The Financial Outlook for Medicare, Medicaid, and Total National Health Expenditures

Testimony before the
House Committee on the Budget
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by

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Chairman Ryan, Representative Van Hollen, distinguished Committee members, thank you for inviting me to testify today about the outlook for health spending in the U.S., including the Medicare and Medicaid programs. I welcome the opportunity to assist you in your efforts to ensure the future financial viability of Medicare (the nation's second largest social insurance program) and Medicaid (the largest government health program in terms of the number of people covered). Together, these programs are a critical factor in the income security of our aged, disabled, and low-income populations.

I would like to begin by saying a little about the role of the Office of the Actuary at the Centers for Medicare & Medicaid Services (CMS). We have the responsibility to provide actuarial, economic, and other technical assistance to policy makers in the Administration and Congress on an independent, objective, and nonpartisan basis. Our highest priority is to help ensure that policy makers have the most reliable technical information possible as they work to sustain and improve Medicare, Medicaid, and health care in the U.S. overall. The Office of the Actuary has performed this role on behalf of Congress and the Administration since the enactment of these programs over 45 years ago.

I am appearing before your Committee today in my role as an independent technical advisor to Congress. My factual statements, estimates, and other information provided in this testimony are drawn from the 2011 Medicare Trustees Report, the forthcoming 2011 Actuarial Report on the Financial Outlook for Medicaid, and our most recent historical and projected National Health Expenditure accounts; any opinions offered are my own and do not represent an official position of the Department of Health & Human Services or the Administration.

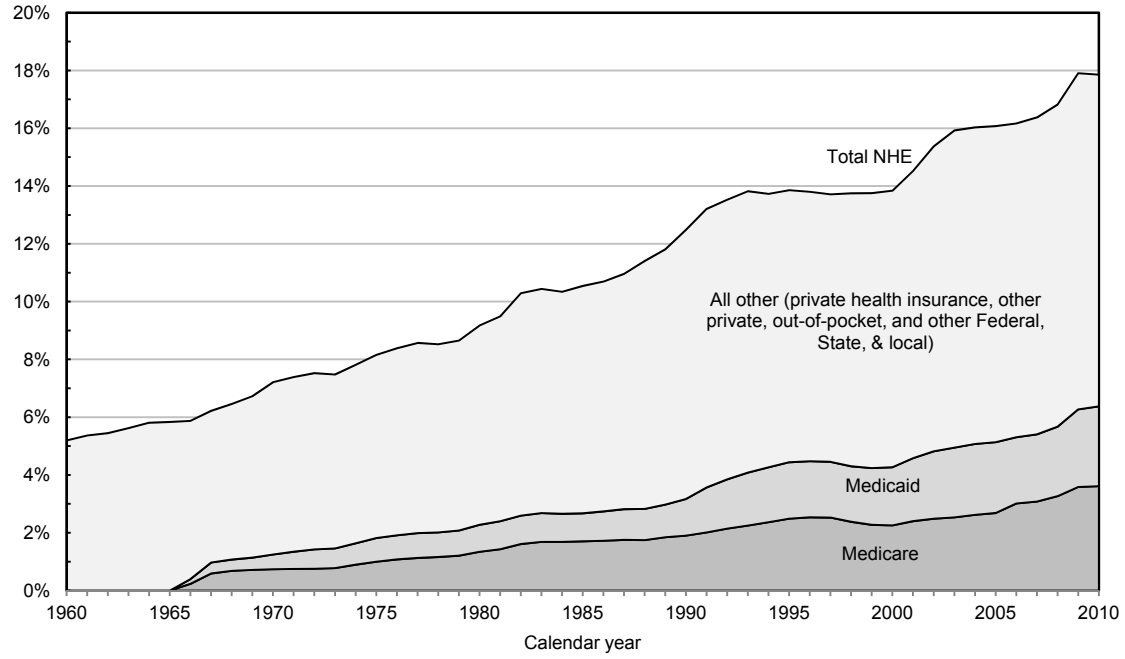
In view of your Committee's interest in budgetary impacts, and the Office of the Actuary's traditional role in assessing the financial outlook for health programs, my testimony will focus on the cost of Medicare and Medicaid, both in the past and as projected for the future. This focus, however, should not obscure the value of these programs. The health insurance coverage available to Medicare beneficiaries is obviously very valuable to them as individuals, with an estimated average benefit this year of more than $12,000 per person. Similarly, low-income individuals and families under Medicaid receive benefits worth, on average, $2,900 per child, $17,300 per disabled enrollee, $15,700 per aged enrollee, and $4,700 for other covered adults. There is also substantial value to society from the orderly provision of health care for the nation's older, sicker, and poorer populations.

I would also like to caution the Committee about the uncertainty of financial projections for health insurance programs. Certain aspects of projections, such as the demographic

characteristics of the population, are relatively predictable.[1] Projections of health cost trends, however, are much more uncertain and depend critically on future economic developments, advances in medical technology, and other factors. Medicaid cost growth, in particular, has been more volatile than most other forms of health coverage, due to the impact of economic cycles on the number of enrollees, frequent legislative changes, and the efforts by the individual States to expand coverage or control costs. For these reasons, it is important to recognize that actual future Medicare, Medicaid, and total national health expenditures can—and generally do—differ from any specific projection. The projections are not intended as firm predictions of future costs, since this is clearly impossible; rather, they illustrate how these programs would operate under a range of conditions that can reasonably be expected to occur and thus serve a useful role in providing guidance to policy makers.

It is helpful to consider Medicare and Medicaid in the context of overall national health expenditures, since many of the factors affecting expenditure growth are common to all forms of health insurance. Chart 1 shows total health expenditures in the U.S. as a percentage of gross domestic product (GDP) from 1960 through 2010, the latest year for which we have complete historical data. The portions of total spending attributable to Medicare and Medicaid are also shown.

Chart 1—Medicare, Medicaid, and total national health expenditures as a percentage of GDP



Health spending in the U.S. has generally increased at a significantly faster pace than the economy, rising from 5.2 percent of GDP in 1960 to 17.9 percent in 2010. The upward trend has fluctuated somewhat, depending on the business cycle (which affects GDP growth) and on faster or slower periods of health cost growth. For example, national health expenditures represented about 13.8 percent of GDP for much of the 1990s, reflecting stronger-than-average real

[1] For example, in 1957 noted actuary and demographer T.N.E. Greville projected that the "Social Security area" population in 2000 would be 302 million; the actual number, 43 years later, was 288 million or less than 5 percent lower than the estimate. More importantly for purposes of social insurance financial analysis, he projected that there would be 5.2 working-age people for every person at age 65 and over; the actual ratio was 4.8 to 1.

economic growth during much of this period and the widespread adoption of managed care health plans. Conversely, the share of GDP devoted to health care accelerated sharply in the early 2000s in part as a result of the public backlash against health care utilization controls and the economic recession that began in 2001.

