CBO TESTIMONY

Statement of Peter R. Orszag Director

Growth in Health Care Costs

before the Committee on the Budget United States Senate

January 31, 2008

This document is embargoed until it is delivered at 10:00 a.m. (EST) on Thursday, January 31, 2008. The contents may not be published, transmitted, or otherwise communicated by any print, broadcast, or electronic media before that time.



CONGRESSIONAL BUDGET OFFICE SECOND AND D STREETS, S.W. WASHINGTON, D.C. 20515

Chairman Conrad, Senator Gregg, and Members of the Committee, thank you for inviting me to testify this morning on the rising costs of health care, which represent the nation's central long-term fiscal challenge. No other single factor will exert as much influence over the federal government's long-term fiscal balance as the future growth rate of costs in the health care sector.

Medicare and Medicaid account for a large and growing share of federal spending. In the years to come, federal spending on health care will rise sharply—mostly because of increasing costs per beneficiary but also because the aging of the babyboom generation will significantly raise the number of beneficiaries. If health care spending grows as projected under current law, future budget deficits will rise to levels that will seriously jeopardize long-term economic growth unless policymakers sharply reduce other projected spending, substantially increase revenues as a share of gross domestic product (GDP), or do some combination of the two.

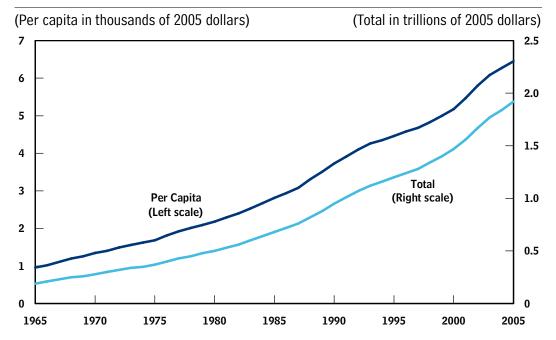
Many of the same forces that drive the growth of federal health care spending also affect private health care spending, and the effects of rising health care costs are not limited to public programs. The rising cost of health benefits can limit the growth of cash earnings for workers with employer-based coverage and make individual private coverage prohibitively expensive.

My testimony, which draws upon the Congressional Budget Office's (CBO's) *The Long-Term Outlook for Health Care Spending* (released in November) and the study *Technological Change and the Growth of Health Care Spending* (released today in conjunction with this hearing), makes the following key points:

- For most of the past four decades, per capita health care spending grew much more rapidly than per capita GDP.
- Most analysts agree that the most important factor driving the long-term growth of health care costs has been the emergence, adoption, and widespread diffusion of new medical technologies and services by the U.S. health care system.
- Other factors, including rising personal income, a growing share of health care costs borne by third-party payers, and the aging of the population, contributed to historical spending growth by increasing the demand for medical services. Even taken together, however, those factors appear to explain less than half of long-term spending growth.
- Technological advances are likely to yield new, desired medical services in the future, fueling further spending growth and imposing difficult choices between health care and other priorities.
- CBO projects that, without changes in law, total spending on health care will rise from 16 percent of GDP in 2007 to 25 percent in 2025 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 and 19 percent in 2082.

Figure 1.

Total and Per Capita Spending on Health Care, 1965 to 2005



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: Spending amounts are adjusted for inflation using the gross domestic product implicit price deflator from the Bureau of Economic Analysis.

- The bulk of the projected increase in spending on Medicare and Medicaid is not due to demographic changes (such as increases in the number of beneficiaries) but rather to ongoing increases in costs per beneficiary.
- Opportunities appear to exist for constraining the growth of health care costs over the long term without harming the overall quality of health care delivered, but taking advantage of those opportunities will probably prove difficult from both a medical and a political economy perspective.

Historical Growth in Health Care Spending, 1965 to 2005

Spending on health care in the United States has grown substantially over the past four decades (see Figure 1). In 1965, that spending amounted to \$187 billion (in 2005 dollars). It more than tripled in real (inflation-adjusted) terms over

20 years, reaching \$666 billion in 1985. Over the next 20 years, spending nearly tripled again, reaching roughly \$1.9 trillion in 2005.

