the Boards of Trustees of the Medicare trust funds.

fail to cover 19 percent of projected benefit expenditures. In the future, the share of benefit expenditures covered by payroll tax collections would fall as health care cost inflation exceeded growth in payroll; by 2050, payroll tax collections would cover only 39 percent of projected Part A expenditures. Once exhausted, the trust fund will have no authority to pay for benefits in excess of its revenues.

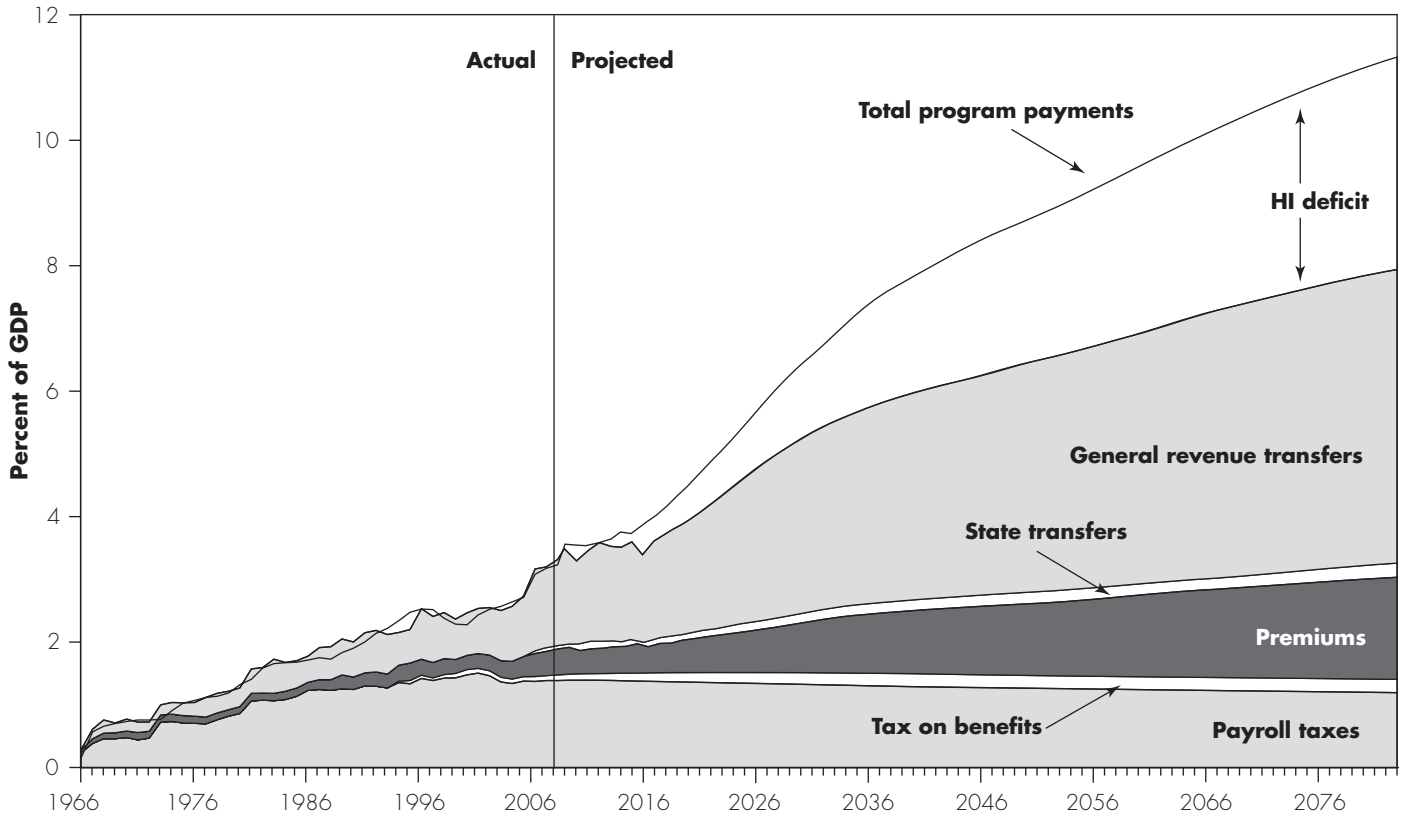
The Supplementary Medical Insurance (SMI) trust fund—which covers Part B and Part D benefits—is financed automatically with general revenues and beneficiary premiums, but the Trustees point out that financing from the federal government's general fund, which is funded primarily through income taxes, would have to increase sharply to match the expected growth in spending. Further, the projections for growth in SMI spending are artificially low because they assume that the reductions in physician spending required under the sustainable growth rate (SGR) formula occur—even though these reductions have been consistently overridden in recent years. Even with the unlikely assumption that the SGR reductions are not overridden, the share of federal taxes and spending would grow significantly. Figure 1-4 (left) illustrates the sources of funding for Medicare expenditures and how program expenditures are distributed among major categories of benefits. The largest source of funds for expenditures is the Part A payroll tax, followed by the transfer from the Treasury general fund for Part B and Part D. Contributions from beneficiaries make up the next largest groups, and include beneficiary premiums, copays and deductibles for Part A and Part B, and prescription drug cost sharing. Figure 1-4 (right) illustrates the major categories of expenditures for Medicare. The largest component of the federal share of expenditures is for hospital services, consisting of 29 percent of total expenditures. The next largest expenditures are for payments to Medicare Advantage plans and payments under the physician fee schedule.

