CHAPTER 1

Context for Medicare payment policy

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Chapter summary

Medicare payment policies must be considered in the broader context of the nation's health care system—including spending, delivery of care, access to and use of services—and pressure on federal and state budgets. Health care has accounted for a large and growing share of economic activity in the United States, nearly doubling as a share of gross domestic product (GDP) in the period between 1980 and 2012, from 8.9 percent to 17.2 percent. Growth in spending has slowed somewhat in recent years, dropping below growth in GDP in 2011 and 2012. Although the causes of this slowdown are debated, the decade-long period of slow economic growth from 2000 to 2011, decline in real incomes, and shift to less generous insurance coverage have all likely had an effect on the growth in health care spending.

The level of and growth in health care spending significantly affect federal and state budgets since public spending on health care accounts for nearly half of all health care spending. If this spending continues to consume an increasing share of federal and state budgets, spending for other public priorities—like education and investment in infrastructure and scientific research—will be crowded out, and the federal government will have less flexibility to support states because of its own debt and deficit burdens. Social Security, Medicare, Medicaid, other health insurance programs, and net interest will account for about 14 percent of GDP in 10 years, whereas total federal revenues have averaged a little over 17 percent of GDP over the past 40 years.

In this chapter

Further, health care spending has a direct and meaningful impact on individuals and families. Evidence shows that the increases in premiums and cost sharing have negated real income growth in the past decade. Likewise, premiums and cost sharing for Medicare beneficiaries are projected to grow faster than Social Security benefits. The lasting effects of the recent economic recession affected the income, insurance status, and assets (namely, the value of owned homes) of many people, including Medicare beneficiaries and adults aging into Medicare eligibility.

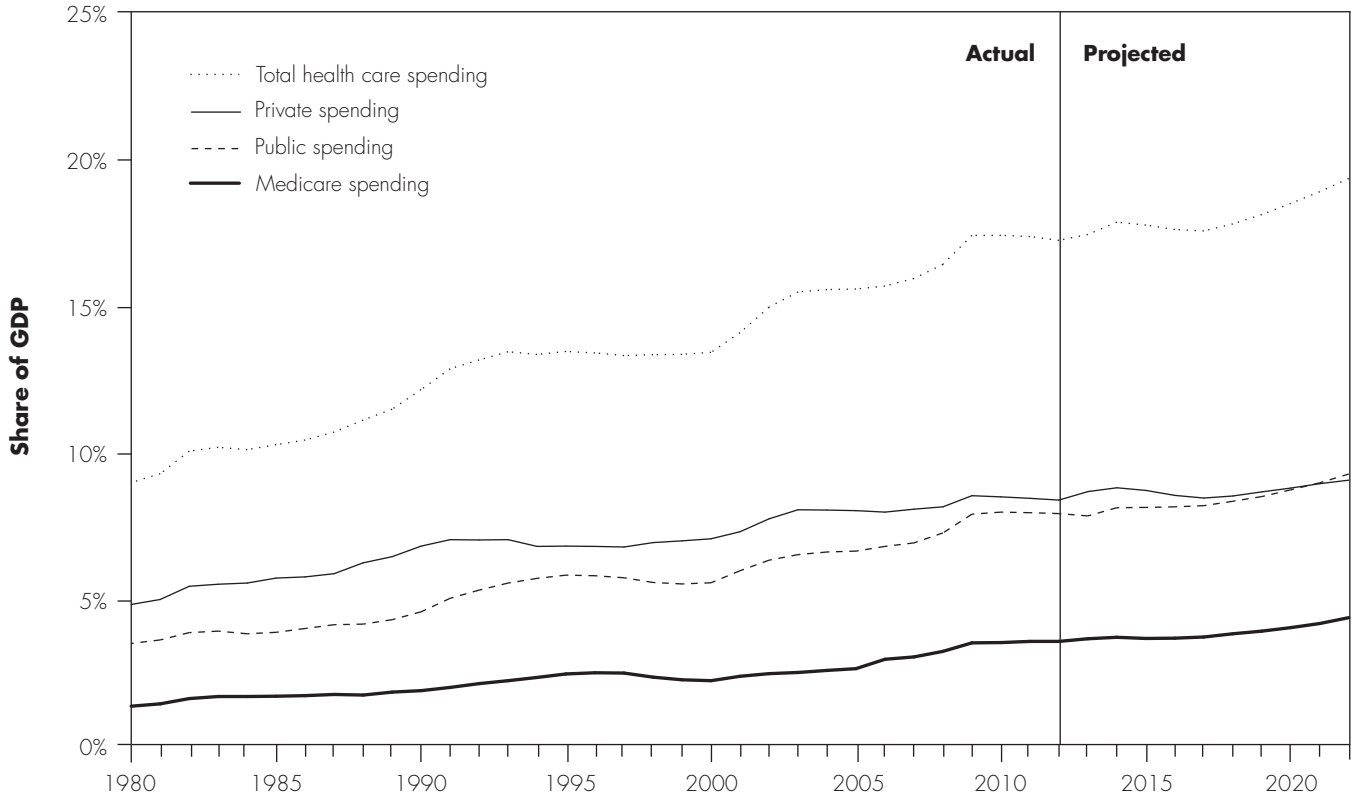
Medicare spending per beneficiary over the next 10 years is projected to grow at a slower rate than in the past 10 years (3.3 percent annually compared with 6.1 percent annually). The lower projections for growth in spending per beneficiary are due in part to reduced updates of fee-for-service Medicare and lower payments to managed care plans and in part to the recent slowdown in use of services. At the same time, the number of Medicare beneficiaries will grow notably faster as the baby-boom generation ages into the program (about 3 percent annually compared with about 2 percent annually in the past). Despite the slower growth rate in spending per beneficiary projections, total Medicare spending will continue to increase because of the sustained increase in the number of Medicare beneficiaries. As a result, the program still faces substantial deficits over the long term, and the Hospital Insurance Trust Fund is projected to be exhausted by 2026.

There are indications that some share of health care dollars is not spent effectively or is simply misspent. First, health care spending varies significantly across different regions of the United States, but studies show that populations in the higher spending and higher use regions do not consistently receive better quality care, even after adjusting for observable differences in beneficiaries' health status across regions. Internationally, the United States has much higher per capita spending on health care compared with other developed countries, but its citizens have shorter life expectancies and poorer average health outcomes than people living in many other countries. Finally, while minority Medicare beneficiaries represent a disproportionate share of high-spending beneficiaries, they tend to experience worse risk-adjusted health outcomes, suggesting that at least a portion of the high spending is not improving the health of minority beneficiaries.

Health care spending and growth in spending put pressure on government, family, and individual budgets. For the Medicare program, this pressure is particularly acute given the outlook for the federal budget and the projected increases in Medicare enrollment. Because the Medicare program pays for just over one-fifth of all health care in the United States, it has an important influence on the shape of the health care delivery system as a whole. Therefore, it must pursue reforms that control spending and create incentives for beneficiaries to seek and providers to deliver high-value services. ■

FIGURE 1–1

Health care spending has risen as a share of GDP



Note: GDP (gross domestic product). Total health care spending is the sum of all private and public spending. Medicare spending is one component of all public spending. Medicare spending reflects current law, which includes the sustainable growth rate.

Source: MedPAC analysis of the 2012 version of the National Health Expenditures released in January 2014 and National Health Expenditure Projections 2012–2022 released in September 2013 by the Centers for Medicare & Medicaid Services Office of the Actuary. Historical GDP data is from the Bureau of Economic Analysis (BEA) downloaded in December 2013. Those data reflect BEA's upward revisions of GDP estimates first released in July 2013. Projected GDP data are from the Congressional Budget Office (CBO) report *The 2013 Long-Term Budget Outlook* released September 2013. CBO's projected GDP data also reflect BEA's upward revisions.

Introduction

The following topics provide important context for the Medicare payment policies discussed in the other chapters of this report:

- the growth in health care spending and the main drivers of that growth,
- Medicare's role in and effect on the whole of the federal budget and how growth in health care spending affects current and future federal and state budgets,
- changes in the Medicare-eligible population,
- the effect of growth in health care spending on individuals and families, and
- variation in health care spending and quality of care, indicators that suggest health care dollars may be substantially misspent or misallocated.

Taken together, these points about the levels and growth of health care spending undergird the Commission's payment update recommendations and its call for payment reforms.

Growth in health care spending

Total health care spending consumes an increasing proportion of national economic resources, accounting for a double-digit share of gross domestic product (GDP) annually since 1982 (Figure 1-1). As a share of GDP, total

The level of health care spending and factors that influence spending growth

Factors that influence health care spending trends include technology, prices, changes in provider and insurer market power, health insurance, and changes in demographics and patient characteristics (particularly in income and wealth). Interactions among factors add an additional layer of complexity to attributing causes of spending levels, growth, and slowdowns. Since the baseline for growth is built from the level of health care spending, we include it in the discussion of some of the growth factors.

- Technology is credited as having the largest single effect on growth in health care spending (ranging across studies from 38 percent to more than 65 percent of spending growth attributed to technology) (Cutler 1995, Newhouse 1992, Smith et al. 2009). In most studies, analysts have not directly measured technology's effect on health care spending because it is difficult to do so. Instead, they have estimated the contributions of other measurable demographic and economic factors on health care spending and attributed the unexplained portion of spending growth, or residual, to technology. Therefore, depending on the study, the term *technology* can be interpreted broadly to mean any factor that cannot be measured. Technology can include not only new procedures and treatments but also old procedures and treatments applied to a different population or for a different purpose from what was originally intended (Ginsburg 2008). Some new technologies such as the application of procedures and treatments that are not proven for a given purpose and interventions that are not proven for a specific contingent of patients could increase spending growth without producing better health outcomes (Baicker and Chandra 2011, Garber et al. 2007, Redberg 2011, Welch 2012).
- Both the level and growth of prices for health care products and services have a major effect on health spending. Prices are higher in the United States than they are in other developed countries, without correspondingly higher quality or outcomes (Anderson et al. 2005, Anderson et al. 2003, Anderson and Squires 2010, Laugesen and Glied 2011). Prices vary across geographic areas, payers, and providers and are rarely transparent; however, studies consistently cite growth in prices (between 10 percent and 25 percent) as a leading cause of health spending growth (Coakley 2011, Health Care Cost Institute 2012a, Health Care Cost Institute 2012b, Laugesen and Glied 2011).
- Provider market power and insurer market power also have major effects on prices and therefore

(continued next page)

health care spending increased from about 9 percent in 1980 to a little over 17 percent in 2009 and has remained at about that share through 2012.[1] It is projected to rise to about 19 percent of GDP by 2022.[2] Why health care spending has increased at a faster rate than GDP is not well understood. Some analysts conclude that the factor with the greatest impact on spending growth is the advancement of medical technology (Chernew and Newhouse 2012). From this point of view, the term *technology* is interpreted broadly to mean any factor that influences spending growth but cannot be measured (see text box for a discussion).

In 2012, public spending made up 49 percent of total health care spending and private spending made up 51 percent.[3] In 2021, public spending is projected to begin to exceed private spending as Medicare enrollment accelerates with the aging of the baby-boom population (individuals born between 1946 and 1964), enrollment in Medicaid expands, and subsidies for coverage purchased in the new health insurance exchanges are provided under provisions of the Patient Protection and Affordable Care Act of 2010 (PPACA).[4] Medicare spending has also grown as a share of the economy from a little over 1 percent of GDP in 1980 to 3.5 percent in 2011. By 2022, Medicare is projected to total 4.3 percent of GDP.

National health care spending

In 2012, total U.S. health care spending reached $2.8 trillion, or $8,915 per person (Martin et al. 2014, Office of

The level of health care spending and factors that influence spending growth (cont.)

health care spending. Hospitals, physician groups, and health insurers alike are increasingly consolidating (Berenson et al. 2012, Cutler and Scott Morton 2013, Robinson 2004). One reason providers merge is to gain market power over insurers to negotiate higher payment rates (Berenson et al. 2012, Berenson et al. 2010, Coakley 2010). (Increased efficiency is another reason cited to explain why providers merge, although studies have not shown a strong link between the two.) Studies have found that hospital prices increased by 5 percent or more as a result of consolidation, and at the same time, quality of care declined (see Gaynor and Town (2012) and Vogt and Town (2006) for syntheses of the research). However, in the presence of provider consolidation, insurance market concentration can decrease health care spending because providers may have less leverage in negotiating prices where insurers are dominant (Moriya et al. 2010, Trish and Herring 2013).

- Health insurance coverage—while increasing access to health care and protecting beneficiaries against the risk of financial hardship when they need expensive health care—reduces the incentive for insured individuals to seek the lowest priced effective service. Researchers suggest that population-level changes in insurance coverage may be responsible for up to half of the increase in per capita health care spending since 1950 (Finkelstein 2007, Peden and Freeland 1995). Studies of Oregon's experiment in extending Medicaid coverage by lottery showed that people randomly chosen for Medicaid coverage used services more—an estimated 25 percent more than the uninsured control group (Baicker and Finkelstein 2011, Finkelstein et al. 2012). More recently, the shifting of health care costs to insurers has slowed due to rising coinsurance, copayments, and deductibles, likely contributing to the recent slowing of the growth in health care spending (Kaiser Family Foundation and Health Research and Education Trust 2013).
- Demographics and patient characteristics (especially income and wealth) also affect spending growth. People who have more expendable income and wealth will use more of it on health care services (Newhouse 1992). National income growth, in tandem with expanding insurance coverage, can drive investment and changes in health technologies (Smith et al. 2009). Changes in the age and health status of a population also affect changes in health care spending. ■

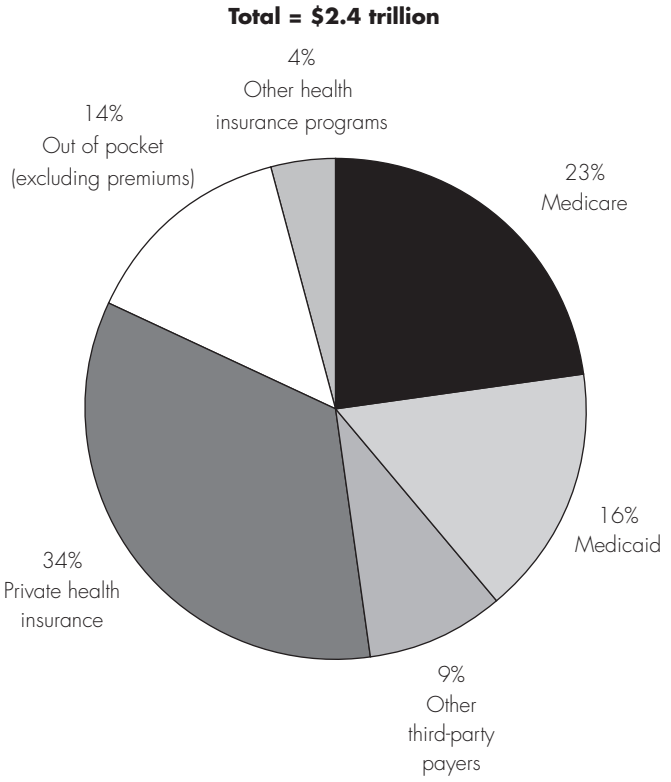
the Actuary 2014). The bulk of that spending—accounting for about 85 percent of spending in the health care sector at $2.4 trillion—was for personal health care spending. That category includes spending for all medical goods and services that are provided for the treatment of an individual. The remaining expenditures are for broad categories of spending that support the provision of health care, including the administrative costs of private and public insurers; the spending by public health departments; and investments in medical research, equipment, and structures.

