CONGRESS OF THE UNITED STATES
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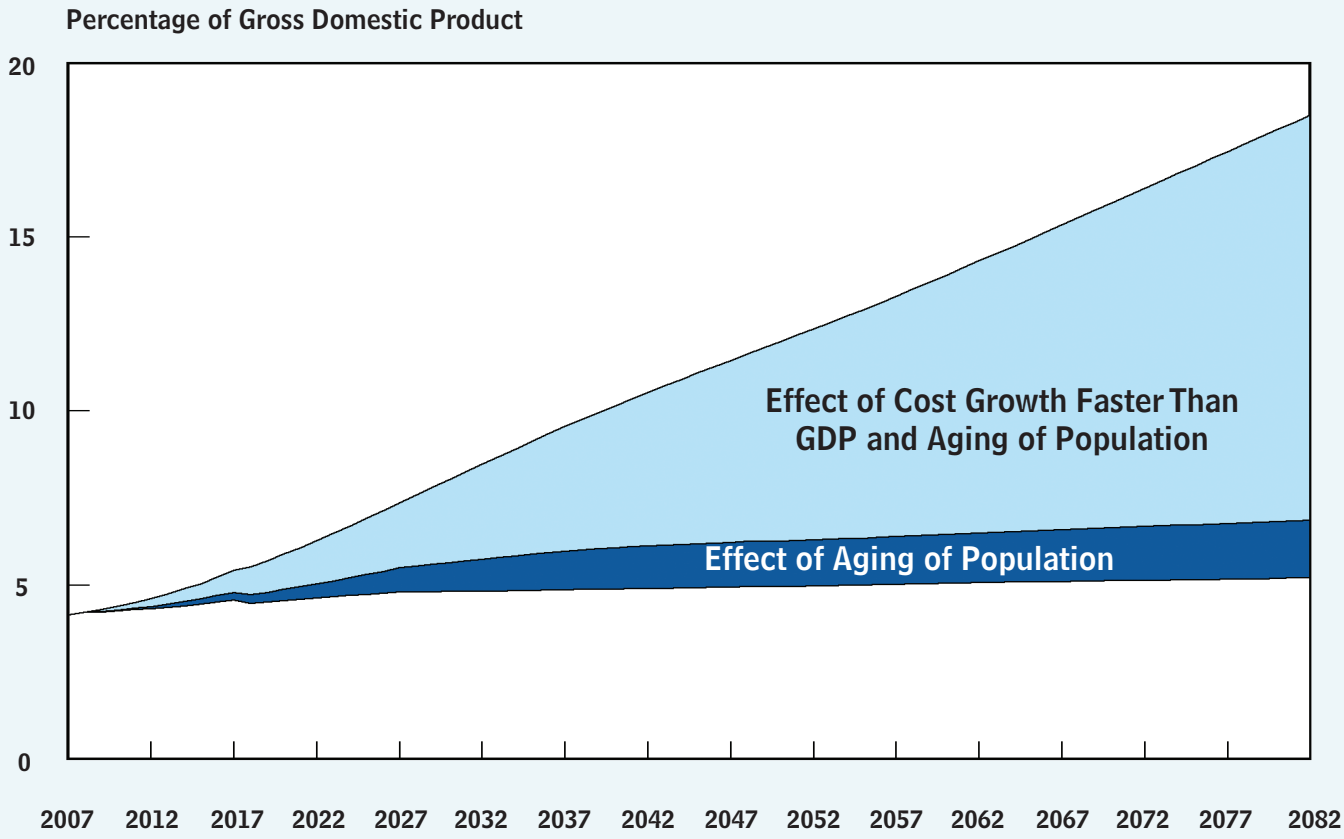
The Long-Term Outlook for Health Care Spending



Sources of Growth in Projected Federal Spending on Medicare and Medicaid

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The Long-Term Outlook for Health Care Spending

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Notes

Numbers in the text and tables may not add up to totals because of rounding.

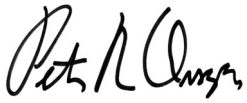
The figure on the cover, explained in detail in Box 2, shows that the aging of the population accounts for only a modest fraction of the projected growth in federal spending on Medicare and Medicaid. The main factor is excess cost growth—or the extent to which the increase in health care spending exceeds the growth of the economy.

Preface

Spending on health care has been growing faster than the economy for many years, representing a challenge both for the government's two major health insurance programs, Medicare and Medicaid, and for the private sector. A prologue to the Congressional Budget Office's (CBO's) upcoming long-term budget outlook, to be released next month, this study presents the agency's projections of federal spending on Medicare and Medicaid and national spending on health care over the next 75 years. The goal of the projections is to examine the implications of a continuation of current federal law, rather than to make a prediction of the future. In reality, federal law will change; nevertheless, the projections provide a useful measure of the scope of the problem facing the nation under current law.

Noah Meyerson, Lyle Nelson, Michael Simpson, and Julie Topoleski of CBO's Health and Human Resources Division prepared the study, with valuable contributions from Ignez Tristao. The study benefited from comments by Colin Baker, James Baumgardner, Thomas Bradley, Philip Ellis, Keith Fontenot, Matthew Goldberg, Arlene Holen, Joyce Manchester, William Randolph, Jonathan Schwabish, Sven Sinclair, Robert Sunshine, and Bruce Vavrichek of CBO. Members of CBO's Panel of Health Advisers also provided useful comments. (The assistance of external reviewers implies no responsibility for the final product, which rests solely with CBO.)

John Skeen edited the study, and Christine Bogusz proofread it. Maureen Costantino prepared it for publication and designed the cover. Lenny Skutnik printed the initial copies, Linda Schimmel handled the print distribution, and Simone Thomas prepared the electronic version for CBO's Web site (www.cbo.gov).



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Director

November 2007

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The Long-Term Outlook for Health Care Spending

Introduction and Summary

Spending on health care in the United States has been growing faster than the economy for many years, representing a challenge not only for the government's two major health insurance programs—Medicare and Medicaid—but also for the private sector. As health care spending consumes a greater and greater share of the nation's economic output in the future, Americans will be faced with increasingly difficult choices between health care and other priorities. However, a variety of evidence suggests that opportunities exist to constrain health care costs without adverse health consequences.[1]

In December 2007, the Congressional Budget Office (CBO) will release new long-term budget projections, and spending on health care will play a central role in the fiscal outlook to be described in that report. This study presents CBO's projections of federal spending on Medicare and Medicaid and health care spending generally over the next 75 years. Despite the substantial uncertainties surrounding projections over that long a period, particularly ones involving the growth of health care costs, such a horizon is useful for illustrating the long-term fiscal challenges that this country faces.

The goal of the projections in this study is to examine the implications of a continuation of current federal law, rather than to make a prediction of the future. Under that assumption, however, federal spending on health care would eventually reach unsustainable levels. In reality, federal law will change in the future, ensuring that the basis for the projections will not turn out to be correct, but the projections nevertheless provide a useful measure of the scope of the problem facing the nation.

A simple extrapolation of historical growth rates in Medicare and Medicaid expenditures can illustrate paths for future spending on those programs.[2] That approach, however, implicitly allows the economic impossibility of having health care spending eventually exceed total national income and fails to allow the nonfederal components of the health system to respond to rising costs (as they probably would do even without a change in federal law). Those shortcomings are magnified as the projection period lengthens. This study describes an alternative approach in which the rising share of national income devoted to health care creates pressure on households and employers to take potentially painful steps to reduce the growth in health care spending.

Various plausible paths exist for how spending in the rest of the health care system would evolve over time in the absence of changes in federal law, and one innovation in the methodology presented here is to incorporate a specific metric for determining how that spending will grow. Many such metrics could be applied; the premise that CBO chose was that Americans will ultimately demand changes to the system to prevent their consumption of other goods and services from declining in real (inflation-adjusted) terms. In other words, CBO's projections assume that to avoid a reduction in real consumption of items besides health care, employers, households, and insurance firms will change their behavior in a variety of ways (potentially including higher cost sharing, increased utilization management, reduced insurance coverage by employers, and greater scrutiny of new technologies based on evidence of their comparative effectiveness) to slow the rate of growth of spending in the nonfederal part of the health system. The projections also assume that, even in the absence of changes in federal law, some of the measures adopted to slow growth in the rest of the health care system will moderate spending growth in Medicare

1. Statement of Peter R. Orszag, Director, Congressional Budget Office, *Health Care and the Budget: Issues and Challenges for Reform,* before the Senate Committee on the Budget (June 21, 2007).

2. Ibid.

and Medicaid and that regulatory changes at the federal level and policy changes at the state level will help to slow cost growth in those programs.[3]

The results of CBO's projections suggest that in the absence of changes in federal law:

- Total spending on health care would rise from 16 percent of gross domestic product (GDP) in 2007 to 25 percent in 2025, 37 percent in 2050, and 49 percent in 2082.
- Federal spending on Medicare (net of beneficiaries' premiums) and Medicaid would rise from 4 percent of GDP in 2007 to 7 percent in 2025, 12 percent in 2050, and 19 percent in 2082.

Those results show significantly higher federal spending on Medicare and Medicaid under current law than other official projections do, which typically assume that spending on those programs grows much more slowly in the future than it has in the past. For example, although the projections by CBO and by the trustees of the Medicare program (under their intermediate assumptions) track each other relatively closely for the next two or three decades, by the end of 75 years, Medicare spending under CBO's projections is about 50 percent higher.

To be sure, significant uncertainty surrounds such projections, and the growth of spending on health care could turn out to be substantially higher or lower over the next 75 years than projected here. Like overall budget projections that show an exploding ratio of federal debt to GDP over the long term (which could not in all likelihood actually occur because, at some point, the government would not be able to sell additional debt to investors), the projections here of significant increases in health care spending and a sustained differential in the growth rates of Medicare and Medicaid relative to that of the rest of the health care system will almost certainly not occur, because current law will be changed to help prevent such outcomes. Nonetheless, the projections are useful in illustrating the implications of current law. The main message of this study is that, without changes in federal law, federal spending on Medicare and Medicaid is on a path that cannot be sustained.

3. Such changes that would also affect federal programs could include less rapid development and adoption of costly new technologies and changes in physicians' practice patterns.

In itself, higher spending on health care is not necessarily a "problem." Indeed, there might be less concern about increasing costs if they yielded commensurate gains in health. But the degree to which the system promotes the population's health remains unclear. Indeed, substantial evidence exists that more expensive care does not always mean higher-quality care. Consequently, embedded in the country's fiscal challenge is the opportunity to reduce costs without impairing health outcomes overall (see Box 1).

Overview of the U.S. Health Care System

Spending on health care in the United States is financed through a combination of private and public sources. Most Americans under the age of 65 have private health insurance obtained through an employer. According to CBO's estimates, about 63 percent of that population (161 million people) had employment-based coverage in 2006, while about 4 percent (10 million people) purchased private coverage directly from an insurer.[4] The two main sources of public financing for health care are Medicare and Medicaid. Nearly 43 million elderly or disabled individuals were enrolled in Medicare in 2006, and nearly 61 million low-income individuals were enrolled in Medicaid for at least part of the year.[5] About 43 million people (constituting 17 percent of the nonelderly population) were uninsured. (For more details on the Medicare and Medicaid programs, see Appendix A.)