From their enactment in 1965, Medicare and Medicaid costs have also grown faster in most years than the economy. Medicare expenditures represented 0.6 percent of GDP in 1967 and 3.6 percent in 2010. The corresponding percentages for Medicaid are 0.4 percent, increasing to 2.8 percent. The "all other" category in chart 1 is composed primarily of expenditures by private health insurance and individuals' direct out-of-pocket payments for health services.

Chart 2 shows the proportion of total U.S. health expenditures by source of payment for 1976 compared to 2010.[2] Medicare and Medicaid have been growing as a share of total expenditures. Over this period, Medicare increased from 13 percent of all U.S. health spending to 20 percent currently, and Medicaid grew from 10 percent to 15 percent. Payments by private health insurance have also increased as a share of the total, reaching 33 percent in 2010, although this level is a little lower than the maximum of 35 percent experienced in 2003 through 2005. Out-of-pocket costs for health care services have declined substantially, from 27 percent of total expenditures in 1976 to 12 percent in 2010, reflecting private health insurance and Medicaid coverage expansions during this period.

Chart 2—Distribution of national health expenditures by source of payment, 1976 and 2010

Source of payment	1976	2010
Individual's out-of-pocket costs	27%	12%
Private health insurance	24%	33%
Medicare	13%	20%
Medicaid (Federal, State, and local)	10%	15%
Veterans Admin., Dept. of Defense, and CHIP	4%	4%
Other third-party payers and programs	11%	7%
Public health	2%	3%
Investment	9%	6%

Medicare and Medicaid spending has increased as a share of total expenditures for several reasons:

- The Medicare benefit package has expanded since 1976 through such factors as a Part B deductible that was increased only twice during 1976 through 2004 and the introduction of the Part D prescription drug benefit in 2006. Eligibility for Medicaid was expanded by higher income thresholds for child and adult enrollees and the States' use of waivers to extend eligibility to other populations. In addition, the Medicaid proportion in 2010 reflects the impact of the 2008-2009 economic recession, which led to a significant increase in the number of enrollees.

[2] The National Health Expenditure accounts also track health care spending by type of service (such as hospital care, physician services, and prescription drugs) and by source of financing (governments, businesses, and households). The historical and projected NHE accounts are available at http://www.cms.gov/NationalHealthExpendData/01_Overview.asp .

- Expenditures by private health insurance plans grew at a somewhat slower rate as a result of the widespread adoption of managed care plans, including health maintenance organizations and preferred provider organizations. In addition, many employers sought to reduce cost growth by taking advantage of competition among insurers and through more frequent adjustments in employee cost-sharing requirements. Also, the proportion of the population with employer-sponsored insurance has declined over time.
- Contrary to popular conceptions, the aging of the post-World War II "baby boom" generation did not have a large impact on the increase in Medicare or Medicaid costs during this period. It will do so in the future, however, since the first members of this generation began reaching age 65 in 2011.

Chart 3 helps to explain why health care costs tend to increase at a faster rate than the overall economy. As indicated, health care cost growth averaged 9.6 percent per year from 1965 to 2010. About 1.0 percentage point is attributable to the growing population (more people, more health expenditures, all else equal). General, economy-wide inflation contributes to higher medical prices, adding about 4.0 percentage points on average over this period.

In addition, medical prices tend to grow at a somewhat faster pace than general economic inflation, since (i) a greater proportion of health care is produced by human capital than in the economy at large, and (ii) productivity improvement is lower for health care providers, reflecting their higher labor share and the individualized nature of many health services. Together, these factors have increased medical prices by about 1.4 percent annually above the level of economy-wide price growth, as measured by the GDP implicit price deflator.

Over time, people tend to use more health care services, and the services tend to be more complex and expensive as new technology is developed. The "volume and intensity" of services per person has added about 2.9 percentage points per year to personal health care expenditure growth. Together, the increases in population, general prices, excess medical-specific prices, and volume and intensity, plus a small contribution from changes in the age and gender distribution of the population, have resulted in an overall average growth rate for personal health care expenditures of 9.6 percent over the last 45 years.

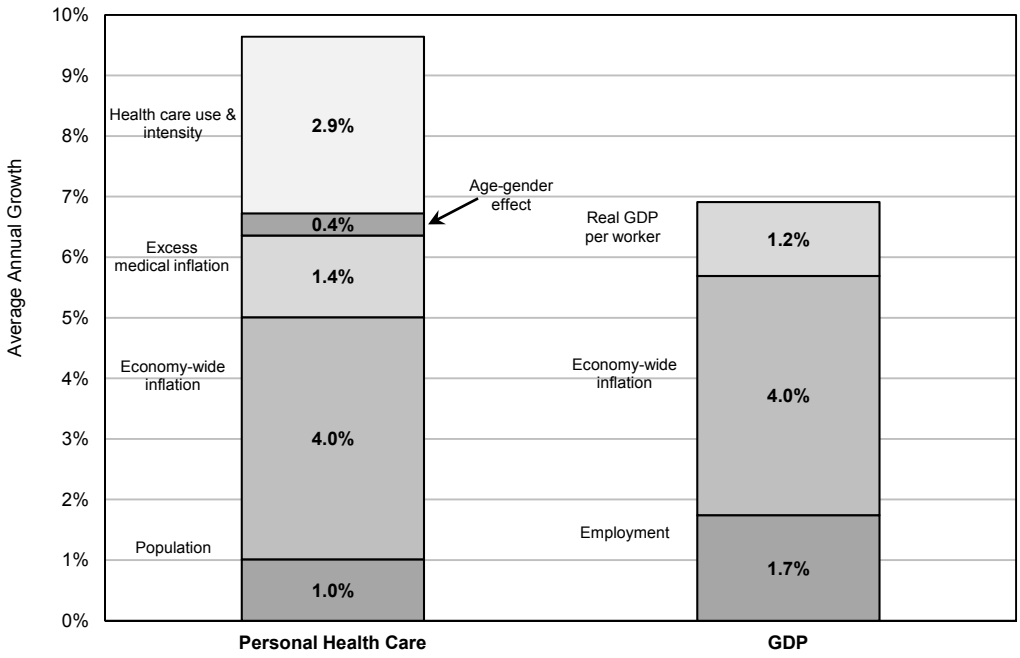
Similarly, growth in the economy can be decomposed into several roughly corresponding factors. The first of these is the increase in the number of workers, which has averaged 1.7 percent during 1965 to 2010—aided in part by the entry of the baby boom generation into the labor force.

The impact of general economic inflation, at 4.0 percent, is the same for both health expenditures and nominal economic growth. The increase in real (inflation-adjusted) GDP per worker occurs primarily as a result of productivity gains and has averaged 1.2 percent over this period.

Collectively, these economic growth factors add up to 6.9 percent, which has been well below the 9.6-percent growth in health expenditures. (As suggested by the trend variations shown in chart 1, the differential between health cost growth and economic growth has not been constant over time.) Going forward, employment growth is likely to be somewhat slower than overall population growth as the baby boom generation leaves the work force. The effect of general inflation is the same for both categories, but, based on past trends, labor productivity growth is

unlikely to keep pace with continuing increases in excess medical prices plus the volume and intensity of services per person.