The largest share of personal health care spending for all payers was for hospital care ($882 billion, or 37 percent) and physician and clinical services ($565 billion, or 24 percent). A smaller share went to spending on prescription drugs ($263 billion, or 11 percent), nursing home care ($152 billion, or 6 percent), and home health services ($78 billion, or 3 percent) (Office of the Actuary 2014).

Medicare is the largest single purchaser of health care in the United States. Of the $2.4 trillion spent on personal health care in 2012, Medicare accounted for 23 percent, or $538 billion, and covered 49.7 million enrollees.[5] Medicaid—a program financed by the federal and state governments that pays for health care services for low-income people—accounted for 16 percent of spending and had an average monthly enrollment of about 56 million people.[6] Thirty-four percent of spending was financed through private health insurance payers covering 188 million people.[7] Individuals contributed 14 percent in the form of out-of-pocket spending; in addition, they made

FIGURE 1–2

Medicare is the largest single purchaser of personal health care, 2012



Note: Personal health care is a subset of national health expenditures. It includes spending for all medical goods and services that are provided for the treatment of an individual and excludes other spending, such as government administration, the net cost of health insurance, public health, and investment. Out-of-pocket spending includes cost sharing for both privately and publicly insured individuals. Premiums are included in the shares of each program (e.g., Medicare, private insurance) rather than in the share of out-of-pocket category. Other health insurance programs include the Children's Health Insurance Program, Department of Defense, and Department of Veterans' Affairs. Other third-party payers include worksite health care, other private revenues, Indian Health Service, workers' compensation, general assistance, maternal and child health, vocational rehabilitation, other federal programs, Substance Abuse and Mental Health Services Administration, other state and local programs, and school health.

Source: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Expenditure Accounts, "Table 6 Personal Health Care Expenditures; Levels, Percent Change and Percent Distribution, by Source of Funds: Selected Calendar Years 1970–2012," released January 2014.

premium contributions that are included in the totals for Medicare and private health insurance spending (Figure 1-2).

Recent slowdown in health care spending

Historically, growth in health care spending has outpaced GDP growth (Figure 1-1, p. 5). In recent years, however, national health expenditure data have shown a significant slowdown in health care spending, with growth in health care spending dropping below the growth in GDP in 2011 and 2012.[8] From 2009 to 2012, spending grew an average of 3.7 percent per year. In contrast, from 1980 to 2012, spending grew an average of 7.8 percent per year. The slower growth rate in recent years led to a slight decrease in health care spending as a share of GDP, declining from 17.4 percent in 2009 to 17.2 percent in 2012.

Many analysts attribute the slowdown to the economic recession of 2007 to 2009 (the Great Recession) and the slow recovery in its aftermath (Cuckler et al. 2013, Fuchs 2013, Hartman et al. 2013, Kaiser Family Foundation 2013, Keehan et al. 2012, Martin et al. 2014). Under that view, health care spending growth is expected to rebound as the economy recovers, and health care spending will once again consume an ever-increasing share of economic output.

The Office of the Actuary (OACT) in CMS shares that viewpoint and attributes the slowdown to the rise in unemployment and decline in income, assets, and private health insurance coverage during the economic downturn (Hartman et al. 2013). Examining data over the last 45 to 60 years, analysts at OACT and elsewhere have found that sharp increases (and decreases) in economic output have been accompanied by similar movements in health care spending (Centers for Medicare & Medicaid Services 2013, Fuchs 2013, Kaiser Family Foundation 2013). Once economic conditions improve significantly, OACT expects health care spending growth to accelerate (Cuckler et al. 2013).

Alternatively, a second point of view attributes the slowdown to more permanent changes in health care markets and concludes that the slower growth rates may persist—somewhat alleviating budget pressure on federal and state governments, third-party payers, and individuals (Cutler and Sahni 2013, Ryu et al. 2013). That viewpoint is supported by studies that found the slowdown was too large to be explained by the recession and even predated the recession by a couple of years (Cutler and Sahni 2013, Roehrig et al. 2012, Ryu et al. 2013). The authors conclude that the slowdown was caused by structural changes in the health care system such as the slowed rate of introduction of new medical technology and, therefore, may persist after the economy fully recovers.

Finally, a third point of view maintains there are three reasons for the spending slowdown in addition to the Great Recession (Holahan and McMorrow 2013):

- The decade-long period of slow economic growth from 2000 to 2011. The economy was in a recession in the early part of the decade and recovered somewhat in the middle before the Great Recession began at the end of 2007. Over the decade, real median household income declined about 10 percent.
- A shift away from employer-sponsored coverage. The proportion of the population with employer-sponsored insurance (ESI) declined 10.9 percentage points, while the Medicaid proportion increased 6.6 percentage points and the proportion of those who were uninsured increased 3.2 percentage points. Medicaid and the uninsured typically pay hospitals and physicians significantly less than ESI. The authors conclude that the real income declines and the shift to less generous coverage slowed the growth in provider revenue. Providers responded by cutting costs, which further reduced spending growth.
- A variety of structural changes contributed to slower spending growth, including payment rate cuts in Medicare, growth in beneficiary cost sharing, and state efforts to contain Medicaid costs. However, they argue that it was the decade-long period of slow economic growth, decline in real incomes, and a shift toward less generous insurance coverage that caused those structural changes.

What do those viewpoints mean for the future? If economic trends caused the slowdown, will growth in health care spending pick up as the economy recovers? If, instead, the slowdown is due to structural changes in health care markets, will growth in health care spending continue to be modest? The Commission maintains that past trends will not necessarily carry into the future—regardless of whether or not they were caused by economic fluctuations or by structural changes. As an example, in the mid-1990s, health care spending slowed dramatically, in part due to a structural change—the rise of managed care plans—but then spending ramped up again as providers and beneficiaries rejected those plans. Similarly, poor economic conditions over the last decade may have exerted pressure on providers to reduce costs, but as the economy recovers and payment pressure diminishes, costs could increase.

Furthermore, even if the growth rate of health care spending has slowed, there is agreement that it will still outpace the growth rate of GDP. In response to the slowdown, the Congressional Budget Office (CBO) has substantially reduced its projections of federal health care spending for the coming decade, but federal spending is still projected to grow more than 2 percentage points faster than the growth rate of GDP (Congressional Budget Office 2013a). OACT estimates that national health spending will grow 1 percentage point faster over the next decade, and an analysis by researchers at Harvard and Dartmouth predicts that it will grow 1.2 percentage points faster over the next couple of decades (Chandra et al. 2013, Cuckler et al. 2013). While those projections are lower than the historical rate—since 1960, national health spending has grown at 2.6 percentage points above the growth rate of GDP—they are still on track to substantially impact the U.S. government, states, employers, individuals, and families.

Finally, studies have found that a significant share of health care spending in the United States is wasteful; even if the growth rate of health care spending slows, much can be done to improve quality of care while lowering cost per beneficiary (Berwick and Hackbarth 2012, Institute of Medicine 2012). The Commission maintains that future trends depend, in large part, on policy decisions made today. Accordingly, the Commission will continue to work on efforts to encourage efficient use of resources and promote coordinated, high-quality health care.

Growth in Medicare spending

Like overall health care spending, the growth in Medicare spending per beneficiary also slowed in the last few years. From 2010 to 2012, Medicare spending per beneficiary grew an average of 1.6 percent per year, or at roughly 2 percentage points below the growth rate of per capita GDP. Historically, however, Medicare spending per beneficiary has grown at roughly 2 or 3 percentage points above the growth rate of per capita GDP. The recent slowdown has been due to both modest payment rate increases and low utilization growth for some sectors (see text box, p. 10, for a description of 2012 program spending and funding).

Despite the overall slowdown, some sectors experienced robust growth. From 2010 to 2011, per beneficiary spending on hospital outpatient services grew 6.3 percent and per capita spending on physician-administered drugs grew 11.4 percent. Moreover, Medicare spending overall continues to grow faster than the growth rate of GDP as

Medicare program spending and funding

Medicare's spending covers acute and post-acute care, ambulatory care, and prescription drugs (Table 1-1). The Medicare program is funded by premiums and cost sharing, payroll taxes, general revenue, and other sources (Table 1-2). General revenue transferred to Medicare accounts for 40 percent of Medicare's revenue (and represents about 16 percent of all income taxes collected by the government) (Congressional Budget Office 2013b).

- ***Part A is Medicare's Hospital Insurance benefit,*** which covers hospitalizations and post-acute care. Part A is financed through a 2.9 percent payroll tax split between employers and employees and, since 2013, an additional 0.9 percent payroll tax on wages over $200,000 for single filers and $250,000 for married filers.
- ***Part B is a part of Medicare's Supplementary Medical Insurance benefit,*** which covers outpatient hospital services and ambulatory care as well as home health care under certain circumstances. Part B is financed primarily through beneficiary premiums and general revenue. Since 2011, Medicare also collects a fee from pharmaceutical manufacturers to fund Part B.
- ***Part C is the Medicare Advantage (MA) program,*** which contracts with private plans to offer Part A and Part B services. The MA program is funded through beneficiary premiums and transfers from Part A and Part B.
- ***Part D is a part of Medicare's Supplementary Medical Insurance benefit,*** which covers outpatient pharmaceuticals and is financed through beneficiary premiums, general revenue, and payments from the states. States make payments to Medicare since Medicare assumed primary responsibility for prescription drug benefits for enrollees who have both Medicare and Medicaid.

Nearly all parts of Medicare have some beneficiary cost sharing through deductibles and coinsurance. The Medicare program does not have a catastrophic limit on cost sharing other than a partial limit in Part D in which cost sharing is significantly reduced after total out-of-pocket expenditures reach a catastrophic threshold. ■

TABLE 1–1 **Medicare program spending, 2012**

	Dollars (in billions)	Percent
Total	**$574**	**100.0%**
Inpatient hospital	140	24.4
Outpatient hospital	39	6.8
Skilled nursing facilities	28	4.9
Home health	19	3.3
Physician fee schedule*	70	12.2
Medicare Advantage	136	23.7
Prescription drugs	67	11.7
Hospice	15	2.6
Other**	52	9.1
Administration	8	1.4

Note: Individual amounts may not sum to total due to rounding.
*Services provided by advanced practice nurses and physician assistants accounted for 3.2 percent of physician fee schedule spending in 2012.
**"Other" includes items such as physician-administered drugs and durable medical equipment.

Source: 2013 annual report of the Boards of Trustees of the Medicare trust funds.

TABLE 1–2 **Sources of Medicare revenue, 2012**

	Dollars (in billions)	Percent
Total	**$537**	**100.0%**
Payroll taxes	206	38.4
Interest from Hospital Insurance Trust Fund	13	2.4
Taxation of Social Security benefits	19	3.5
Premiums	70	13.0
General revenue	214	39.9
Transfers from states*	8	1.5
Other**	7	1.3

Note: *"Transfers from states" (often called the Part D "clawback") refers 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.
**"Other" includes items such as fees on manufacturers of brand drugs and transfers from the fraud and abuse control program and the Railroad Retirement program.

Source: 2013 annual report of the Boards of Trustees of the Medicare trust funds.

TABLE 1–3

Spending, use, and price trends for people enrolled in employer-sponsored health insurance and FFS Medicare

Percent change from 2010 to 2011[1]

	Employer-sponsored health insurance			FFS Medicare		
	Spending per insured	Services per insured	Price per service	Spending per FFS beneficiary	Services per FFS beneficiary	Price per service
All categories	4.6%			1.0%		
Inpatient hospital[2,3]	4.9	–0.6%	5.5%	–1.0	–1.3%	0.7%
Medical		–1.2			–0.5	
Surgical		–4.2			–3.8	
Outpatient visits and services[2,4]	6.9	1.9	4.9	6.3	4.4	1.8
Emergency room		3.7			2.4	
Observation		3.2			5.3	
Outpatient surgery[5]		–0.2			0.2	
Professional services[2,6]	3.8	1.2	2.6	3.1	0.8	2.3
Office and home visits	5.2	1.2	3.9	5.7	0.6	5.1
Radiology	–2.4	–3.8	1.5	0.5	0.6	–0.1
Prescription drugs[2,7]	1.0[8]	–0.2	1.2[8]	3.4[8]	2.3	1.7[8]

Note: FFS (fee-for-service).
[1] Results for other or longer time periods may differ from the results examined here.
[2] The estimates for inpatient hospital, outpatient visits and services, and professional services include other subcategories not shown.
[3] For inpatient hospital, services per beneficiary are measured as admissions per beneficiary.
[4] Outpatient services include radiology, lab/pathology, and other services such as physical therapy and audiology services provided in an outpatient setting.
[5] Outpatient surgery does not include surgeries furnished at ambulatory surgical centers.
[6] Professional services exclude physician-administered drugs.
[7] Services per beneficiary are measured as prescriptions per beneficiary. For Medicare, this category includes only prescriptions provided under Part D. Not every FFS beneficiary enrolls in a Part D prescription drug plan. In 2010 and 2011, a little over half were enrolled. Those who are not enrolled may be receiving prescription drug benefits from a former employer.
[8] Both employer-sponsored health insurance and FFS Medicare rely on private insurers to administer drug benefits. Private insurers negotiate drug prices with pharmacies and rebates with drug manufacturers. Also, for FFS Medicare, the Patient Protection and Affordable Care Act of 2010 required drug manufacturers to offer a 50 percent discount on brand drugs and a 7 percent discount on generic drugs filled in the coverage gap in 2011. (The coverage gap is a temporary gap in coverage after a beneficiary's total spending exceeds a certain threshold but is below a catastrophic threshold.) The spending and price growth estimates are for total spending (including beneficiary cost sharing) and do not reflect any rebates or discounts.

