

CHAPTER

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**Context for  
Medicare spending**

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## Context for Medicare spending

**M**edicare spending increased by an annual average of 9.6 percent per beneficiary between 1968 and 2000. Although slightly lower than the growth rate of health care spending by private insurers, increases of this magnitude have unique implications given limited federal budget, trust fund, and beneficiary resources. Moreover, because the growth in Medicare spending has exceeded growth of the gross domestic product—as has *all* health care spending—an increasing portion of the nation’s economic resources are devoted to health care services. Medicare’s spending growth is a concern because it requires policymakers to weigh competing priorities and ultimately to make trade-offs in allocating limited resources.

This chapter explores trends in Medicare spending, compares Medicare growth to that of other health spending indicators, and examines the implications of spending increases given limited resources.

### In this chapter

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- Medicare spending trends
  - Medicare spending compared with other indicators of health spending
  - Implications of Medicare spending given limited resources
  - Spending and other implications of MedPAC’s recommendations
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The Congress has charged MedPAC with assessing the design and implementation of Medicare payment policy and making recommendations to the Congress and the Secretary of the Department of Health and Human Services to address any problems identified. In carrying out these responsibilities, MedPAC examines whether Medicare's payment policy supports the ultimate goal of the program: ensuring that its beneficiaries have access to medically necessary acute care of high quality in the most appropriate clinical setting, without imposing undue financial burdens on beneficiaries and taxpayers. This examination requires that we evaluate not only the technical aspects of payment policy as they affect access to care, but also the implications for beneficiaries and taxpayers of rising Medicare and health care spending.

This chapter shows that after a few anomalous years of low rates of growth, Medicare spending has resumed its more typical trajectory, growing an average of 7.7 percent between 2001 and 2002. To provide a context in which to assess this growth rate, the chapter compares Medicare's growth to that of other types of national health care spending. The data suggest that while growth rates diverge at certain points, over the long run Medicare's growth is roughly comparable to that of other purchasers.

The chapter also identifies resource constraints that ought to be considered when evaluating both the short-term payment policy recommendations in this report and the need for longer-range Medicare reforms. Medicare is absorbing a growing proportion of the nation's budget and economic resources; the Medicare Hospital Insurance trust fund insolvency date looms; and beneficiaries are spending a growing percentage of their resources on health care, which for some means painful trade-offs between getting medical care and purchasing other essentials of living. This chapter does not go so far as to recommend solutions to

these problems, but MedPAC will analyze and report on innovations in health care financing and delivery that may hold promise for addressing them.

Given Medicare's limited resources, MedPAC makes its recommendations with—and policymakers should consider them with—an understanding of their consequences on spending as well as on beneficiaries and providers. To further this goal, MedPAC is making the implications of its recommendations more explicit by summarizing the implications below each recommendation and providing an estimate of the change in spending, when possible.

This chapter first presents background information on Medicare spending trends. Then it discusses overall national health spending and other health care spending that may serve as a benchmark against which to assess Medicare's scope and growth. Third, the chapter identifies the resource constraints associated with the federal budget, Medicare trust funds, the economy, and beneficiaries. Finally, given these trends and constraints, the chapter discusses how MedPAC assesses and presents the implications of its recommendations.

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## Medicare spending trends

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Understanding how much Medicare spends for which services and for which beneficiaries, and also how fast this spending is expected to grow, is essential to assessing the performance and financial sustainability of the program. Information on spending trends lays the foundation for comparing Medicare's spending growth with that of other payers and for considering various spending constraints, such as the federal budget and Medicare trust funds. In addition, this information provides a sense of scale for assessing the impact of various policy options. For example, an option that is estimated to

increase hospital payments by 1 percent is far more costly than an option increasing hospice payments by 1 percent.

## Spending levels and distribution

The amount of Medicare spending can be expressed in many different ways that are useful for different purposes. For a general understanding, perhaps the best way to consider Medicare spending is to include all the money the Medicare program pays for benefits. In 2002, Medicare spent about \$250 billion, or \$6,200 per enrollee.<sup>1</sup> In the same year beneficiaries, often through a supplemental insurer, also paid an additional \$38 billion in Medicare coinsurance and deductibles to their providers.

Medicare spending is concentrated on certain services, beneficiaries, and geographic areas. Inpatient hospital services were by far the largest spending category (40 percent), followed by physicians (17 percent), skilled nursing facilities (6 percent), and home health (5 percent). Spending for beneficiaries enrolled in the Medicare+Choice program accounted for 15 percent of the total. This distribution has changed over time, particularly as enrollment in the Medicare+Choice program has fluctuated and major changes in payment policy have affected spending levels of individual sectors. For example, although inpatient hospital spending has grown 53 percent from 1992 to 2002, it has shrunk as a percentage of Medicare's spending, falling from 51 percent to 40 percent (Figure 1-1).

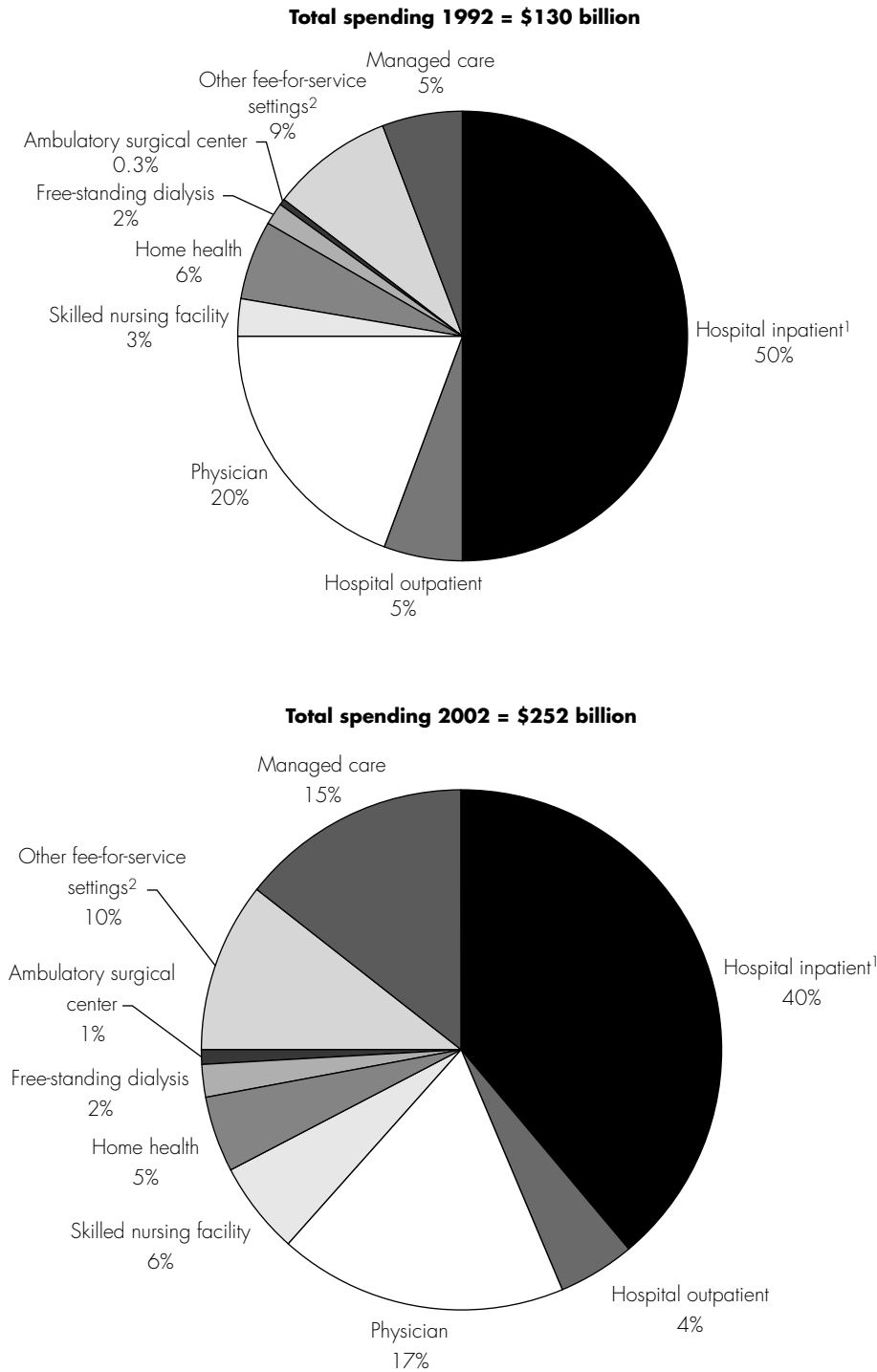
Like private insurance spending, Medicare spending is concentrated in a small percentage of beneficiaries. In 1997, half of Medicare spending was for the costliest 5 percent of beneficiaries, and 90 percent was for the costliest 25 percent of beneficiaries. By contrast, the least costly 50 percent of beneficiaries consumed only 2 percent of all Medicare spending in

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<sup>1</sup> For the purposes of this chapter, unless otherwise noted, spending numbers are presented as gross outlays, meaning that they include spending financed by beneficiary premiums but do not include spending by beneficiaries (or on their behalf) for cost-sharing associated with Medicare-covered services. In general, they are reported on a fiscal year, incurred basis and do not include spending on program administration.