Spending has also risen rapidly on a per capita basis, with growth averaging around 4.9 percent per year in real terms over the past four decades. By contrast, per capita GDP grew, on average, by only 2.1 percent per year during that period. As a result, health care spending is now a much larger proportion of GDP—nearly 15 percent in 2005 compared with 5 percent in 1965.

Although the growth of health care spending has been continual, the pattern of growth in the mid- to late 1990s differed from that of previous decades (see Figure 2). From 1965 to 1990, annual growth in real per capita spending averaged about 5.5 percent. Despite brief periods of relatively slow growth during that time, growth rates never remained low for a sustained period. That pattern changed during the 1990s; from 1994 to 1999, annual real growth never exceeded 2.8 percent. Some analysts attribute that lull to greater enrollment in managed care plans as well as to excess capacity among some types of providers, which increased health plans' negotiating leverage. That period of relatively slow growth in health care spending also coincided with relatively rapid overall economic growth. As a result, the share of national income devoted to health care during those six years remained unchanged (see Figure 3). Since then, however, a combination of slower economic growth and accelerated spending on health care has led to a sharp increase in health care costs as a share of GDP—from 12.5 percent in 1999 to 14.5 percent in 2005.

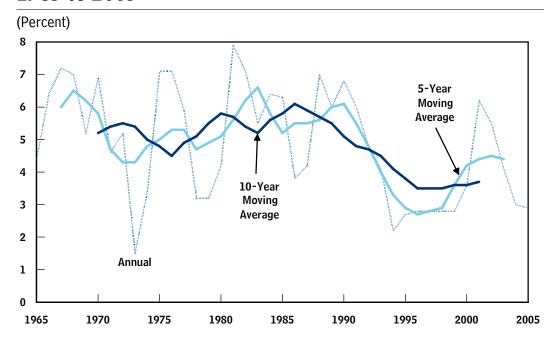
The United States spends more on health care per person than do other industrialized countries. Data from the Organisation for Economic Co-operation and Development show that per capita health care spending in the United States in 2005 was nearly twice that in France, Canada, and Germany and roughly two-and-a-half times that in the United Kingdom, Italy, and Japan. Although the *level* of spending per capita in the United States contrasts sharply with that of other wealthy countries, the *growth rate* of spending in the United States is less unusual. Most industrialized countries—even those with a financing system quite different from that in the United States—have experienced a substantial long-term rise in real spending on health care.

^{1.} Figures represent spending on health care services and supplies, as defined in the national health expenditure accounts, maintained by the Centers for Medicare and Medicaid Services.

^{2.} 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 2.

Growth in Real Per Capita Spending on Health Care, 1965 to 2005



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.

Notes: Spending amounts are adjusted for inflation using the gross domestic product implicit price deflator from the Bureau of Economic Analysis.

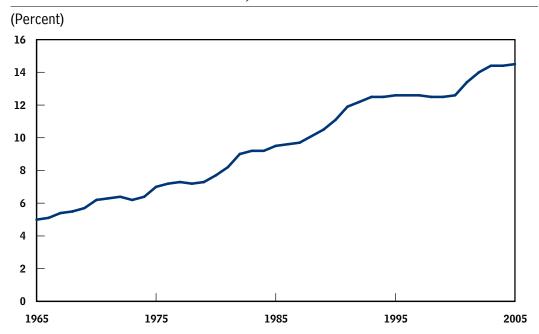
The data represent compound moving averages. For example, for the five-year moving average series, the 1990 figure represents the average annual growth from 1987 to 1992; for the ten-year moving average series, the 1990 figure represents average annual growth from 1985 to 1995.

Factors Underlying Historical Growth in Health Care Spending

The large increase in health care spending over the past several decades was caused by many factors, and accounting precisely for all of them is difficult. Nonetheless, the general consensus among health economists is that growth in real spending on health care was principally the result of the emergence of new medical technologies and services and their adoption and widespread diffusion by the

Figure 3.

Total Spending on Health Care as a Percentage of Gross Domestic Product, 1965 to 2005



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.