Source: Health Care Cost Institute 2012. *Health Care Cost and Utilization Report: 2011.* MedPAC analysis of claims data for 100 percent of Medicare FFS beneficiaries.

enrollment increases at a faster rate than in the past due to the aging of the baby-boom population.

Fee-for-service Medicare and private health insurers: A comparison of trends for spending, use, and price

An analysis of private-sector claims data shows that between 2010 and 2011 per capita spending for the privately insured grew faster than per capita spending for Medicare beneficiaries in the traditional fee-for-service (FFS) program. The Health Care Cost Institute (HCCI), which examined health care spending for people younger than 65 covered by employer-sponsored private health insurance, found that from 2010 to 2011, per capita spending by private insurers increased by 4.6 percent; by comparison, Medicare spending during this period rose 1 percent for FFS Medicare. (Results for other or longer time periods may differ from the results examined here.)

HCCI also broke down the percentage change in per capita spending for private insurers into changes in use and price, which we compare with Medicare use and prices in Table 1-3. Overall, the growth in per capita spending by private insurers was driven largely by price growth and occurred

despite tepid or even negative growth in utilization. Medicare experienced low growth in per capita spending as a result of low growth in utilization coupled with low price growth.

Inpatient hospital use declined for both private insurers and Medicare. However, for private insurers, prices grew by 5.5 percent, driving an increase in per capita spending of 4.9 percent. In contrast, prices increased by less than 1 percent in Medicare, contributing to a decline in per capita spending of 1 percent.

Both private insurers and Medicare had high growth in per capita spending for hospital outpatient departments (6.9 percent for private insurers and 6.3 percent for Medicare). For private insurers, the increase in per capita spending was driven largely by price growth (of 4.9 percent) and to a lesser extent by growth in utilization (of 1.9 percent). The opposite was true for Medicare: growth in utilization (4.4 percent) was the primary driver of per capita spending growth, while prices grew by 1.8 percent.

Trends for professional services (services provided by physicians and other health professionals) were similar between Medicare and private insurers. Both Medicare and private insurers experienced relatively low growth in per beneficiary service use of about 1 percent. Price growth was also similar at 2.3 percent for Medicare and 2.6 percent for private insurers, resulting in per capita spending growth of 3.1 percent for Medicare versus 3.8 percent for private insurers.

Growth in per capita spending on prescription drugs was higher for Medicare (Part D) than for private insurers (3.4 percent growth for Medicare versus 1 percent growth for private insurers).[9] Medicare's higher per capita spending was the result of both higher volume growth and higher price growth. Unlike the services discussed above, Medicare does not set prices administratively for prescription drugs and so cannot as readily control price growth for prescription drugs as it can for other services. Instead, Medicare relies on competing private plans to negotiate drug prices with pharmacies and control drug spending.[10]

The higher price growth may also be partly explained by Medicare beneficiaries using a higher share of brand-name drugs than the privately insured in 2011: brand-name drugs accounted for 25 percent of prescriptions dispensed in Medicare versus 21 percent for private insurers, and brand prices continued to grow faster than generic prices.[11]

The closing of the coverage gap in Medicare Part D, which began in 2011, could also have contributed to the growth in spending and use. Beginning in 2011, PPACA requires drug manufacturers to offer a 50 percent discount on brand drugs filled in the coverage gap. The discount counts toward a beneficiary's catastrophic limit on out-of-pocket spending. That change likely contributed to the increased proportion of Part D beneficiaries reaching catastrophic coverage in 2011 compared with 2010 (8.4 percent compared with 7.9 percent). Those beneficiaries could have filled more prescriptions as their cost sharing declined on reaching catastrophic coverage.

Other factors affect the difference in rates of growth in drug spending and use, such as the availability of drugs that treat the medical conditions of the two insured populations and the different impact economic conditions may have on the two populations' demand for prescription drugs.

Medicare spending over the next 10 years

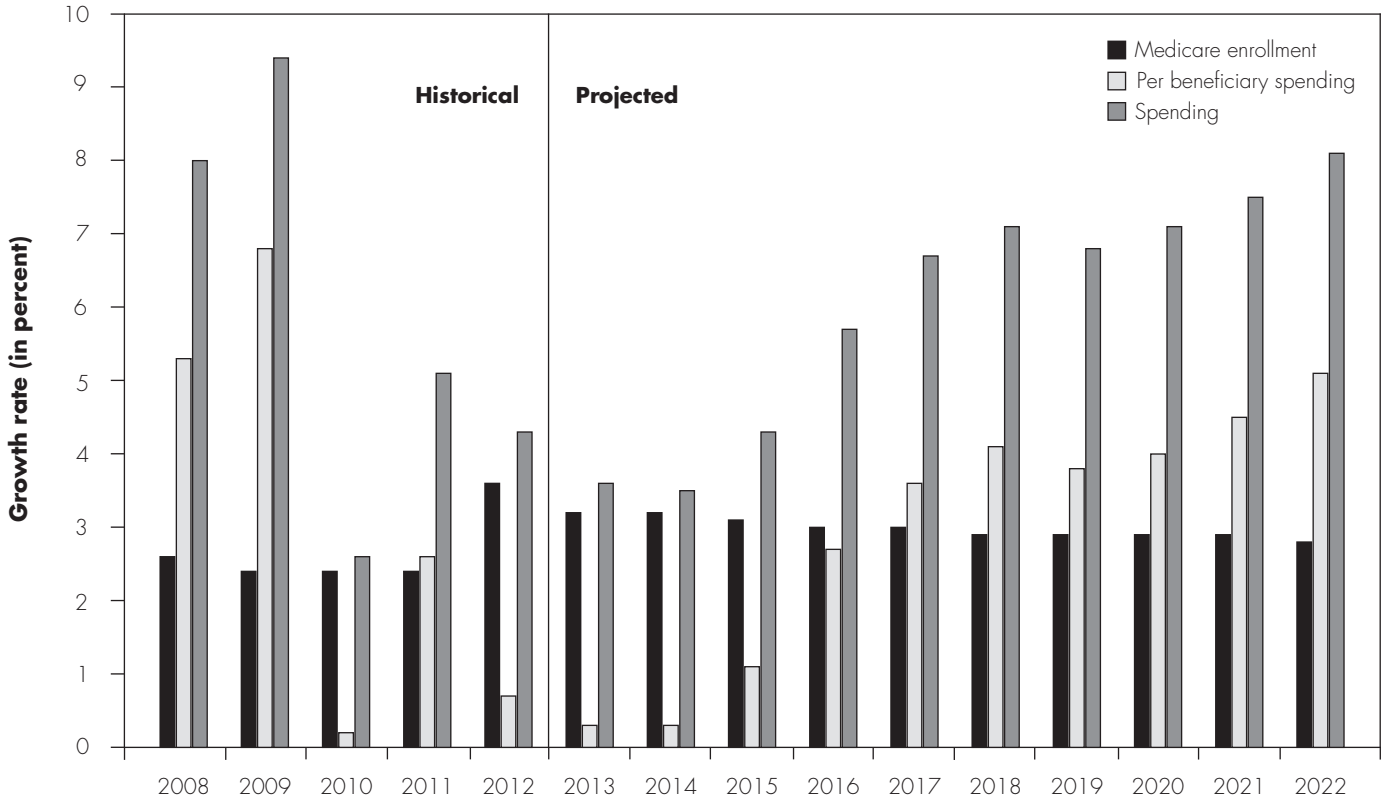
Despite the slow growth in recent years, CBO projects that total Medicare spending will grow at an average annual rate of about 6.6 percent over the next 10 years.[12] Figure 1-3 shows historical and projected spending growth broken out between growth in per beneficiary spending and growth in enrollment. While the growth in per beneficiary spending has slowed recently (averaging 1.6 percent annually from 2010 to 2012 compared with an annual average growth rate of about 7 percent since 1980), it is projected to begin to pick back up and average 3.3 percent annually over the next 10 years. Historically, Medicare enrollment has grown about 2 percent per year, but over the next decade, Medicare enrollment growth is projected to average about 3 percent annually, increasing Medicare enrollment from about 50 million beneficiaries today to about 70 million by 2022 (Boards of Trustees 2013).

CBO projects strong growth in enrollment in Medicare Advantage (MA) plans. Payment reductions to MA plans began in 2011, but MA enrollment as a share of total Medicare enrollment continued to climb—by 3 percent in 2011 and by 6 percent in 2012. CBO projects that the share of Medicare beneficiaries enrolled in MA plans will continue to increase over the decade and reach 30 percent by 2023 (Congressional Budget Office 2013b).

Long-run Medicare projections

The Medicare Trustees project that Medicare's share of GDP will rise to 5.8 percent in 2040 and to 6.5 percent in 2085 (Figure 1-4, p. 14). Under an alternative set

FIGURE 1–3 **Despite the recent slowdown, growth in Medicare spending is projected to increase**



Note: Assumes the sustainable growth rate formula is replaced with a 0 percent update annually beginning in 2014.

Source: 2013 annual report of the Boards of Trustees of the Medicare trust funds, Congressional Budget Office May 2013 baseline, Congressional Budget Office May 2013 budgetary impact of alternative policies.

of assumptions—including an override of the price reductions for physician services called for by the sustainable growth rate (SGR) formula, a phase-out of productivity cuts to Medicare providers after 2020, and an override of cuts mandated by the Independent Payment Advisory Board—Medicare's share of GDP would reach 7 percent of GDP in 2040 and 10.3 percent in 2085 (Boards of Trustees 2013).

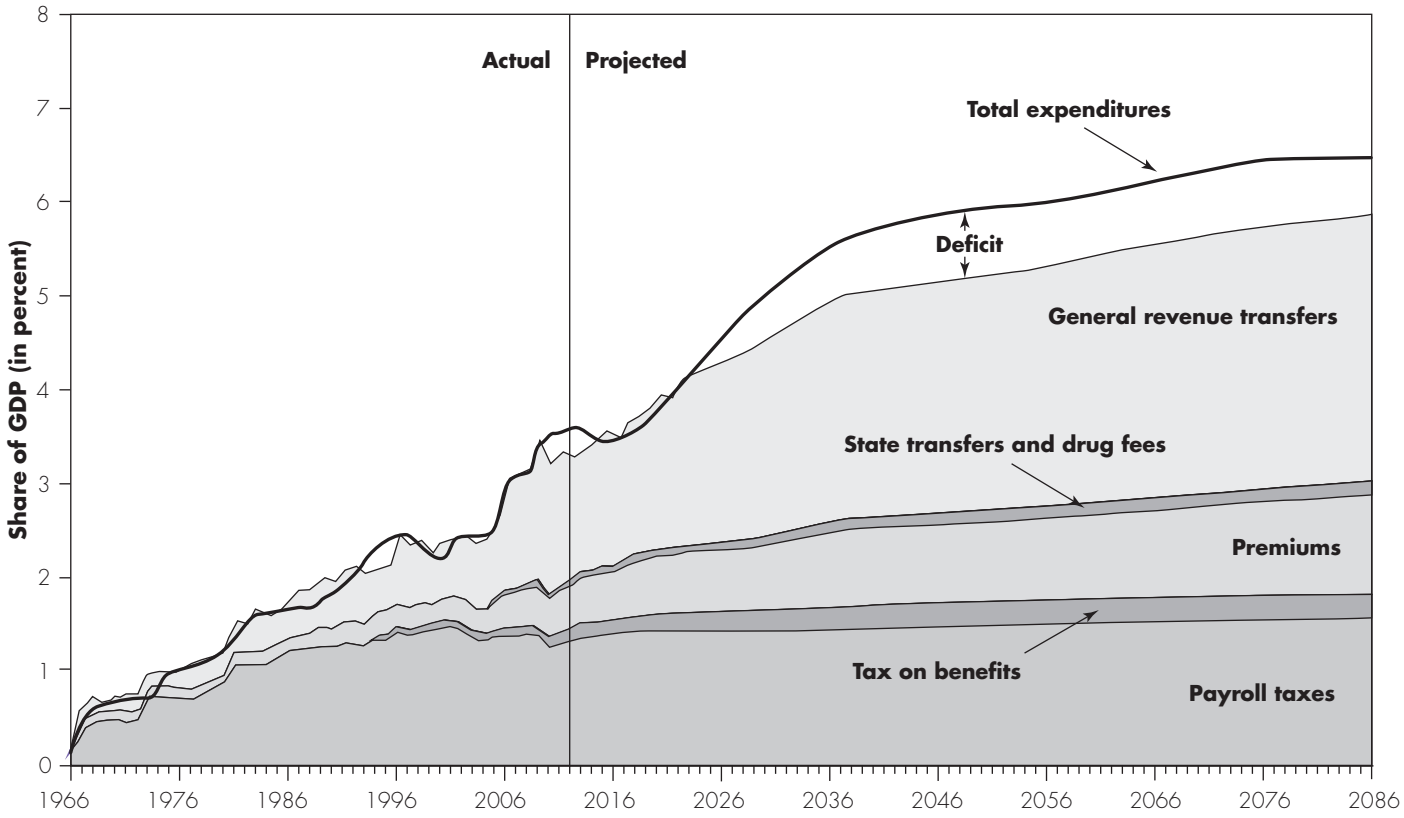
While projections about the growth rate of spending per beneficiary vary, analysts agree that Medicare spending as a share of GDP will continue to rise. Enrollment growth will be a large driver of spending growth through 2035 because of the aging of the baby-boom population (Boards of Trustees 2013). So even if Medicare spending per beneficiary grows at the same rate as GDP—an extremely slow rate by historical standards—Medicare spending will continue to rise as a share of GDP from 3.5 percent in 2012 to 5.1 percent in 2035 (Chernew 2013).

As spending grows, general revenues will grow as a share of total Medicare financing, adding significantly to federal budget pressures (Figure 1-4, p. 14). In this chapter, the term *general revenues* includes both tax revenue and borrowing since federal spending, with few exceptions, has exceeded federal revenues since the Great Depression. In 2012, the most current year for which data are available, spending exceeded revenue by 44 percent.

Under current law, beneficiaries pay for about 25 percent of Part B and Part D spending through annual premiums. The other 75 percent is paid by taxpayers through general revenues. Because general revenue transfers and premiums are reset each year to match expected Part B and Part D spending, they grow at the same rate as Part B and Part D spending. In contrast, payroll taxes—which fund the Hospital Insurance (Part A) trust fund—are projected to

FIGURE 1–4

Medicare's long-term financing challenge



Note: GDP (gross domestic product). 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") refers 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. "Drug fees" refers to the fee imposed in the Patient Protection and Affordable Care Act of 2010 on manufacturers and importers of brand-name prescription drugs. These fees are deposited in the Part B account of the Supplementary Medical Insurance trust fund.