In 2005, the most recent year for which data are available, national spending on health care totaled nearly $1.9 trillion, or 14.9 percent of the nation's GDP.[6] Some 55 percent of the total was financed privately, and the rest came from public sources (see Table 1). Payments by private

4. Those estimates are from CBO's health insurance simulation model. For a description of the model, see Congressional Budget Office, *CBO's Health Insurance Simulation Model: A Technical Description* (October 2007).

5. Sixteen percent of Medicare beneficiaries were also enrolled in Medicaid.

6. This study defines national spending on health care as total spending on health services and supplies, as defined in the national health expenditure accounts, maintained by the Centers for Medicare and Medicaid Services. The figure cited is equal to total national health expenditures minus spending on research and development and construction.

Box 1.

What Policy Options Can Help Reduce Spending on Medicare and Medicaid?

The analysis underlying the projections in this study, by design, keeps federal law unchanged. A result of that constraint is that Medicare and Medicaid grow more rapidly than the rest of the health system, which is unlikely to occur because federal law will change in the future. In other words, it is certain to change to prevent the scenarios presented here from being realized. So what types of federal policy options would help to reduce future spending on Medicare and Medicaid?

One type of change involves reducing payment rates in the two programs. For example, some analysts have proposed reducing payments to Medicare Advantage plans. Those private insurance plans, according to the Congressional Budget Office's estimates, are paid roughly 12 percent more than the cost of enrolling their beneficiaries in the traditional fee-for-service component of Medicare. Other proposals have involved reductions in reimbursement rates for specific types of services or providers.

A more fundamental set of federal policy changes may help to reduce not only federal spending but also health care spending overall. Indeed, given the interactions between federal programs and the rest of the health system, many analysts believe that significantly constraining the growth of costs for Medicare and Medicaid over long periods of time, while maintaining broad access to health providers under those programs, can occur only in conjunction with slowing cost growth in the health care sector as a whole.

Two potentially complementary approaches to reducing spending on Medicare, Medicaid, and health care generally—rather than simply reallocating spending among different sectors of the economy—involve generating more information about the relative effectiveness of medical treatments and changing the incentives for providers and consumers in the supply and demand of health care. The current financial incentives facing both providers and patients tend to encourage or at least facilitate the adoption of expensive treatments and procedures, even if the evidence about their effectiveness relative to other therapies is limited. For doctors and hospitals, those incentives stem from fee-for-service reimbursement. Such payments can encourage health care providers to deliver a given service in an efficient manner but also provide an incentive to supply additional services—as long as the payments exceed the costs. For their part, insured individuals generally face only a portion of the costs of their care and thus have only limited financial incentives to seek lower-cost treatments. Private health insurers have incentives to limit the use of ineffective care but are also constrained by a lack of information about what treatments work best for which patients.

Many analysts believe that expanded research on "comparative effectiveness" offers a promising mechanism to address some of those concerns. Analysis of comparative effectiveness is simply a comparison of the impact of different options that are available for treating a given medical condition for a particular set of patients. Such studies may compare similar treatments, such as competing drugs, or they may analyze very different approaches, such as surgery in comparison to drug therapy. The analysis may focus only on the relative medical benefits and risks of each option, or it may go on to weigh both the costs and the benefits of those options. In some cases, a given treatment may be found more effective for all types of patients, but more commonly a key issue is determining which specific types would benefit most from it.

To affect medical treatment and reduce health care spending, the results of comparative effectiveness analyses would ultimately have to change the behavior of doctors and patients—that is, to get them to use fewer services or less intensive and less expensive services than are currently projected, which, for Medicare, would require changes to current law. The program has not taken costs into account in

Box 1.

Continued

determining what services are covered and has made only limited use of data on comparative effectiveness in its payment policies. But if statutory changes permitted doing so, the program could use information about comparative effectiveness to promote higher-value care. For example, Medicare could tie its payment to providers to the cost of the most effective or most efficient treatment. If that payment was less than the cost of providing a more expensive service, then doctors and hospitals would probably elect not to provide it—so the change in Medicare's payment policy would have the same practical effect as a coverage decision. Alternatively, enrollees could be required to pay for the additional costs of less effective procedures (although the impact on incentives for patients and their use of care would depend on whether and to what extent they had supplemental insurance coverage that paid some or all of Medicare's cost-sharing requirements).

More modest steps that Medicare could be authorized to take would include smaller-scale financial inducements to doctors and patients to encourage the use of cost-effective care. Doctors and hospitals could receive modest bonuses for practicing effective care or modest cuts in their payments for using less effective treatments. Likewise, enrollees could be required to pay a portion of the additional costs of less efficient procedures (rather than the full difference in costs). Or Medicare could provide information to doctors and their patients about doctors' use of various treatments, which would create some pressure for them to use more-efficient approaches. Adopting more modest measures to incorporate the findings of comparative effectiveness research, however, would probably yield smaller savings for the program.

Even in the absence of more information about comparative effectiveness, changes in incentives could help to control health care costs—but such measures would be more likely to maximize the health gains obtained for a given level of spending if they were combined with improved information. On the provider side, greater bundling of payments to cover all of the services associated with a treatment, disease, or patient could reduce or eliminate incentives to provide additional services that might be of low value. Such approaches, however, can raise concerns about the financial risk that providers face and about incentives for them to provide too little care. On the consumer side, a landmark health insurance experiment by RAND showed that higher cost sharing reduced spending—particularly when compared with a plan offering free care—with little or no adverse effects on health.

The broad options of generating more information and of changing incentives do not represent an exhaustive list of proposals intended to reduce costs in Medicare and Medicaid. In addition, some analysts have advocated significant expansions of disease management and care coordination as mechanisms for reducing costs—proposals that reflect the increasing prevalence of many chronic conditions, the large share of health care spending attributable to those conditions, and the lack of systems to coordinate care in many public and private health insurance plans. For example, 25 percent of Medicare beneficiaries accounted for 85 percent of the program's costs in 2001; more than three-quarters of those expensive beneficiaries had one or more of seven prominent chronic conditions (including coronary artery disease, diabetes, and congestive heart failure). However, the evidence to date—including the findings of several demonstration projects conducted under Medicare—suggests that disease management and care coordination may raise the quality of the health care provided but do not significantly reduce costs among a broad array of patients. As more evidence on the approaches is developed, identifying specific ways to reduce costs, especially for targeted subsets of beneficiaries, may become possible; for now, the possibility and scope of savings remain unclear.

Table 1.

National Spending on Health Care by Source of Funds, 2005

	Billions of Dollars	Percent
Private Spending	1,013.5	54.5
Private health insurance	694.4	37.3
Out-of-pocket payments	249.4	13.4
Other private spending	69.8	3.7
Public Spending	847.3	45.5
Medicare	342.0	18.4
Medicaid[a]	311.0	16.7
Other public spending	194.3	10.4
Total	**1,860.9**	**100.0**

Source: Congressional Budget Office based on data on spending on health services and supplies, as defined in the national health expenditure accounts, maintained by the Centers for Medicare and Medicaid Services.

a. Spending on Medicaid includes amounts spent by the federal government as well as by the states.

health insurers were the largest component of private spending, accounting for 37 percent of national health expenditures. Consumers' out-of-pocket expenses, which include payments for deductibles and copayments for services covered by insurance as well as payments for services not covered by insurance, accounted for 13 percent of national health expenditures.[7] Other sources of private funds, from philanthropy and on-site clinics that some employers maintain for their workers, accounted for 4 percent of the total.

Federal spending on Medicare accounted for 18 percent of national health expenditures in 2005, while federal and state spending on Medicaid accounted for 17 percent. A variety of other public programs accounted for 10 percent of national health expenditures, including ones by state and local health departments, the Department of Veterans Affairs, and the Department of Defense; workers' compensation programs; and the State Children's Health Insurance Program.

7. Out-of-pocket payments do not include the premiums that people pay for health insurance. Premiums fund the payments by insurers, which are already included in the measure of private spending.

The American health care system also consists of a broad array of health care providers, manufacturers, and suppliers. Although 45 percent of the spending on medical care is financed publicly, most services are furnished by private providers. For example, Medicare and Medicaid beneficiaries receive most of their care from physicians, hospitals, and other providers that deliver services to the general population.

From 1975 to 2005, the share of national health expenditures that was financed privately fell slightly, from 59 percent to 55 percent, while the share that was financed publicly rose correspondingly, from 41 percent to 45 percent (see Figure 1). During that period, out-of-pocket payments fell from 31 percent of national health expenditures to 13 percent, while payments by private insurers rose from 25 percent to 37 percent. Although the share of national health expenditures that is financed by out-of-pocket payments has fallen substantially, such payments are still a significant burden for many families. According to one study, 4.3 percent of the nonelderly population (nearly 11 million people) lived in families that spent more than 20 percent of their after-tax income on out-of-pocket payments for medical care in 2003.[8]

Historical Growth of Health Care Spending

Total spending on health care in the United States, including both private and public spending, increased from 4.7 percent of GDP in 1960 to 14.9 percent in 2005, the most recent year for which data are available, rising steadily throughout most of that period (see Figure 2). A notable exception was the period from 1993 to 2000, when the share remained relatively stable. Many analysts have attributed that lull to a substantial increase in the number of people who were enrolled in managed care plans as well as to excess capacity among some types of providers, which increased health plans' negotiating leverage.[9]

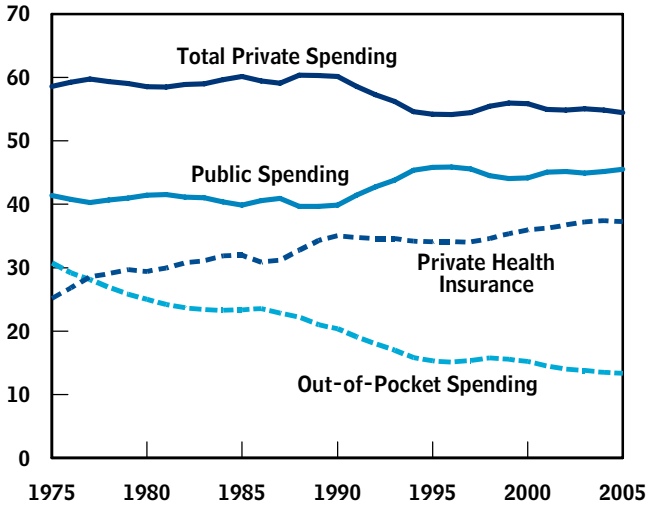
8. Jessica S. Banthin and Didem M. Bernard, "Changes in Financial Burdens for Health Care: National Estimates for the Population Younger Than 65 Years, 1996 to 2003," *Journal of the American Medical Association,* vol. 296, no. 22 (December 13, 2006), pp. 2712–2719.

9. See, for example, Katharine Levit and others, "National Health Expenditures in 1997: More Slow Growth," *Health Affairs,* vol. 17, no. 6 (1998), pp. 99–110.

Figure 1.