**FIGURE  
1-1**

**Change in distribution of Medicare spending  
by setting, fiscal years 1992–2002**



1997 (Figure 1-2, p. 6).<sup>2</sup> When examined over a five-year period, the concentration is less dramatic: roughly 75 percent of spending between 1993 and 1997 was for the costliest 25 percent of beneficiaries.

Focusing on the characteristics of costly beneficiaries is illuminating, but the implications of these characteristics must be considered carefully. Costly beneficiaries in one year are more likely than other beneficiaries to have high costs in the following years. Of the high-cost beneficiaries who were alive at the end of 1993, over half remained in the highest quartile of spending in the next calendar year—a rate twice as high as would be expected by chance (Crippen 2002a).

Costly beneficiaries are also likely to have multiple chronic conditions. One analysis found that beneficiaries with three or more conditions (46 percent of beneficiaries) account for almost 90 percent of total Medicare spending, while those with no chronic conditions account for less than 1 percent (Anderson 2002). Because this analysis measured all spending for each type of beneficiary regardless of whether the spending was associated with the beneficiaries' chronic conditions, it is unclear to what extent the costly acute-care episodes were attributable to chronic conditions. It is known, however, that costly beneficiaries tend to use a lot of inpatient hospital care. More than half of Medicare spending on the most expensive 5 percent of beneficiaries was for inpatient hospital services in 1997 (Crippen 2002a).

Costly beneficiaries often include those in the last year of life. About 25 percent of Medicare outlays are spent on the last year of life for the 4.7 percent of beneficiaries who die each year. It is important to remember, however, that because the year or time of death is not predictable, this figure shows the cost of caring for severely ill individuals with unknown life expectancy, not the cost of care delivered in anticipation of impending death (MedPAC 2000).

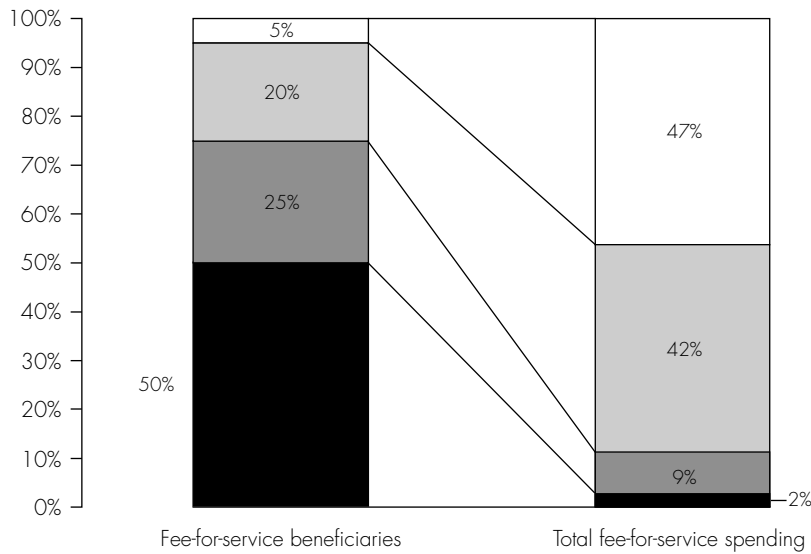
Note: Includes program outlays only. Totals may not add to 100 due to rounding.  
<sup>1</sup>Includes all hospitals, those paid under the prospective payment system (PPS), and PPS-exempt hospitals.  
<sup>2</sup>Includes hospice; outpatient laboratory; durable medical equipment; Part B drugs, ambulance services, and supplies; and Rural Health Clinics, Federally Qualified Health Centers, and outpatient rehabilitation facilities.

Source: CMS, Office of the Actuary, 2002.

2 This data is based on a Congressional Budget Office analysis of claims data for fee-for-service beneficiaries. The five-year analysis includes only beneficiaries enrolled in Medicare since 1993.

**FIGURE 1-2**

**Distribution of Medicare spending among beneficiaries, 1997**



Source: Congressional Budget Office, 2002.

In addition, beneficiaries in some areas of the country are more costly, on average, than beneficiaries in other areas of the country. Some of this variation is due to deliberate payment adjustments to reflect differences in input prices, such as wages and rent, and to support other missions, such as payments for medical education and provision of uncompensated care. An additional part of the geographic variation is due to beneficiaries receiving different amounts of medical services, which is influenced by differences in providers' practice patterns and beneficiaries' propensity to seek care, which in turn are influenced by factors such as their health status, income, culture, and presence of supplemental coverage.

### Spending growth

Prior to 1997, Medicare spending had been increasing rapidly, averaging 11.1 percent annually between 1981 and 1997.<sup>3</sup> This rate of increase declined sharply

between 1998 and 2000 to 1.7 percent, as the effects of provider payment reductions in the Balanced Budget Act of 1997 (BBA) and enhanced efforts to deter fraud and abuse were felt. For 2001 and 2002, however, the rates of increase in spending resumed more typical trajectories of about 9 percent and 5.6 percent, respectively.

This general growth pattern was observed in virtually every service sector, but several specific trends are worth highlighting (Table 1-1):

- Leading up to the passage of the BBA, home health and skilled nursing facility (SNF) spending were growing at double-digit rates, peaking at 34 percent and 43 percent, respectively. Between 1997 and 2000, however, home health and SNF spending levels decreased. By 2001 and 2002, annual growth rates for each sector were again positive, and in the double digits.
- Inpatient hospital growth rates have not shown the same volatility as those for post-acute care, but because inpatient hospital care represents a large portion of Medicare spending, its growth greatly influences Medicare's overall growth. Between 1993 and 1997, inpatient hospital spending grew 6.1 percent annually, on average. Growth dipped to just 0.1 percent between 1998 and 2000 (after the BBA), before resuming a 6.7 percent annual growth rate between 2001 and 2002.
- Managed care spending grew nearly 30 percent annually, on average, between 1993 and 1997, as enrollment more than doubled. After

**TABLE 1-1**

**Annual change in Medicare spending, selected settings, 1993-2002**

Setting	1993-1997	1998-2000	2001-2002
Hospital inpatient	6.1%	0.1%	6.7%
Physician	4.3	4.7	8.6
Skilled nursing facility	27.6	-4.8	15.8
Home health	19.7	-21.8	22.8

Source: CMS, Office of the Actuary, 2002. Hospital inpatient includes all hospitals, those under the prospective payment system (PPS), and PPS-exempt hospitals. Includes program outlays only, gross mandatory, fiscal year, incurred.

<sup>3</sup> In calculating average annual growth rates over a span of years, growth for the first year is calculated as the difference in spending from the prior year (1980, in this case) to spending in the year noted (1981, in this case). This convention is followed throughout the report.

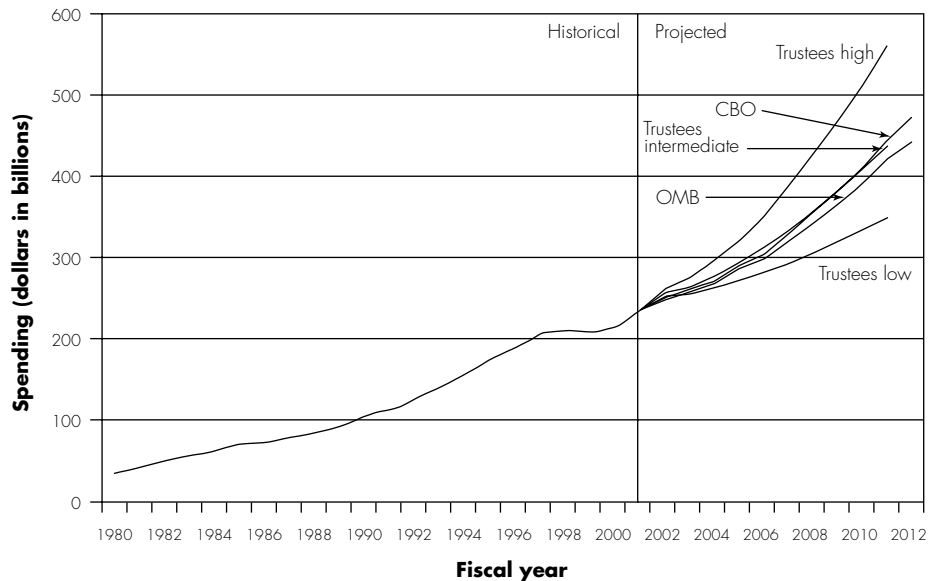
the passage of the BBA, a number of plans withdrew from the program or reduced their service area and enrollment declined, resulting in annual growth rates that averaged 16.4 percent between 1998–2000 and –4.2 percent between 2001–2002.

Projections of future growth suggest that Medicare will continue to grow at about 6 percent annually, on average, until the retirement of the baby boom generation, when growth will accelerate significantly. Forecasts of future Medicare spending are inherently uncertain but need to be considered in order to evaluate whether the program is financially sustainable. Several entities project future Medicare spending, including the Congressional Budget Office (CBO), the Office of Management and Budget (OMB), and the Medicare Trustees (Figure 1-3). Among the factors contributing to the uncertainty of their estimates is that they assume no change in current law, despite the fact that Congress regularly intervenes to adjust payment policies and occasionally changes coverage policies. Another source of uncertainty is difficulty predicting changes in the volume and intensity of services to be delivered to Medicare beneficiaries and, in particular, how new technology will influence these factors.