Source: 2013 annual report of the Boards of Trustees of the Medicare trust funds.

grow only slightly faster than GDP because the rate of growth is based on the rates of growth in earnings and because the ratio of workers to retirees is shifting with the retirement of the baby-boom generation.

Under current law, Part A is fully financed through payroll taxes paid by current workers. However, since 2008, the Hospital Insurance Trust Fund has run an annual deficit (i.e., paid more in benefits than it collects in revenues). The trust fund still has interest income generated from loaning funds to other parts of the government during times of surplus, but those assets are projected to be exhausted by 2026, an event that could prompt a call for increasing the payroll tax on current workers, adding a beneficiary premium to Part A, or initiating general revenue transfers to the trust fund. However, as Medicare becomes more dependent on general revenues, there will be fewer resources available to finance other priorities, such as education and investment in infrastructure and scientific research, and greater pressure to reduce spending or increase taxes.

The impact of health care spending on federal and state budgets

Because general revenues finance a large share of Medicare—and Medicare is a significant share of the

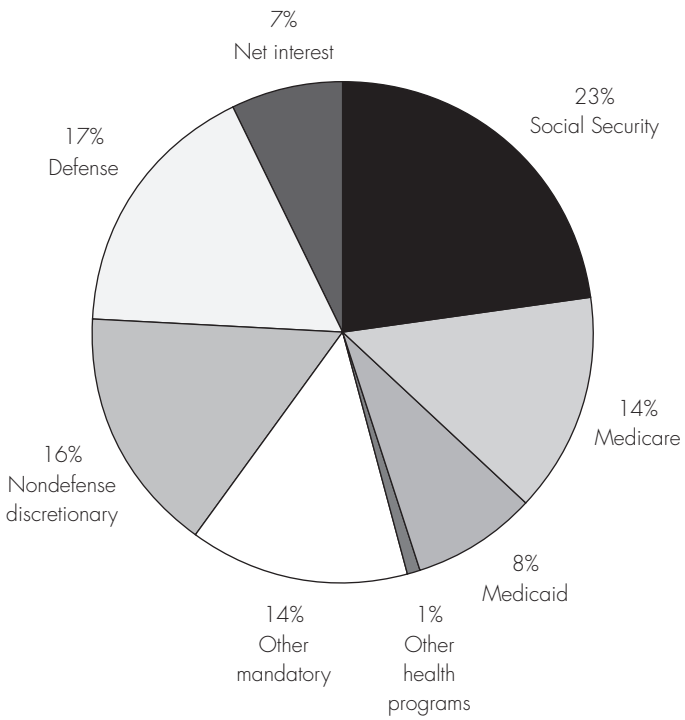
federal budget—Medicare's fiscal sustainability is tightly linked to that of the overall federal budget and vice versa. Medicaid—a joint federal–state program that pays for health care services for low-income people—accounted for about one-sixth of state general fund spending in 2011, making it the second largest category of general fund spending after education (The National Association of State Budget Officers 2012).[13]

Health care and federal spending

In 2014, Medicare spending is projected to consume 14 percent of the federal budget. When combined with spending on Social Security and Medicaid, the three programs are projected to consume 45 percent of the federal budget (Figure 1-5). Spending on those three programs is projected to grow rapidly over the decade, by 6.3 percent annually, on average (Table 1-4). Spending growth in those programs is hard to change because they are entitlement programs, meaning the Congress must appropriate whatever funds are required to implement the benefits to those who are eligible. To change the spending trajectory of these programs, the Congress would need to pass new laws changing the benefit structure of the programs or changing those who are eligible.

FIGURE 1–5

Medicare, Medicaid, and Social Security are projected to consume 45 percent of the federal budget in 2014



Source: MedPAC analysis of data from the Congressional Budget Office's *Updated Budget Projections: Fiscal Years: 2013 to 2023.*

TABLE 1–4

Spending on Medicare, Medicaid, and Social Security is projected to grow rapidly over the decade

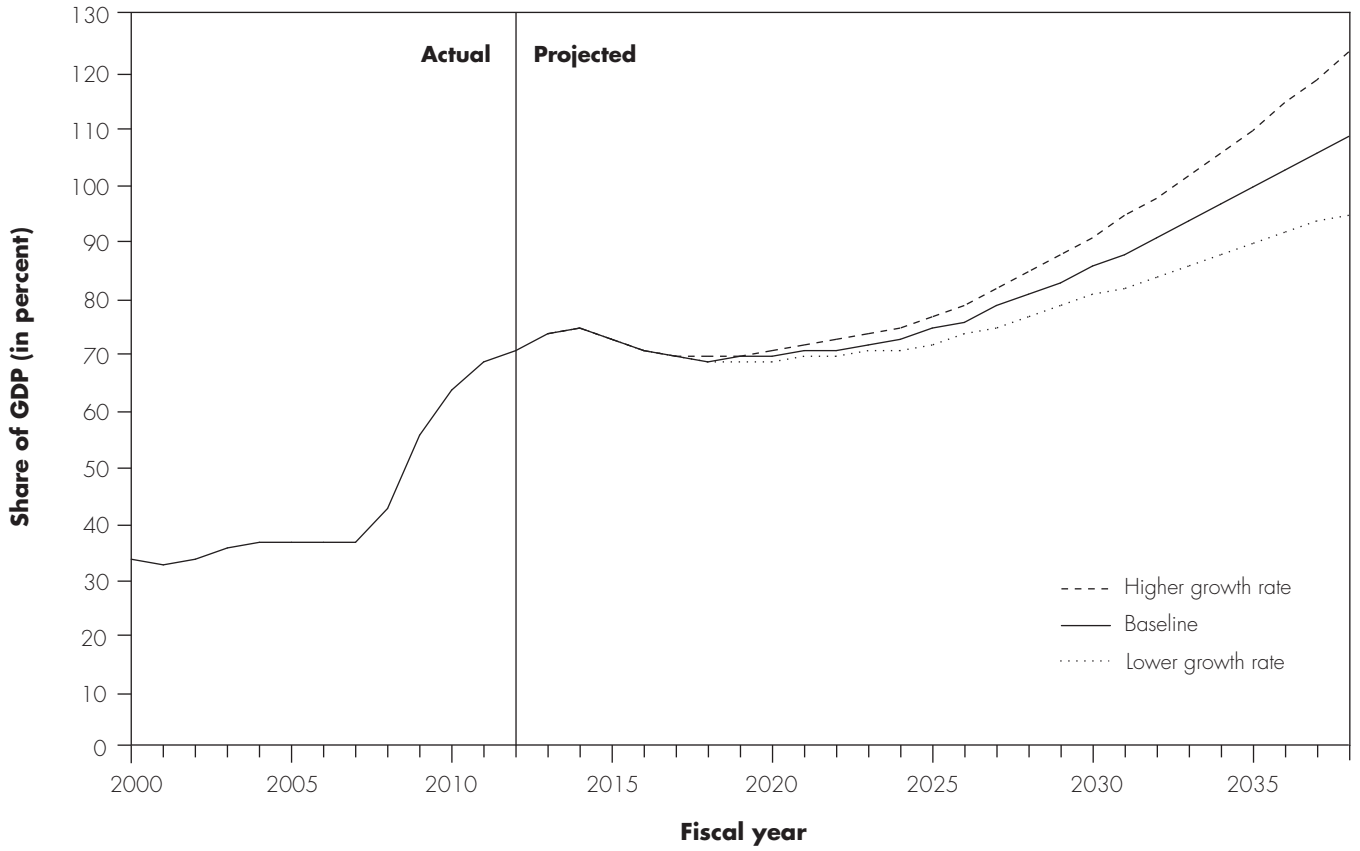
	2003–2012 actual average annual growth rates	2014–2023 projected average annual growth rates
Medicare	8.1%	6.6%
Medicaid	5.1	7.1
Social Security	5.6	5.8
Medicare, Medicaid, and Social Security	6.3	6.3
Other mandatory spending	6.6	1.9
Defense	5.8	1.9
Nondefense discretionary	4.3	2.4
Net interest	4.1	14.0
Nominal GDP	3.9	4.9
Population growth	0.9	0.8

Note: GDP (gross domestic product). All figures are nominal (i.e., not adjusted for inflation) and based on the Congressional Budget Office's May 2013 baseline, which conforms to the statutory spending caps and sequester provisions in the Budget Control Act of 2011. Growth rates are compound annual growth rates.

Source: Congressional Budget Office May 2013 baseline, Bureau of Economic Analysis.

FIGURE 1–6

Debt as a share of GDP under alternative assumptions about the growth of federal spending on health care



Note: GDP (gross domestic product). The baseline assumes that per beneficiary spending on Medicare and Medicaid will grow at average annual rates of 4.3 percent and 4.7 percent, respectively, between 2013 and 2038. The higher growth rate of per beneficiary spending on Medicare and Medicaid is 0.5 percentage points per year higher—and the lower growth rate is 0.5 percentage points per year lower—than in the baseline. The projections incorporate the effects that changes in debt and marginal tax rates have on the economy in the long run and how that economic feedback, in turn, would affect the budget. Incorporating the economic feedback, the Congressional Budget Office projects the debt to equal 108 percent of GDP by 2038 under the baseline assumptions. Without incorporating the economic feedback, the Congressional Budget Office projects the debt to equal 100 percent of GDP by 2038 under the baseline assumptions.

Source: Congressional Budget Office 2013a.

In trying to reduce deficits and the debt, Congress has passed laws to reduce spending growth in the rest of the budget. Under current law, spending for other parts of the budget—defense, nondefense discretionary, and other mandatory—is projected to grow at about 2 percent per year through 2023, much less than the actual rates of spending for those programs from 2003 through 2012, which ranged on average from 4.3 percent to 6.6 percent per year (Table 1-4, p. 15).

However, the debt is projected to remain historically high for the next decade and beyond due to growing interest payments to finance the sizable debt, the pressures of an aging population, and rising health care costs (Figure 1-6). Federal debt equaled 35 percent of GDP at the end of 2007 as the economy entered the last recession. In response to the recession, tax revenue declined and federal spending increased as more people qualified for unemployment compensation, food stamps, and Medicaid. As a result, the debt climbed, reaching 70 percent of GDP in 2012—almost twice the percentage as at the end of 2007. By 2038, the debt is projected to equal 108 percent of GDP, under CBO's baseline assumptions, reaching levels obtained just after World War II.[14]

The baseline assumes that per beneficiary spending for Medicare and other health care programs will increase more slowly in the future than during the past several decades. If, however, per beneficiary spending on Medicare and Medicaid were to rise 0.5 percentage point

per year faster, on average, than in the baseline, the federal debt would be 123 percent of GDP by 2038. In contrast, if Medicare and Medicaid per beneficiary spending rose 0.5 percentage point per year more slowly, on average, the federal debt would be 94 percent of GDP by 2038.

Health care and state spending

In 2011, the Medicaid program had an average monthly enrollment of about 56 million people, with spending totaling $432 billion, accounting for 2.8 percent of GDP (Office of the Actuary 2012). The federal portion was about $294 billion (or 64 percent of the total) and states paid the remainder ($138 billion, or 36 percent of the total). Historically, the federal portion has averaged 57 percent. Legislation—in response to the last economic recession—temporarily boosted the federal share.

PPACA expands Medicaid eligibility beginning in 2014 to nonelderly people with incomes at or below 133 percent of the federal poverty level in states that have chosen to adopt this option. Based on the assumption of how many states would expand eligibility, the expansion is projected to increase enrollment by 15 percent in 2014 and by 31 percent in 2021 (Office of the Actuary 2012). The federal government will pay all of the costs of covering newly eligible enrollees in 2014, with the federal government's share declining gradually to 90 percent by 2020 and remaining at 90 percent thereafter.

Some of the new enrollees are expected to be people who were previously eligible for Medicaid but were not already enrolled. States will not receive the higher federal share for that group. People who were previously eligible but not already enrolled are expected to sign up for Medicaid in response to a more streamlined enrollment process required by PPACA and an increased awareness of health insurance coverage options as the health insurance exchanges begin in 2014. Some states concerned about increased enrollment from that group have acted to contain spending now and have reduced provider payment rates and optional benefits (National Governors Association and National Association of State Budget Officers 2012).

To increase the participation of primary care providers in Medicaid to meet the needs of the expansion, PPACA also requires states to increase the payment rates of certain services furnished by primary care physicians in 2013 and 2014 to Medicare levels, with the federal government paying for the difference. Some health policy analysts have questioned how much of an effect the provision could have on provider participation since it lasts only two years. Additionally, providers often state reasons for not participating in Medicaid other than low payment rates, such as a heavy administrative burden from program participation.