Growing federal fiscal burden

The projected rapid growth in Medicare spending will have repercussions for beneficiaries and taxpayers as well as for the availability of funds for other federal priorities. Specifically, if Medicare benefits and payment systems remain as they are today, the Trustees note that over time the program will require major new sources of financing

FIGURE 1–5

Medicare faces serious challenges with long-term financing



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: 2009 annual report of the Boards of Trustees of the Medicare trust funds.

for Part A and will automatically require increasing shares of general tax revenues for Part B and Part D. The Trustees project that dedicated payroll taxes will make up a smaller share of Medicare's total revenue and that a large deficit will develop between spending for Part A and revenue from dedicated payroll taxes (Figure 1-5). The share of the nation's GDP committed to Medicare will grow to unprecedented levels, squeezing other priorities in the federal budget. Delays in addressing the HI deficit will provide less time to phase in changes, giving providers and beneficiaries less time to adjust. In addition, the premiums and general revenues required to finance projected spending for SMI services could impose a significant financial liability on Medicare beneficiaries and on resources for other priorities. If income taxes remain at the historic average share of the economy, the Medicare Trustees estimate that the SMI program's share of personal and corporate income tax revenue would rise from about 11 percent today to 24 percent by 2030. If the projections for SMI were adjusted to remove the payment reductions required by the SGR, the share of personal and corporate income taxes required would be even higher. For example, if the Medicare Expenditures Index update was provided instead of the current reduction, Part B spending would be about 2.9 percent of GDP in 2030 instead of 2.6 percent, which would increase Medicare's revenue needs by $100 billion in just that year (Clemens et al. 2009).

Increases in Medicare's cost could have profound effects for the federal budget and the economy. Higher spending for Medicare would mean fewer resources for the federal

government to commit to other federal priorities, assuming federal revenues remained unchanged. If a significant share of increased federal spending for Medicare and other health care programs is funded with borrowing, as it has been in the past, the federal government would experience growing deficits.

Increasing out-of-pocket liabilities for beneficiaries

Rapid growth in Medicare spending has implications for beneficiaries because they also finance the program. Cost sharing in Medicare is indexed to increase with expenditures through a variety of mechanisms. For example, from 2004 to 2008, the deductible for Part A rose 17 percent and the Part B deductible rose 35 percent. In addition, as Medicare raises providers' payment rates for services, beneficiary liabilities for copayments and premiums in Part B also increase; spending for Part B copayments has roughly doubled since 1990.

Part B monthly premiums for 2010 are estimated to be $104.20 (about $1,250 for the year), an 8.1 percent increase over 2009 (Boards of Trustees 2009). However, most beneficiaries will not pay this amount because of a provision in law that limits the amount that can be deducted from Social Security benefits to pay Medicare premiums. Medicare law has a "hold-harmless" provision that prevents a beneficiary's Social Security benefit from decreasing when the Part B premium increase is greater than the annual cost-of-living adjustment for Social Security; the intent of this provision is to prevent a beneficiary's income from falling due to a rise in the Part B premium. In 2010, no cost-of-living adjustment is projected for Social Security; consequently, 75 percent of beneficiaries will not be subject to the increase in the premium due to the hold-harmless provision.

The 25 percent of beneficiaries subject to the full premium consist of higher income beneficiaries subject to the income-related premium, new enrollees, and dual eligibles—beneficiaries eligible for both Medicare and Medicaid—who have their premiums paid by Medicaid (Kaiser Family Foundation 2009). These beneficiaries will pay a higher premium to compensate for the revenue lost from the hold-harmless provision. This scenario is likely to recur in 2011 because the current Social Security Trustees' forecast projects another year in which there will be no cost-of-living adjustment. The lack of growth in Social Security benefits will shift Part B's increasing costs to a minority of beneficiaries for a few years, but this shift should dissipate when the annual cost-of-living increase for Social Security resumes.