National Spending on Health Care by Source of Funds, 1975 to 2005

(Percent)



Source: Congressional Budget Office based on data on spending on health services and supplies, as defined in the national health expenditure accounts, maintained by the Centers for Medicare and Medicaid Services.

Factors Underlying the Historical Growth in Health Care Spending

Most analysts agree that the most important factor contributing to the growth in health care spending in recent decades has been the emergence, adoption, and widespread diffusion of new medical technologies and services.[10] Major advances in medical science allow providers to diagnose and treat illnesses in ways that were previously impossible. Many of those innovations rely on costly new drugs, equipment, and skills. Other innovations are relatively inexpensive but add up quickly as growing numbers of patients make use of them. Although technological innovation can sometimes reduce spending, in medicine such advances and the resulting changes in clinical practice have generally increased it.

Other factors that have contributed to the growth of health care spending include increases in personal income and the growth of insurance coverage. Demand for medical care tends to rise as real family income increases. Moreover, the growth of insurance coverage in recent decades, as evidenced by the substantial reduction in the percentage of health care spending that is paid out of pocket, has also increased the demand for medical care, because coverage reduces consumers' cost of care. However, according to the best available evidence, increasing income and insurance coverage cannot explain much of the growth in health care spending in recent decades.[11]

Another source of spending growth has been the aging of the population. Among adults, average medical spending generally increases with age, so as the population becomes older, health care spending per capita rises. However, over the past three decades, the effect of aging on health care spending has been relatively modest. The demographic effect will become more pronounced with the aging of the baby-boom generation, but it will continue to have a modest effect not only on national health care spending but also on federal spending on Medicare and Medicaid.[12]

Historical Trends

When analyzing historical trends in the growth of health care spending, it is useful to disaggregate the various components. Factors that affect spending on health care include general inflation; growth in the size of the population; and, to a lesser extent, changes in the age distribution of the population. Removing their effects reveals the amount of spending growth that is attributable to factors beyond inflation and demographics. There are at least two ways to measure such additional spending growth: as the increase in real annual health care spending for an average individual ("real per capita cost growth") or as the increase in health care spending for an average individual relative to the growth of per capita GDP.[13] The latter measure is commonly referred to as "excess cost growth,"

10. See Joseph P. Newhouse, "Medical Care Costs: How Much Welfare Loss?" *Journal of Economic Perspectives,* vol. 6, no. 2 (Summer 1992), pp. 3–21; David M. Cutler, "Technology, Health Costs, and the NIH" (paper presented at the National Institutes of Health Economics Roundtable on Biomedical Research, Cambridge, Mass., September 1995); and Technical Review Panel on the Medicare Trustees' Reports, *Review of Assumptions and Methods of the Medicare Trustees' Financial Projections* (December 2000).

11. Ibid.

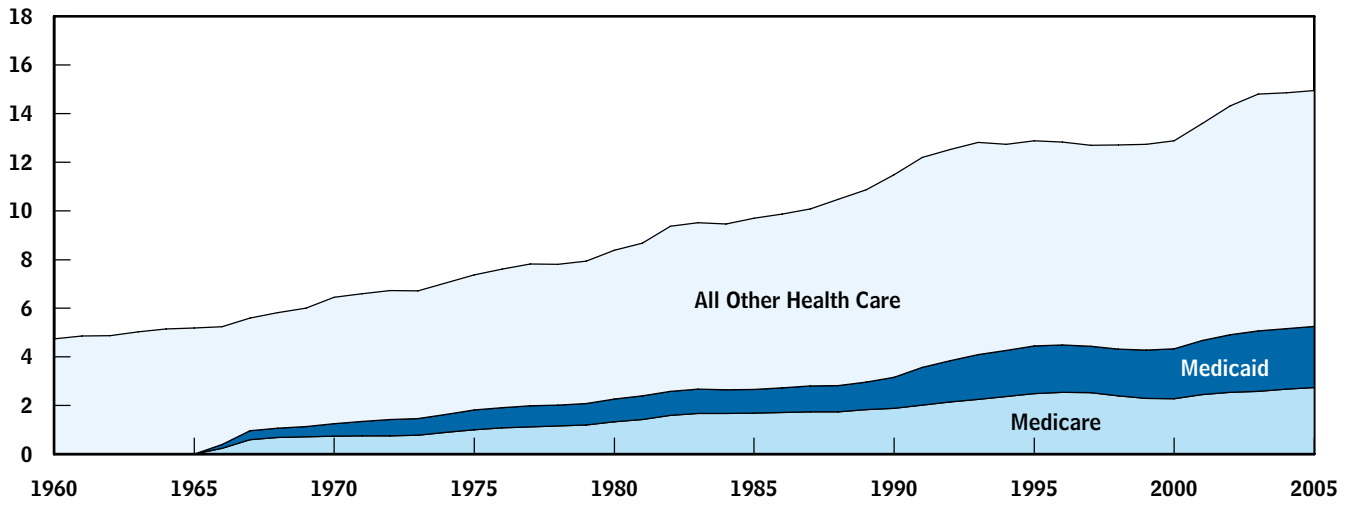
12. For the effect on Medicare, see Micah Hartman and others, "U.S. Health Spending By Age, Selected Years Through 2004," *Health Affairs*, Web Exclusive (November 6, 2007), available at www.healthaffairs.org.

13. The effect of general inflation is removed from the second measure because growth in spending on health care is measured relative to growth in per capita GDP, both of which are affected by general inflation.

Figure 2.

Spending on Health Care as a Percentage of Gross Domestic Product, 1960 to 2005

(Percent)



Source: Congressional Budget Office based on data on spending on health services and supplies, as defined in the national health expenditure accounts, maintained by the Centers for Medicare and Medicaid Services.

Note: Amounts for Medicare are gross federal spending on the program. Amounts for Medicaid include spending by the federal government and the states.

signifying that it measures the extent to which growth in per capita spending on health care exceeds the growth in per capita GDP, after adjustments for changes in the age distribution of the population. (The phrase is not intended to imply that growth in per capita spending on health care is necessarily excessive. It simply measures that growth relative to the growth of the economy.) If per capita health care spending grows faster than per capita GDP, the share of the economy devoted to health care will rise.

Although real per capita cost growth is useful for short-term projections, excess cost growth is a more useful concept for long-term projections. From one year to the next, real per capita cost growth is the more reliable measure, because health care spending does not closely track annual economic trends. (Per capita health care spending does not usually fall in a recession or sharply accelerate during years of strong economic growth.) As a result, excess cost growth is often unusually low during periods of strong economic growth and unusually high during periods of slow growth. Over longer periods, though, growth in per capita health care spending is likely to reflect changes in overall economic growth. As the baby-boom generation retires and the growth of the labor force slows, per capita GDP growth will probably slow from the rate experienced over the past 30 years, and growth in per capita spending on health care will probably slow as well. Because the projections contained in this study are long term, they are based on assumptions about future excess cost growth rather than real per capita cost growth.

In part, the projections are based on historical trends since 1975. The purpose of beginning in 1975 is to exclude the start-up period for Medicare and Medicaid; by that year, both programs had been in effect for nearly 10 years, and Medicare benefits had been available to nonelderly disabled people for two years.

The historical rates of cost growth that CBO used for Medicare and Medicaid remove the effect of growth in the number of beneficiaries. The calculation for Medicare also removes the effect of changes in the age composition of the population. For Medicaid, the computation removes the effect of changes in the composition of the

Table 2.

Real per Capita Cost Growth in Medicare, Medicaid, and All Other Spending on Health Care

(Percent)

	Medicare	Medicaid[a]	All Other	Total
1975 to 1990	5.4	5.4	4.8	5.1
1990 to 2005	3.8	3.3	3.1	3.4
1975 to 2005	4.6	4.4	4.1	4.2

Source: Congressional Budget Office.

Note: Figures are annual averages.

a. For Medicaid, data are available through 2004.

caseload: the portion of beneficiaries who are children, disabled people, elderly people, and other adults.[14]

From 1975 to 2005, real per capita spending on health care grew an average of 4.2 percent annually (see Table 2). During that period, per capita GDP grew at 2.2 percent, and excess cost growth amounted to 2.1 percentage points (see Table 3).[15] Those measures capture the growth in total spending on health care, including payments from all private and public sources. Excess cost growth was somewhat higher during that period for Medicare (2.4 percentage points) and Medicaid (2.2 percentage points) and somewhat lower for all other health care spending (2.0 percentage points). Included in other health care spending are payments by private insurers, payments by people who lacked health insurance coverage, all other out-of-pocket payments by consumers, and health care spending by government programs other than Medicare and Medicaid. Consequently, the differences in excess cost growth between Medicare, Medicaid, and other health care spending should not be interpreted as meaning that Medicare or Medicaid is less able to control spending than private insurers.

14. That methodology is consistent with CBO's projections of future spending, which separately account for projected changes in the composition of the caseload.

15. Excess cost growth is not computed simply by subtracting per capita growth in GDP from per capita growth in health care spending but involves a more complex formula (see Appendix B).

Excess cost growth was higher during the earlier part of that period and slower during the second half. The slower growth in overall spending during the 1990s, though, may have reflected one-time changes (for instance, the spread of managed care) rather than a change in the underlying trend. In addition, rates of excess cost growth in Medicare and Medicaid are partly driven by changes in law and policy. Changes have included expansions of the programs as well as efforts to limit cost growth. Most notably, in 1983, Medicare introduced a prospective payment system, under which hospitals are paid a predetermined rate for each admission. The system reduced costs. Whether such changes will ultimately constitute one-time shifts or more permanent changes in cost growth rates is uncertain. As with other spending on health care, the rates of real per capita cost growth and excess cost growth for Medicare and Medicaid were lower from 1990 to 2005 than they were in the preceding 15 years. Because it is unclear whether the experience from the 1990s represented a one-time shift in the level of costs or a change in the underlying trend and because the entire 30-year period was marked by substantial year-to-year volatility without any apparent trend (as shown in Figure 3), CBO uses the average from 1975 onward as the starting point for the projections of the future.

Table 3.

Excess Cost Growth in Medicare, Medicaid, and All Other Spending on Health Care

(Percentage points)

	Medicare	Medicaid[a]	All Other	Total
1975 to 1990	2.9	2.9	2.4	2.6
1990 to 2005	1.8	1.3	1.4	1.5
1975 to 2005	2.4	2.2	2.0	2.1

Source: Congressional Budget Office.

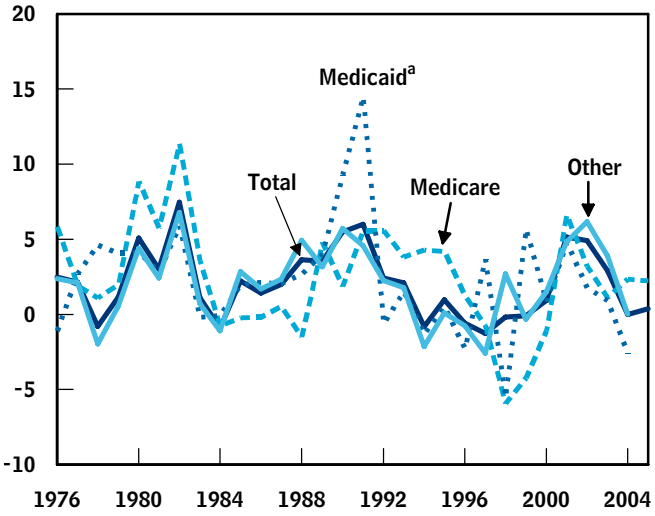
Note: Excess cost growth refers to the number of percentage points by which the growth of spending on Medicare, Medicaid, or health care generally (per beneficiary or per capita) exceeded the growth of nominal gross domestic product (per capita). Figures are annual averages.

a. For Medicaid, data are available through 2004.