With these caveats in mind, we note that CBO projects that mandatory spending for Medicare will grow at an annual average rate of 6.5 percent over the 2003–2012 period (3.9 percent real growth). CBO’s estimate of cumulative spending over the first 5 years of the projection window is 7.7 percent higher than the estimates of the Office of Management and Budget; it is 10.2 percent higher than OMB’s estimates over the 10-year window.<sup>4</sup> The Medicare Trustees’ intermediate projection for 2003–2011 assumes 6.1 percent average annual growth (3.5 percent real growth).

**FIGURE 1-3**

**Total Medicare spending, 1980–2012**



Note: CBO (Congressional Budget Office), OMB (Office of Management and Budget), Trustees (2002 annual report of the Boards of Trustees of the Medicare trust funds). All data are nominal, gross mandatory program outlays. Trustees and OMB projections include administrative spending, and Trustees projections are presented on a calendar year basis ending in year 2011.

Source: CMS, Office of the Actuary 2002 (historical spending). 2002 annual report of the Boards of Trustees of the Medicare trust funds, CBO 2002, OMB 2002 (projections).

### Medicare spending compared with other indicators of health spending

As policymakers debate how to improve Medicare’s ability to be a prudent purchaser and whether policy changes are needed to change the projected trajectory of Medicare spending, it may be helpful to compare Medicare spending with total health spending and spending by other payers. This comparison provides a benchmark, albeit an imperfect one, that helps policymakers understand the size of Medicare in the marketplace and, in turn, its potential influence in the market.

To give a better sense of how Medicare spending compares with other health care spending, this section first discusses the comparative scope of Medicare, then compares Medicare’s growth rates to those of other private and public health spending, and finally explores the factors driving growth in health care spending. This discussion draws heavily from the national health expenditure (NHE) data compiled by the CMS Office of the Actuary, which disaggregates total spending by source of funding and service.<sup>5</sup>

### Comparative scope of Medicare

In 2001, the Medicare program spent \$235 billion (about \$5,900 per beneficiary) and accounted for 19 percent of total national

4 The differences between CBO’s and OMB’s estimates are attributable to different assumptions about annual updates for provider payment rates, administrative actions on outpatient drug payment, managed care enrollment, and the rate of increase in the volume and mix of services in the fee-for-service sector (Crippen 2002b).

5 NHE’s Medicare estimates are derived from the Medicare Trustees reports. Its latest year of actual data is 2001.

spending on personal health care services.<sup>6</sup> As such, Medicare is the single largest payer for health services in the marketplace. Of the \$1.24 trillion (about \$4,400 per person) spent on personal health care services in the United States in 2001, about 35 percent was private insurance payments from a wide array of payers and 17 percent was consumer out-of-pocket spending. Medicare, Medicaid, the State Children's Health Insurance Program (SCHIP), and all other public spending combined accounted for about 43 percent (Figure 1-4).

The level and distribution of Medicare spending differ somewhat from those of other payers largely because Medicare covers an older, sicker population and does not cover most prescription drugs or

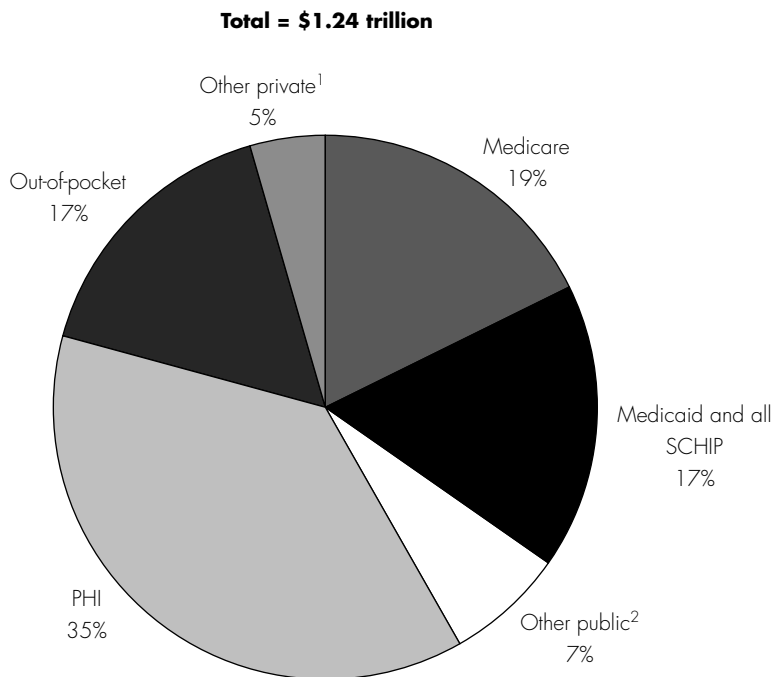
dental care. Accordingly, a greater percentage of Medicare's total spending is devoted to hospital and home health services compared with that of private insurers. Medicare is the single largest purchaser of these services. In 2001, it paid for 30 percent of both hospital and home health services. However, Medicare paid for only 2 percent of prescription drugs and 12 percent of nursing home care (Figure 1-5). For some types of providers, including certain hospitals and physician specialties, Medicare accounts for more than half of their revenue. As such, Medicare's payment and coverage policies can be a strong influence on the health care delivery system.

### Comparing growth in spending

In this section, we compare the growth in Medicare spending with total spending on personal health care, private insurance spending on benefits, and premium growth of other government insurance programs. Although comparing Medicare's per enrollee growth rate with other payers' growth rates may be informative, it must be undertaken with an appreciation for the limits of the comparison. First, Medicare and other purchasers do not buy the same mix of services. So, for example, Medicare is largely unaffected by the rapid growth in spending for outpatient prescription drugs, one of the main drivers of other purchasers' spending increases. In addition, Medicare covers an older

**National spending for personal health care, by payment source, 2001**

**FIGURE 1-4**



Note: PHI (Private Health Insurance), SCHIP (State Children's Health Insurance Program). Out-of-pocket spending includes cost-sharing for both privately and publicly insured individuals. Personal health spending includes spending for clinical and professional services received by patients. It excludes administrative costs and profits.

<sup>1</sup>Includes industrial in-plant, privately funded construction, and nonpatient revenues including philanthropy.

<sup>2</sup>Includes programs such as workers' compensation, public health activity, Department of Defense, Department of Veterans Affairs, Indian Health Service, and state and local government hospital subsidies and school health.

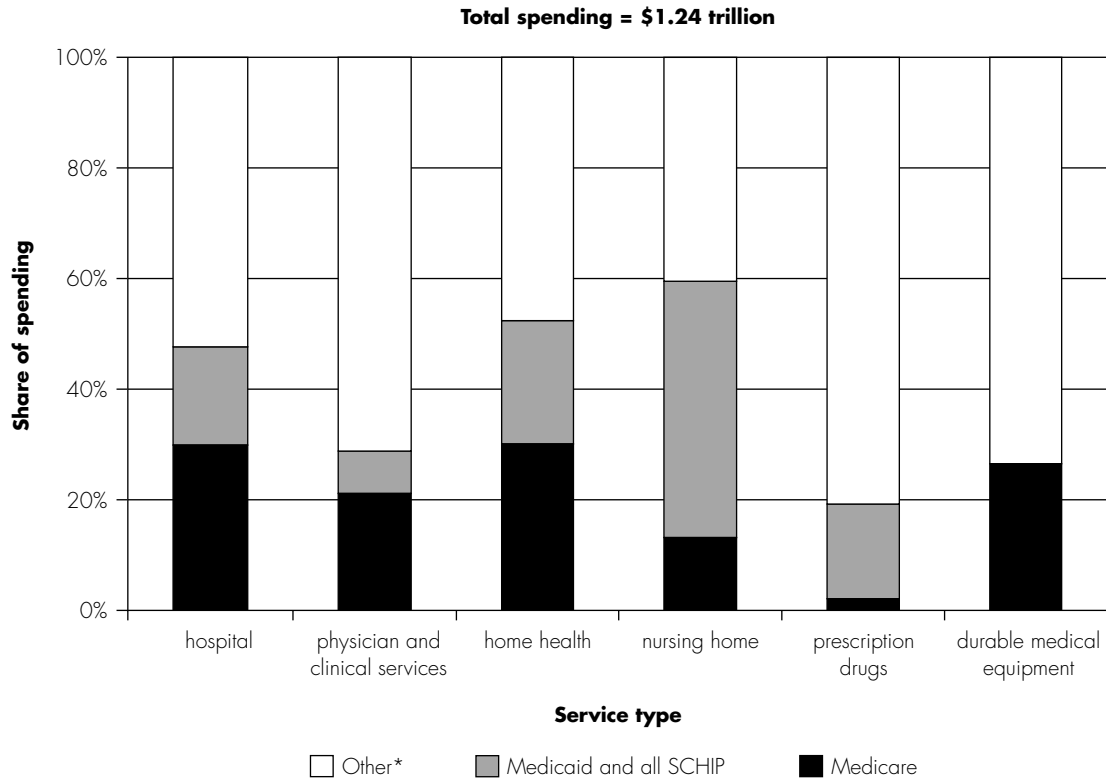
Source: CMS, Office of the Actuary, National Health Accounts, 2003.

<sup>6</sup> Medicare spending does not include beneficiary spending on cost sharing for Medicare benefits. Personal health care spending excludes spending for such categories as research, construction, public health, and administrative costs.