The share of Social Security benefit devoted to annual Medicare cost sharing is one metric for assessing the burden of cost sharing on beneficiaries. Social Security accounts for three-quarters of the income for 60 percent of the elderly population in 2006 (Federal Interagency Forum on Aging Related Statistics 2008). If we include the out-of-pocket costs of both Part B and Part D, the average cost of SMI premiums and cost sharing (including copayments and deductibles) for Part B and Part D are estimated to absorb about 26 percent of Social Security benefits in 2010 (about 16 percent will be for Part B and about 10 percent will be for Part D) (Figure 1-6, p. 20).

The amount of cost sharing among beneficiaries varies significantly, with beneficiaries incurring the highest Medicare costs bearing a disproportionate share of the total cost-sharing burden. For example, in 2007, the top 6 percent of beneficiaries with the greatest cost-sharing liability, those with $5,000 or more in liabilities, accounted for 38 percent, or $19 billion, of all cost sharing paid (Medicare Payment Advisory Commission 2009a). There is no catastrophic protection in Part A or Part B. The growth rate for cost sharing also varies among Medicare beneficiaries. One analysis found that, controlling for inflation and health conditions, average cost sharing for beneficiaries without supplemental insurance from 1996 to 2005 grew by 31 percent, compared with 17 percent for those with some form of private supplemental insurance (Paez et al. 2009).

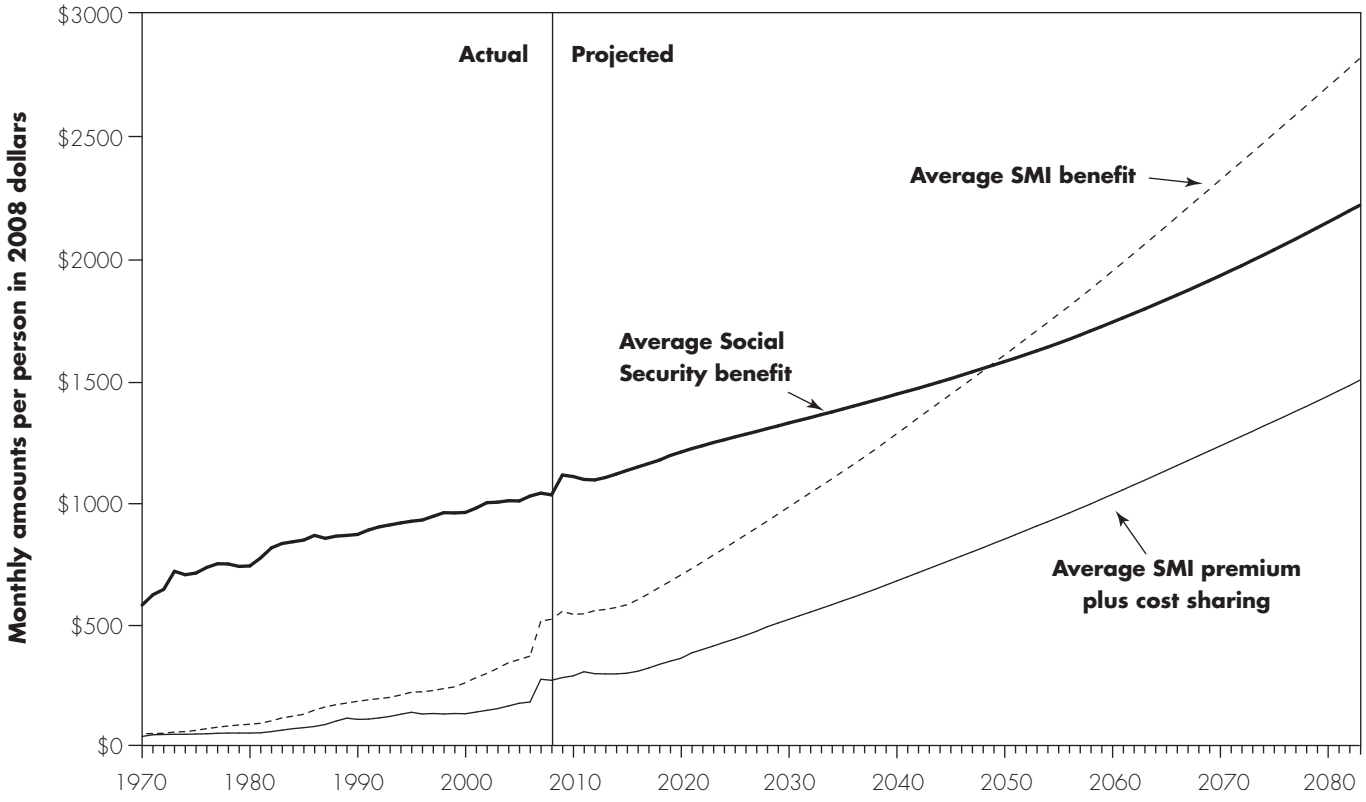
These projections highlight the importance of finding ways to slow growth in Medicare spending (Figure 1-7, p. 21). Beneficiaries who are most exposed to higher out-of-pocket spending—those without supplemental insurance—tend to be more likely to report forgoing care due to cost (Centers for Medicare & Medicaid Services 2005a). If policymakers do not act to curb rising costs, Medicare's need for financing will place an increasing liability on beneficiaries through their premiums and cost sharing, which may compel more of them to forgo medical services.