Changes in the Medicare-eligible population

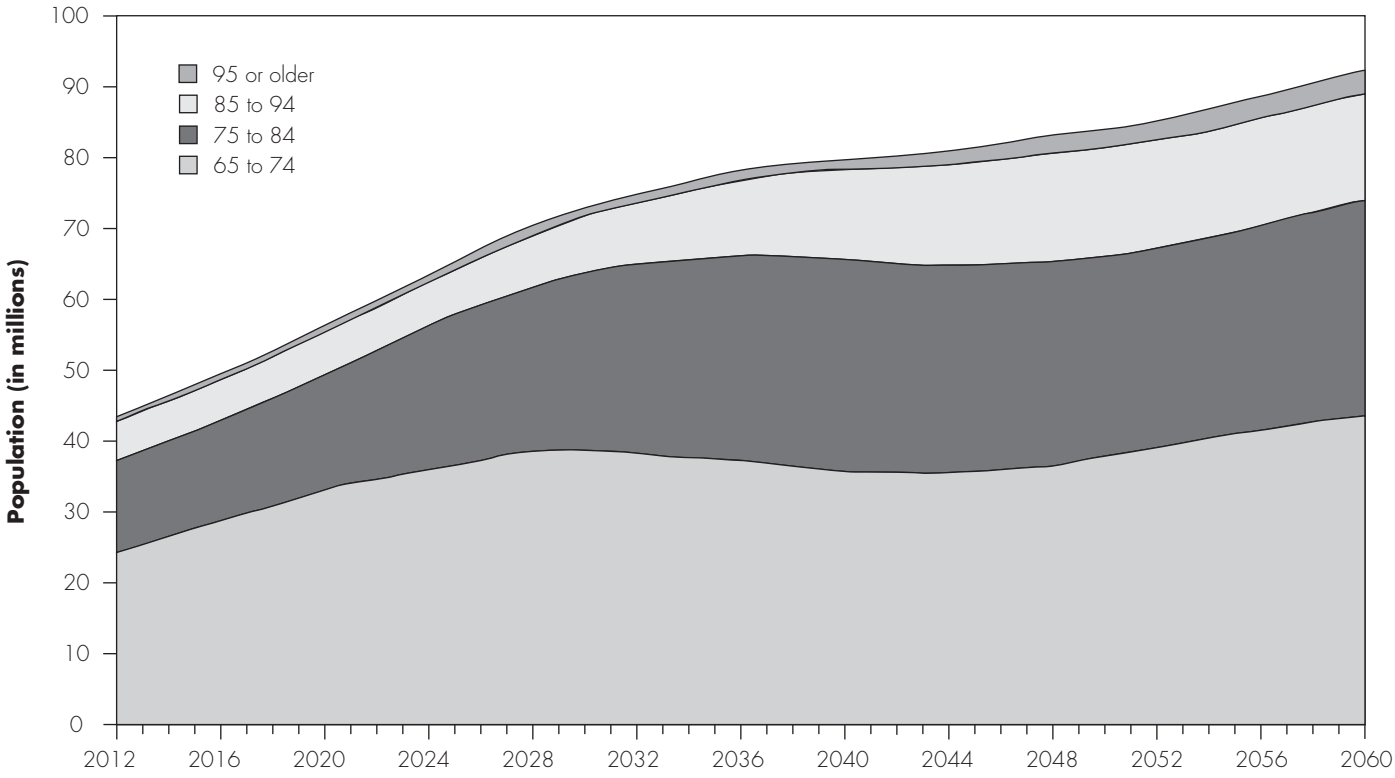
The Medicare population is projected to grow by over 70 percent over the next 20 years, as the bulk of the baby-boom generation ages into Medicare eligibility. With this expansion, the Medicare population will differ in key ways from the current one. First, the average age initially will skew younger than in the recent past, but then grow rapidly older as the number and share of beneficiaries ages 85 and older increases. Second, it will become more racially and ethnically diverse than the current population. Third, a greater number and share of beneficiaries will have multiple chronic conditions. Finally, beneficiaries entering the program over the next several years will have had very different experiences with employer-sponsored and other forms of health care coverage, due to significant changes that have taken place and continue in the private and non-Medicare public health insurance markets.

Age and demographic changes

The Census Bureau estimates that between 2012 and 2032, the number of Americans ages 65 and older will grow from about 43 million to about 75 million—an increase of over 70 percent over the next 20 years (Figure 1-7, p. 18, and Table 1-5, p. 18).[15] Over the next approximately 50 years, the number of Americans 65 years and older will more than double, reaching an estimated 92 million individuals by 2060. In the next 10 years, the average age of Medicare beneficiaries will continue to decline slightly as the large baby-boom generation (individuals born between 1946 and 1964) continues to age into Medicare eligibility. By 2022, almost 60 percent of Medicare beneficiaries ages 65 and over will be between 65 and 74 years old (Table 1-5). However, around the middle of the 2020s, the average age of Medicare beneficiaries will start to increase as a function of the continued aging of the baby boomers and expected increases in longevity. By 2042, over half of Medicare beneficiaries will be ages 75 and older, with almost one-fifth ages 85 and older (Table 1-5).

FIGURE 1–7

Projected U.S. population ages 65 and over, 2012–2060



Source: Census Bureau, 2012 National Population Projections.

TABLE 1–5

Projected U.S. population ages 65 and over, by age cohort, selected years 2012–2060

Age group	2012	2022	2032	2042	2060
Age 65–74					
Population (in millions)	24.0	34.5	38.1	35.2	43.3
Percent of total	56%	58%	51%	44%	47%
Age 75–84					
Population (in millions)	13.3	18.2	26.6	29.8	30.5
Percent of total	31%	31%	36%	37%	33%
Age 85 and over					
Population (in millions)	5.9	6.9	10.0	15.1	18.2
Percent of total	14%	12%	13%	19%	20%
Total					
Population (in millions)	43.2	59.6	74.7	80.2	92.0
Percent of total	100%	100%	100%	100%	100%

Note: Columns may not sum to total due to rounding.

Source: Census Bureau, 2012 National Population Projections.

In addition to growing rapidly in overall size, the Medicare population will become more diverse racially and ethnically over the next 50 years as increasing percentages of Americans ages 65 and over will identify as African American, Asian American, and Hispanic. The largest increase will be among the proportion of Americans age 65 and over identifying as Hispanic, which is projected to triple from 7 percent to 21 percent between 2012 and 2060 (Figure 1-8, p. 20).

At the same time, the number of Medicare beneficiaries who speak a language other than English at home, and therefore may have limited English proficiency, also is expected to grow. The number of people living in the United States who speak a language other than English at home increased from 23 million in 1980 to over 60 million in 2011 (Ryan 2013). The single largest group today, and among the fastest-growing over the past 30 years, are speakers of Spanish or Spanish Creole; there were about 17 million persons in this group in 1990 and over 37 million in 2011. Other primary (spoken at home) languages that are relatively large and/or fast growing include Chinese, Russian, Korean, Vietnamese, and Tagalog (Ryan 2013).

Of the 60.6 million people who spoke a language other than English at home in 2011, about 42 percent reported that they spoke English less than "very well" (Ryan 2013). Individuals who speak a language other than English at home and who speak English less than very well are considered to have limited English proficiency (LEP), which means that they are not able to speak, read, write, or understand the English language at a level that permits them to interact effectively with health care providers (Karliner et al. 2007). A significant body of research suggests that language barriers in health care settings may compromise access and quality of care for LEP patients and that the use of professional medical interpreters can significantly improve clinical care for these patients (Karliner et al. 2007, Wilson et al. 2005). Since the number of people in the United States, including those ages 65 years and over, who speak a language other than English at home is projected to continue to grow (Ortman and Shin 2011), health care providers—especially those in the geographic areas where LEP patients tend to be concentrated—will encounter growing demands for linguistic (and often cultural) competencies to meet the clinical care needs of a diverse Medicare patient population. Few studies have been done of the costs of providing interpreter and translation services for LEP patients as required by federal law. An estimate prepared by the Office of Management and Budget in 2002 assessed that total national costs for health care providers to comply with the law would be about $270 million, or about 0.02 percent of national health expenditures in 2002. The report estimated that the average increase in costs per visit by LEP persons across the four types of services examined (emergency department visits, inpatient hospital admissions, outpatient physician visits, and dental visits) would be 0.5 percent (Office of Management and Budget 2002).

Disease burden and prevalence of multiple chronic conditions

According to a study of the 2010 Medicare FFS population, chronic conditions such as high blood pressure, high cholesterol, heart disease, and diabetes were highly prevalent: almost 60 percent had high blood pressure; 45 percent had high cholesterol; and almost one-third had ischemic heart disease, arthritis, or diabetes (Figure 1-9, p. 21) (Centers for Medicare & Medicaid Services 2012). The top 15 chronic conditions and the percentage of beneficiaries with those diagnoses in 2010 are shown in Figure 1-9. The percentages add up to more than 100 percent because beneficiaries may have multiple chronic conditions.

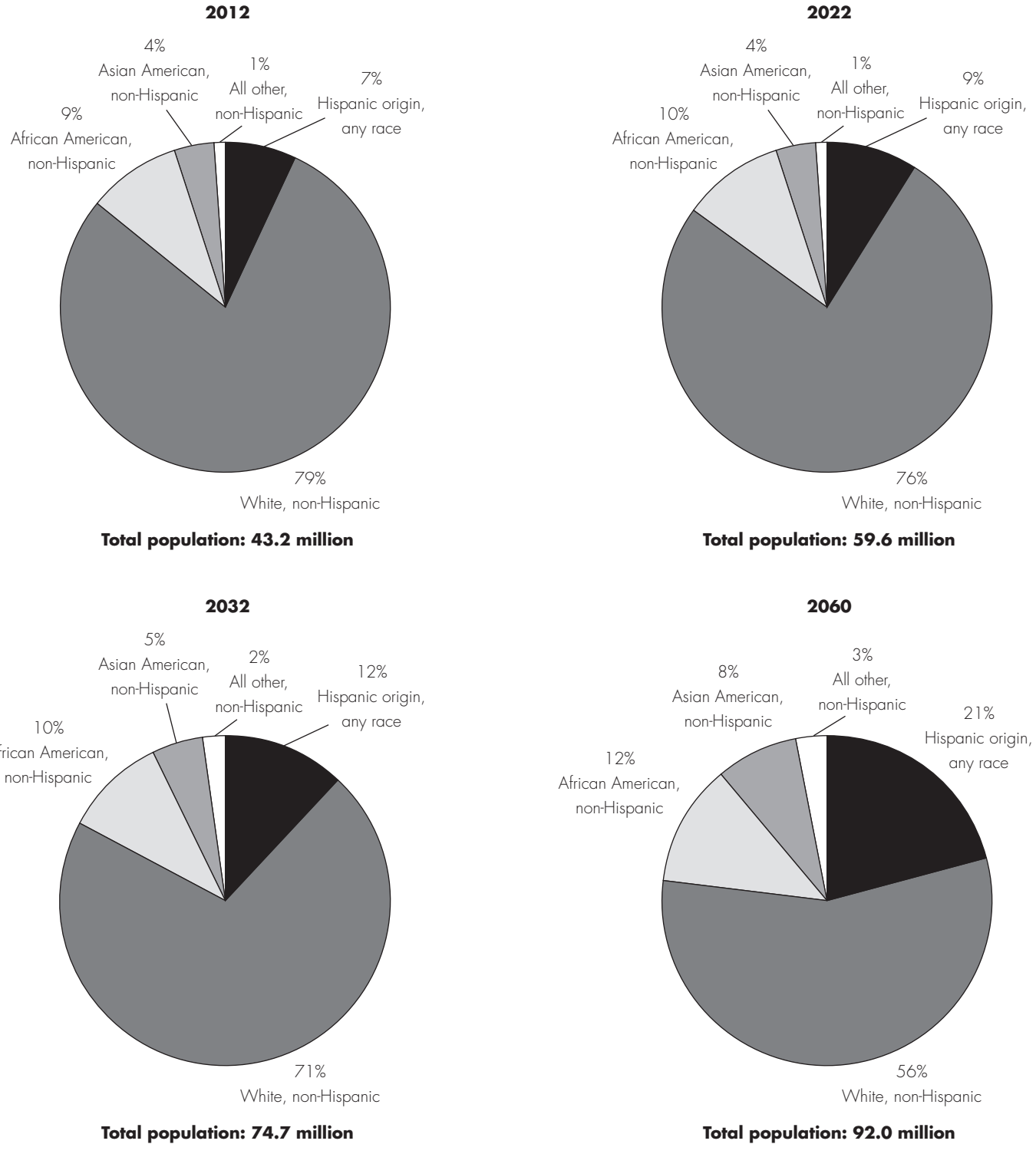
In fact, over two-thirds of Medicare beneficiaries have multiple (2 or more) of these 15 chronic conditions (Figure 1-10, p. 22). Beneficiaries with multiple chronic conditions accounted for a greater share of Medicare spending than those with a single chronic condition or none. Beneficiaries with six or more chronic conditions constituted about 14 percent of the Medicare population but accounted for over 40 percent of Medicare spending. In contrast, beneficiaries with none or one chronic condition—about a third of the population—accounted for 7 percent of total Medicare spending (Figure 1-10, p. 22).

In 2010, Medicare spent an average of $9,738 per beneficiary across all FFS Medicare enrollees, compared with an average of $32,658 per beneficiary for those who were diagnosed with six or more chronic conditions (Centers for Medicare & Medicaid Services 2012). Those beneficiaries were more likely than the average beneficiary to have heart failure, chronic kidney disease, chronic obstructive pulmonary disease, atrial fibrillation, and stroke.

Another recent study estimated that in 2010 nearly 15 percent of people older than age 70 years (or about 3.8 million people) had dementia—a broad category that

FIGURE 1–8

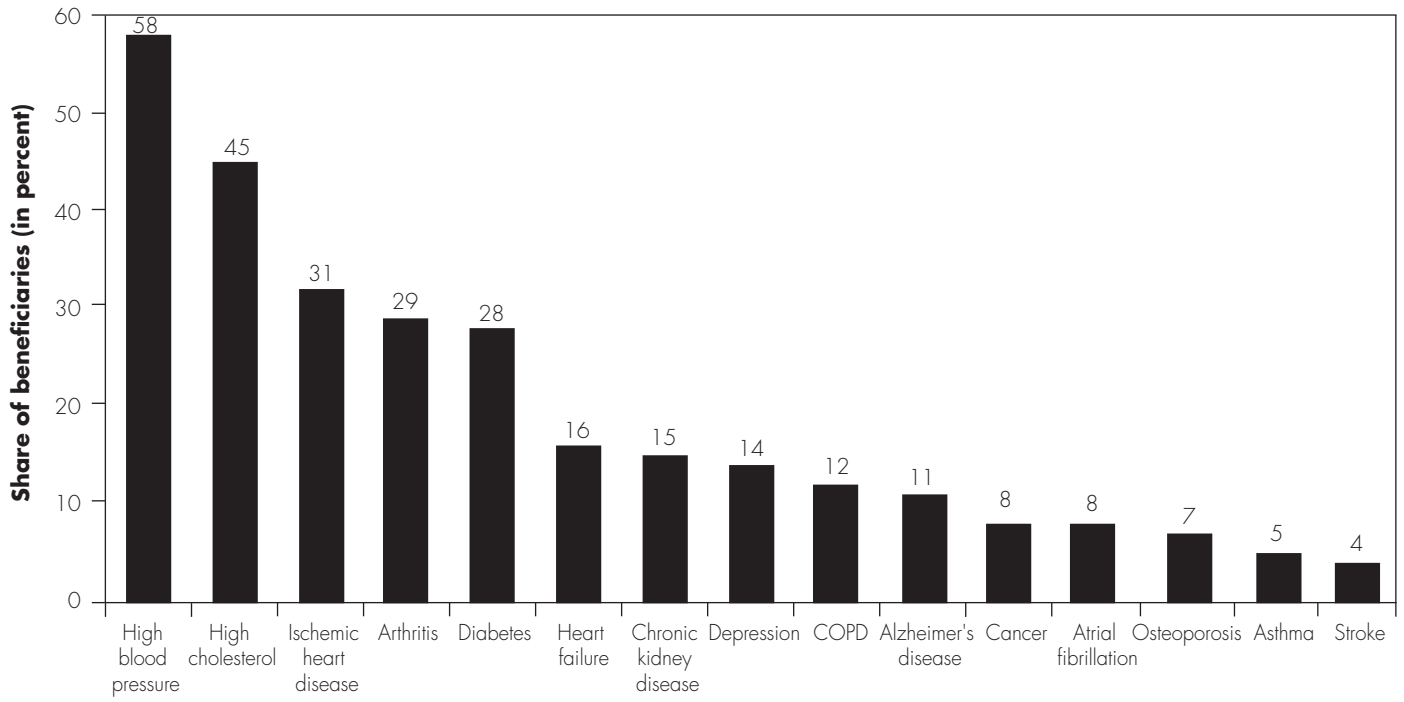
Estimated U.S. population ages 65 and over, by race and Hispanic origin, selected years, 2012–2060



Note: "Asian American" includes Native Hawaiian and all other Pacific Islander. "All other" includes American Indian and Alaska Native and multiracial.