U.S. health care system.³ Advances in medical science have made available to patients and physicians a wealth of new medical therapies, many unheard of in even the relatively recent past. Some medical advances permit the treatment of previously untreatable conditions, introducing new categories of spending. Others, relative to older modes of treatment, improve medical outcomes at added cost, expanding existing spending. Available empirical estimates suggest that

^{3.} For this analysis, CBO defines technological advances as changes in clinical practice that enhance the ability of providers to diagnose, treat, or prevent health problems. Technological advances take many forms. Examples include new drugs, devices, or services, as well as new clinical applications of existing technologies (providing a particular service to a broader set of patients, for example). Other technological advances are newly developed techniques or additions to knowledge.

Table 1.

Estimated Contributions of Selected Factors to Growth in Real Per Capita Spending on Health Care, 1940 to 1990

(Percent)			
	Smith, Heffler, and Freeland (2000)	Cutler (1995)	Newhouse (1992)
Aging of the Population	2	2	2
Changes in Third-Party Payment	10	13	10
Growth of Personal Income	11-18	5	<23
Prices in the Health Care Sector	11-22	19	*
Administrative Costs	3-10	13	*
Defensive Medicine and Supplier-Induced			
Demand	0	*	0
Technology-Related Changes in			
Medical Practice (Residual)	38-62	49	>65

Sources: Sheila D. Smith, Stephen K. Heffler, and Mark S. Freeland, "The Impact of Technological Change on Health Care Cost Increases: An Evaluation of the Literature" (working paper, 2000); David M. Cutler, "Technology, Health Costs, and the NIH" (paper prepared for the National Institutes of Health Economics Roundtable on Biomedical Research, September 1995); Joseph P. Newhouse, "Medical Care Costs: How Much Welfare Loss?" *Journal of Economic Perspectives*, vol. 6, no. 3 (Summer 1992), pp. 3–22.

Notes: Amounts in the table represent the estimated percentage share of long-term growth that each factor accounts for.

< = less than; > = greater than; * = not estimated.

approximately half of all long-term growth in health care spending has been associated with the expanded capabilities of medicine brought about by technological advances.⁴

Other factors have also contributed to increases in health care spending. One example is the aging of the population. Among adults, health care spending generally increases with age. As the number of elderly people increased over time, health care spending naturally grew. However, the population aged only gradually over the past half century, and aging played only a minor role in the large increases in spending that occurred. Published analyses suggest that aging can account for only about 2 percent of all spending growth from 1940 to 1990, for example (see Table 1). As the baby-boom generation reaches retirement age, the effects of aging

^{4.} See Joseph P. Newhouse, "An Iconoclastic View of Health Cost-Containment," *Health Affairs*, vol. 12, Supplement (1993), pp. 154–171; David M. Cutler, "Technology, Health Costs, and the NIH" (paper prepared for the National Institutes of Health Economics Roundtable on Biomedical Research, September 1995); and Sheila D. Smith, Stephen K. Heffler, and Mark S. Freeland, "The Impact of Technological Change on Health Care Cost Increases: An Evaluation of the Literature" (working paper, 2000).

will increase, but the course of technological innovation will have a far greater effect on cost growth. (Another factor—the rising share of the population who are overweight or obese—has also probably contributed to the growth in health care spending. See Box 1 for a discussion of obesity and its effect on spending growth.)

Other examples of factors contributing to spending growth include the growth in personal income and the rising share of health care costs paid by third-party insurers over recent decades; both of those trends contributed to spending growth by increasing demand for medical care. Because medical care is a desired service, people naturally purchase more of it as their income increases. And health insurance, as economists are fond of pointing out, effectively drives down the cost of care from the consumer's perspective, resulting in a higher quantity of services demanded than would otherwise be the case. But estimates suggest that under an assumption of no changes in medical technology, historical changes in such factors could explain only part of the long-term rise in health care spending (see Table 1). Income growth and expanded health insurance may have contributed indirectly to spending growth, however, by encouraging the development of more costincreasing medical technologies. Other factors such as defensive medicine (which refers to medical tests or procedures of little or no clinical value that are ordered by physicians primarily to avoid lawsuits) and physician-induced demand (which refers to spending that is brought about at least in part by providers' desire to augment their own income) do not appear to explain a significant part of the growth in spending, according to published analyses (see Table 1).