Chart 3—Factors accounting for growth in Personal Health Care spending and the economy, 1965-2010



Another way to assess the causes of rapid health care expenditure growth is through an economic analysis of the key factors leading to increased demand for services and higher costs. Chart 4 summarizes the most recent research in this area, as published by Sheila Smith and Mark Freeland from the Office of the Actuary together with Joseph Newhouse of Harvard University.[3]

Chart 4–Causal factors for growth in health care spending, 1960-2010

Factor	Contribution to growth (percent)
Income effects	28-41
Relative medical price inflation	8-21
Demographic effects	7
Change in insurance coverage	10
Technology	26-45

Income growth has long been identified as a primary contributor to higher health spending. As individuals, or nations, become "richer," they tend to spend an increasing amount on health care. Smith *et al.* estimate that real per capita income growth during 1960 to 2010 was responsible for between 28 and 41 percent of the increase in real per capita health expenditures.

[3] See Smith, S., Newhouse, J., and Freeland, M., "Income, Insurance, and Technology: Why Does Health Spending Outpace Economic Growth?" *Health Affairs,* September/October 2009. The estimates shown in chart 4 have been updated through 2010 using the authors' methodology; the results are very similar to those shown in the article for 1960-2007.

Relative medical price inflation (above and beyond economy-wide inflation) was found to have contributed between 8 and 21 percent. Demographic effects were not substantial over this period, but they explain about 7 percent of total health cost growth, while broader availability and higher levels of health insurance account for another 10 percent.

The impact of technology on health cost growth is usually measured as the residual, after all of the factors above have been estimated. In the Smith *et al.* analysis, technology is estimated to account for between 26 and 45 percent of historical real health expenditure growth per person. (In practice, other factors that are not separately estimated will also be included in the residual category. Such factors are believed to have only a small effect.) Technological advances contribute to expenditure growth both through the adoption of new treatments, devices, and drugs, such as implantable defibrillators, and through the ability of the health sector to apply existing services to a broader group of people, for example heart bypass and hip replacement operations to older patients. Although some new technologies enable the provision of existing services at lower costs, historically most technology has been cost-increasing. Growing incomes and the widespread availability of health insurance facilitate a ready market for new developments, even if their cost is much higher than existing treatments.

Medicare

Medicare expenditures are projected under current law to increase at a much lower rate than usual during 2012 through 2020, due to the combined effects of (i) continuing slow general inflation, (ii) a sharp reduction in physician payment rates required under the sustainable growth rate (SGR) formula, and (iii) the impact of the savings provisions in the Affordable Care Act. Most of these latter savings will occur as a result of the slower provider payment rate updates for most non-physician providers[4] and a downward adjustment in Medicare Advantage payment benchmarks and rebate percentages. Collectively, these factors contribute to a projected average annual cost growth rate of 5.9 percent during 2012 through 2020, despite the advent of the baby boom generation reaching age 65 and qualifying for HI benefits during this period. About 3 percentage points of this increase are due to growth in the number of HI beneficiaries. For comparison, the average annual growth rate over the last 10 years was 8.6 percent, with enrollment growth contributing 2 percentage points to this average. Put another way, the *per beneficiary* growth rate for the next 10 years is expected to be less than half of the rate over the last 10 years, principally as a result of the SGR payment reduction and the savings provisions in the Affordable Care Act.

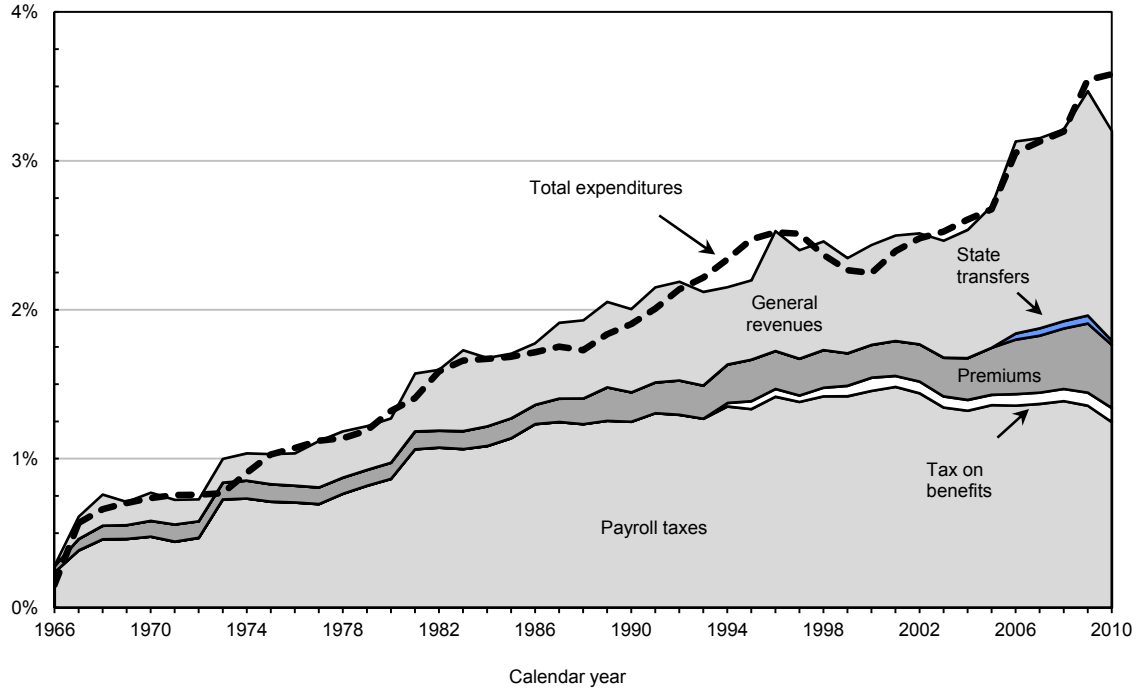
As the Trustees and I have cautioned, it is important to note that the actual future costs for Medicare are likely to exceed those shown by the current-law projections. Congress is almost certain to override the approximately 30-percent reduction in Medicare payment rates to physicians that is scheduled to take place in 2013. In addition, it is doubtful that other providers will be able to improve their efficiency and productivity sufficiently to match the downward adjustments to Medicare payment updates based on economy-wide productivity. Since the provision of health services tends to be labor-intensive and is often customized to match individuals' specific needs, most categories of health providers have not been able to improve

[4] For hospitals, skilled nursing facilities, home health agencies, diagnostic laboratories, and most other providers of health services, Medicare payment updates will be set at the increase in provider input prices (or the CPI, in certain cases) less the increase in private, non-farm business multifactor productivity in the economy overall. In addition, the Affordable Care Act requires additional payment update reductions in 2010-2019 for specified provider categories. For hospitals, these additional reductions total 3.6 percent.

their productivity to the same extent as the economy at large. Over time, the productivity adjustments mean that the prices paid for health services by Medicare will grow in all future years by about 1.1 percentage point per year more slowly than the increase in input prices that providers must pay to purchase the goods and services they use to furnish health care to beneficiaries. Unless providers could reduce their cost per service correspondingly, through productivity improvements or other steps, they would eventually become unwilling or unable to treat Medicare beneficiaries. In this event, Congress would likely override the adjustments, much as they have done for 2003 through 2012 to prevent the reductions in physician payment rates otherwise required by the SGR formula in current law.