**FIGURE  
1-5**

**National spending for personal health care, by setting and payment source, 2001**



Note: SCHIP (State Children's Health Insurance Program). Personal health spending includes spending for clinical and professional services received by patients. It excludes administrative costs and profits.  
\*Other includes private health insurance, out-of-pocket, and other private and public spending.

Source: CMS, Office of the Actuary, National Health Accounts, 2003.

population that tends to be more costly and may use expensive technology at a faster pace than younger people (Moon 1999). This comparison is also complicated because the NHE includes in its private insurance spending supplemental insurers' spending for Medicare beneficiaries.

Another concern about comparing private payers' spending with Medicare spending is that these measures do not isolate changes in cost-sharing for covered services. Because changes in the level of

enrollee cost-sharing can either increase or decrease spending by payers, examining changes in the spending by payers can be misleading about their ability to contain overall health care costs. In previous decades, private insurers tended to reduce cost-sharing. Recently, however, evidence from employer surveys and focus groups suggests that enrollees are facing higher cost-sharing as private-sector purchasers seek to inject greater cost-consciousness among enrollees and slow the growth in the use of health care services (Robinson

2002).<sup>7</sup> This shift of health care costs from the premium to cost-sharing may be equivalent to a 2 to 3 percent increase in premiums (Strunk 2002).<sup>8</sup>

**Comparing personal health care spending and Medicare spending**

To see how Medicare's growth compares with growth in national spending on health care services, we examined NHE measurements of personal health spending, which include consumer out-of-pocket spending as well as spending by a

7 One survey found that, between 2001 and 2002, preferred provider organizations (PPOs) increased their deductibles 37 percent and that the percentage of workers in health maintenance organizations (HMOs) facing a \$20 copayment for outpatient physician services rose from 2 percent to 11 percent (Kaiser-HRET 2002).

8 Ideally, our analysis would tease out this shifting of costs between insurers' spending and beneficiary cost-sharing to ensure the most accurate comparison. However, the data on out-of-pocket spending do not specify the extent to which such spending has been associated with benefits covered by Medicare as opposed to private insurance, or the extent to which spending has been related to uncovered services.

multitude of payers, including Medicare, insurance companies, and employers. Between 1991 and 1997, Medicare's spending growth generally outpaced the average growth of all other components of personal health spending (e.g., private insurance, Medicaid, and out-of-pocket spending) combined. However, Medicare's growth slowed dramatically after 1997, while other components of personal health care spending continued growing at a faster rate. Medicare represented 19 percent of personal health care spending in 2001, down from 21 percent in 1997. The actuaries who develop the NHE data project that this proportion will decline further to 18 percent by 2003 and remain relatively steady through the remainder of the

projection window (Figure 1-6), which ends just before the retirement of the baby boom generation.

### Comparing Medicare spending and private insurance spending

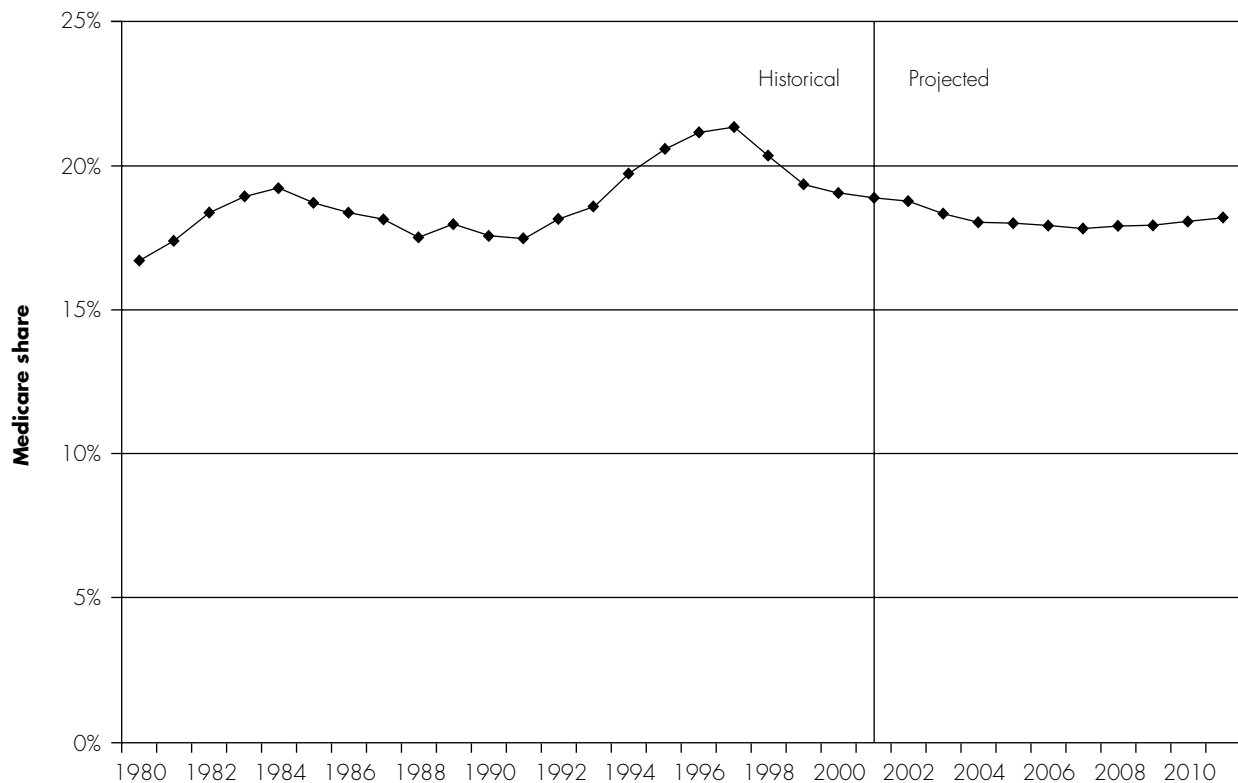
Two of the major sources of personal health care spending are Medicare and private insurance.<sup>9</sup> Over a 33-year period, despite some fluctuation, the per enrollee average growth rates in Medicare and private insurance have been roughly comparable, with Medicare growing slightly more slowly (see Figure 1-7). After adjusting spending levels for differences in age and gender, unpublished CMS data show that real per enrollee Medicare growth over this period was 3.1 percent compared to 4.4 percent for private health insurance. When estimated spending on outpatient

prescription drugs is subtracted from private health insurance and Medicare spending, the growth rates of Medicare and private health insurance are even more comparable (3.1 percent for Medicare vs. 4.0 percent for private health insurance). Over shorter periods within this time frame, the growth rates of the two sectors have diverged as each tried different cost-containment strategies (Figure 1-8, p. 12).

Projections of future growth rates are highly uncertain and usually fail to anticipate the timing of peaks and valleys in spending growth rates. Nevertheless, they are useful for gaining a sense of the likely direction of the spending trajectory and the relationship between payers. Assuming current law, Medicare per enrollee spending is expected to grow

**FIGURE 1-6**

**Medicare share of national spending for personal health care, 1980–2011**

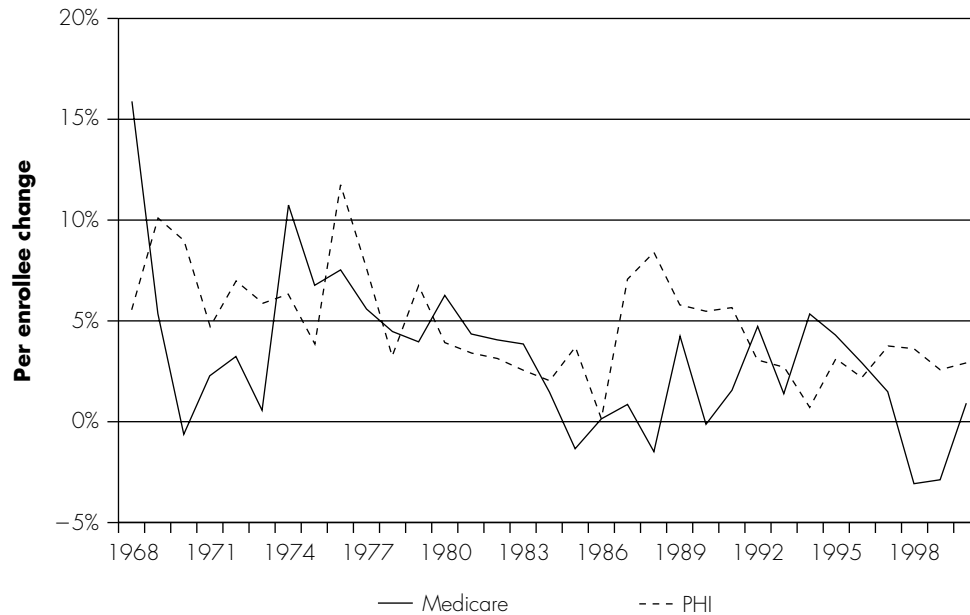


Note: Personal health spending includes spending for clinical and professional services received by patients. It excludes spending on research, construction, public health and administrative costs.

<sup>9</sup> Recall that private insurance includes spending by private insurers for Medicare beneficiaries, so these measures are not entirely independent.

**FIGURE  
1-7**

**Real change in spending per enrollee, Medicare and PHI, 1968–2000**



Note: PHI (private health insurance). Age and gender adjusted. Private health insurance spending includes spending for clinical and professional services received by patients. It excludes administrative costs and profits.