Figure 3.

Excess Cost Growth in Medicare, Medicaid, and All Other Spending on Health Care

(Percentage points)



Source: Congressional Budget Office based on data on spending on health services and supplies, as defined in the national health expenditure accounts, maintained by the Centers for Medicare and Medicaid Services.

Note: Excess cost growth refers to the number of percentage points by which the growth of annual spending on Medicare, Medicaid, or all other health care (per beneficiary or per capita) exceeded the growth of nominal gross domestic product (per capita).

a. For Medicaid, data are available through 2004.

Projections of Health Care Spending

In the absence of an unprecedented change in the long-term trends, national spending on health care will grow substantially over the coming decades. The magnitude of that growth is highly uncertain, even over short periods, let alone a period as long as 75 years. CBO's projections show health care spending assuming no change in federal law affecting Medicare or Medicaid.[16] Thus, they provide a measure of the scope of the potential problem posed by the rising costs but are not a forecast of future developments because the magnitude of the problem will ultimately necessitate changes in the government's programs. They are also subject to the inherent uncertainty surrounding any long-term predictions, especially regarding health care.[17] Nevertheless, they provide a useful reference in showing the consequences of current law and assessing the impact of changes in law.

CBO's Assumptions About Future Spending on Health Care

In CBO's projections, spending for Medicare and Medicaid over the next 10 years is based on the agency's March 2007 budget outlook.[18] The projections for those programs in 2018 and later, as well as the projections for other health care spending, are based on the growth and aging of the population, growth in per capita GDP, and assumed rates of excess cost growth.

Short-Term Projections. For federal spending on Medicare and Medicaid, this study uses CBO's baseline budget projections for 2008 to 2017, which assume no change in current federal law.[19] CBO's baseline budget projections do not include projections of total national spending on health care. Therefore, short-term projections of all other (non-Medicare and non-Medicaid) health care spending

16. The projections for Medicare assume that the program will continue to pay for benefits as currently scheduled, notwithstanding the projected insolvency of the Medicare Hospital Insurance trust fund. Moreover, CBO assumes that future Medicare spending will not be affected by the provision of current law that requires the Medicare trustees to issue a "Medicare funding warning" if projected outlays for the program exceed 45 percent of "dedicated financing sources," because the law does not require the Congress to respond to such a warning by enacting legislation that would reduce Medicare spending.

17. For simplicity, the projections assume that the projected growth in health care spending has no effect on the future growth of GDP.

18. Congressional Budget Office, *An Analysis of the President's Budgetary Proposals for Fiscal Year 2008* (March 2007) and *Detailed Projections for Medicare, Medicaid, and State Children's Health Insurance Program* (March 2007).

19. Appendix C presents projections under an alternative scenario that assumes a change in federal law to prevent the reductions that would otherwise occur in the fees that Medicare allows for physicians' services. That scenario assumes that those fees will be updated to account for inflation in the inputs used for physicians' services. In both that scenario and the one presented in the main text, projected outlays for Medicare over the next 75 years are similar because the assumption that Medicare's physician fees will be updated to account for inflation has a minor effect over the long term.

were made using the same methods as those used for the long-term projections, as described below.

The Structure of Long-Term Projections. In its long-term projections, CBO combines an assumption about excess cost growth in the spending on health care with projections of the growth and aging of the population and of the growth in per capita GDP.

The agency develops separate projections for three categories:

- Federal spending on Medicare;
- Federal spending on Medicaid; and
- All other spending on health care, which includes private, state and local, and other federal health spending. (This category includes Medicare premiums, Medicare beneficiaries' cost sharing, and the states' share of Medicaid spending.)

CBO constrained Medicare premiums and cost sharing to grow at the same rate as federal spending on Medicare and constrained state Medicaid spending to grow at the same rate as federal Medicaid spending.[20]

Assumptions About Initial Rates of Excess Cost Growth. Although all long-term economic and demographic trends are difficult to forecast, future excess cost growth in health spending during the next century may be particularly uncertain. Systems of health care and health care financing have existed in their current forms for only a few decades, and medical technology continues to evolve rapidly.

One simple projection methodology is to base excess cost growth in the future on the average rate in the past. CBO adopts that approach when selecting *initial* rates of excess cost growth. Specifically, the excess cost growth rate for each of the three categories (Medicare spending, Medicaid spending, and all other spending on health care) in 2018 is assumed to equal the average of the rates from 1975 to 2005 (as presented in Table 3). (As mentioned, for all other spending on health care, the same rate is also used for 2008 through 2017.)

Assumptions About Long-Term Rates of Excess Cost Growth. For later years, one option would be to adopt the historical averages indefinitely. Although that approach is attractive for its simplicity (the results from such an extrapolation are presented in Appendix D), it has significant shortcomings. For example, simply extrapolating prior growth rates would result in total spending on health care eventually exceeding 100 percent of GDP. Furthermore, even in the absence of changes in federal law, spending growth would probably slow eventually as health care expenditures continued to rise and displaced increasing amounts of consumption of goods and services besides health care. In other words, pressure to slow cost growth will mount as health care accounts for a larger share of the American economy.

In response to rising health care costs, various policy changes in the private sector and by state governments would be likely. Employers would probably intensify their efforts to reduce their own costs, by, for example, working with insurers to make health care more efficient or by reducing insurance coverage. They would also probably raise premiums and out-of-pocket charges. Employees would then react to the higher charges either by shifting to plans with lower premiums—and more restrictive coverage—or by limiting their consumption directly in response to the higher out-of-pocket charges.[21]

It is impossible to predict with certainty precisely how such a process would unfold and how much cost growth could slow. Among various plausible approaches, a simple and transparent one is to assume that within the projection period, households would not be willing to spend so much more on health care that, from one year to the next, the increase in such spending alone was greater than the total increase in productivity. Therefore, under the assumption that the consumption of items besides health care does not decline, at the end point of CBO's projec-

20. To apply those constraints, CBO initially projected total Medicare spending, gross of beneficiaries' premiums and including cost sharing by beneficiaries, and total Medicaid spending, including both state and federal spending. To separate out federal spending on Medicare and Medicaid, CBO then reclassified the projected Medicare premiums and cost sharing and state spending on Medicaid into the category that includes all other spending on health care.

21. In its projections, CBO assumes that the share of health care spending that will be in the form of premiums in employment-based plans—and thus is tax preferred—will remain at approximately 58 percent of non-Medicare, non-Medicaid spending on health care.

tion period, in 2082, per capita consumption would continue to grow because of increased productivity, but the additional economic resources would be devoted entirely to health care. That assumption, to be sure, is not the only reasonable one, and other assumptions could generate higher or lower amounts of spending on health care in the long term. The approach, though, has the virtue of considering future levels of spending on both health care and other goods and services.[22]

Under the scenario that CBO presents, the slowdown in excess cost growth would not be painless and would not occur simply through improved efficiencies given the current structure of the health sector. Households would probably face increased cost sharing; new and potentially useful health technologies would be introduced more slowly or utilized at lower levels than would occur without a slowdown in excess cost growth; and more treatments or interventions might simply not be covered by insurance. Nevertheless, Americans would still face steadily increasing health costs. In other words, even though the growth rate might decline, the real level of health care costs would continue to rise—to the point of accounting for all of the increase in productivity. Therefore, real average consumption of goods and services other than health care would stagnate.

Such a slowdown in non-Medicare, non-Medicaid spending on health care may be particularly difficult to achieve in the absence of changes in federal law (as assumed in the projections). But at some point, the pressure on that portion of the system would probably become so severe that measures to slow growth would be taken. State governments and the private sector would almost certainly have more flexibility to respond to that pressure than the federal government would have without a change in federal law. The steps taken to slow growth in the non-Medicare, non-Medicaid sectors of the health system, in turn, would probably exert some downward pressure on growth rates in the public programs because they are integrated to a significant degree with the rest of the health care system. To the extent that actions by individuals and businesses resulted in lower-cost "practice patterns" by physicians, slower development and diffusion of new technologies, and cost-reducing changes to the structure of the health care system, Medicare and Medicaid would experience some reduction in their own growth—but the extent of that spillover is uncertain.

Moreover, CBO assumes that under current law, the federal government would make regulatory changes aimed at slowing spending growth on federal health programs and that Medicare beneficiaries' demand for health care services would decline as Medicare premiums and cost-sharing amounts consumed a growing share of their income. On the basis of discussions with health and policy experts, CBO assumes that—without changes in law—the combined effects of those factors would be to reduce Medicare's excess cost growth by one-fourth of the reduction in the growth of non-Medicare, non-Medicaid spending on health care. In other words, in a scenario in which the growth rate of spending on health care outside Medicare and Medicaid declined from 2 percent to 1 percent per year, Medicare spending growth would decline from 2 percent to 1.75 percent per year. (As discussed below, it is perhaps unlikely that Medicare and Medicaid would actually experience a significantly higher growth rate than the rest of the health sector over an extended period of time, but changes in federal law would be necessary to avoid that outcome.)

CBO assumes that excess cost growth will decline more rapidly for Medicaid, which is a joint federal–state program, than for Medicare. In addition to the spillover effects and possible federal regulatory changes noted above, states are likely to take actions to reduce the growth of Medicaid spending even without changes in federal law. State governments would probably respond to growing fiscal pressures by limiting the services they chose to cover or by reducing their number of beneficiaries by tightening eligibility. In its projections, CBO assumes that the rate of decline in Medicaid's excess cost growth will be 75 percent of the reduction in the growth of non-Medicare, non-Medicaid spending on health care. CBO's projection methodology for excess cost growth from 2019 through 2082 is thus based on the following set of assumptions:

- Excess cost growth in 2018 for Medicare, Medicaid, and all other health care will equal the historical averages;

22. For related discussions, see Michael E. Chernew, Richard A. Hirth, and David M. Cutler, "Increased Spending on Health Care: How Much Can the United States Afford?" *Health Affairs*, vol. 22, no. 4 (2003), pp. 15–25; and Glenn Follette and Louise Sheiner, "The Sustainability of Health Spending Growth," Finance and Economics Discussion Series No. 2005-60 (Washington, D.C.: Board of Governors of the Federal Reserve System, 2005).

Table 4.

Assumptions About Excess Cost Growth Over the Long Term

(Percentage points)

	2018 Rate (Historical Average)	Annual Decline in Rate, 2018–2082 (Percent)	Average Rate, 2018–2082	Rate in 2082
Medicare	2.4	1.1	1.7	1.1
Medicaid	2.2	3.4	0.9	0.2
All Other Spending on Health Care	2.0	4.6	0.6	0.1

Source: Congressional Budget Office.