Medicare has been financed by a somewhat eclectic set of dedicated and general revenues. The amounts of these financing sources are shown in chart 5, together with total expenditures, all expressed as a percentage of GDP. In total, Medicare revenues have been relatively close to expenditures, illustrating the "pay-as-you-go" nature of Medicare financing. (Most other forms of health insurance are also financed on a pay-as-you-go basis.)

Chart 5—Medicare sources of non-interest income and expenditures



The primary sources of financing for the Medicare program are as follows:

- Payroll taxes—Part A of Medicare is financed primarily through a portion of the FICA and SECA payroll taxes.[5] Employees and employers each pay 1.45 percent of covered earnings, while self-employed workers pay the combined total of 2.90 percent. Following the Omnibus Budget Reconciliation Act of 1993, Part A payroll taxes are paid on total earnings in covered employment, without limit. The Affordable Care Act introduced an additional 0.9-percent Part A payroll tax on individuals and couples with

[5]Federal Insurance Contributions Act and Self-Employment Contributions Act, respectively.

earnings above $200,000 or $250,000, respectively, starting in 2013.[6] Because these earnings thresholds are not indexed, over time a growing proportion of all workers will be subject to this additional tax rate. By 2085, for example, an estimated 80 percent of workers would be subject to the additional 0.9-percent HI payroll tax. The Part A tax rate is specified in the Social Security Act and is not scheduled to change at any time in the future under present law. Thus, program financing cannot be modified to match variations in program costs except through new legislation. Until recently, payroll taxes were the largest source of financing for Medicare.

- Income taxes on Social Security benefits—Up to 85 percent of an individual's or married couple's Social Security benefits may be countable as taxable income for Federal income taxes. Any taxes payable on the taxable portion of benefits between 50 and 85 percent are allocated to the Part A trust fund. Because the income thresholds are not indexed, a growing percentage of Social Security beneficiaries are becoming subject to such taxes.

- Beneficiary premiums—Parts B and D of Medicare are financed in part by beneficiary premiums, which currently represent about 25 percent of Part B financing and 13 percent of Part D. These amounts are adjusted each year to keep pace with the cost of benefits; as a result, premiums have been a growing share of total financing for Medicare. In addition, premiums for higher-income beneficiaries are adjusted to cover a greater proportion of the average cost of Part B and Part D coverage.

- Payments by States—With the transfer of prescription drug costs for dual Medicare-Medicaid beneficiaries to Part D of Medicare, States are required to pay a portion of their forgone Medicaid costs to the Part D trust fund account. These payments currently cover about 10 percent of Part D financing and serve to reduce the amount of general revenues otherwise required.

- Fees on prescription drugs—Starting in 2011, manufacturers and importers of brand-name prescription drugs are required to pay annual fees, with the payments credited to the Part B trust fund account. These payments reduce the premiums and general revenues otherwise required to finance Part B.

- Federal general revenues—Roughly three-fourths of Part B and Part D costs are met by the general fund of the Treasury. As with beneficiary premiums, general revenues for these programs are reset annually and increase at the same rate as program expenditures. Consequently, income for Parts B and D automatically matches expenditures without the need for legislative adjustments. As a result of this financing basis, and the slowdown in payroll tax receipts due to the 2008-2009 recession, general revenues recently became the largest source of Medicare financing.

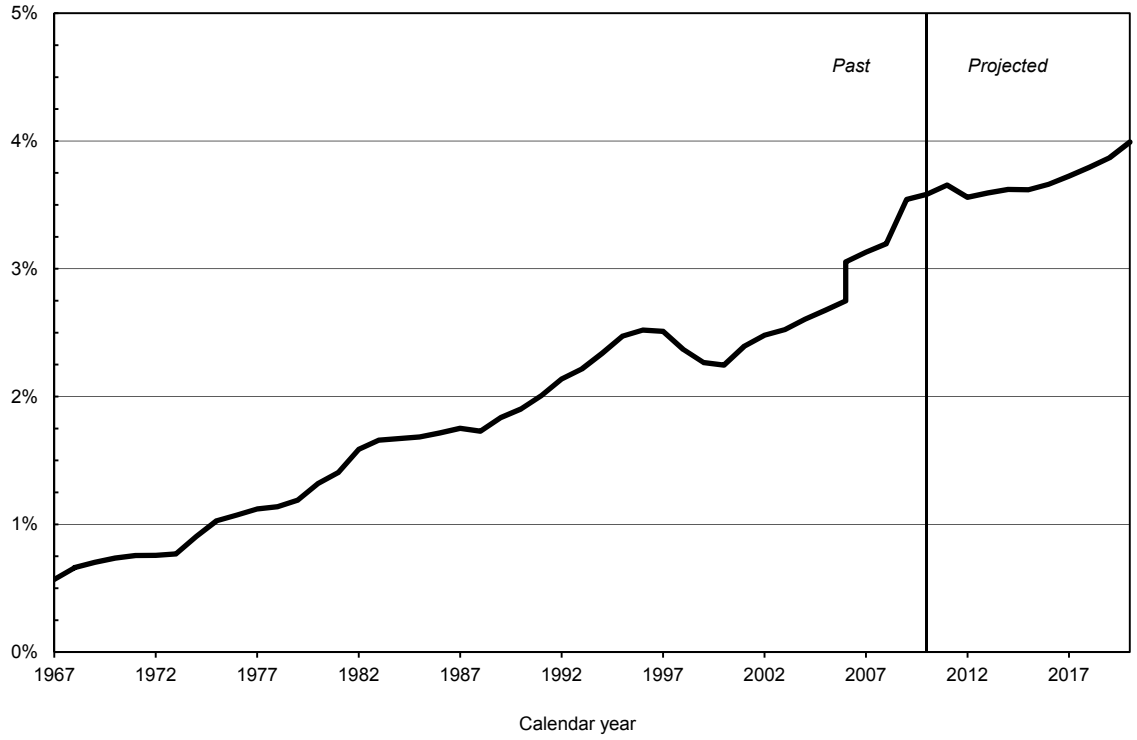
- Interest—Any Medicare revenues that are not needed for the immediate payment of benefits and other costs are invested in Treasury securities. Interest earnings on these assets are credited to the associated trust fund account and may be used to pay program costs. Currently, interest represents about 4 percent of Part A income, 1 percent for Part B, and a negligible share of Part D revenues. (Interest is not shown in chart 5, since it is not a significant source of financing.)

[6] The Affordable Care Act also specifies that individuals with incomes greater than $200,000 per year and couples above $250,000 will pay an additional "Medicare contribution" of 3.8 percent on some or all of their non-work income (such as investment earnings). However, the revenues from this tax are not allocated to the Medicare trust funds.