Source: Census Bureau 2012 National Population Projections.

FIGURE 1–9 **Percentage of Medicare FFS beneficiaries with 15 selected chronic conditions, 2010**



Note: FFS (fee-for-service), COPD (chronic obstructive pulmonary disease).

Source: Centers for Medicare & Medicaid Services 2012.

includes Alzheimer's disease as one of its forms (Hurd et al. 2013). Medicare beneficiaries with dementia suffer from loss of memory, reasoning, speech, and other cognitive functions, making it difficult for them to make decisions and perform the activities of daily living (such as dressing and bathing).

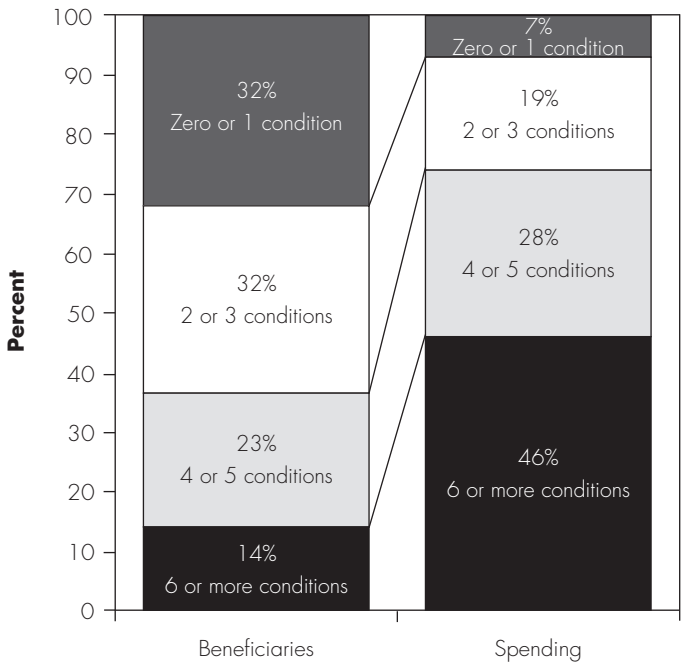
Evidence is mixed on whether the prevalence of chronic disease among the Medicare-eligible population has increased over time. For example, between 1997 and 2011, the proportion of individuals ages 65 and over who reported having heart disease remained relatively stable, at about 30 percent, and the proportion who reported having had a stroke also remained relatively constant, at about 8 percent (Centers for Disease Control and Prevention 2012). In contrast, the proportion who reported having cancer increased from 14 percent to about 19 percent over the same time period (which could reflect changes in the use of cancer diagnostic procedures over the time period), and the share reporting that they had diabetes (both physician diagnosed and undiagnosed) grew from about 22 percent to 28 percent from 1999 to 2010.

Trends have been found in the increasing prevalence of multiple chronic conditions in the population that will be aging into Medicare over the next 20 years. An analysis of 2001–2010 National Health Interview Survey data by Centers for Disease Control and Prevention researchers showed a statistically significant trend from 2007 through 2010 for increases in the number of adults ages 45 to 64 years with two to three chronic conditions, and a significant increase in the prevalence of four or more chronic conditions from 2001 through 2010 among the same age cohort (Ward and Schiller 2013). Given the evidence that health care service use and costs increase as the number of chronic conditions an individual has increases (Anderson 2010, Centers for Medicare & Medicaid Services 2012, Machlin and Soni 2013), it is reasonable to expect upward pressure on Medicare spending from these trends in the number of chronic conditions per person and the number of adults with four or more chronic conditions in the population cohort that is approaching the current Medicare eligibility age.

In addition, the overall aging of the Medicare population as the large baby-boom cohort grows older will almost

FIGURE 1–10

Medicare spending is concentrated among beneficiaries with multiple chronic conditions, 2010



Note: Data are based on Chronic Condition Warehouse definitions of chronic conditions.

Source: Centers for Medicare & Medicaid Services 2012.

certainly magnify trends in the prevalence of multiple chronic conditions. In general, older beneficiaries are more likely to have multiple chronic conditions (Table 1-6). As noted earlier, the age distribution of Medicare beneficiaries will begin to shift steadily upward in about 10 years. If the current relationship between age and number of chronic conditions holds, then the number of older Medicare beneficiaries needing treatment for multiple chronic conditions also will begin to increase at that time.

Experience with private health insurance coverage

Changes in the private health insurance market may have an effect on new Medicare beneficiaries' familiarity with different types of coverage and their expectations about out-of-pocket costs. For example, workers covered by private health care insurance today are accustomed to receiving health care from a network of participating health care providers rather than from an unconstrained array of unaffiliated providers paid under a fee-for-service arrangement. Adults approaching Medicare eligibility who have worked for large employers often have been choosing coverage from among a range of plan choices during their working years, and those purchasing individual health insurance also may gain experience in choosing health insurance plans through the new state and federal health insurance exchanges commencing in 2014. Those experiences may increase the willingness of future Medicare beneficiaries to enroll in Medicare Advantage plans or other alternatives to fee-for-service Medicare.

In 2013, 20 percent of workers covered by private health insurance were enrolled in a high-deductible health plan that offered some sort of savings account to pay for the deductible, compared with just 4 percent in 2006 (Kaiser Family Foundation and Health Research and Educational Trust 2013). High-deductible health plans typically have lower premiums than traditional plans but require the enrollee to spend down a large deductible before receiving insurance benefits. In addition, premiums for all types of employer-sponsored coverage have grown rapidly over the past decade; premiums for family coverage increased 80

TABLE 1–6

Older beneficiaries are more likely to have multiple chronic conditions, 2010

	Age (in years)			
Number of chronic conditions	**Less than 65**	**65 to 74**	**75 to 84**	**85 and older**
0 to 1	47%	37%	23%	17%
2 to 3	28	34	33	29
4 to 5	17	20	27	29
6 and more	9	9	18	25

Note: Number of chronic conditions is based on counts of 15 selected conditions using the Chronic Condition Warehouse definitions. Totals may not sum to 100 percent due to rounding.

Source: Centers for Medicare & Medicaid Services 2012.

percent between 2003 and 2013 (Kaiser Family Foundation and Health Research and Educational Trust 2013).

Effects of growth in health care spending on individuals and families

For individuals and families, growth in health care spending means higher health insurance premiums, higher out-of-pocket costs, and higher taxes devoted to health care (Auerbach and Kellerman 2011). For those covered by employer-sponsored health insurance, an increase in premiums also results in decreased wages as employers offset their increased costs of providing health insurance to their employees (Baicker and Chandra 2006, Gruber 2000, Steuerle 2013). As health care spending increases, an increasing share of income from individuals and families is transferred to hospitals, physicians, and other providers of health care services.

The trends in per capita health spending, premiums, and incomes in the years preceding the most recent economic recession indicate the negative effect accelerating health care spending has on incomes. From 2001 to 2007, per capita health spending grew at an average annual rate of 6.5 percent (Figure 1-11a and Figure 1-11b, p. 24) (Office of the Actuary 2013), while the average annual rate of premiums for individuals and families grew about 9 percent (Kaiser Family Foundation and Health Research & Educational Trust 2013). In contrast, during this period, average household income grew an average annual rate of just 2.5 percent; the median household income grew an average annual rate of 2.9 percent (Census Bureau 2013).

Medicare beneficiaries are not exempt from the financial challenges of ever-growing cost-sharing liabilities under the program. Over time, growth in Medicare premiums and cost sharing has outpaced growth in Social Security benefits and is projected to continue to do so (Figure 1-12, p. 25). Social Security benefits constitute about 40 percent of income for the median Medicare beneficiary and close to 90 percent of income for Medicare beneficiaries in the bottom income quintile (Kaiser Family Foundation 2010). In 2012, Supplementary Medical Insurance (Medicare Part B and Part D) premiums and cost sharing consumed 23 percent of the average Social Security benefit (Boards of Trustees 2013). By 2032, the Medicare Trustees estimate that those costs will consume 31 percent of the average Social Security benefit.

As the Commission has noted in its work on reforming Medicare's benefit design, about 90 percent of current Medicare beneficiaries purchase or receive some form of supplemental benefits so that their actual out-of-pocket spending is much smaller than their cost-sharing liabilities (Medicare Payment Advisory Commission 2012a). Almost one-quarter of Medicare beneficiaries enrolled in Part A and Part B in 2007 had medigap policies and 31 percent had employer-sponsored retiree policies.[16] However, trends in coverage for both of these forms of supplemental benefits indicate that many future Medicare beneficiaries will have higher out-of-pocket spending than current beneficiaries. Enrollment is growing rapidly in the newer standardized medigap plans, which include enrollee cost-sharing requirements (America's Health Insurance Plans 2013, Medicare Payment Advisory Commission 2012a). The number of large employers offering retiree health benefits to active workers has been steadily declining over the past 25 years, from 66 percent in 1988 to 28 percent in 2013 (Kaiser Family Foundation and Health Research and Educational Trust 2013).

Despite these challenges, Medicare beneficiaries experience greater stability from guaranteed insurance benefits than adults under the age of 65. Adults ages 65 and older are less likely to report trouble paying for health care (17 percent) compared with those ages 18 to 64 (about 30 percent). Fewer seniors report skipping care due to cost concerns (43 percent) compared with privately insured adults under 65 (60 percent) (Kaiser Family Foundation 2012). In the survey conducted annually by the Commission on access to physician services, we find that most beneficiaries have reliable access to primary and specialty care.

The recent economic downturn has made it more difficult for Medicare beneficiaries and for adults approaching Medicare eligibility (ages 45 to 64) to cope with the high growth rate of health care spending. The economic downturn has depreciated the value of their assets and caused more financial insecurity for that population. Adults ages 45 to 64 have experienced a notable increase in unemployment during the recent recession, similar to those in most other age groups (Bureau of Labor Statistics 2012). In a 2010 RAND survey, one-quarter of respondents ages 50 to 59 lost more than 35 percent of their retirement savings, and 40 percent had been affected by unemployment, declining home values, or foreclosure (Hurd and Rohwedder 2010). As a result, adults approaching Medicare eligibility could have smaller assets and income than their predecessors.

FIGURE 1–11

Growth in health care spending and premiums has outpaced growth in household income

Figure 11a. Cumulative change, 2001–2007

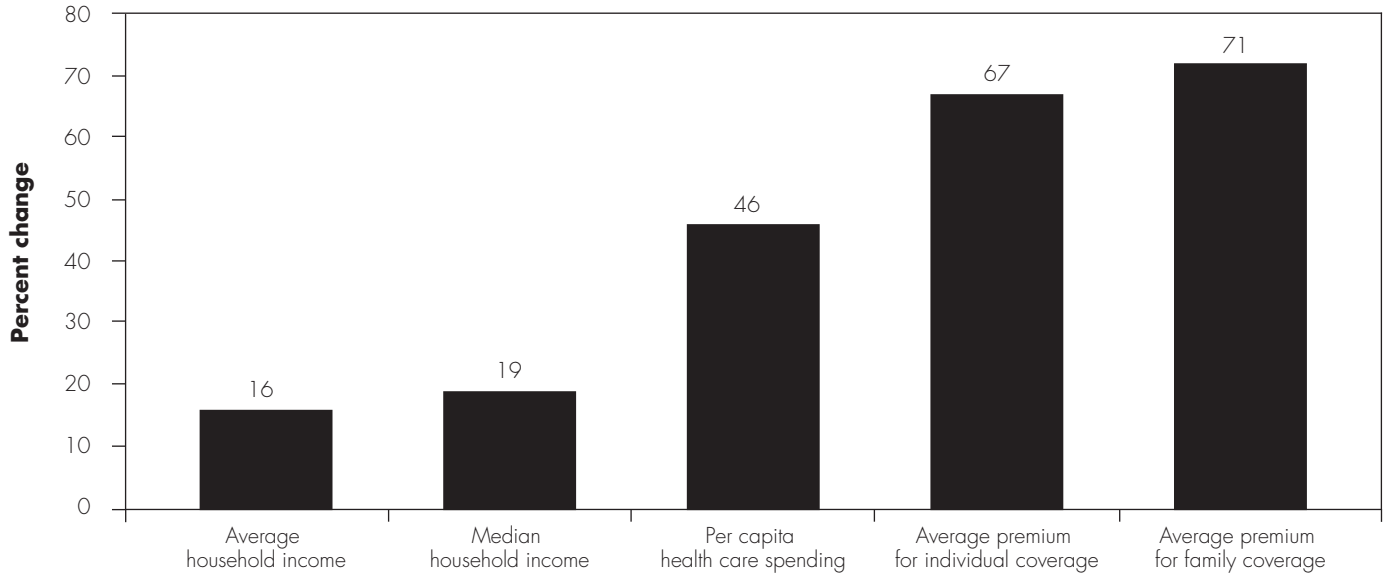
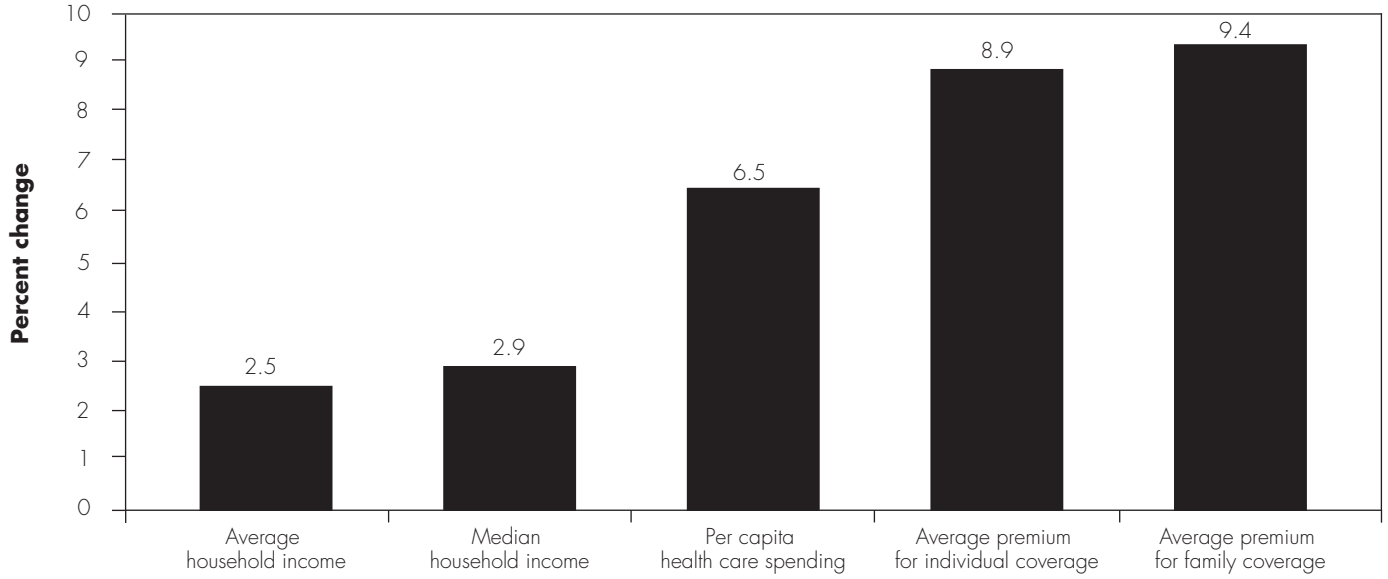


Figure 11b. Average annual change, 2001–2007



Note: Household income, health expenditures, and premiums are all measured in nominal dollars.