Source: CMS, Office of the Actuary, 2002.

more slowly than private health insurance spending through 2011. However, if Congress intervenes and raises payment rates to Medicare providers, the slower out-year growth may not be realistic.

The accuracy of the estimates for near-term private insurance growth (10.4 percent increase in premiums for 2002) is also uncertain. Surveys suggest higher private premium increases in the short-term—between 12 and 16 percent in 2002, and more than 15 or 16 percent in 2003 (Mercer 2002, Kaiser Family Foundation 2002, Hewitt Associates 2002, Towers Perrin 2002).

### Comparing Medicare to other government health purchasers

Comparing Medicare's growth to that of other large public purchasers, each of which has a different approach to containing costs,

tells a similar story: While growth rates differ over selected periods, over the long-term they tend to be similar.

The Federal Employees Health Benefits Program (FEHBP) and California Public Employees' Retirement System (CalPERS) are two examples of public entities that use a market-oriented approach to contract with private insurance plans for employee health coverage. While the strategies these public entities use to contain costs offer some insight into potential payment alternatives for Medicare, policymakers must recognize important differences between these purchasers and Medicare. For example, in contrast to Medicare, both FEHBP and CalPERS serve current workers as well as retirees; CalPERS enrollees are concentrated in California and FEHBP annuitants are largely concentrated in urban areas, which

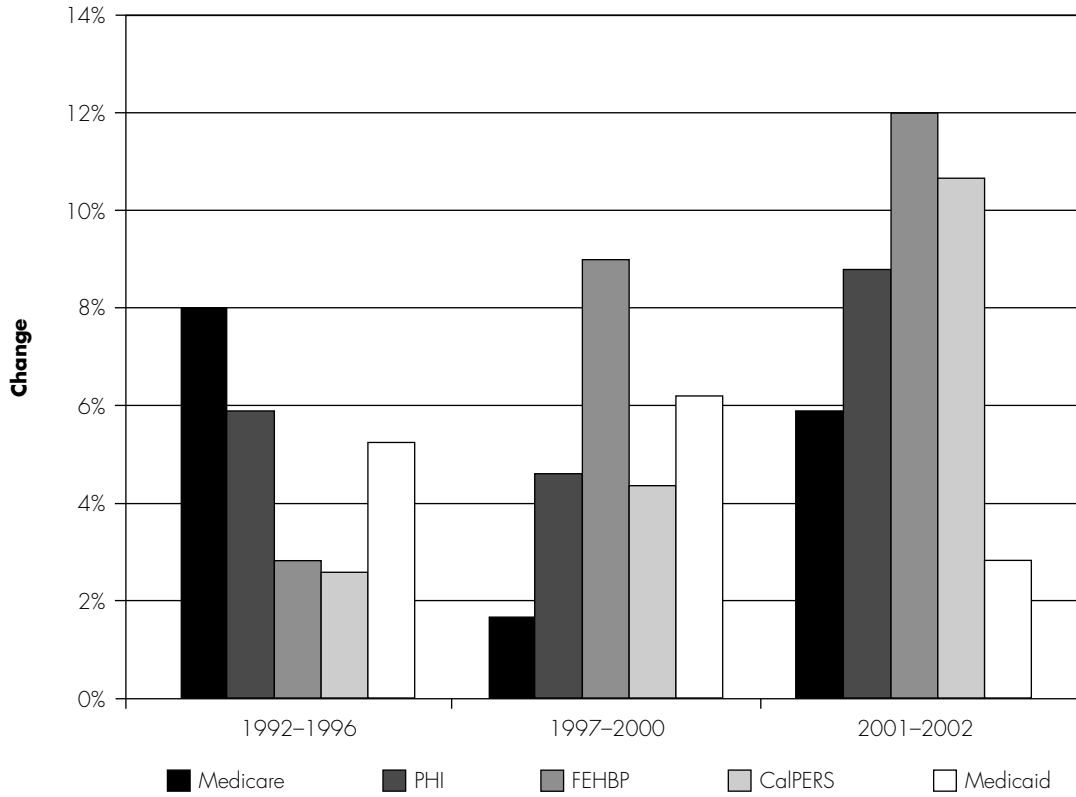
enables greater competition among contracting plans; and both programs have far fewer beneficiaries than Medicare does. Also, CalPERS and FEHBP provide coverage for outpatient drugs, whereas, as mentioned above, Medicare does not.

- FEHBP is the health benefit program run by the federal government for its civilian employees. It contracts with 188 plans each year to cover about 9 million lives, of which approximately 31 percent are annuitants (Quayle 2003). FEHBP requires annual bid submissions from plans and negotiates with plans to determine premiums and benefit packages. Over the last 10 years, FEHBP's average growth was slightly higher than Medicare's, although for different periods within that time frame, growth rates differed (Figure 1-8, next page).<sup>10</sup>

<sup>10</sup> FEHBP annual increases are a weighted average of the premiums of all individual and family contracts (including of both active workers and annuitants) calculated at the end of the annual open season.

**FIGURE  
1-8**

**Change in spending per enrollee, Medicare and other purchasers, selected years**



Note: PHI (private health insurance), FEHBP (Federal Employees Health Benefits Program), CalPERS (California Public Employees' Retirement System). Changes in spending are nominal. Private health insurance spending excludes profits and spending on administration.

Source: CMS, Office of the Actuary 2002, Medicare, PHI, and Medicaid (not including SCHIP) spending; FEHBP 2003, FEHBP premium increases; CalPERS 2002, CalPERS premium increases.

- CalPERS is a public agency that contracts annually for health benefits coverage on behalf of 1,100 member state and local public agencies in California. Many public agencies in lower cost markets choose not to join CalPERS. Approximately 1 million California public employees, retirees, and dependents were in CalPERS plans in 1997, 20 percent of them retirees. The rate of growth of CalPERS' premiums was lower than Medicare's over the last 10 years but higher over the last 12 years.<sup>11</sup>

A comparison between Medicare and Medicaid growth is of limited utility given the myriad eligibility and payment policy issues that are unique to Medicaid and have greatly influenced its growth rate. For example, Medicaid's growth has been influenced by increases in enrollment across all eligibility categories in the early 1990s; state use of financing mechanisms, such as provider taxes and disproportionate share payments; escalating prescription drug costs; and fluctuations in the economy that affect eligibility. In addition, there is wide variation in the amount of resources used by Medicaid enrollees, depending on age

and eligibility category. On a per-enrollee basis, Medicaid spending grew at roughly the same pace as Medicare between 1987 and 2001, and has grown at a slower pace than Medicare recently.

Comparisons with the Department of Veterans Affairs (VA) and the Department of Defense (DoD), significant public purchasers of health care services, are also not particularly apt. The VA differs from Medicare in that it owns and manages its own hospitals and clinics and operates within a capped budget. DoD also owns and operates some facilities, although it relies increasingly on TRICARE—a managed care entity that

<sup>11</sup> CalPERS' increases are a weighted average of the premiums of all individual and family policies calculated at the beginning of the annual open enrollment period for all enrollees except Medicare beneficiaries. CalPERS has a separate benefit design and associated premium for its retirees who are eligible for Medicare.

employs private-sector contractors—to deliver care to its Medicare beneficiaries, and operates within a capped budget (see Chapter 5 for further discussion).

### **Factors affecting Medicare and other health spending growth**

Growth in aggregate public and private spending for health care are influenced by many of the same underlying factors, but some dynamics affect one sector differently than the other. The most significant underlying factors that the two sectors share are inflation and increases in the volume and intensity of services delivered. Increases in volume and intensity (that is, shifts in the composition of services toward those that are more resource intensive) are due to technological developments and consumer demand, among other factors.

New technologies tend to increase costs, on balance, because they often mean that more services can be performed and more people can benefit from them.<sup>12</sup> As a result, total spending increases even though the unit cost of services may decline. New technologies may also replace less expensive technologies. Because these costlier technologies may offer only marginal improvement in patient outcomes, the increased spending is not necessarily offset by reduced spending on subsequent care. Of course, some new technologies may yield some savings. In particular, some suggest that new technologies that improve the process of health care delivery, such as electronic medical records and physician order entry technology, are likely to result in savings. However, because they have start-up costs and have not been widely implemented, their savings potential has not been fully tested.

Increases in consumer demand for services also lead to increases in volume and intensity. Because individuals are

shielded from much of the cost of their care, they tend to use more than they would otherwise. Similarly, physicians, who often direct beneficiaries' care, may be insensitive to costs when making treatment decisions. Second, increases in income, as experienced in the 1990s, tend to increase demand for health care services. A third factor is beneficiaries' changing expectations about their health status as they age. Beneficiaries do not view illness and debilitation as a necessary part of the aging process anymore. Instead, beneficiaries expect that medical services should enable them to retain their health and mobility, and even agility, as they age (Alliance for Aging Research 2001).

The aging of the population and impact of increased managed care enrollment are examples of dynamics that can affect the two sectors differently. While growth in the nation's population has been a steady and comparatively small factor driving overall health care spending for the population under 65 years of age (Ginsburg 2002), the looming retirement of the baby boom generation is certain to dramatically affect Medicare's spending. Medicare spending is greatly influenced by both the number of people over 65 and the increased longevity of those people. Accordingly, with the leading edge of the baby boom generation becoming eligible for Medicare in 2011 and life expectancy at age 65 projected to increase by 20–25 percent between now and 2075, Medicare spending is expected to increase significantly over the long term. In fact, as a result of these demographic shifts, the proportion of the nation's population over 65 is expected to nearly double by 2075 (from 12 percent to 23 percent by 2075) (CBO 2002b).