In the early years of Medicare, beneficiary out-of-pocket costs for Part B premiums and cost-sharing requirements represented about 6 percent of an average Social Security benefit. Currently, Part B and Part D out-of-pocket costs for an average beneficiary are about 26 percent of an average Social Security benefit. Similarly, general revenue transfers to Medicare have increased from about 0.8 percent of total Federal personal and corporate income tax receipts in 1970 to about 18 percent currently. As Part B expenditures increase faster than the GDP or people's incomes, financing these costs represents an increasing share of available resources for both beneficiaries and the Federal government.

Chart 6 shows past and projected Medicare expenditures as a percentage of GDP. The past trend has been generally increasing, with the exception of the first 3 years following the Balanced Budget Act of 1997. The subsequent Balanced Budget Refinement Act of 1999 and the Benefits Improvement and Protection Act of 2000 eased certain of the BBA provisions, and cost growth continued to exceed economic growth. The addition of Part D prescription drug coverage in 2006 increased Medicare costs by about 12 percent. With the economic recession of 2008-2009, GDP declined and Medicare costs increased rapidly as a share of GDP, from 3.1 percent in 2007 to 3.6 percent in 2011.

Chart 6—Medicare expenditures as a percentage of GDP



Medicare expenditures are projected to remain fairly level at about 3.6 percent of GDP from 2011 through 2015.[7] This pattern reflects both faster assumed growth in GDP and slower Medicare cost growth as a result of the savings provisions in the Affordable Care Act and the large reduction in physician payment rates required under the statutory SGR formula.

[7] These projections are drawn from the 2011 Medicare Trustees Report and thus do not reflect the Budget Control Act of 2011, the Temporary Payroll Tax Cut Continuation Act of 2011, or the Middle Class Tax Relief and Job Creation Act of 2012. The forthcoming 2012 Trustees Report will incorporate these impacts.

Expenditures are projected to increase as a share of GDP thereafter, but at a slower rate than historically as noted previously.

Together, the SGR formula and the reduced payment updates under the Affordable Care Act are estimated to permanently reduce Medicare expenditure growth rates by over 1.1 percentage points annually. In practice, however, Congress has overridden the physician payment reductions otherwise required by the SGR for every year 2003 through 2012, and further legislative action to prevent substantial payment reductions is probable. Also, as I and others have cautioned, the cumulative effect of the payment update reductions for other providers may lead to inadequate payment rates in the long range. In discussing strategies for reducing health care costs, former Office of Management and Budget (OMB) Director Peter Orszag wrote the following:

> The first approach is to simply reduce payments to providers—hospitals, doctors, and pharmaceutical companies. This blunt strategy can work, often quite well, in the short run. It is inherently limited over the medium and long term, however, unless accompanied by other measures to reduce the underlying quantity of services provided. If only Medicare and Medicaid payments were reduced, for example, providers would shift the costs to other patients and also accept fewer Medicare and Medicaid patients. This would make the approach politically nonviable.[8]

If the SGR provision continued to be overridden and the productivity adjustments to other provider payment updates became unworkable, then future Medicare costs would be substantially higher than those projected under current law.[9]

Chart 7 shows the long-range projection of Medicare expenditures from the 2011 Medicare Trustees Report, together with the projected cost under an illustrative alternative to current law.[10]

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[8] Orszag, Peter R., "How Health Care Can Save or Sink America," *Foreign Affairs* Vol. 90, No. 4, July/August 2011.

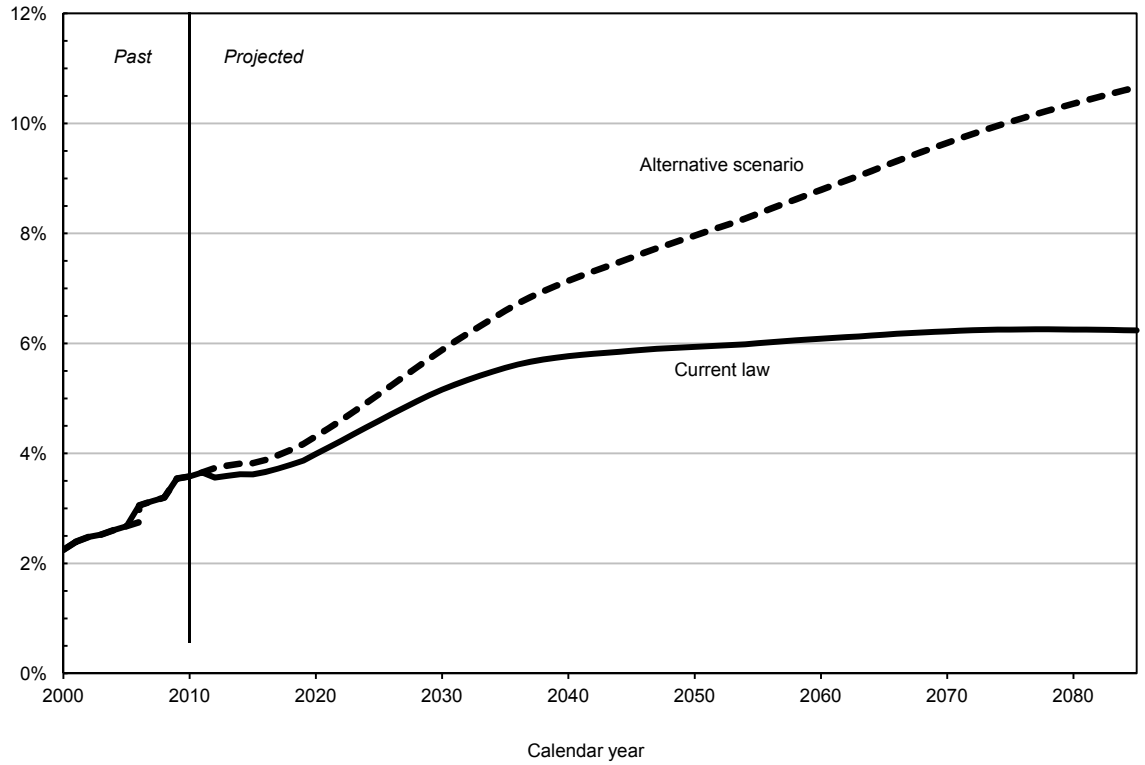
[9] As described in my July 13, 2011 testimony before the House Committee on the Budget, Medicare payment rates for inpatient hospital care in 2009 were about 67 percent of those paid by private health insurance for their commercial plans. Under current law, Medicare payment rates are projected to decline relative to private health insurance payment rates over the next 75 years. The increasing differential between Medicare and private payment rates is due to the productivity adjustments in 2012 and later for the Medicare payment updates (and, to a lesser degree, to the other, smaller downward adjustments in 2010-2019 specified by the Affordable Care Act in addition to the productivity adjustments). By the end of the long-range projection period, Medicare payment rates for inpatient hospital services would represent roughly 33 percent of the average level for private health insurance and about one-half of the current relative level for Medicaid.