Consequences of rapid health care spending growth system wide

Some employers argue that the rising cost of health care premiums affects their ability to compete in the world marketplace, but most economists contend that growth in the health premiums employers pay has no long-term

FIGURE 1–6

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 shown.

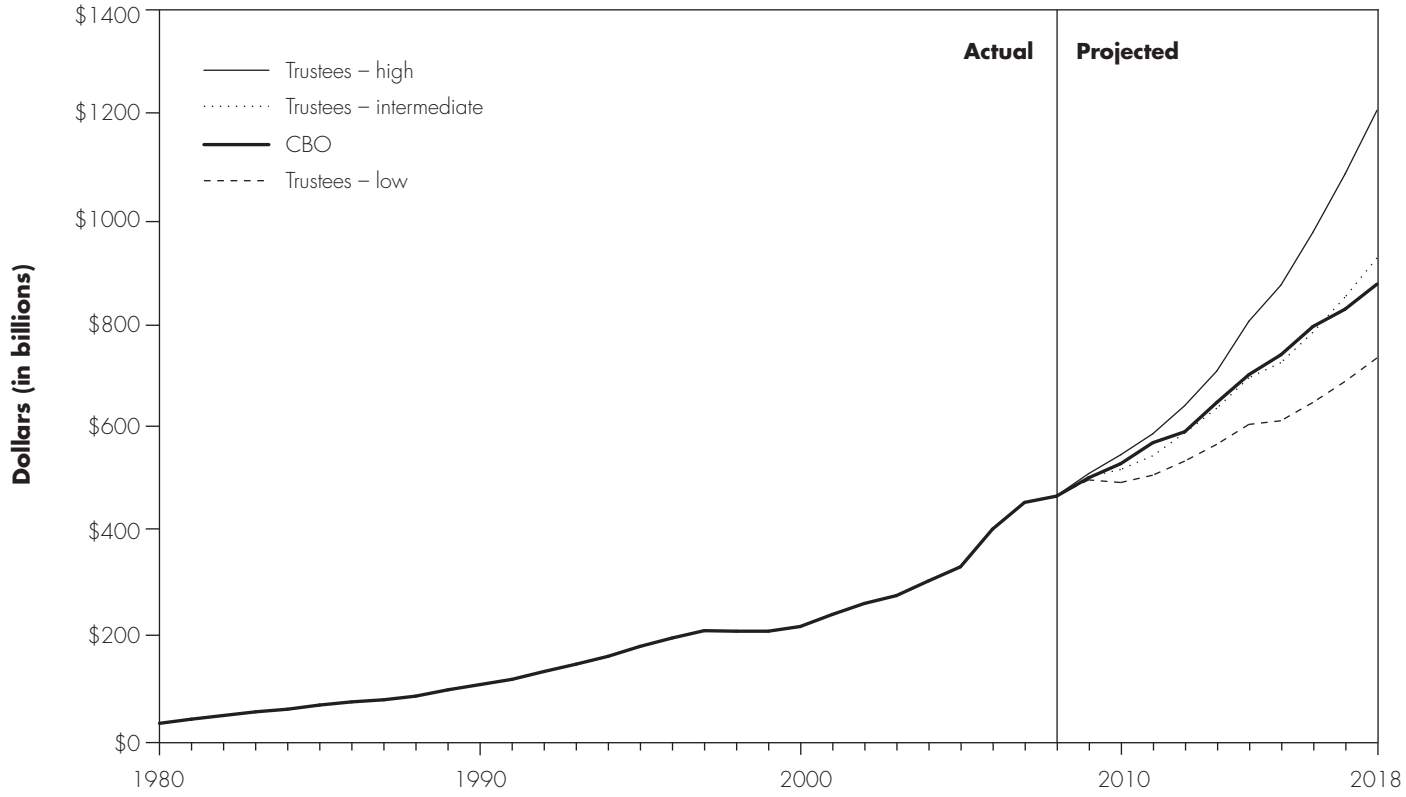
Source: 2009 annual report of the Boards of Trustees of the Medicare trust funds.