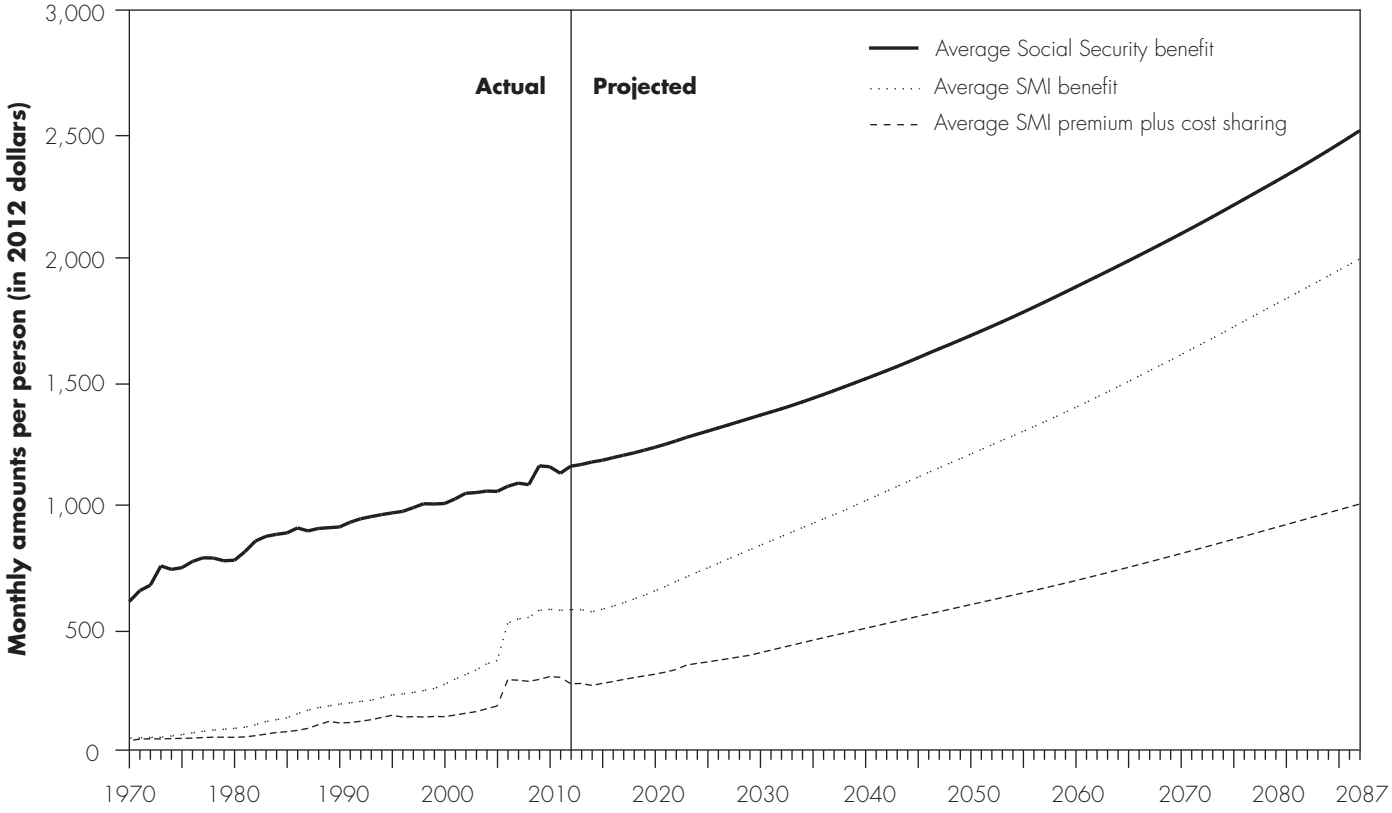
Source: Census Bureau 2013, National health expenditure data 2013, and Kaiser Family Foundation and Health Research & Educational Trust 2013.

Patterns in health care spending that suggest inefficiencies

Several patterns that are evident in U.S. health care spending broadly and Medicare in particular suggest that at least some portions of current spending are inefficient and do not improve health outcomes. Researchers have documented notable geographic variation in the use of and spending on health care that cannot be fully explained by differences in disease burden or severity or in the supply of providers. Evidence also points to a decline in the marginal value of the health care dollar, particularly for the elderly, suggesting that some health spending does not equate to better health. Medicare expenditures

FIGURE 1–12

Average monthly SMI 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 before 2006 is not included.

Source: 2013 annual report of the Boards of Trustees of the Medicare trust funds.

resulting from fraud and abuse show no signs of abating, abetted by the program's complexity and susceptibility to improper payments as well as by statutory requirements such as "any willing provider" that prevent Medicare from deploying program integrity tools such as provider credentialing that are routinely used by private payers. Several FFS Medicare payment systems are poorly targeted and undermine efforts to design payment systems that can induce the efficient delivery of clinically appropriate and high-quality care. Finally, though some indicators of quality are improving from a national perspective, disparities persist in health care quality across communities, and racial and ethnic minorities continue to experience worse health outcomes. All of these patterns suggest opportunities for payment reforms to incentivize more efficient care delivery that improves health outcomes for all beneficiaries.

Wide variation occurs across geographic areas in health care spending and service use

Researchers have documented wide variations across geographic areas in health care service use and spending and have found no consistent relationship between the amount of spending and quality of care (i.e., more spending is not always associated with higher quality, nor vice versa). The observed variation in service use and spending is so wide that it cannot be fully explained by differences in patients' disease burden or severity of illness, nor by the supply of care and caregivers in a region (Fisher et al. 2003a, Fisher et al. 2003b, Institute of Medicine 2013b, Medicare Payment Advisory Commission 2011b, Zhang et al. 2010, Zuckerman et al. 2010). The latest comprehensive analysis, released by the

Institute of Medicine in July 2013, found that substantial variation in spending and utilization remains at all levels of measurement, from the hospital referral region to the group practice level (Institute of Medicine 2013b).

In 2011, the Commission reported significant variation in the use of services among the Medicare population. After accounting for Medicare's explicit price adjustments and special payments, variation in Medicare service use between the 90th percentile and 10th percentile of measurement area was 44 percent. After adjusting for beneficiaries' health status, a 30 percent gap in service use remained between the 90th percentile and 10th percentile of areas. Variation in use of post-acute care services (such as home health care and durable medical equipment) was particularly high, and those services disproportionately contributed to overall variation (Medicare Payment Advisory Commission 2011b). Similarly, use of Medicare Part D for drugs was 20 percent greater for beneficiaries in higher spending areas (the 90th percentile) compared with lower spending areas (the 10th percentile).

There is little evidence to support the contention that greater amounts of health care services, measured by either service use or spending, result in better quality of care for beneficiaries. The Institute of Medicine's recently published report on geographic variation in health care found no consistent relationship, at the level of hospital referral regions, between quality and spending or service use among either Medicare beneficiaries or the commercially insured (Institute of Medicine 2013b). Similarly, older research using Medicare data found that beneficiaries in high-spending areas (in the top 20 percent) received as much as 60 percent more care than their counterparts in low-spending areas but did not realize better health outcomes (Baicker and Chandra 2004, Fisher et al. 2003a, Fisher et al. 2003b). The amount of real variation in spending and service use across the United States, with no corresponding patterns of higher quality in areas with higher spending and service use, prompts fundamental questions about the efficiency of health care spending in high-expenditure areas, as well as significant concerns about the persistence of fraud and abuse in those areas.

In addition to the variations in health care service use and spending within U.S. regions, there are also significant international differences in health care use, spending, and outcomes (see the text box on p. 28 for a discussion).

Vulnerability of FFS Medicare to fraud contributes to spending variation

Some of the geographic variation in health care spending in the United States is due to geographic variation in health care fraud (Institute of Medicine 2013b). Over the last several years, CMS and federal law enforcement agencies have initiated efforts to find and prosecute perpetrators of fraud and recover fraudulent spending, returning $2.4 billion to the Medicare trust funds in fiscal year 2012 (Department of Health and Human Services and Department of Justice 2013). When CMS began the process of screening 1.5 million Medicare-enrolled providers in fiscal year 2012, it reported eliminating nearly 150,000 ineligible providers (about 10 percent) from its billing system by the end of the year (Department of Health and Human Services 2013). These law enforcement and administrative efforts are not insignificant, but they do not alter fundamental statutory limitations such as Medicare's current "any willing provider" policy that prevent the program from using tools such as provider credentialing requirements that are commonly deployed in private health plans. The Government Accountability Office (GAO) has found "persistent weaknesses in Medicare's enrollment standards and procedures that increased the risk of providing billing privileges to entities intent on defrauding the program," and notes that CMS has taken steps under new statutory authority in recent years to address only some of these problems (Government Accountability Office 2013). Estimates of the total amount of health care spending attributable to fraud are imprecise by definition, but one recent analysis estimated that the costs of fraud to Medicare and Medicaid ranged from about 4 percent to over 12 percent of combined federal spending on the two programs in 2011 (Berwick and Hackbarth 2012). According to GAO, Medicare reported improper payments estimated to be more than $44 billion in 2012, and it remains on GAO's list of "high-risk" programs, where it has been since 1990 (Government Accountability Office 2013).

Some FFS Medicare payment policies may not be well targeted

The Commission has found instances in which certain Medicare payment policies that were intended to reach one kind of goal, such as ensuring beneficiaries' access to care, may have, over time, resulted in inefficiencies that can contribute to unnecessary spending. For example, in its March 2007 report to the Congress, the Commission found that the indirect medical education payment adjustment to teaching hospitals was set considerably above the

empirical level of costs for those hospitals (Medicare Payment Advisory Commission 2007). In its June 2012 report on rural payment policies, the Commission observed that some special payments to providers in rural areas are not well targeted because some providers in those areas do not need the extra financial assistance or are not the sole providers in their communities (Medicare Payment Advisory Commission 2012a). Other payment distortions that contribute to inefficiency in care delivery have occurred as the various FFS payment systems have evolved separately. For instance, the Commission has analyzed whether it undermines efficiency to continue Medicare policies that result in higher payments for certain services, such as physician evaluation and management and some ambulatory surgery services, based solely on the setting in which the service is delivered (Medicare Payment Advisory Commission 2013). In general, the Commission maintains that Medicare should base payment rates on the resources needed to treat patients in the most efficient setting, adjusting for differences in patient severity to the extent that those differences affect provider costs.

Value of health care services is not always clear

In addition to abusive payment system practices, health system analysts have questioned the comparative value of certain health care services, given the wide variation in service use and spending that does not correspond to significant differences in health outcomes. First, researchers have noted a decline in the value of health spending over time. For instance, Cutler and colleagues showed that spending from 1960 to 2000 provided reasonable value (in terms of macro-level quality indicators like mortality rates); however, after 2000, the value of health care spending seems to have decreased, particularly among the elderly (Cutler et al. 2006).

Second, health dollars are misallocated when they are spent for inappropriate or inappropriately applied services, including improper services, services delivered at an inappropriate time, services that are not proven for a given purpose, interventions that are not proven for a specific contingent of patients, and interventions disseminated beyond a population for whom they are effective or for whom the risks of screening or treatment outweigh the benefits (Baicker and Chandra 2011, Garber et al. 2007, Kale et al. 2013, Lipitz-Snyderman and Bach 2013, Redberg 2011). Spending on such services does not improve health and, indeed, may expose patients to unnecessary medical and financial risk. A recent analysis of trends in the delivery of inappropriate care (both overuse and misuse) in ambulatory care settings (e.g., physician offices, outpatient clinics) found steady or growing rates of inappropriate care between 1999 and 2009 for 10 of 13 measures analyzed (Kale et al. 2013).

Disparities across populations persist

The Commission remains concerned about the notable differences in access to quality care for different demographic groups. First, in its 2012 annual survey of access to physician services, the Commission noted that minorities more frequently report access problems. Second, beneficiaries who are members of racial or ethnic minorities or those with low incomes are more likely to seek care from providers of poorer quality (Bach et al. 2004, Dimick et al. 2013, Jha et al. 2007). Further, though quality of care is broadly improving across racial and ethnic groups, age groups, and income groups, minorities continue to experience worse quality of care compared with their nonminority counterparts (Agency for Healthcare Research and Quality 2013).

These discrepancies are also of concern because racial and ethnic minority beneficiaries have disproportionately high rates of chronic disease with multiple comorbid conditions and so are disproportionately likely to incur high Medicare spending (Centers for Medicare & Medicaid Services 2012). For example, African Americans and Hispanics are overrepresented among those beneficiaries in the top decile of Medicare spending (Medicare Payment Advisory Commission 2012a). For individuals with diabetes, which is one of the most prevalent conditions among Medicare beneficiaries with multiple chronic conditions, the rate of hospital admissions for uncontrolled diabetes is significantly higher for African Americans (the highest) and Hispanics (next highest) than the rate for non-Hispanic Whites; all non-White racial and ethnic groups have higher rates of end-stage renal disease due to diabetes than non-Hispanic Whites (Agency for Healthcare Research and Quality 2013).