Somewhat similarly, Medicare physician payment levels in 2009 were about 80 percent of private health insurance payment rates. Medicare physician payment rates would decline to about 57 percent of private health insurance payment levels due to the mandated reduction in the Medicare physician fee schedule of roughly 30 percent under the SGR formula in current law. (As noted, Congress is very likely to override this reduction, as it has consistently for 2003 through 2012.) Under current law, the Medicare rates would eventually fall to 27 percent of private health insurance levels by 2085, which would be less than half of the current relative level of Medicaid physician payment rates. The continuing slower growth would occur as a result of negative update adjustment factors caused by growth in the volume and intensity of physician services that exceeds the real per capita GDP increase factor specified by the SGR formula.

[10] To help illustrate the degree to which the current-law projections potentially understate actual future costs, the Board of Trustees asked the Office of the Actuary to prepare short- and long-range projections under an illustrative alternative to current law that assumes (i) all future physician payment updates are based on the increase in the Medicare Economic Index, and (ii) the productivity adjustments for most other categories of providers are gradually phased out during 2020 to 2035. No endorsement of such changes by the Office of the Actuary or the Board of Trustees should be inferred. The illustrative alternative projections are available at http://www.cms.gov/ReportsTrustFunds/Downloads/2011TRAlternativeScenario.pdf.

In 2010, total Medicare expenditures were $523 billion or about 3.6 percent of GDP. Under current law and based on the Trustees' intermediate set of economic and demographic assumptions, costs are initially projected to level off and decline slightly as a percentage of GDP as the economy recovers and unemployment returns to more normal levels. Costs will increase as the baby boom generation becomes eligible for HI benefits in 2011-2030 but are projected to largely level off thereafter at roughly 6 percent of GDP. This pattern results primarily from the accumulating effect of the productivity adjustments.

Chart 7—Medicare expenditures as a percentage of GDP



For comparison, costs under the illustrative alternative projections increase rapidly throughout the long-range period, reaching 10.7 percent of taxable payroll in 2085, compared to 6.2 percent under current law. Thus, depending on the long-range feasibility of the SGR provision and the slower payment updates for other providers, Medicare expenditures could be about three-fourths higher than projected under current law.

It is possible that providers can improve their productivity, reduce wasteful expenditures, and take other steps to keep their cost growth within the bounds imposed by the Medicare price limitations. The implementation of payment and delivery system reforms, facilitated by the aggressive research and development program implemented by the Affordable Care Act, could help constrain cost growth to a level consistent with the lower Medicare payments. These outcomes are far from certain, however. As specific reforms have not yet been designed, tested, or evaluated, their ability to reduce costs cannot be estimated at this time, and thus no specific savings have been reflected in the Trustees Report projections for the initiative.

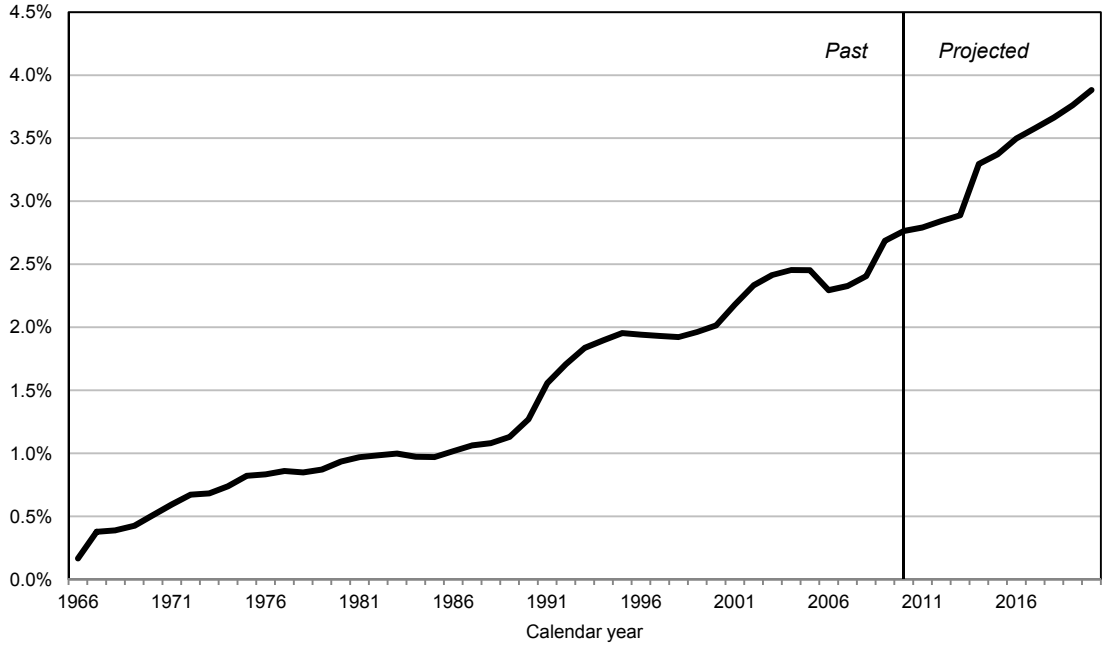
The effect of the baby boom generation on Medicare and Social Security is relatively well known, having been discussed by actuaries and others for almost 40 years. In brief, by 2030 when the baby boom cohorts have enrolled in Medicare, there will be about 65 percent more

Medicare beneficiaries than there are today, but the number of covered workers will have increased by only about 15 percent. There are other demographic effects beyond those attributable to the varying number of births in past years. In particular, life expectancy has improved substantially in the U.S. and is projected to continue doing so. The average remaining life expectancy for 65-year-olds increased from 12.4 years in 1935 to 19 years currently, with an estimated further increase to about 23 years at the end of the long-range projection period. Medicare costs are sensitive to the age distribution of beneficiaries. Older persons incur substantially larger costs for medical care, on average, than do younger persons. Thus, as the beneficiaries age, over time they will move into higher-utilization age groups, thereby adding to the financial pressures on the Medicare program.

Medicaid

Historically, total (Federal plus State) expenditures on behalf of Medicaid enrollees have increased faster than the U.S. economy in most years, as shown in chart 8. Costs as a percentage of GDP have fluctuated with the business cycles, since higher unemployment both adds to the number of Medicaid enrollees and decreases GDP, with economic recoveries having the opposite effects. Medicaid expenditures increased dramatically between 1988 and 1995, doubling as a share of GDP from 1 percent to 2 percent, in part as a result of eligibility expansions for children but more so from the enactment of "tax and donation" schemes by States to increase the Federal share of Medicaid financing. Medicaid costs decreased in 2006 with the implementation of the Medicare Part D prescription drug benefit, which transferred drug costs for dual beneficiaries from Medicaid to Medicare. Most recently, costs increased significantly as a result of the recent economic recession. These trends also reflect States' recent efforts to constrain cost growth through limits on provider payment rates, tighter eligibility standards, and increasing use of managed care plans.