Note: Excess cost growth refers to the number of percentage points by which the growth of spending on Medicare, Medicaid, or health care generally (per beneficiary or per capita) is assumed to exceed the growth of nominal gross domestic product (per capita).

- Total real per capita consumption of goods and services besides health care will not decline during the 75-year projection period; and
- The annual reduction in excess cost growth in Medicare and Medicaid will be, respectively, one-fourth and three-fourths of that for all other health care.

Under those assumptions, the excess cost growth rate for non-Medicare, non-Medicaid spending on health care declines by 4.6 percent annually (see Table 4).[23] By 2082, that rate drops to 0.1 percentage point. For Medicare, excess cost growth declines to 1.1 percentage points that year, and for Medicaid, to 0.2 percentage points. The average rates for excess cost growth between 2018 and 2082 are 0.6 percentage points for non-Medicare, non-Medicaid spending, 1.7 percentage points for Medicare, and 0.9 percentage points for Medicaid.

It may be difficult to envision how per capita Medicare and Medicaid spending could continue to grow more rapidly than other health care spending over such a long period, but changes in federal law are probably necessary to avoid that outcome. Furthermore, actions to reduce spending growth in the private sector could attenuate the incentives for the development and diffusion of new medical technologies for nonelderly people while having little effect on new technologies focused on diseases principally affecting the elderly.

That aspect of the projections may appear unrealistic, but it highlights the core problem—the unsustainability of current federal law. (The inherent tension in making long-term projections for a federal health care system that cannot be sustained in its current form must manifest itself in some way.) In reality, it is likely that changes in federal law as well as in practices in the private sector will slow the growth of health care spending such that growth in per capita Medicare and Medicaid spending does not diverge greatly from other spending on health care.

Projections of Health Spending

Over the past 30 years, total national spending on health care has more than doubled as a share of GDP. Under the assumptions described above, according to CBO's projections, that share will double again by 2035, to 31 percent of GDP. Thereafter, health care costs continue to account for a steadily growing share of GDP, reaching 41 percent by 2060 and 49 percent by the end of the 75-year projection period (see Figure 4).

Although the *rate* of cost growth slows over the projection period, the annual increase in the *level* would remain high. For example, for the five years beginning in 2007, CBO projects health care spending, measured as a share of GDP, to grow by 12 percent—from 15.5 percent of GDP to 17.4 percent. From 2070 to 2075, CBO projects, it will grow by only 4 percent, from 44.4 percent of GDP to 46.2 percent. From one perspective, the growth during the latter period is much slower. But in both periods, health care spending rises by about 2 percent of GDP.

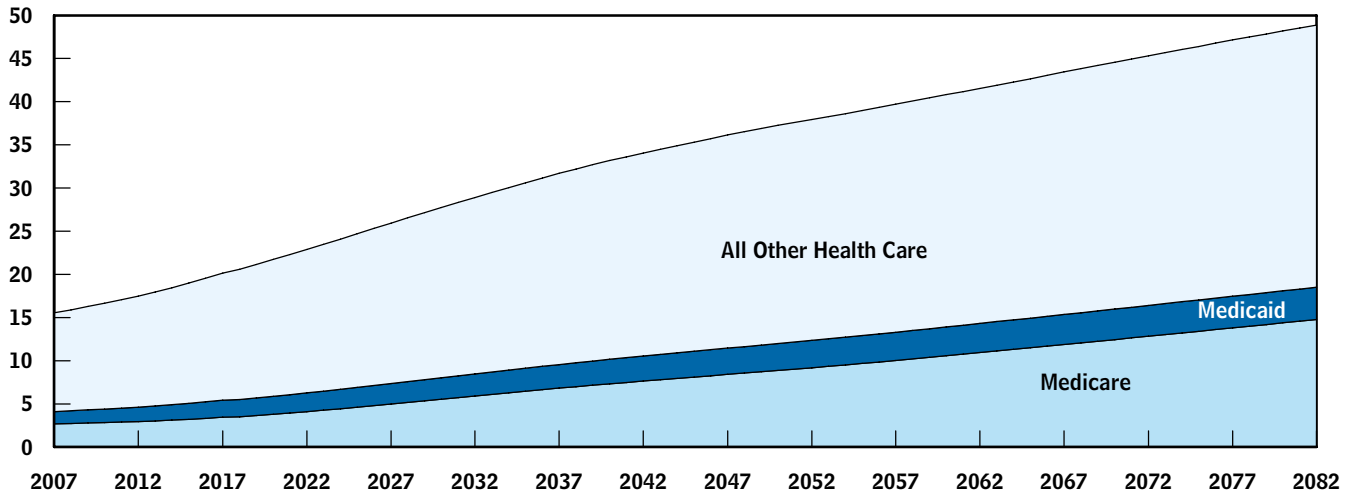
Spending on Medicare and Medicaid is projected to grow as a share of total spending on health care—as the assumed rates of excess cost growth for those programs under current federal law slow less quickly than does the rate for other spending on health care and as

23. Specifically, $ECG_y = ECG_{y-1} \cdot 0.954$.

Figure 4.

Projected Spending on Health Care as a Percentage of Gross Domestic Product

(Percent)



Source: Congressional Budget Office.

Note: Amounts for Medicare are net of beneficiaries' premiums. Amounts for Medicaid are federal spending only.

the population ages. Net federal spending on those programs now accounts for about 4 percent of GDP, or 26 percent of total spending on health care. By 2035, those figures grow to 9 percent of GDP, or 30 percent of total spending on health care, and by 2082, to 19 percent of GDP, or 38 percent of total spending.

Excess cost growth is the main factor responsible for the projected increase in both national spending on health care and federal spending on Medicare and Medicaid. By itself, the projected change in the age composition of the population has a modest effect on the future path of health care spending (see Box 2).

Consumption of Health Care and of Other Goods and Services

Historically, economic growth has been driven primarily by improved productivity. As the average worker is able to produce more, the average citizen can consume more. As the population ages and a smaller portion is employed, per capita GDP is likely to grow more slowly, but, on average, future generations will be substantially richer than Americans are today. In 2007, total per capita consumption averages about $27,000, of which about $6,000 is for health care. Under CBO's projections, by 2035, per capita consumption would grow by over $15,000 (in 2007 dollars), but more than three-quarters of that extra money would be spent on health care. While the consumption of other goods and services would grow by just 12 percent, the consumption of health care would triple.

In addition, although the consumption of goods and services besides health care would, on average, be stable at the end of the projection period, the effect would vary for different individuals. Lower-income people tend to spend fewer dollars on health care than average, but that spending represents a larger portion of their earnings than it does for others. Also, people generally have less flexibility about their spending on health care than on other things. For example, even in companies that offer multiple options for health insurance, premiums do not vary substantially. As a result, as costs for health care increased, higher-income people would generally still be able to increase their consumption of other goods and services,

Box 2.

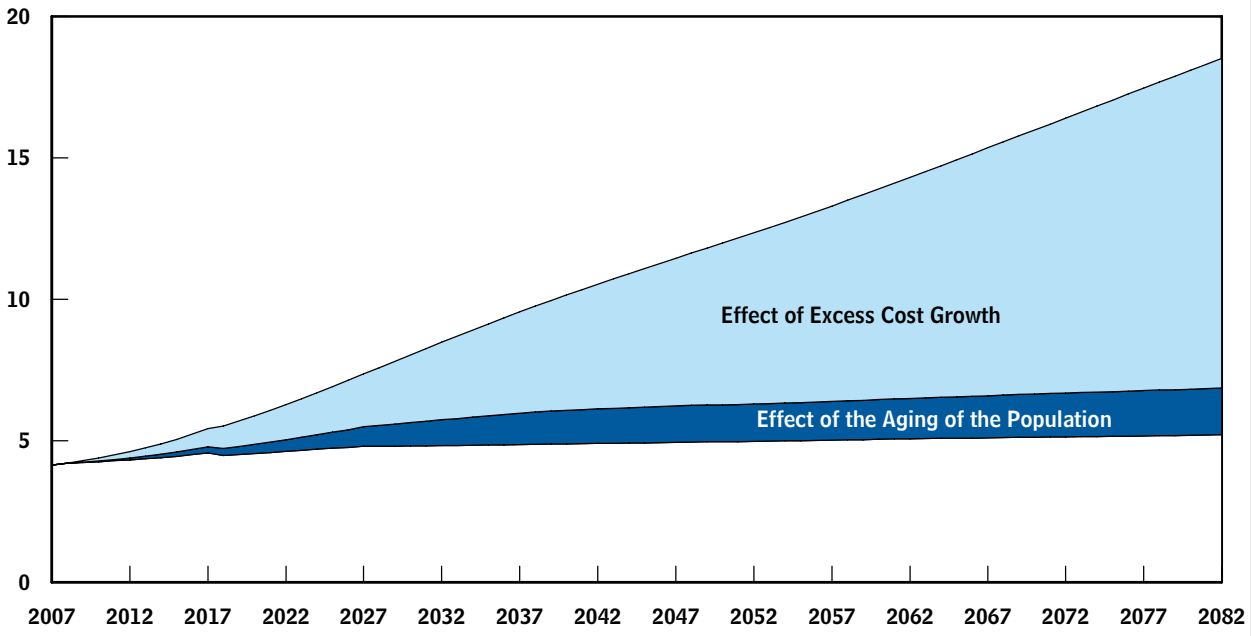
The Effect of the Aging of the Population on Spending on Medicare and Medicaid

In coming decades, the share of the population that is covered by Medicare will expand rapidly as members of the baby-boom generation become eligible for the program, and the share that uses long-term care services financed by Medicaid will also probably increase. Although the aging of the population is frequently cited as a major factor contributing to the large projected increase in federal spending on those two programs, it accounts for a modest fraction of the growth that the Congressional Budget Office (CBO) projects. The main factor is excess cost growth—or the extent to which the increase in health care spending for an average individual exceeds the growth in per capita gross domestic product (GDP).

As shown in the figure, if the age distribution of the population were fixed—so that the average age did not increase over time—and there were no excess cost growth, spending on Medicare and Medicaid as a share of GDP would remain essentially constant. That scenario is represented by the bottom line in the figure. The next line shows projected spending on Medicare and Medicaid if the age distribution of the population changes as expected—so that the average age of the population increases—but excess cost growth remains at zero. The difference between that line and the bottom line captures the effect of the aging of the population on projected federal spending on Medicare and Medicaid. The top line in the figure shows CBO's projection of spending on those programs, which includes the effects of the aging of the population and of excess cost growth. By itself, aging accounts for about one-quarter of the projected growth in federal Medicare and Medicaid spending through 2030. By 2050, that share has fallen to under 20 percent, and by 2082, to only about 10 percent.