Throughout the 1990s, the private sector (and other public purchasers) turned to managed care as a way of controlling

spending growth. In a market characterized by excess capacity among providers, managed care plans were able to negotiate lower prices per service and, to a lesser extent, reduce the number of services provided. In contrast, Medicare's payment method for managed care services prevented the Medicare program from capturing any direct savings from managed care.<sup>13</sup> In fact, increases in managed care enrollment led to increased Medicare spending because of Medicare's inability to appropriately adjust payments to reflect the relative health status of managed care enrollees.

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### **Implications of Medicare spending given limited resources**

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Assessing the implications of spending growth requires an understanding of the nature of resource constraints and of accompanying pressures on policymakers to make choices in allocating resources. Among the resource constraints affecting Medicare spending are the federal budget, the Medicare trust funds, the size of the economy, and beneficiaries' ability to afford to pay the costs of their care.

#### **The federal budget**

Medicare is an increasingly large portion of the federal budget, leaving fewer resources available for other spending priorities. Current and anticipated annual budget deficits tend to increase pressure on policymakers to make choices about spending and find sources of budget savings. Because Medicare is such a large part of the budget, policymakers often look to savings from Medicare to reduce budget deficits.

Throughout the 1980s, Medicare program outlays accounted for between 6 and 8 percent of total federal spending. Over the

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12 For example, cataract procedures rose from 334,000 performed on an inpatient basis in 1980 to 1,487,000 performed either in hospital outpatient departments or in ambulatory surgical centers in 1996 (Moon 1999).

13 Indirect fee-for-service savings may have resulted from increased managed care enrollment overall to the extent managed care plans induced providers to adopt more conservative practice styles in caring for all their patients, including Medicare beneficiaries. This indirect savings is called the "spillover effect" (Baker 1997).

course of the 1990s, Medicare's share increased sharply to 13 percent in 1997, dipping 1 percent in the period following the BBA, then returning to 13 percent by 2001 (Figure 1-9).

According to the CBO, Medicare spending is projected to remain at about 13 percent of federal spending until 2007, when it is expected to grow faster than overall spending, reaching 16 percent of total spending by 2012. While projections of Medicare spending as a percentage of total federal spending provide a sense of the direction of the trend, they are inherently uncertain and may change if current law changes.

### The Medicare trust funds

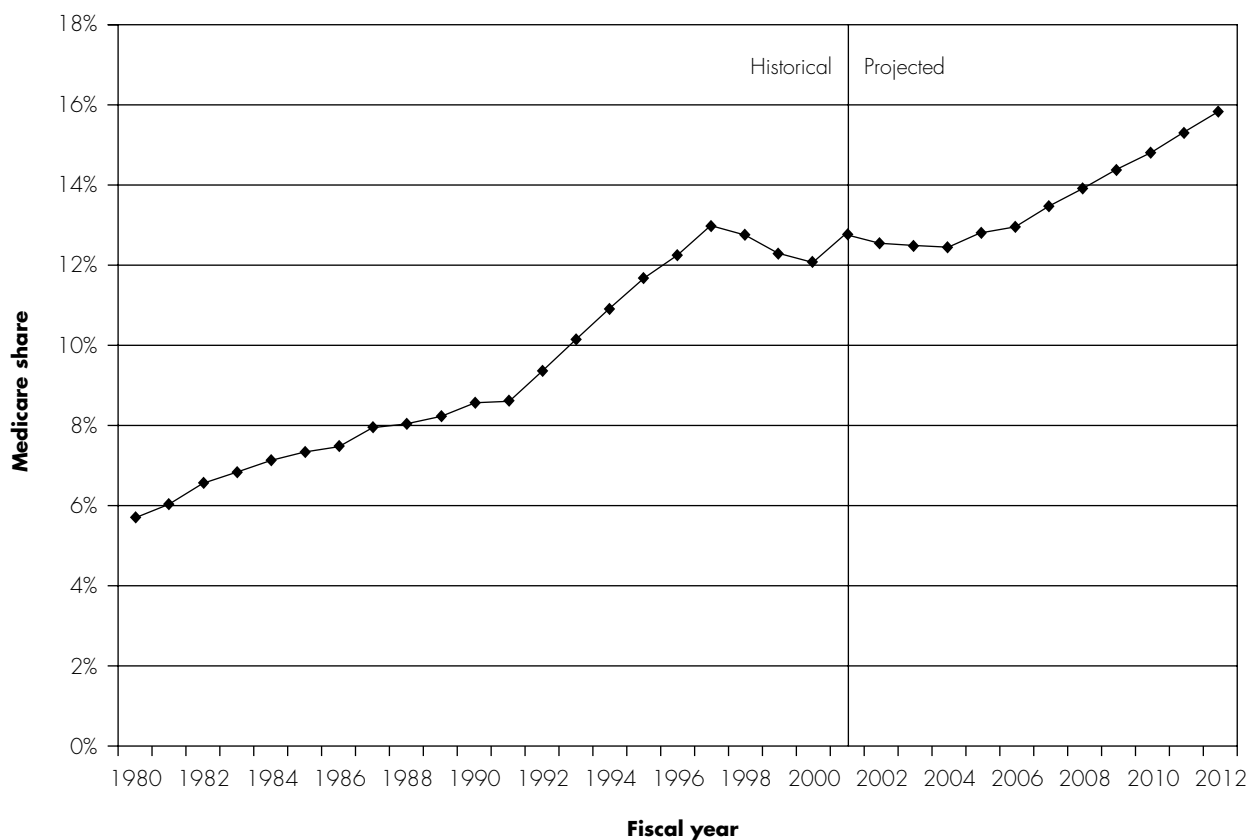
The Medicare program is financed through two trust funds: the Hospital Insurance (HI) trust fund for Part A services and the Supplementary Medical Insurance (SMI) trust fund for Part B services. Unlike the SMI trust fund, the HI trust fund can be exhausted if spending exceeds revenue plus reserves.<sup>14</sup> Once the HI trust fund is exhausted, Medicare stops paying its bills for Part A services. The pending insolvency date therefore exerts pressure on policymakers to balance trust fund revenue and spending to ensure continued operation of much of the program.

In recognition of the uncertainty of projections, the Medicare Trustees, who are responsible for reporting on the status of the Medicare trust funds, make a low-cost, high-cost, and intermediate projection. Solvency dates are reassessed annually and are subject to substantive change from year to year. Economic and legislative changes can quickly alter projections of solvency, in much the same way that they alter total annual federal budgetary surplus or deficit projections.

The HI fund is projected to become insolvent in 2030 under the Trustee's intermediate estimate. Costs are projected to begin exceeding tax revenues in 2016,

**FIGURE 1-9**

**Medicare spending as share of the federal budget, 1980-2012**



Note: Federal budget includes spending on Social Security.

Source: Congressional Budget Office, 2002.

<sup>14</sup> The HI fund's receipts come primarily from current payroll taxes (87 percent in 2001) and interest earnings on assets held by the trust fund (8 percent in 2001), with the remainder from beneficiary premiums, income taxes on Social Security benefits, and other sources (approximately 5 percent in 2001).

requiring the fund to use interest income to pay some costs. In 2021, projected costs would exceed all HI income, so trust fund assets would need to be spent to meet costs. Finally, the HI fund assets are projected to be exhausted in 2030. Under the Trustees' low estimate, the HI fund would remain solvent throughout the 75-year projection window (ending in 2076). Under the high-cost estimate, however, it would be exhausted in the year 2018 (Table 1-2).

In contrast to the HI fund, the SMI fund, financed primarily by federal general revenues and beneficiary premiums, is designed to remain solvent indefinitely. Current law automatically sets annual financing to cover SMI's expected costs for the upcoming year plus a "contingency reserve." However, as Medicare's beneficiary population grows with the retirement of the baby boom generation, and as health care costs continue to rise, the SMI fund is expected to require increasing amounts of general revenue and substantial increases in beneficiary premiums.

In addition, the trust fund financing structure affects the distributional impact of any policy and may encourage certain types of policy decisions. For example, if extending the solvency date of the HI trust fund is paramount, either spending reductions on Part A services or changes in the 2.9 percent payroll tax on worker wages (half of which is paid by employers and half of which is paid by employees) that finances the HI trust fund must be pursued. On the other hand, if the goal is to reduce beneficiary premiums, changes in Part B spending are needed. From a budgetary perspective, changes to Part B result in relatively smaller changes to the budget, because 25 percent of the change would be offset by premium changes.

## The economy

Medicare spending is growing as a percentage of the nation's economy, as measured by the gross domestic product (GDP). Depending on one's point of view,

**TABLE 1-2**

## Medicare HI trust fund solvency projections

	Year outgo exceeds income from payroll taxes	Year HI trust fund assets exhausted
Estimate		
High	2008	2018
Intermediate	2016	2030
Low	*	*

Note: HI (Hospital Insurance). \*Not exhausted within the 75-year projection period (ending 2076).

Source: 2002 annual report of the Boards of Trustees of the Medicare trust funds; CMS, Office of the Actuary, 2002.