Chart 8—Medicaid benefit outlays as a percentage of GDP



Medicaid cost growth should decelerate somewhat over the next several years as the economy recovers and many enrollees regain jobs and employer-sponsored private health insurance. Beginning in 2014, the number of enrollees is expected to increase substantially as a result of the Affordable Care Act provisions to (i) increase the income threshold to (effectively) 138 percent of the Federal poverty limits, (ii) eliminate asset limits, and (iii) expand eligibility to all low-income adults regardless of family or disability status. We estimate that enrollment in 2014 will increase by about 14.9 million, or 26 percent, but Medicaid expenditures are expected to increase by a much lower amount—7 percent—since most of the new enrollees will be non-disabled adults, with relatively low health care costs compared to the average for current enrollees.

Chart 9 shows Federal, State, and total Medicaid outlays in fiscal year 2010, by category of payment. Acute-care benefits remain the largest category of outlays, although payments made under capitated arrangements have been an increasing share of the total. Outlays for long term care services have increased more slowly than the historical average in recent years.[11]

Chart 9— Medicaid outlays for fiscal year 2010 by type of payment
(In billions)

Title XIX outlays - 2010[1]	Federal share	State share	Total
Medical assistance payments (MAP):			
Acute care benefits[2]	$98.5	$44.2	$142.7
Long-term care benefits[2]	76.3	36.7	113.0
Capitation payments[2]	71.5	32.4	103.9
DSH payments[2]	8.7	6.5	15.2
Adjustments[3]	4.7	3.6	8.3
Subtotal MAP	259.7	123.4	383.1
Administration payments	10.1	8.0	18.1
Vaccines For Children program	3.8	0.0	3.8
Gross outlays	273.5	131.4	404.9
Collections	-0.8	-0.1	-0.9
Net outlays	272.8	131.3	404.1

Source: 2011 Actuarial Report on the Financial Outlook for Medicaid (forthcoming).

[1] Outlays do not include Title XIX share of State Children's Health Insurance Program.

[2] Benefit expenditures by category from CMS-64.

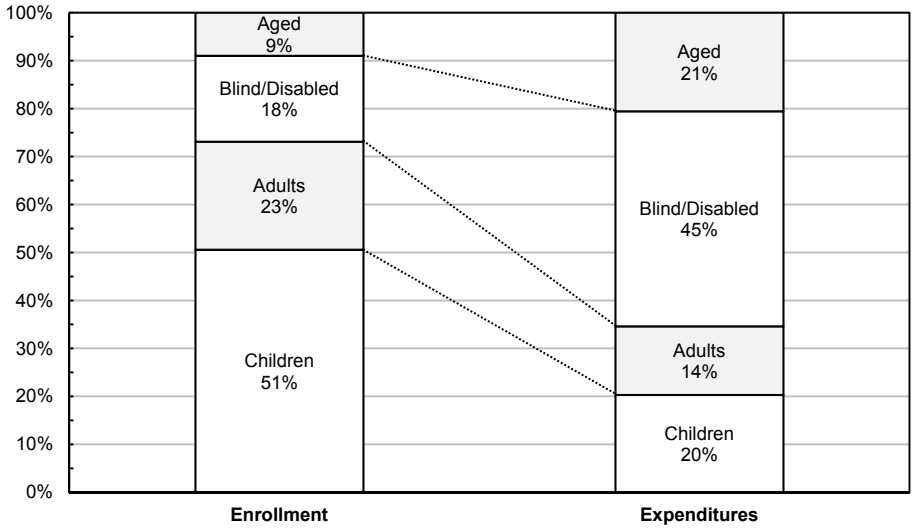
[3] Adjustments include collections, prior period adjustments, and difference between expenditures and outlays.

Medicaid costs are met primarily by Federal and State general revenues, on an as-needed basis; the States may also rely on local government revenues to finance a portion of their share of Medicaid costs. Other than a very small amount of premium revenue from enrollees and certain other sources of State revenue (such as provider taxes), there are no dedicated revenue sources comparable to the Medicare Part A payroll tax. Federal financing for Medicaid is authorized through an annual appropriation by Congress. These funds are then spent through daily draws from the general fund of the Treasury in the amounts required to pay that day's Federal matching amounts on the State program expenditures. As a result, Federal Medicaid outlays and revenues are automatically in financial balance.

[11] The forthcoming *2011 Actuarial Report on the Financial Outlook for Medicaid* will have a comprehensive discussion of past and projected trends in Medicaid spending.

Chart 10 presents the distribution of Medicaid enrollees and costs by enrollee category as of 2010. About half of all enrollees were children; due to their relatively low level of per capita health care costs, Medicaid expenditures on behalf of children represented only about 20 percent of the total. Conversely, aged and disabled Medicaid enrollees were only about one-fourth of the total number, but their per capita Medicaid costs were about two-thirds of total costs, despite the fact that most of the aged enrollees, and many of the disabled, are also eligible for Medicare, which is the primary payer for dual beneficiaries.

Chart 10—Medicaid enrollment and expenditures by eligibility group, as a share of total



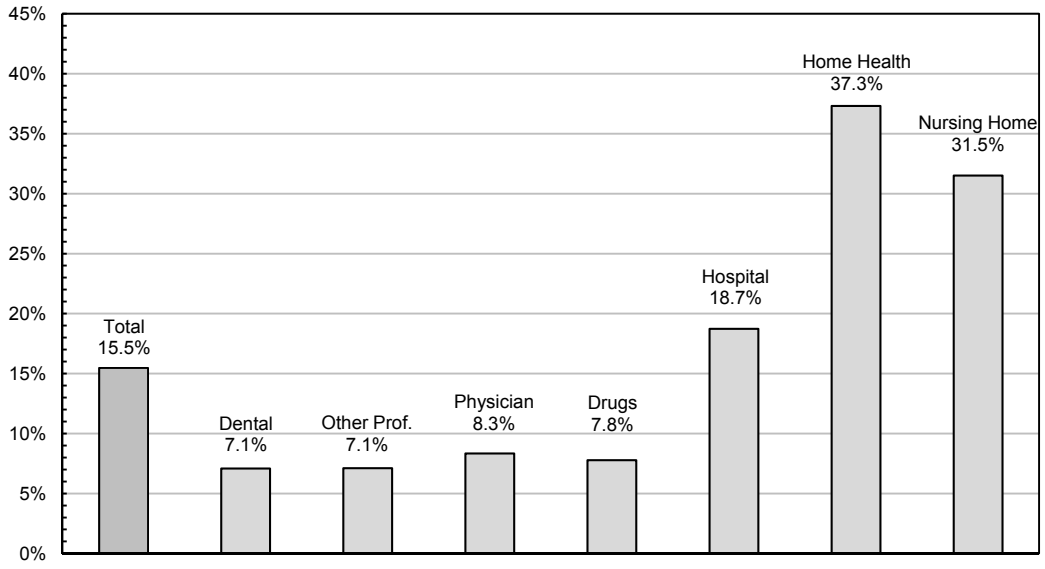
Source: *2011 Actuarial Report on the Financial Outlook for Medicaid* (forthcoming).

Total Medicaid enrollment in 2010 averaged about 54 million, representing 17.4 percent of the total U.S. population. As shown previously, Medicaid paid about 15 percent of all health care costs in 2010, or somewhat less than might be expected based on the percentage of the population covered by the program. The difference occurs primarily because Medicaid provider payment rates are much lower than average, and the proportion of children enrolled in Medicaid is significantly higher than the overall enrollment percentage. In addition, as noted above, Medicare pays a majority of health care costs for most aged Medicaid enrollees and for many of the disabled.