Sources of Growth in Projected Federal Spending on Medicare and Medicaid

(Percentage of gross domestic product)

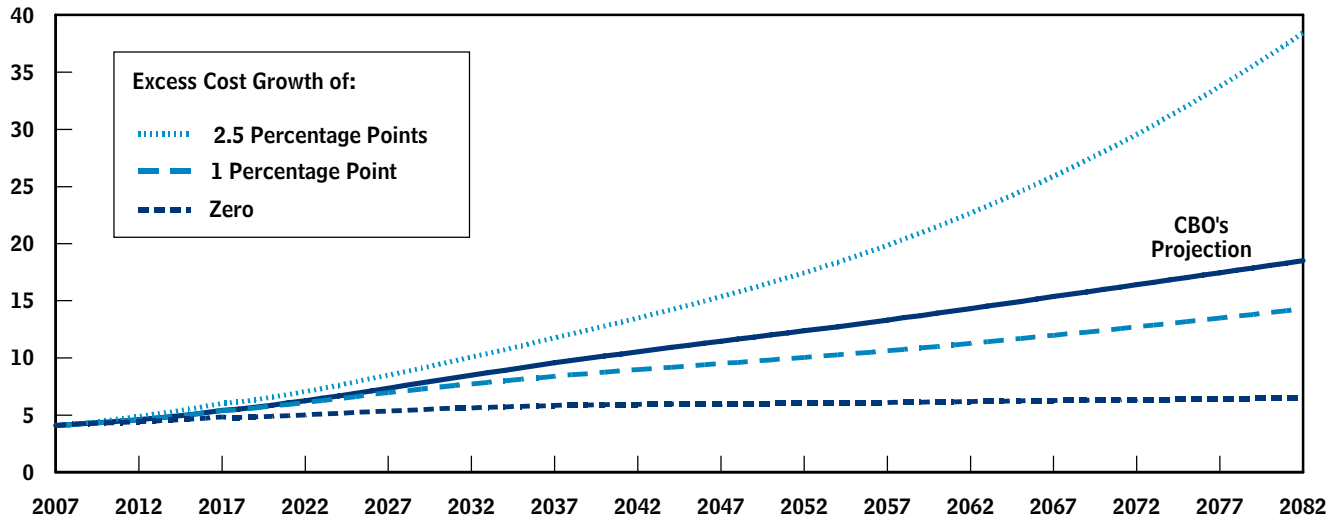


Source: Congressional Budget Office.

Figure 5.

Federal Spending for Medicare and Medicaid as a Percentage of Gross Domestic Product Under Different Assumptions About Excess Cost Growth

(Percent)



Source: Congressional Budget Office.

Note: Excess cost growth refers to the number of percentage points by which the growth of annual health care spending per beneficiary is assumed to exceed the growth of nominal gross domestic product per capita.

whereas poorer people would probably see their consumption of those items decline.[24]

Projections Under Alternative Assumptions

Analysts working 75 years ago, in 1932, would have been extremely unlikely to correctly project the current share of the economy devoted to health care, and the projections in this study will undoubtedly prove to be inaccurate in one direction or another. It will be difficult to judge their accuracy even after the fact, because they assume no changes in federal law, and such changes are virtually certain to occur.

Even without those changes, though, actual spending on health care could be much lower or much higher. Past technological developments have generally resulted in expanded treatment and higher total spending. Future innovations could accelerate that trend. Alternatively, if future research results in the development of inexpensive curative therapies, growth could slow.

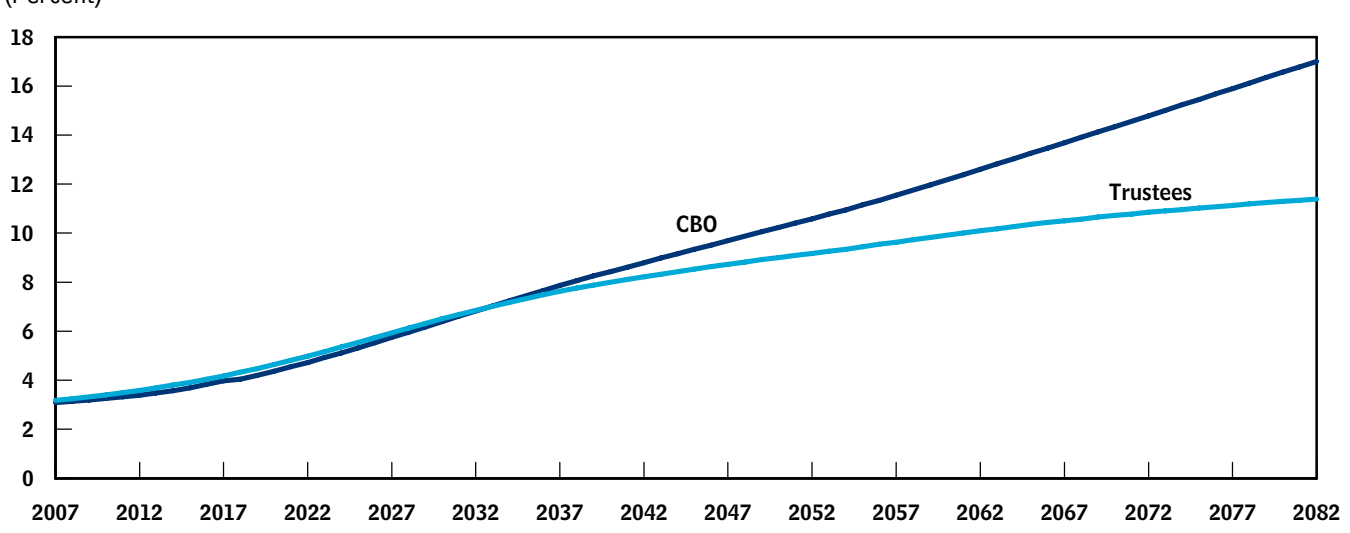
Among simple alternative scenarios for excess cost growth, one in which it is held constant at zero, while implausible, is useful because it isolates the effect of the aging of the population (see Figure 5). Aging alone is projected to increase federal spending on Medicare and Medicaid. Under that scenario, projected net federal outlays on the two programs would increase from 4 percent of GDP in 2007 to 6 percent of GDP by 2040 and then rise gradually to 7 percent by 2082.

Under a scenario in which excess cost growth for Medicare and Medicaid is 2.5 percentage points, which could be roughly interpreted as what would occur with no slowing of growth rates whatsoever, net federal spending on the two programs would grow to 13 percent of GDP in 2040 and 38 percent of GDP by 2082. (Appendix D shows a set of projections in which spending on Medicare, Medicaid, and other health care grows at their historical average excess growth rates from 1975 through 2005.)

24. For example, consider the simplified example of two coworkers with incomes of $20,000 and $80,000 who both get a 10 percent salary increase and devote their extra income to an increase of $5,000 in health insurance premiums. The lower earner's income would increase by $2,000, but his or her health care costs would be $3,000 higher than that, forcing a real reduction in his or her consumption of other goods and services. The higher earner's income would increase by $8,000, more than enough to cover the additional $5,000 in health care expenses.

Figure 6.

CBO's and the Trustees' Projections of Spending on Medicare as a Percentage of Gross Domestic Product



Source: Congressional Budget Office.

Note: Projections are of gross federal spending.

The projections presented in this study can also be compared to the Medicare trustees' projections of spending on the program.[25] For that comparison, CBO adjusted its projections to measure Medicare spending gross of the premiums paid by beneficiaries, which is the measure used by the trustees. (All of CBO's other projections of Medicare spending in this study are net of beneficiaries' premiums.) Both CBO and the trustees project that gross Medicare outlays will more than double from their current level of 3 percent of GDP to more than 7 percent of GDP in 2035 (see Figure 6). Under their intermediate scenario, the trustees assume that excess cost growth will decline gradually from the 25th to the 75th year of the projection period but constrain total spending over the 75-year period to the result obtained by assuming excess cost growth to be a constant 1 percentage point in the 25th year and later. CBO's methodology does not impose that type of constraint. Consequently, the two sets of projections track each other relatively closely over the next two to three decades but then diverge significantly; the trustees project gross Medicare outlays to reach 11 percent of GDP by the end of the projection period, compared with CBO's 17 percent. In both sets of projections, however, the main message is that health care spending is projected to rise significantly and that changes in federal law will be necessary to avoid or mitigate a substantial increase in federal spending on Medicare and Medicaid.

25. See Department of Health and Human Services, Centers for Medicare and Medicaid Services, Office of the Actuary, *2007 Annual Report of the Board of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds* (April 23, 2007), pp. 160–162.

APPENDIX

A

Medicare and Medicaid: An Overview

Medicare and Medicaid are the nation's main public health insurance programs and, after Social Security, are the largest federal entitlement programs. Together, they provide federally funded health insurance coverage to millions of low-income, disabled, or elderly beneficiaries.

The Medicare Program

The Medicare program was enacted in 1965 to provide health insurance coverage to Americans age 65 and over, and eligibility for the program was expanded in 1972 to include individuals under age 65 who qualify for Social Security disability benefits. People who are under 65 and disabled become eligible for Medicare 24 months after they become entitled to Social Security benefits. When Medicare was enacted, only about half of the elderly had any private health insurance, which generally covered only inpatient hospital costs, and even that coverage was often quite limited.[1] Much of the health care spending incurred by the elderly was paid out of pocket by the individual or family members.

Part A of Medicare, or Hospital Insurance, covers inpatient services provided by hospitals and skilled nursing facilities as well as hospice care. Part B, or Supplementary Medical Insurance, covers services provided by physicians and other practitioners, hospitals' outpatient departments, laboratories, and suppliers of medical equipment. Part B also covers a limited number of drugs, most of which must be administered by injection in a physician's office.[2] Depending on the circumstances, home health care may be covered by either Part A or Part B. The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 added a prescription drug benefit that became available in 2006 under a newly created Part D.

Part A benefits are financed primarily from a payroll tax. Premiums paid by beneficiaries cover about one-quarter of the cost of the Part B program, and the rest comes from general revenues.[3] Enrollees' premiums under Part D are set at a level to cover about one-quarter of the cost of the basic prescription drug benefit, but receipts from premiums cover less than one-quarter of the total cost of the Part D program because some of the outlays for that program (such as subsidies for low-income beneficiaries and for employers that maintain drug coverage for their retirees) are not included in the calculation of premiums.

In 2006, Medicare spending totaled an estimated $381.9 billion, of which $374.9 billion (or 98 percent) covered benefits for enrollees. About 32 percent of the spending on benefits paid for inpatient hospital care, and 26 percent paid for services provided by physicians and other professionals as well as outpatient ancillary services (see Table A-1).[4] About 15 percent of Medicare expenditures were for the Medicare Advantage program (discussed

1. See Amy Finkelstein, "The Aggregate Effects of Health Insurance: Evidence from the Introduction of Medicare," Working Paper 11619 (Cambridge, Mass.: National Bureau of Economic Research, September 2005).

2. Certain other drugs are also covered under Part B, including oral cancer drugs if injectable forms are also available, oral antinausea drugs that are used as part of a cancer treatment, and oral immunosuppressive drugs used after an organ transplant.

3. The standard Part B premiums are established each year to cover 25 percent of projected average expenditures in the Part B program. In 2007, the standard monthly Part B premium is $93.50. Beginning in 2007, higher premiums are required of single beneficiaries with an annual income over $80,000 and couples with an annual income over $160,000. Those income thresholds will be indexed to inflation in future years. CBO estimates that about 4 percent of beneficiaries are paying the higher premiums in 2007.