Medicare's growth may signal the nation's collective preferences, a program growing out of control, or something in between. Regardless of one's point of view, however, this growing portion highlights the need to improve the value gained from increased spending.

For the historical period 1980 to 2001, Medicare's share of GDP rose from 1.2 percent in 1980 to a high of 2.5 percent in 1997 (Figure 1-10, p. 16). As a result of spending reduction provisions in the BBA, increased fraud and abuse scrutiny, and strong economic growth, Medicare spending declined slightly as a share of GDP to 2.2 percent in 2000. However, after passage of legislation that tempered previously enacted payment reductions, it has since risen to 2.4 percent in 2001 and is projected to increase steadily to 2.8 percent by 2012. It is estimated that by 2030 Medicare will climb to 5.4 percent of GDP. When the three big entitlement programs—Medicare, Social Security, and Medicaid—are taken as a whole, they will account for 14.7 percent of GDP by 2030 (Crippen 2002b). Because these figures exclude spending by beneficiaries, or on behalf of beneficiaries by Medicaid or private insurers, for coinsurance and deductibles associated with the Medicare benefit package, the total share of GDP related to Medicare-covered services would be even higher.

Medicare growth of this magnitude raises questions about how these costs will be borne by taxpayers and beneficiaries in

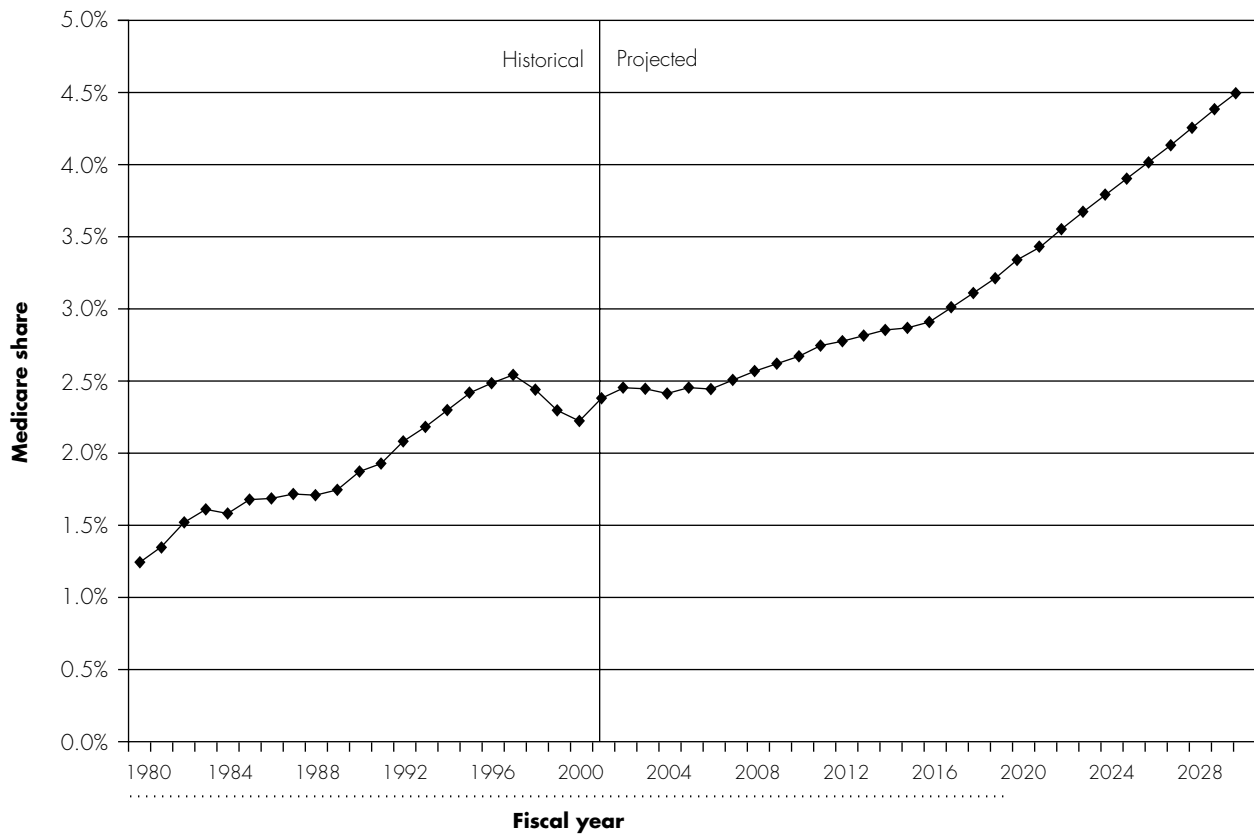
the future. If Medicare's spending were financed by raising taxes or increasing beneficiary contributions, less disposable income would be available for consumption or investment. Raising payroll taxes affects all workers, but particularly affects low-income workers because the payroll tax is not graduated; raising income taxes would likely affect income groups more progressively because income taxes are calculated as a graduated percentage; and raising premiums affects beneficiaries exclusively and would have different distributional effects depending on whether the increase were adjusted by income. Alternatively, Medicare's growth could be financed by more borrowing. In that case, more capital would be invested in government-issued debt and less would be available for private investment, which in turn could slow economic growth.

## Beneficiaries' ability to absorb health care costs

Like other people, many beneficiaries have limited ability to absorb rising health care costs. Although beneficiaries 65 years of age and older have lower poverty rates than younger people, most elderly households—56 percent in 1999—have incomes below \$20,000. On average, these households spend 25 percent of their income on health care (CMS 2002). Beneficiary out-of-pocket spending on health care includes direct spending on uncovered services, cost-sharing for

**FIGURE 1-10**

**Medicare spending as share of GDP, 1980–2030**



Note: GDP (gross domestic product).

Source: Congressional Budget Office, 2002; years 2020 to 2030 are from 2002 annual report of the Boards of Trustees of the Medicare trust funds, and are presented on a calendar year basis.

Medicare-covered services, payments for Medicare Part B premiums, and payments for supplemental insurance premiums. Because there is a potential for high out-of-pocket spending, the vast majority of beneficiaries have supplemental insurance coverage (see Chapter 5 for further discussion).

Beneficiaries' resource constraints are important to keep in mind when assessing the level and distribution of out-of-pocket spending and evaluating policy options. Changes in the scope of Medicare's coverage and levels of cost-sharing affect beneficiaries' out-of-pocket spending. In addition, beneficiaries' out-of-pocket spending is directly affected by changes in payment for Part B services because coinsurance for Part B services is

calculated, in general, as 20 percent of payment and Part B premiums are calculated as 25 percent of total Part B spending.

**Extent of Medicare coverage**

Medicare provides considerable financial protection to its enrollees, but beneficiaries are at risk for substantial out-of-pocket costs. For all beneficiaries, including the institutionalized and those in Medicare+Choice (M+C), Medicare covered 52 percent of total costs, or \$9,573, in 2000. On average, beneficiaries who were in the traditional fee-for-service program and living in the community consumed \$8,200 in health care services in 2000, of which Medicare covered 57 percent.

While the proportion of beneficiaries' health care costs covered by Medicare has remained largely unchanged since 1993 for institutionalized beneficiaries and those in managed care, the proportion for fee-for-service beneficiaries living in the community has declined from 63.2 percent in 1993. This decline may result from several factors, including an increase in the working aged, for whom Medicare is the secondary insurer, and an increase in the proportion of the disabled, for whom Medicare pays a smaller proportion of total costs than for the aged. However, much of this change is attributable to growth in out-of-pocket spending on prescription drugs—a trend that can be expected to continue absent legislative change. CBO estimates that spending per



Medicare beneficiary for prescription drugs will increase from \$2,439 in 2003 to \$5,816 in 2012, an average annual change of 10.1 percent (CBO 2002a).

According to a MedPAC analysis of Medicare Current Beneficiary Survey (MCBS) data, growth in out-of-pocket costs for fee-for-service beneficiaries living in the community has outpaced growth in their income and the largest source of out-of-pocket growth has been for noncovered services. Between 1993 and 2000, growth in beneficiaries' out-of-pocket spending was slightly faster (5.4 percent on average) than their growth in income (3.8 percent on average). More than three-quarters of growth in out-of-pocket spending in this time period was due to increased spending on noncovered services and supplemental insurance premiums.

On average, beneficiaries spend about 20 percent of their income on health care services, but it is perhaps more useful to consider the distribution of spending by income. Households with incomes less than \$10,000 in 2000 spent 29 percent of their income on health care, and households with incomes between \$10,000 and \$19,000 spent 22 percent of their income on health. In contrast, households with incomes greater than \$70,000 spent 5 percent of their income on health care (CMS 2002).

Entities that subsidize supplemental coverage also find it difficult to keep up with rapidly growing health care costs. Medicaid provides assistance to certain low-income beneficiaries by providing coverage for benefits that Medicare does not cover and paying for beneficiaries' Medicare premiums and/or cost-sharing for Medicare-covered benefits, depending on beneficiaries' income and state eligibility income thresholds. Growth in these costs has contributed to recent state budget strains and deficits. Employers are also affected to the extent that they offer supplemental coverage for their retirees. Recent surveys indicate that they are considering reducing this coverage or eliminating it for new employees (Kaiser Family Foundation 2002).