It is occasionally suggested that advances in technology can lead to reduced spending, and that might be the case in some instances. Vaccinations, for example, may sometimes offer the potential for savings, and certain types of preventive medical care may help some patients avoid costly acute care hospitalizations. But, overall, examples of new therapies for which long-term savings have been clearly demonstrated are few. Improvements in medical care that decrease mortality by helping patients avoid or survive acute health problems often paradoxically increase overall spending on health care, as those (surviving) patients live to use health services through old age. New curative therapies with one-time costs could potentially reduce spending if they obviated the need for costlier treatments. Many advances in medical science, however, do not fall into that category. In fact, many of the most notable medical advances in recent decades involve ongoing treatments for the management of chronic conditions such as diabetes and coronary artery disease.

CBO's Projections of Future Spending on Health Care

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 of health care spending assume that federal

Box 1.

The Rising Prevalence of Obesity and Its Impact on Health Care Spending

The fraction of Americans who are overweight or obese has increased in recent years. Obesity raises an individual's risk of serious illnesses such as cardiovascular disease and diabetes, and obese persons incur greater health care costs. In 2001, for example, spending for health care per person of normal weight was \$2,783, compared with \$3,737 per obese person and \$4,725 per morbidly obese person (see the table to the right). A rise in the prevalence of obesity is therefore a likely contributor to the growth of health care spending.

One method for estimating how the rising prevalence of obesity affects health care spending is to ask how much that spending would have risen if the prevalence of obesity was the only factor that changed over time. If health care spending per capita remained at 1987 levels for each category of body weight but the prevalence of obesity changed to reflect the 2001 distribution, health care spending would have risen by only 1.4 percent per capita on average. Because actual spending per capita rose by 34.6 percent, this estimate would imply that the change in the prevalence of obesity could account for about 4 percent of all spending growth from 1987 to 2001. (Note that "prevalence of obesity" here refers to changes in the fraction of persons in all categories of body weight, including those who are underweight. The fraction of underweight persons—who incur costs that are slightly higher than those of persons of normal weight—actually fell during this period.)

law affecting Medicare or Medicaid does not change.⁵ Those projections should thus be interpreted as providing a measure of the scope of the potential problem posed by rising costs rather than a prediction of future developments, because the magnitude of the problem will ultimately necessitate changes in the government's

^{5.} CBO's projections for Medicare also 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 law that requires the Medicare trustees to issue a "Medicare funding warning" if nondedicated sources of revenue—primarily general revenues—are projected to account for more than 45 percent of the program's outlays; that law does not require the Congress to respond to such a warning by enacting legislation that would reduce Medicare spending. For a detailed discussion of CBO's long-term projections of health care spending, see Congressional Budget Office, The Long-Term Outlook for Health Care Spending (November 2007).

Box 1.

Continued

Distribution of Population Aged 19 or Older and Health Care Spending by Weight Category

	1987		2001	
	Percentage of Population	Spending Per Capita (Dollars)	Percentage of Population	Spending Per Capita (Dollars)
All Persons	100.0	2,352	100.0	3,166
Underweight	3.6	2,695	1.8	3,092
Normal	51.6	2,259	38.6	2,783
Overweight	31.4	2,322	35.8	3,103
Obese	12.2	2,655	20.7	3,737
Morbidly Obese	1.3	2,674	3.1	4,725

Source: Congressional Budget Office analysis using the National Medical Expenditure Survey (1987 data) and the Medical Expenditure Panel Survey (2001 data).

Note: Weight categories are defined using the body-mass index (BMI)—a measure of body fat based on height and weight that applies to adult men and women—as follows: underweight (BMI is less than or equal to 18.5); normal (greater than 18.5 and less than 25); overweight (greater than or equal to 25 and less than 30); obese (greater than or equal to 30 and less than 40); morbidly obese (greater than or equal to 40).