effect on the competitive position of firms (Congressional Budget Office 2008a, Fuchs 2005, Pauly 1997). However, some economists argue that, at least in the short run, there are some circumstances in which employers cannot shift costs to employees (Nichols and Axeen 2009). One analysis suggests that, in certain industries, employers have not been able to fully offset higher health costs with lower wages or other controls (Sood et al. 2009). Overall, however, most economists believe that health premiums substitute for cash compensation that companies would otherwise pay to workers, and so the costs of health insurance fall on employees.

The impact of health insurance costs on employee wages illustrates how the inefficiencies of the health care system can affect the broader economy. Employers have a finite budget for compensation, and increases in compensation costs that are committed to health insurance cannot be used to increase salaries. In recent years, increases in the cost of private health insurance have been two or three times greater than the growth in salaries (Claxton et al. 2007). The cost of health insurance benefits has steadily risen as a share of wages and salaries, reflecting the fact that health care spending has outpaced economic growth. As more employee compensation shifts to health insurance, annual wage increases are reduced or eliminated.

Other distributional issues arise from rapid growth in spending on health care. In response to rapid increases in premiums, many employers have raised cost-sharing requirements for their employees or asked them to pay a larger share of premiums. Some analysts have concluded that benefit reductions by some employers have resulted in health plans that do not adequately protect beneficiaries against high medical costs. An analysis by

FIGURE 1–7 **Trustees and CBO project Medicare spending to grow significantly in future years**



Note: CBO (Congressional Budget Office). All data are nominal, gross program outlays (mandatory plus administrative expenses) by calendar year.

Source: 2009 annual report of the Boards of Trustees of the Medicare trust funds. CBO March 2009 baseline.

the Commonwealth Fund found that between 2003 and 2007, the share of nonelderly underinsured, defined as individuals with insurance who spent more than 5 to 10 percent of their income on cost sharing, increased by 35 percent (Schoen et al. 2008).[2]

Insurance coverage is also declining and many analysts attribute this trend to rising costs. From 2000 to 2008, the share of the population without insurance increased from 14.0 to 15.4 percent; CBO estimates that this share will reach 19 percent by 2019 (Congressional Budget Office 2008a, DeNavas-Walt et al. 2009, Mills 2001). These trends in declining coverage are reflected in the falling proportion of employers offering insurance. From 2000 to 2007, the percentage of employers offering health insurance fell from 69 percent to 60 percent (Nichols and Axeen 2009). Affordability also affects employee choices when offered health insurance. Because required premium contributions by enrollees have risen faster than income, some workers choose to forgo coverage (Ginsburg 2004).

Increases in the numbers of people without private health insurance raise demand for public coverage. Those who cannot secure coverage may receive uncompensated care, and providers may seek higher payments for insured patients to cover losses. The costs of caring for the uninsured do not fall equally on all providers, since the uninsured often postpone care until their condition becomes 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 the beneficiaries who already have coverage. Some analysts contend that higher health care costs can 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). ■

Private and public sources of financing for health care

Currently, public financing—federal, state, and local programs—makes up about 46 percent of all United States health care spending, with private sources providing the rest. The public share will rise by a few percentage points to over 51 percent by 2018 (Centers for Medicare & Medicaid Services 2009). Medicare accounted for 19 percent of health care spending in 2009. Medicaid was the next largest public program, accounting for 17 percent, and private health insurance (including employer-sponsored plans) equaled about 35 percent. In 2005, employers—including private sector and government employers—were the largest source of health insurance, covering about 177 million individuals or approximately 60 percent of United States residents (Nichols and Axeen 2009).

Estimates of the share of public spending in the national health accounts do not include tax expenditures—that is, the tax revenues that the federal government forgoes through the tax exclusion for employer-sponsored insurance and other provisions. Because these transfers use the tax code to finance health insurance or health care, they are arguably part of the public commitment to funding health care. If the federal tax expenditures for health care in 2007 had been included in the national health accounts as public expenditures, the share of public expenditures would have risen from 47 percent to 60 percent. (Note that this estimate does not include the tax expenditures from state and local taxes forgone and it does not include the impact of changes in behavior by health care payers that would likely occur in the absence of favorable tax treatment.) ■

Endnotes

1 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.

2 The thresholds were 10 percent of income for higher income beneficiaries, and 5 percent for low-income beneficiaries.

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