## Assessing the implications

Because beneficiaries differ in their use of services, access to supplemental insurance coverage, and ability to afford their care, the current burden of out-of-pocket liability and spending varies. Any policy changes would have different implications for different types of beneficiaries. To assess the distributional implications of growth in beneficiary out-of-pocket spending, policymakers must consider these characteristics and their interrelationships.

Out-of-pocket spending is concentrated among a minority of beneficiaries, though less so than Medicare spending. In 2000, 5 percent of all beneficiaries account for 20 percent of total out-of-pocket spending. The highest levels of out-of-pocket spending are related to higher levels of spending for noncovered services. Spending for noncovered services accounted for nearly 46 percent of out-of-pocket spending for beneficiaries in the highest quartile, while out-of-pocket spending for noncovered services hovered around 30–35 percent of total out-of-pocket spending for all other beneficiaries (Figure 1-11, p. 18).

In general, MCBS data show that Medicare beneficiaries who have low out-of-pocket spending fit one of two profiles. The first group includes relatively young and healthy people, between ages 65 and 74, for instance, and disabled beneficiaries who have stable conditions and use few services. Within this group are people who have only Medicare coverage and those who have additional coverage but do not pay the associated premiums. The second group includes people with comprehensive supplemental coverage, including beneficiaries eligible for Medicaid, and relatively high-income people with good employer-sponsored coverage who pay a small or no portion of the premium.

In contrast, people who have high out-of-pocket spending pay more for supplemental coverage and noncovered services. They tend to be older, use many services, and have relatively high

incomes, and they are more likely to have supplemental coverage, primarily Medigap that does not pay much of their noncovered services. Accordingly, to the extent that employers reduce the supplemental coverage they offer, affected beneficiaries may buy Medigap coverage, but between higher premiums and less comprehensive coverage, they will pay more out-of-pocket.

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## Spending and other implications of MedPAC's recommendations

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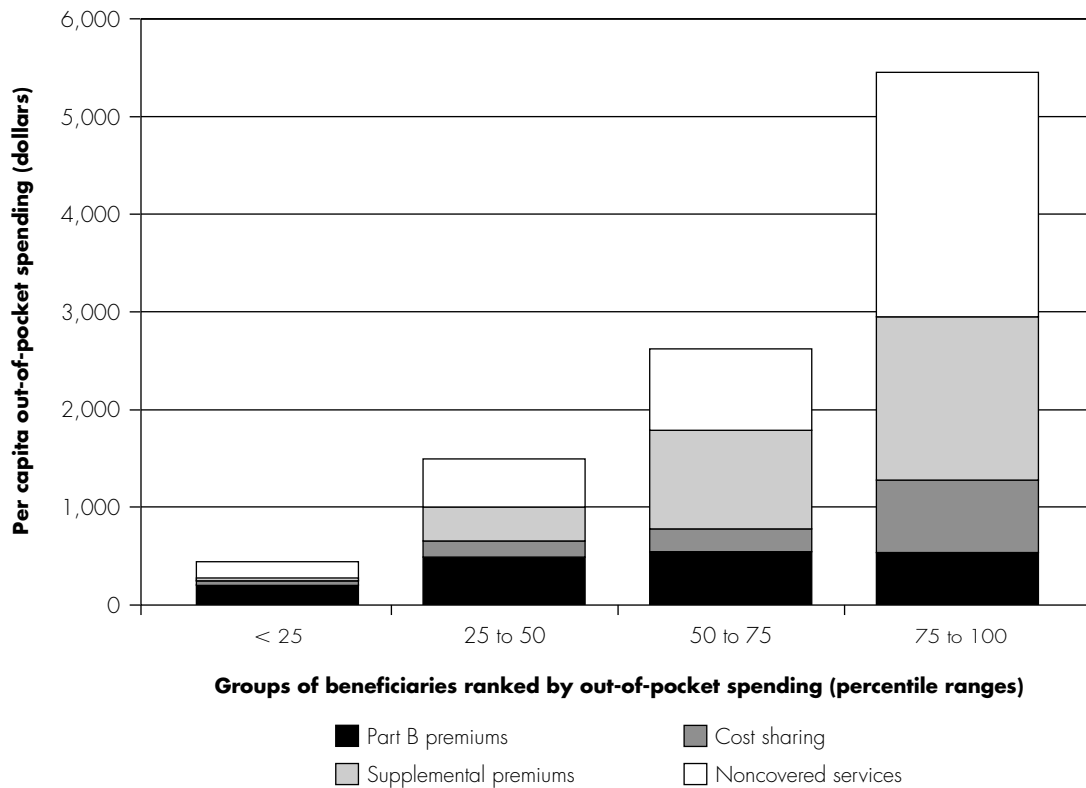
Given limited budgetary, economic, and beneficiary resources, MedPAC's recommendations should be made and considered by policymakers with an understanding of their consequences for spending as well as for beneficiaries and providers. Accordingly, a few changes from previous MedPAC reports will be evident in the pages that follow. First, in this report, we will make the implications of MedPAC's policy recommendations prominent in the text.

Second, where applicable, MedPAC will provide one- and five-year estimates of spending change for its recommendations, expressed as being within one of several predetermined dollar ranges (Table 1-3, p. 18). In the past, our estimates of spending impact were often expressed as a percentage increase in baseline spending or were discussed in general terms. This new approach is intended to give readers a better and more direct sense of the potential spending impact of a given policy recommendation.

MedPAC recognizes that other organizations, including CBO, CMS' Office of the Actuary (OACT), OMB, and the Medicare Trustees, specialize in and have a legislated role in forecasting Medicare spending and estimating the impact of policy options. MedPAC's estimates are intended only to aid readers in considering the implications and scale of a given recommendation. They are not formal budget or trust fund estimates. MedPAC will consult, or work in tandem,

**FIGURE  
1-11**

**Composition of out-of-pocket spending, by out-of-pocket spending level, 2000**



Note: Sample of 9,577 includes community-dwelling beneficiaries who participated in traditional Medicare in 2000. Out-of-pocket spending includes beneficiaries' direct spending in four categories: the Part B premium, cost sharing for covered services, supplemental premiums, and noncovered services. The vertical bars represent per enrollee out-of-pocket spending, divided into the four categories, for each group. For example, the < 25 group illustrates per enrollee out-of-pocket spending for beneficiaries with the 25 percent smallest values (the lowest quartile). Likewise, the 75 to 100 group illustrates per enrollee out-of-pocket spending for beneficiaries with the 25 percent largest values (the highest quartile).

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use file, 2000.

**TABLE  
1-3**

**Dollar ranges for one- and five-year spending estimates**

1-year estimates	5-year estimates
No spending	No spending
< \$50 million	< \$250 million
\$50–\$200 million	\$250 million–\$1 billion
\$200–\$600 million	\$1 billion–\$5 billion
\$600–\$1.5 billion	\$5 billion–\$10 billion
Over \$1.5 billion	over \$10 billion

with CBO and the OACT to inform the estimates and reduce the likelihood of widely different estimates for the same policies. Nevertheless, separately produced CBO or OACT estimates are in no way constrained by MedPAC estimates.

We have elected to express our estimates of spending changes in terms of a one- and five-year dollar range. One-year estimates may be particularly relevant for our payment update recommendations, where we fully expect to revisit the recommendations for the following year. Five-year estimates may be more helpful for more long-term policy recommendations, particularly those that

include a phased-in approach that delays realization of the full spending impact beyond the first year.

We are presenting a range for each estimate, rather than a point estimate, for several reasons. First, because MedPAC's estimates are intended to give readers only a sense of scale, ranges are more realistic indications of impact than point estimates (see text box). Second, many of our recommendations are not sufficiently detailed to produce a point estimate. Third, we hope that by presenting a range, we reduce any possible confusion between our estimates and those of CBO or the OACT.

## Why spending estimates may change

Spending estimates may change because of the considerable uncertainty in projecting future spending and the complex technical aspects of such projections. For this reason, the Commission is providing some background information on estimating Medicare spending.

First, spending estimates depend on assumptions about Medicare spending absent any new policy changes. These spending assumptions define the current law baseline (also referred to simply as the baseline). Three versions of the current law baseline are produced separately by CBO, the Office of the Actuary for OMB, and the Medicare Trustees, and each is updated at least once a year to incorporate new assumptions about spending or the impact of recent legislative or regulatory changes to the program.

Sometimes the baseline will change significantly based on new

information about the use and/or mix of services or the prices paid for services. Accordingly, an estimate that was based on a baseline including one set of assumptions may be very different if the underlying assumptions change. For example, baseline assumptions about M+C enrollment have changed dramatically. A policy change to M+C payments will have different implications now than it would have in 1998 when enrollment in M+C was higher than its current level.

Second, estimating the behavioral response of providers and beneficiaries to a policy proposal is highly imprecise. Different estimates are likely based on different assumptions about whether the policy will, for example, increase or decrease the volume of services delivered. Differences in these assumptions can result in major changes in the spending estimate for the policy. ■

Three other caveats should also be considered. First, the spending implications for each recommendation have been developed as if the policy were the sole change. If other policy changes were to be made simultaneously, there could be interactions that would influence the spending implications. Accordingly, we caution against attempts to add up the spending implications across recommendations. Second, our estimates do not reflect the impact on spending for other programs, such as Medicaid, VA, or DoD, and as such do not approximate formal budget estimates. Third, differences may arise between what is intuitively thought to affect spending and what is considered “scorable” for purposes of budget laws. For example, CBO generally scores changes in law, not changes in administrative policy. ■

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