Another way to examine the effect of obesity on spending is to ask how much would be saved if the prevalence of obesity returned to that of 1987, given the 2001 levels of spending for each respective category of body weight. That approach implies that changes in the prevalence of obesity account for around 12 percent of the spending growth between 1987 and 2001. The different results generated by the two methods reflect the change in the relative magnitude of spending on obese persons compared with spending on persons of normal weight. In 1987, spending per morbidly obese person was about 18 percent higher than spending per person of normal weight, but by 2001 it was 70 percent higher.

programs. They are also subject to the inherent uncertainty surrounding any long-term projections, especially regarding health care. Nevertheless, they provide a useful reference in showing the consequences of current law and assessing the impact of changes in law.

^{6.} For simplicity, the projections assume that the projected growth in health care spending has no effect on the future growth of GDP.

Table 2.

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 All Other Spending on	2.2	3.4	0.9	0.2
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).

In CBO's current long-term projections, spending for Medicare, Medicaid, and other health care—including Medicare premiums, Medicare beneficiaries' cost sharing, and the states' share of Medicaid spending—is based largely on the growth and aging of the population, growth in per capita GDP, and assumed rates of cost growth per beneficiary relative to GDP growth per capita (a differential referred to as "excess cost growth").

In selecting the *initial* rates of excess cost growth for its projections, CBO used the average rate in the past. Specifically, the rate of excess cost growth 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 2).⁸

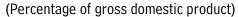
For later years, one option would be to adopt the historical averages indefinitely. Although that approach is attractive for its simplicity (the results from such an extrapolation are presented in Figure 4), it has significant shortcomings. For example, simply extrapolating prior growth rates would result in total spending on health care that eventually exceeded 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 other than health care. In other words, pressure to slow cost growth will mount as health care accounts for a larger share of the U.S. economy.

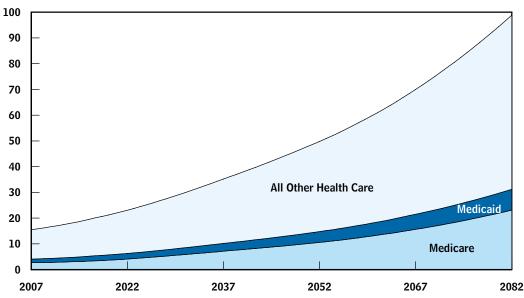
^{7.} CBO constrained Medicare premiums and cost sharing to grow at the same rate as federal spending on Medicare; it constrained state Medicaid spending to grow at the same rate as federal Medicaid spending.

The historical average is also used to compute spending on all other health care through 2017.
Medicare and Medicaid projections for that period are taken from CBO's standard 10-year budget outlook.

Figure 4.

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





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.

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—for example, by 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.⁹

It is not possible to know 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 will not

^{9.} 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.

be willing to spend so much more on health care that, from one year to the next, the increase in such spending alone will be greater than the total increase in productivity. Therefore, under the assumption that the consumption of items other than health care does not decline, at the end point of CBO's projection 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. ¹⁰

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 used less frequently than would occur without a slowdown in excess cost growth; and more treatments or interventions might not be covered by insurance. Nevertheless, Americans would still face steadily increasing health care 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 the growth of non-Medicare, non-Medicaid spending on health care might 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 health care 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 the programs 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.

(Washington, D.C.: Board of Governors of the Federal Reserve System, 2005).

^{10.} 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

Moreover, CBO assumes, under current law, the federal government would make regulatory changes aimed at slowing the growth of spending 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. (As discussed below, it is unlikely that Medicare and Medicaid will actually experience a significantly higher growth rate than the rest of the health care 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 spill-over 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 the number of their beneficiaries by tightening eligibility. In its projections, CBO assumes that the rate of decline in Medicaid's excess cost growth will be three-fourths of the reduction in the growth of non-Medicare, non-Medicaid spending on health care. In sum, CBO's projection methodology for excess cost growth from 2019 through 2082 is 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;
- Total real per capita consumption of goods and services other than 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 these assumptions, the rate of excess cost growth for non-Medicare, non-Medicaid spending on health care declines by 4.6 percent annually (see Table 2). ¹¹ 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.