4. Other professionals include physician assistants, nurse practitioners, psychologists, clinical social workers, and physical, occupational, and speech therapists. Outpatient ancillary items or services include durable medical equipment, Part B drugs, laboratory services, and ambulance services.

Table A-1.

Medicare Spending by Type of Service, 2006

	Billions of Dollars	Percent
Inpatient Hospital Services	120.7	32
Physicians' and Suppliers' Services	86.1	23
Medicare Advantage Plans	55.9	15
Prescription Drug Benefits	32.0	9
Hospital Outpatient Services	20.1	5
Care in Skilled Nursing Facilities	19.5	5
Home Health Services	13.2	4
Hospice Services	8.6	2
Other Services	18.8	5
Total	**374.9**	**100**

Source: Congressional Budget Office.

below), and 9 percent paid for prescription drug benefits under Part D.

The Fee-for-Service Program

Most Medicare beneficiaries receive their Part A and Part B benefits in the traditional fee-for-service program, which pays providers for each covered service (or bundle of services) they provide. Beneficiaries must pay a portion of the costs of their care through deductibles and coinsurance. Unlike many private insurance plans, Medicare does not include an annual cap on beneficiaries' cost sharing. Nearly 90 percent of beneficiaries who receive care in the fee-for-service program, however, have supplemental insurance that covers many or all of Medicare's cost-sharing requirements. The most common sources of supplemental coverage are plans for retirees offered by former employers (held by 37 percent of beneficiaries in the fee-for-service program), individually purchased medigap policies (34 percent), and Medicaid (16 percent).[5] The percentage of Medicare beneficiaries who have coverage as retirees, as well as the generosity of that coverage, is expected to decline in the future as employers respond to the financial stresses of rising health care costs. The evidence on trends in such coverage over the past decade is mixed: Some studies have found that the percentage of employers that offer the coverage has fallen during that period, while other studies have found that that percentage has remained stable. However, in recent years, some employers have sought to reduce their future costs for health coverage for retirees by increasing premiums and cost-sharing requirements and eliminating coverage for future retirees.[6]

The Medicare Advantage Program

As of June 2007, 18 percent of Medicare beneficiaries were enrolled in private health plans under the Medicare Advantage program (also known as Part C of Medicare). Such plans submit bids indicating the per capita payment for which they are willing to provide Medicare Part A and Part B benefits, and the government compares those bids with county-level benchmarks that are determined in advance through statutory rules. Plans are paid their bids (up to the benchmark) plus 75 percent of the amount by which the benchmark exceeds their bids. Plans must return that 75 percent to beneficiaries as additional benefits (such as reduced cost sharing on Medicare services) or as a rebate on their Part B or Part D premiums.

Under current law, benchmarks are required to be at least as great as per capita expenditures in every county that are incurred in the fee-for-service portion of Medicare and are higher than those expenditures in many counties. For 2007, the Congressional Budget Office (CBO) calculates that benchmarks are 17 percent higher, on average, than projected per capita fee-for-service expenditures nationwide, and that payments to plans will be about 12 percent higher than per capita spending in the fee-for-service portion of the program.

The Medicaid Program

Medicaid is a joint federal–state program that pays for health care services for a variety of low-income individuals. The program was created in 1965 by the same legislation that created Medicare, replacing an earlier program of federal grants to states to provide medical care to people with low income. In 2006, federal spending for the program was an estimated $180.6 billion, of which $160.9 billion covered benefits for enrollees. (In addition to benefits, Medicaid's spending includes payments to

5. Medicare Payment Advisory Commission, *A Data Book: Healthcare Spending and the Medicare Program* (June 2007), p. 61.

6. The Henry J. Kaiser Family Foundation and Hewitt Associates, *Retiree Health Benefits Examined: Findings from the Kaiser/Hewitt 2006 Survey on Retiree Health Benefits* (December 2006), available at www.kff.org.

Table A-2.

Medicaid Enrollees and Federal Benefit Payments, by Category of Enrollee, 2006

	Enrollees		Federal Benefit Payments		Percentage of Benefit Payments for Long-Term Care
	Number (Millions)	Percent	Billions of Dollars	Percent	
Aged	5.5	9.0	36.7	22.8	70.6
Disabled	9.8	16.1	72.2	44.9	36.0
Children	29.5	48.4	31.1	19.3	7.7
Adults	16.0	26.3	20.8	12.9	1.9
Total	**60.9**	**100.0**	**160.9**	**100.0**	**34.0**

Source: Congressional Budget Office.

Note: Disabled enrollees include some people who are over age 65 or under age 18. Adult enrollees are adults who are not aged or disabled; they are primarily poor parents and pregnant women.

hospitals that treat a "disproportionate share" of low-income patients as well as costs for the Vaccines for Children program and administrative costs.) The federal government's share of Medicaid's spending for benefits varies among the states but currently averages 57 percent.

States administer their Medicaid programs under federal guidelines that specify a minimum set of services that must be provided to certain poor individuals. Mandatory benefits include inpatient and outpatient hospital services, services by physicians and laboratories, and nursing home and home health care. Groups that must be eligible (according to federal requirements) include poor children and families who would have qualified for the former Aid to Families with Dependent Children program, certain other poor children and pregnant women, and elderly and disabled individuals who qualify for the Supplemental Security Income program. In general, a Medicaid enrollee must have both a low income and a low level of assets, although the minimum financial thresholds vary depending on the basis for an enrollee's eligibility.

Within broad statutory limits, states have the flexibility to administer the Medicaid program and determine its scope. Partly as a result, the program's rules are complex, and it can be difficult to generalize about the types of enrollees who are covered, the benefits that are offered, and the cost sharing that is required. States may choose to make additional groups of people eligible (such as individuals with high medical expenses who have "spent down" their assets) or to provide additional benefits (such as coverage for prescription drugs and dental services) and have exercised those options to varying degrees. Moreover, states often seek and receive federal waivers that allow them to provide benefits and cover groups that would otherwise be excluded under Medicaid. By one estimate, total spending on optional populations and benefits accounted for about 60 percent of the program's expenditures in 2001.[7]

On the basis of administrative data, CBO estimates that about half of Medicaid's 61 million enrollees in 2006 were poor children and that another one-quarter were either the parents of those children or poor pregnant women.[8] Per capita costs for those groups are relatively low, though, while expenses are higher for elderly and disabled beneficiaries, many of whom require long-term care. Although the elderly and disabled constitute about one-quarter of Medicaid's enrollees, they account for two-thirds of the program's spending (see Table A-2). Overall, one-third of Medicaid's spending in 2006 was for long-term care, which includes nursing home services, home health care, and other medical and social services for people whose disabilities prevent them from living independently.

7. See Kaiser Commission on Medicaid and the Uninsured, *Medicaid Enrollment and Spending by "Mandatory" and "Optional" Eligibility and Benefit Categories* (Washington, D.C.: Henry J. Kaiser Family Foundation, June 2005), p. 11.

8. The enrollment figure of 61 million includes all people who were enrolled in Medicaid at any time during 2006. About 46 million people were enrolled in the program in June of that year.

About 45 percent of Medicaid beneficiaries are enrolled in managed care plans that accept a capitated payment (a fixed amount per enrollee) for providing a comprehensive set of benefits. Those arrangements are more common for families and children, although some states also enroll the elderly and the disabled. About 15 percent of beneficiaries are enrolled in an arrangement that provides what is termed primary care case management, in which enrollees select (or are assigned) a primary care physician or group practice that is paid an additional fee for overseeing and coordinating their care. Many states also use "carve-out" arrangements, in which the states contract with organizations that assume the responsibility and financial risk for providing a subset of Medicaid benefits, such as dental services or mental health care.

APPENDIX

B

Computing Historical Excess Cost Growth

To compute historical excess cost growth for Medicare, Medicaid, and total national spending on health care, the Congressional Budget Office (CBO) adjusted historical aggregate growth rates to remove the effects of changes in the population and per capita growth of gross domestic product (GDP).

The national health expenditure accounts, maintained by the Centers for Medicare and Medicaid Services, provide detailed historical data by both source of funds and type of expenditure. Total national health expenditures represent aggregate health care spending in the United States. The analysis in this study focuses on the consumption of health care, so instead of using those totals, it uses spending on health services and supplies, which includes all spending on personal health care, governments' administrative costs and public health activities, and the net costs of private health insurance.[1] That measure captures spending on all medical care provided in a given year. Spending on health services and supplies equals total national health expenditures minus amounts invested in research and in structures and equipment.

For this anaylsis, spending on health services and supplies is divided into three categories by source of funds: Medicare, Medicaid, and other. For the total and each category, CBO estimated historical excess cost growth, which measures the increase in per capita health care spending relative to the increase in per capita GDP, after removing the changes in spending that are associated with changes in the age composition of the population. The analysis uses data from the national health expenditure accounts from 1975 through 2005.

Future health care costs are projected using the same general formula:

$$HealthCostPerCapita_t = HealthCostPerCapita_{t-1} \times \frac{GDPperCapita_t}{GDPperCapita_{t-1}} \times \frac{AgeCompIndex_t}{AgeCompIndex_{t-1}} \times (1 + x_t),$$

where x_t is excess cost growth in year t; *HealthCostPerCapita* is nominal health expenditures per capita, *GDPperCapita* is nominal GDP per capita, and *AgeCompIndex* is an age-weighted health care cost index that is included in the formula to remove changes in health care spending attributable to changes in the age distribution of the population. Both *HealthCostPerCapita* and *AgeCompIndex* vary depending on which of the measures of excess cost growth is being calculated. Historical excess cost growth (x_t) is calculated as follows:

$$x_t = \frac{HealthCostPerCapita_t}{HealthCostPerCapita_{t-1}} \times \frac{GDPperCapita_{t-1}}{GDPperCapita_t} \times \frac{AgeCompIndex_{t-1}}{AgeCompIndex_t} - 1$$

The approach for Medicaid is similar, but rather than an age composition index, an adjustment for type of beneficiary—children, disabled, aged, or other adult—is used.

Data on the total population and nominal GDP are available within the data on national health expenditures.

1. For a detailed description of national health accounts data, see Department of Health and Human Services, Centers for Medicare and Medicaid Services, *National Health Expenditures Accounts: Definitions, Sources, and Methods Used in the NHEA 2005*, available at www.cms.hhs.gov/NationalHealthExpendData/downloads/dsm-05.pdf.

Medicare

HealthCostPerCapita
For the equation to determine excess cost growth in Medicare, health costs per capita are nominal Medicare spending per beneficiary, available within the data on national health expenditures. The number of Medicare beneficiaries is from Medicare Enrollment Reports by the Centers for Medicare and Medicaid Services.[2]

AgeCompIndex
For Medicare, the age composition index in year t is:[3]

$$y_t = \left(\frac{N_{65-74}}{N_{65+}}\right) \times P_{65-74} + \left(\frac{N_{75-84}}{N_{65+}}\right) \times P_{75-84} + \left(\frac{N_{85+}}{N_{65+}}\right) \times P_{85+},$$

where N_a is the population in a given age group a in year t, and P_a is per capita personal health care expenditures in 1999 for age group a. Those expenditures are derived using the 1999 Medical Expenditure Panel Survey (MEPS), administered by the Agency for Healthcare Research and Quality within the Department of Health and Human Services.[4]

2. See www.cms.hhs.gov/MedicareEnRpts/Downloads/HISMI05.pdf.

3. The Medicare population also includes people who are under age 65 and have been collecting Social Security disability benefits for at least two years as well as nonelderly people with end-stage renal disease. Those groups are not included in the age composition index because of limitations in the available data.