Differences in medical literacy (the individual's ability to understand medical instructions and communicate with doctors and other staff members) further compound disparities in the prevalence of chronic disease. The proportion of individuals having below-basic medical literacy is significantly higher for Hispanics (41 percent), African Americans (24 percent), and Native Americans/Alaskan Natives (25 percent) than for Whites (9 percent) and Asian/Pacific Islander groups (13 percent) (Kutner et

The United States spends more on health care than other countries but achieves poorer health outcomes

The United States spends more on health care, both per capita and as a share of gross domestic product (GDP), than any of the 34 countries that are members of the Organisation for Economic Co-operation and Development (OECD) (Figure 1-13a) (Organisation for Economic Co-operation and Development 2013). At the same time, the United States ranks 26th in life expectancy and 31st on infant survival rates of the 34 OECD countries (Figure 1-13b) (Organisation for Economic Co-operation and Development 2013). Since 1990, life expectancy at birth in the United States and the health of the population more generally have increased, but at a slower rate than in the other OECD countries (Organisation for Economic Co-operation and Development 2013, U.S. Burden of Disease Collaborators 2013). Researchers have explored several possible explanations for the relatively poor health outcomes in the United States, including the fragmented nature of the health care delivery system and large segment of the population without health insurance; higher rates of chronic diseases such as obesity, ischemic heart disease, and diabetes; socioeconomic factors such as a higher relative poverty rate; and behavior-related factors such as higher calorie consumption per capita, higher prevalence of unsafe sex practices and drug abuse, and higher rates of deaths from motor vehicle accidents and homicides (National Research Council and Institute of Medicine 2013a, Organisation for Economic Co-operation and Development 2013). Moreover, countries with substantially lower GDPs and health expenditures per capita, such as Chile, Portugal, Slovenia, and South Korea, have lower mortality rates than those in the United States (U.S. Burden of Disease Collaborators 2013). According to the Institute of Medicine, the superior health outcomes in other countries demonstrate that people in the United States are dying and suffering from illness and injury at rates that are unnecessary (Institute of Medicine 2013a). Moreover, ever-higher health care spending with poorer health outcomes for its workforce puts the United States at an economic disadvantage with respect to other countries (Institute of Medicine 2013a).

Other evidence indicates that the higher U.S. spending levels are attributable to the nation's significantly higher prices for health care services and not to greater utilization of hospital and physician services (Anderson et al. 2003, Laugesen and Glied 2011, Squires 2012, White 2007). The United States has shorter lengths of stay per hospital visit than most other countries and has a comparatively lower number of hospital beds and hospital visits per capita (Anderson and Squires 2010, Organisation for Economic Co-operation and Development 2013). At the same time, spending per hospital discharge is higher in the United States than any other OECD country (Anderson et al. 2003). Per capita, the United States also has relatively fewer physicians and physician visits compared with the other OECD countries (Anderson and Squires 2010, Organisation for Economic Co-operation and Development 2013). Physicians generally receive higher payment rates for office visits and hip replacements in the United States than in Australia, Canada, France, Germany, and the United Kingdom (Laugesen and Glied 2011).

However, the use and cost of sophisticated imaging technology—computerized tomography scanners, magnetic resonance imaging, and positron emission tomography scanners—are higher in the United States than most other OECD countries (Anderson and Squires 2010, Organisation for Economic Co-operation and Development 2013, Squires 2012).

One key driver of higher prices in the United States is provider market power (Berenson et al. 2012, Berenson et al. 2010, Coakley 2010). Hospitals merge and physician groups consolidate to gain market power over insurers to negotiate higher payment rates (see text box on pp. 6–7 for a discussion of market power and prices). In OECD countries, prices are typically set administratively. ■

(continued next page)

The United States spends more on health care than other countries but achieves poorer health outcomes (cont.)

FIGURE 1–13

Out of 34 OECD countries, the United States ranks first on health care spending but 26th on life expectancy

Figure 13a. Health care spending as a share of GDP, selected OECD countries, 2011

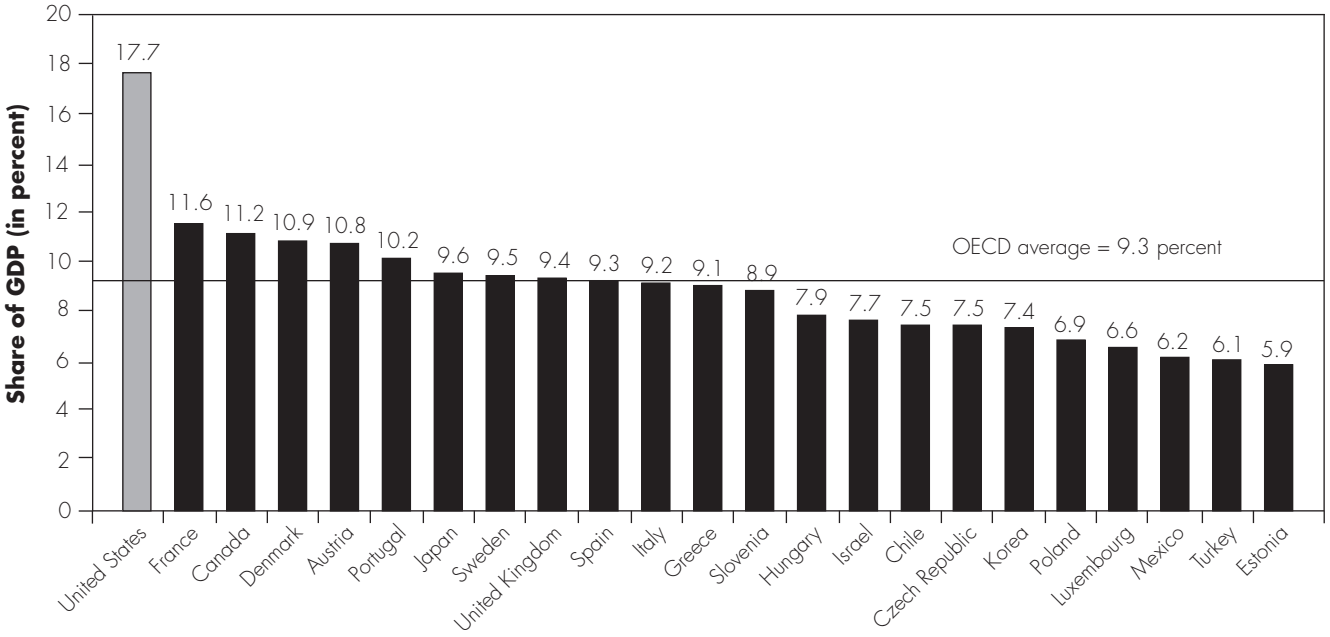
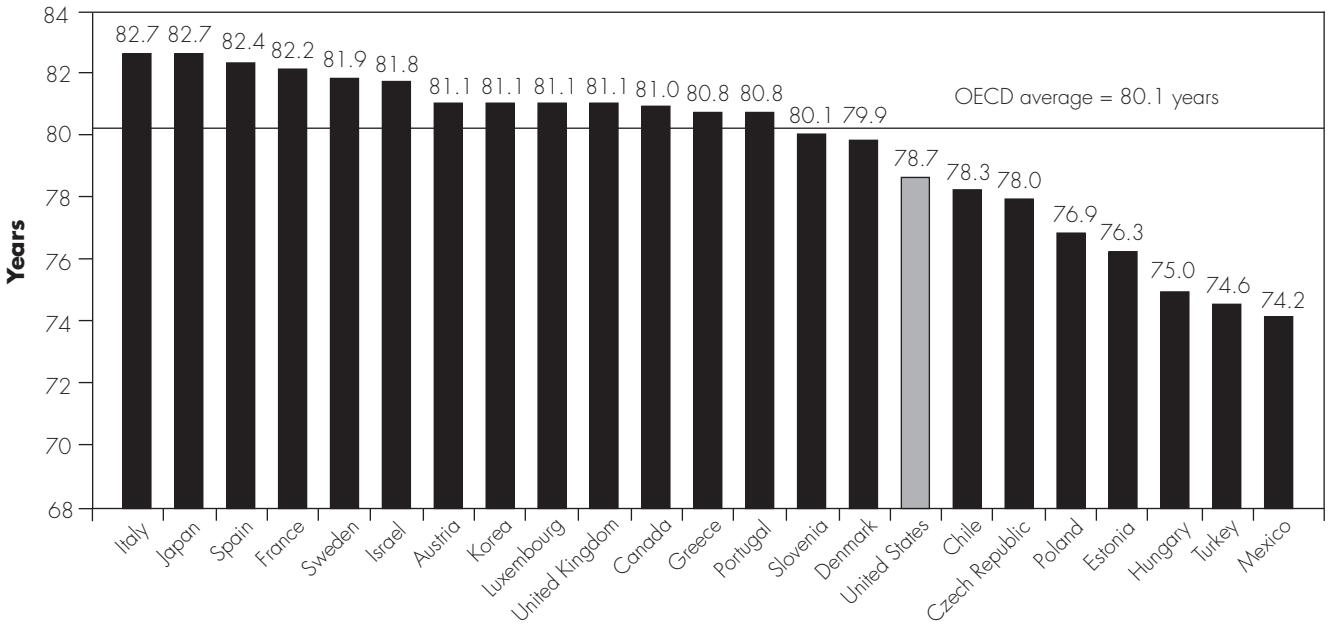


Figure 13b. Life expectancy at birth, selected OECD countries, 2011



Note: OECD (Organisation for Economic Co-operation and Development), GDP (gross domestic product).

Source: Organisation for Economic Co-operation and Development 2013.

al. 2006). Noting that minorities tend to seek care from poorer quality providers, the Commission recommended that the Secretary make low-performing providers and community-level initiatives a high priority in allocating resources for technical assistance for quality improvement. If effective, such a policy could lead to improved outcomes for racial and ethnic minority beneficiaries (Medicare Payment Advisory Commission 2011a).

Conclusion

The level and growth of health spending as a share of the economy will require that an ever-increasing amount of the country's economic activity and gain be dedicated to purchasing health care. Medicare, as the single largest payer in the health care sector, will expand, and its eligible population will grow more diverse with the aging of the baby-boom generation, with major implications for program spending and the delivery of care. Significant variation in use and spending, which does not correspond to better quality, raises flags that higher health care use and spending are not improving overall health and are putting beneficiaries at risk (both medically and financially).

Because of its size and because other payers use its payment methods, Medicare has an important influence on the nation's health care delivery system and its evolution. Reciprocally, trends in the privately insured health care market can influence whether Medicare's payment reforms are ultimately successful. Because of this interaction between public and private payers, the alignment of incentives across payers is an important consideration for delivery system reforms. All payers will face continued pressure to decrease growth in health care spending.

Despite the relatively lower spending growth rates recently experienced by and projected for the Medicare program under current law, the program will continue to absorb increasing amounts of federal revenues. Other public investments such as education and infrastructure will be crowded out by high and growing levels of health care spending. State and federal budgets face continued fiscal pressure, effects intensified by the trends in health care spending. In light of strained budgets and the downward trend in income, the Medicare program must be vigilant in pursuing reforms that decrease spending and improve quality. ■

Endnotes

1 MedPAC analysis of the 2012 version of the National Health Expenditures released in January 2014 by the Office of the Actuary, Centers for Medicare & Medicaid Services.

2 MedPAC analysis of National Health Expenditures Projections released September 2013, and projected GDP data from the Congressional Budget Office's *The 2013 Long-Term Budget Outlook*, released September 2013.

3 MedPAC analysis of the 2012 version of the National Health Expenditures released in January 2014 by Office of the Actuary, Centers for Medicare & Medicaid Services.

4 MedPAC analysis of National Health Expenditure Projections 2012–2022 released in September 2013 by the Office of the Actuary, Centers for Medicare & Medicaid Services.

5 While Medicare's spending on personal health care in 2012 was $538 billion, Medicare's total spending in that year was $574 billion. Total spending includes items such as investment and administration costs that are not included in personal health care.

6 In 2012, 10.6 million people were enrolled in both Medicare and Medicaid (Boards of Trustees 2013). Medicaid pays for either a portion or all of the Medicare premium and out-of-pocket health care expenses for those enrollees who qualify for dual enrollment based on limited income and resources.

7 Enrollees in private health insurance may also be enrolled in other third-party health insurance programs. For example, Medicare FFS beneficiaries may also have supplemental insurance sold by private companies.

8 Statements in this paragraph are based on the Commission's analysis of the 2012 version of the National Health Expenditures released in January 2014 by the Office of the Actuary, CMS, and historical GDP data from the Bureau of Economic Analysis (BEA), downloaded in December 2013. The historical GDP data reflect BEA's upward revisions to GDP estimates first released in July 2013.

9 Not every FFS beneficiary enrolls in a Part D prescription drug plan. In 2010 and 2011, a little over half were enrolled. Those who are not enrolled may be receiving prescription drug benefits from a former employer.

10 Both employer-sponsored health insurance and FFS Medicare rely on private insurers to administer drug benefits. Private insurers negotiate drug prices with pharmacies and rebates with drug manufacturers. As well, for FFS Medicare, PPACA required drug manufacturers to offer a 50 percent discount on brand drugs and a 7 percent discount on generic drugs filled in the coverage gap in 2011. The spending and price growth estimates are for total spending (including beneficiary cost sharing) and do not reflect any rebates or discounts.

11 To be comparable with the other Medicare data in Table 1-3, the 2011 brand-name drug dispensing rate of 25 percent is the rate for Medicare's prescription drug plans only (plans that service FFS beneficiaries) and does not reflect the experience of Medicare Advantage prescription drug plans.

12 This projection assumes that the reductions to the payment rates for physicians and other health professionals mandated by the sustainable growth rate (SGR) formula are replaced with a payment rate freeze beginning in 2014.

13 That estimate of Medicaid's share of state general fund spending is based on state Medicaid funds and excludes federal matching funds in the calculation.

14 The projections incorporate the effects that changes in debt and marginal tax rates have on the economy in the long run and how that economic feedback, in turn, would affect the budget. Without incorporating the economic feedback, CBO projects the debt to equal 100 percent of GDP by 2038 under the baseline assumptions.

15 This discussion of the impact on Medicare of rapid enrollment growth, aging, and demographic changes is focused on Medicare beneficiaries age 65 and over because the program's actuaries project that enrollment of beneficiaries under age 65 who are eligible on the basis of disability will grow much more slowly over at least the next 10 years than enrollment of those age 65 and over. Enrollment of beneficiaries under age 65 who are eligible on the basis of disability is projected to grow at an average annual rate of 0.7 percent from 2012 through 2022 compared with 3.8 percent annually for those age 65 and over (Boards of Trustees 2013).

16 The other sources of supplemental benefits that cover some or all Medicare cost-sharing liabilities are Medicaid programs and Medicare Advantage plans.

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