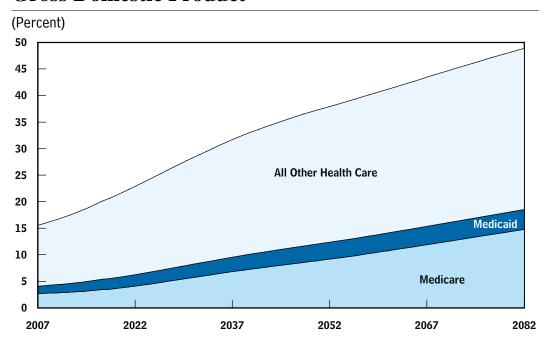
The projected differential growth in Medicare and Medicaid relative to the rest of the health care system under these current-law projections may appear unrealistic,

13

^{11.} Specifically, $ECG_v = ECG_{v-1} \cdot 0.954$.

Figure 5.

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



Source: Congressional Budget Office.

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

but that observation 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, changes in federal law as well as in practices in the private sector are likely to slow the growth of health care spending such that growth in per capita Medicare and Medicaid spending does not diverge greatly from growth in other spending on health care.

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 will 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 5).

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 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.

The Long-Term Budget Outlook

The rise in health care spending is the largest contributor to the growth projected for federal spending over the long term, but the aging of the population will exacerbate fiscal pressures. For example, future growth in spending on Social Security will largely reflect demographic changes; CBO projects that such spending will increase from about 4 percent of GDP today to 6 percent in 25 years and then will roughly stabilize at that rate thereafter. Federal spending on programs other than Medicare, Medicaid, and Social Security—including national defense and a wide variety of domestic programs—is likely to contribute far less, if anything, to the upward trend in federal outlays as a share of GDP.

Although aging contributes to the projected spending growth, excess cost growth will remain the dominant factor. The effect of aging on spending growth for Medicare, Medicaid, and Social Security can be estimated by asking how much spending would rise if aging were the only factor driving that growth. This approach computes the increase in spending for Medicare, Medicaid, and Social Security when the population profile is allowed to change over time as the population ages but excess cost growth is constrained to be zero. Aging accounts for 29 percent of the total projected increase in Medicare, Medicaid, and Social Security spending as a share of GDP through 2050 and 22 percent through 2082. The relative effect of aging is projected to decrease over time as the impact of excess cost growth accumulates. ¹³

All of these projections raise fundamental questions of economic sustainability. If outlays increased as projected and revenues did not grow at a corresponding rate, deficits would climb and federal debt would grow significantly. Substantial budget deficits would reduce national saving, which would lead to an increase in borrowing from abroad and lower levels of domestic investment that in turn would hold down income growth in the United States. In the extreme, deficits could seriously harm the economy. Such economic damage could be averted by putting the nation

^{12.} Congressional Budget Office, The Long-Term Budget Outlook (December 2007).

^{13.} An alternative way to measure the effect of aging on spending is to ask how much lower spending would be if the aging factor was removed from the projections. Suppose that excess cost growth was consistent with the assumptions underlying CBO's long-term health projections but the population profile was constrained not to change over time. Under that method, spending on Medicare, Medicaid, and Social Security as a share of GDP through 2050 would be 40 percent lower than it would be if the population's aging was a factor in the calculations; through 2082, that spending would be 39 percent lower. The effects on spending that can be attributed to aging would be greater under this alternative approach because excess cost growth would amplify those effects.

on a sustainable fiscal course, which would require some combination of less spending and more revenues than the amounts now projected. Making such changes sooner rather than later would lessen the risk that an unsustainable fiscal path poses to the economy.

Policy Options to Constrain Future Spending on Health Care

Given that future health care spending is the single most important factor determining the nation's long-term fiscal condition, the Congressional Budget Office is devoting increasing resources to assessing options for reducing such spending in the future. Straightforward changes to the Medicare and Medicaid programs—such as more stringent eligibility criteria, greater cost sharing, or changes in provider payments—could reduce federal spending in part by shifting costs from the federal government to households. Ultimately, however, such cost-shifting approaches are unlikely to be sustainable, and controlling federal spending on health care while maintaining broad access to care under these programs will therefore almost certainly need to be associated with slower cost growth in the health care sector as a whole.