4. See www.cms.hhs.gov/NationalHealthExpendData/downloads/agetables.pdf

Medicaid

HealthCostPerCapita
For the equation to determine excess cost growth in Medicaid, health costs per capita are nominal Medicaid spending per beneficiary.[5]

AgeCompIndex
For Medicaid, the age composition index in year t is:

$$y_t = \left(\frac{N_{Children}}{N_{Total}}\right) \times P_{Children} + \left(\frac{N_{Adult}}{N_{Total}}\right) \times P_{Adult} + \left(\frac{N_{Elderly}}{N_{Total}}\right) \times P_{Elderly} + \left(\frac{N_{Disabled}}{N_{Total}}\right) \times P_{Disabled},$$

where N is the number of beneficiaries of a given type in year t. The *Adult* category includes only nonelderly, nondisabled adults.[6] P is per capita Medicaid expenditures in 1999 for the given type of beneficiary.

Overall Excess Cost Growth

HealthCostPerCapita
For the equation to determine overall excess cost growth, health costs per capita are nominal spending on health services and supplies divided by the total population.

5. Spending data are within the data on national health expenditures. Data on the number of beneficiaries by category and average per capita expenditures for each beneficiary type are from Centers for Medicare and Medicaid Services, *Health Care Financing Review*, *Medicare and Medicaid Statistical Supplement* (2005).

6. Counts of beneficiaries by type are available only through 2004, so all calculations for Medicaid are for 1975 through that year.

AgeCompIndex

The age composition index in year t is:

$$y_t = \left(\frac{N_{0-18}}{N_{Total}}\right) \times P_{0-18} +$$
$$\left(\frac{N_{19-44}}{N_{Total}}\right) \times P_{19-44} +$$
$$\left(\frac{N_{45-54}}{N_{Total}}\right) \times P_{45-54} +$$
$$\left(\frac{N_{55-64}}{N_{Total}}\right) \times P_{55-64} +$$
$$\left(\frac{N_{65-74}}{N_{Total}}\right) \times P_{65-74} +$$
$$\left(\frac{N_{75-84}}{N_{Total}}\right) \times P_{75-84} +$$
$$\left(\frac{N_{85+}}{N_{Total}}\right) \times P_{85+},$$

where N_a is the number of individuals in a given age group a in year t, and P_a is per capita personal health care expenditures in 1999 for age group a derived using MEPS data.[7]

Non-Medicare, Non-Medicaid Excess Cost Growth

Excess cost growth for non-Medicare, non-Medicaid spending is calculated as a dollar-weighted average of the cost growth rates for Medicare, Medicaid, and overall. Specifically,

$$a = x_t^{Overall} \times Cost_t^{Overall}$$
$$b = x_t^{Medicare} \times Cost_t^{Medicare}$$
$$c = x_t^{Medicaid} \times Cost_t^{Medicaid}$$

$$x_t^{NMNM} = \frac{a-b-c}{Cost_t^{NMNM}},$$

where x_t is annual excess cost growth for the indicated category, *NMNM* is non-Medicare and non-Medicaid, and $Cost_t$ is the nominal dollars accounted for by that category.

7. See www.cms.hhs.gov/NationalHealthExpendData/downloads/agetables.pdf.

APPENDIX

C

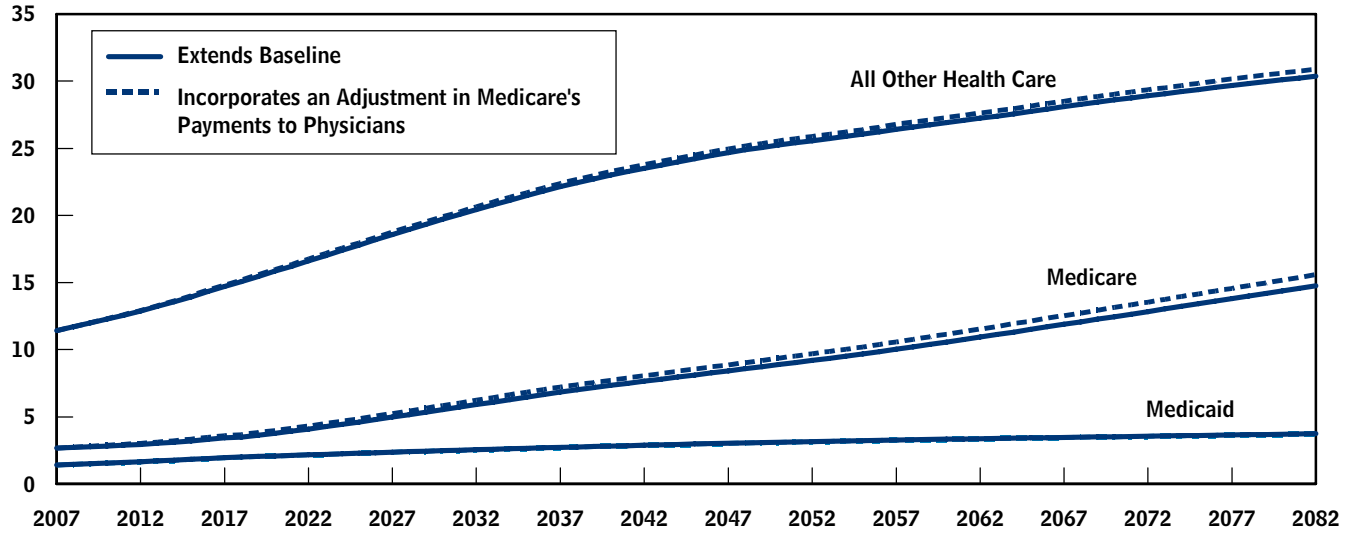
Projected Health Care Spending Under an Alternative Fiscal Scenario

For the projections of federal Medicare spending in the main text, this study uses the Congressional Budget Office's (CBO's) baseline budget projections for 2008 to 2017, which assume no change in current federal law. Based on current law, CBO's baseline assumes that the sustainable growth rate (SGR) mechanism for updating Medicare's payment rates for physicians will reduce those rates by about 4 percent or 5 percent annually for at least the next several years. However, since 2003, the Congress has taken action to prevent the reductions in physician payment rates that would have occurred under the SGR. Therefore, CBO developed an alternative set of long-term projections that assume that similar action will be taken for the next 10 years. Specifically, under that alternative scenario, Medicare's physician payment rates are assumed to grow with the Medicare economic index, which measures inflation in the inputs used for physicians' services. Projected outlays for Medicare over the next 75 years are similar in both that scenario and the one presented in the main text because the assumption that Medicare's physician fees will be updated to account for inflation has only a minor effect over the long term (see Figure C-1).

Figure C-1.

Comparison of CBO's Projections of Spending on Health Care: Extending the Baseline vs. Incorporating an Adjustment in Physician Fees Under Medicare

(Percentage of gross domestic product)



Source: Congressional Budget Office.

Note: Currently, a mechanism in federal law would reduce Medicare's fees for physicians' services. For its alternative scenario, CBO assumes that those fees are updated to account for inflation in the inputs used for physicians' services.

APPENDIX

D

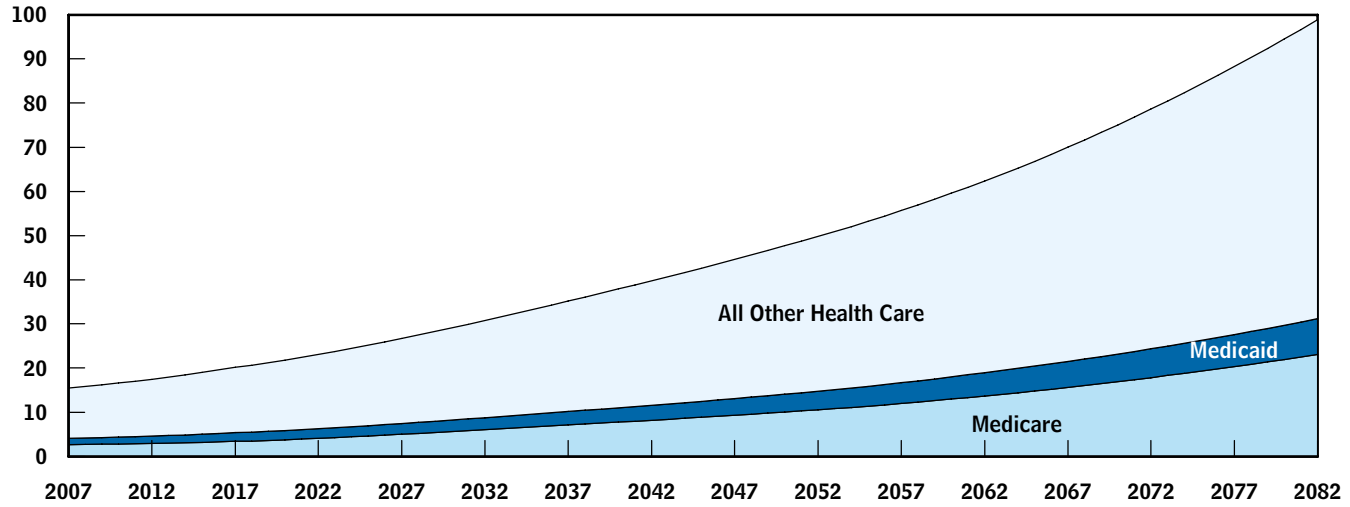
Projected Health Care Spending When Excess Cost Growth Is Assumed to Continue at Historical Averages

This appendix presents projections of health care spending under the assumption that the excess cost growth rates for spending on Medicare, Medicaid, and all other health care continue indefinitely at their average values from 1975 to 2005: 2.4 percentage points for Medicare, 2.2 percentage points for Medicaid, and 2.0 percentage points for other health care. Under that assumption, federal spending on Medicare and Medicaid would reach 8 percent of gross domestic product (GDP) by 2030, 14 percent of GDP by 2050, and 31 percent of GDP by 2082 (see Figure D-1). Total national spending on health care would reach 29 percent of GDP by 2030, 48 percent of GDP by 2050, and 99 percent of GDP by 2082.

Figure D-1.

Projected Spending on Health Care Under an Assumption That Excess Cost Growth Continues at Historical Averages

(Percentage of gross domestic product)



Source: Congressional Budget Office.

Notes: Excess cost growth refers to the number of percentage points by which the growth of spending on Medicare, Medicaid, or health care generally (per beneficiary or per capita) is assumed to exceed the growth of nominal gross domestic product (per capita).

Amounts for Medicare are net of beneficiaries' premiums. Amounts for Medicaid are federal spending only.