Future increases in spending could be moderated if costly new medical services were adopted more selectively in the future than they have been in the past and if the diffusion of existing costly services was slowed. Although this approach would mean fewer medical services, evidence suggests that savings are possible without a substantial loss of clinical value. Currently, the added clinical benefits of new medical services are not always weighed against added costs before those services enter common clinical practice. And newer, more expensive services are sometimes used in cases in which older, cheaper alternatives could offer comparable outcomes for patients.

Two potentially complementary approaches to reducing total health care spending—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 of health care. In addition to those changes, a variety of approaches to changing health-related behavior could improve health outcomes at a given level of costs.

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 evidence about their effectiveness relative to existing therapies is limited. Costly services that are known to be highly effective in some types of patients are sometimes provided to other patients for whom clinical benefits have not been rigorously demonstrated. More information on the "comparative effectiveness" of alternative medical treatments could offer a basis for ensuring that future technologies and existing costly services are used only in cases in which they confer clinical

benefits that are superior to those of other, cheaper services.¹⁴ 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.

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. Bringing about those changes would probably require action by public and private insurers to incorporate the results into their coverage and payment policies in order to affect the incentives facing doctors and patients.

The Medicare program has not taken costs into account in 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 it, Medicare could use information about comparative effectiveness to promote higher-value care. For example, Medicare could tie its payments 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).

Even in the absence of more information about comparative effectiveness, changes in incentives could help 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, may raise concerns about the financial risk that providers face and about their incentives to provide too little care. On the consumer side, a landmark health insurance experiment by RAND showed that higher cost sharing reduces spending—particularly when compared with a plan offering free care—with few or no adverse effects on health. However, compared with more typical health insurance plans (which do not offer free care), high-deductible designs have more modest effects on health care spending;

^{14.} For a discussion of comparative effectiveness, see Congressional Budget Office, *Research on the Comparative Effectiveness of Medical Treatments: Issues and Options for an Expanded Federal Role* (December 2007).

^{15.} See Willard G. Manning and others, "Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment," *American Economic Review*, vol. 77, no. 3 (June 1987), pp. 251–277.

such approaches also raise concerns about the financial burden on individuals with significant health problems (again reflecting trade-offs between providing insurance protection and maintaining incentives to control costs).¹⁶

Finally, the ultimate objective of any health care system is to promote health, whether by treating diseases that arise or by preventing them from occurring in the first place. Despite the cost of the nation's health care system, many concerns exist about the degree to which it is attaining that objective. Indeed, concerns about rising health care costs might not be so prominent if more evidence showed that those expenditures were yielding commensurate gains in health. In part, those shortcomings in the system's performance relate to the concerns noted above about whether patients are receiving the most effective or most cost-effective treatments—reflecting a lack of information, among other factors. Concerns also exist, though, about steps that are *not* being taken today to prevent the onset of disease, even when clear evidence is available about their benefits. In that context, proposals that encourage more prevention and healthy living can help promote better health outcomes, although their net effects on federal and total health spending are uncertain. Moreover, bringing about substantial changes in behavior could require actions outside the formal health care sector, and even then might be very difficult to achieve.

Nonetheless, reform proposals could encompass preventive measures and efforts to encourage healthier lifestyles. Broadly speaking, three basic policy approaches could be adopted. First, more information about the consequences of unhealthy behavior or the factors contributing to it could be made available, in forms that could affect individual behavior or even social norms. (Nutritional information, for example, is readily available for packaged foods but more difficult to come by for other sources, such as restaurant meals.) Second, financial incentives could be modified to encourage healthier living and to discourage unhealthy activities. For example, cigarette taxes could be increased, which would discourage smoking, especially among teenagers. In addition, an increase in the federal tax on cigarettes of 50 cents per pack would raise about \$5 billion per year, according to the Joint Committee on Taxation. Third, regulatory steps could be taken to encourage healthy behavior and discourage poor health habits. For example, recent efforts have been aimed at improving the nutrition and reducing the calories of school lunches and snacks available in schools. In addition, some research suggests that changing the presentation of food choices can encourage healthy eating. There could be great value in exploring these and other mechanisms that offer the potential of constraining health care spending without diminishing the quality of care that people receive.

16. See Congressional Budget Office, Consumer-Directed Health Plans: Potential Effects on Health Care Spending and Outcomes (December 2006).