As indicated in chart 11, Medicaid's share of total U.S. health expenditures varies significantly depending on the type of service. In particular, Medicaid is the largest payer of the costs of nursing home care. Other categories, such as physician, other professional, and prescription drugs have lower percentages for the reasons given above.

States have taken many steps in recent years to try to reduce Medicaid costs, which have become one of the largest categories of State expenditures. The primary means has been to limit or reduce payment rates to physicians, hospitals, and other fee-for-service health care providers. Although such steps have been effective at holding down per person cost growth, an increasing number of enrollees report that they have difficulty in finding physicians (specialists in particular) who are willing to see new patients with Medicaid.

Chart 11—Percentage of total U.S. health expenditures paid by Medicaid, by type of service, 2010

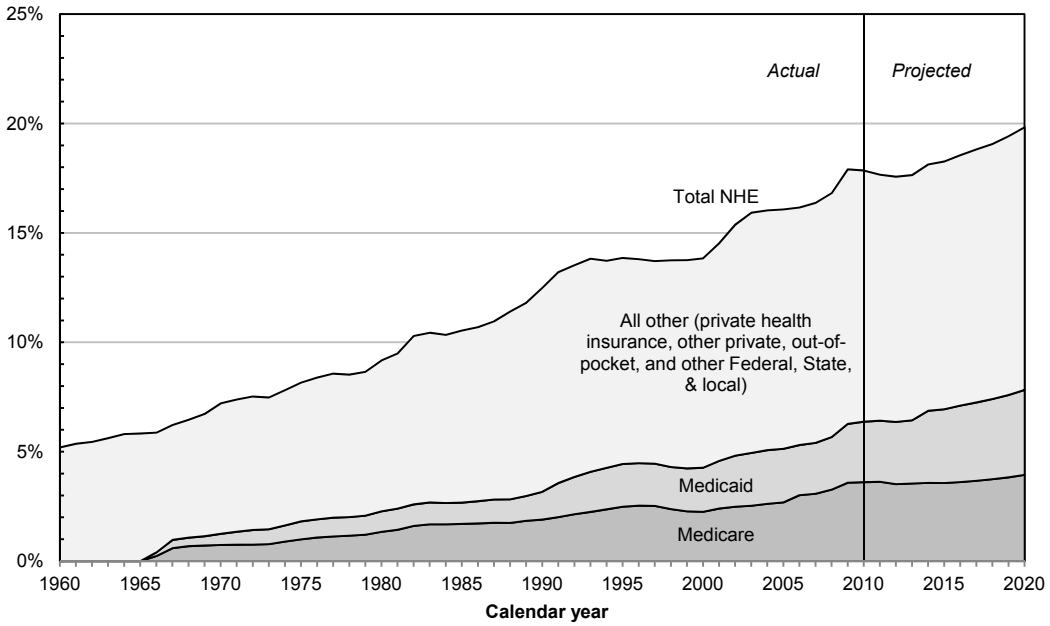


Source: National Health Expenditure accounts, Office of the Actuary.

Conclusion

Chart 12 shows projected Medicare, Medicaid, and other health expenditures for the next 10 years.[12] Total national health expenditures are estimated to increase from their 2010 level of 17.9 percent of GDP to 19.8 percent in 2020, reflecting an average annual growth rate in health expenditures of 6.0 percent and average growth in nominal GDP of 4.8 percent.

Chart 12—Past and projected Medicare, Medicaid, and total NHE as a percentage of GDP

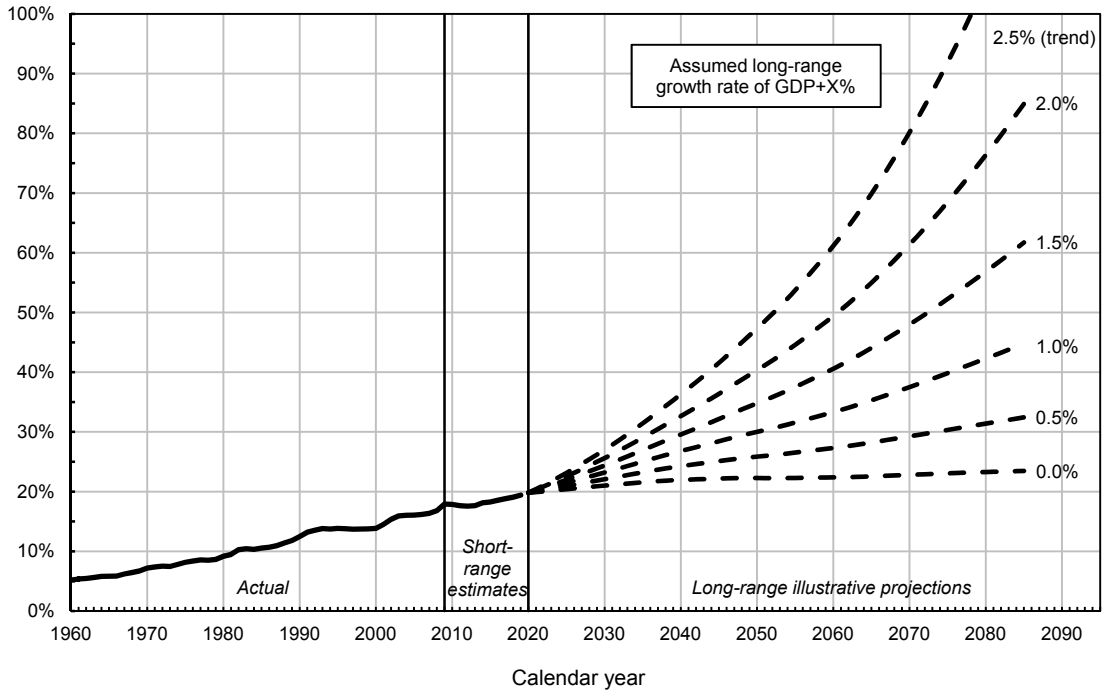


[12] "National Health Spending Projections Through 2020: Economic Recovery and Reform Drive Faster Spending Growth," *Health Affairs* Vol. 30, No 8 (2011). http://www.cms.gov/NationalHealthExpendData/01_Overview.asp .

My final graph (chart 13) illustrates the level of national health expenditures as a percentage of GDP under several hypothetical cost growth rates in the long-range future. On average during 1960 through 2010, per capita health care spending increased at the rate of growth in per capita GDP plus another 2.6 percentage points. If that long-range past trend continued in the long-range future, national health expenditures would represent more than 100 percent of GDP—an obviously impossible situation. The pursuit of better health will continue to be extremely important, but it cannot crowd out food, clothing, housing, and all other necessities and desires of life.

Over the last 20 years, health spending has increased at the rate of GDP plus 1.9 percent. Even if this rate continued into the indefinite future, health care would represent an untenable proportion of total economic production. As the late economist Herb Stein once quipped, "If something cannot go on forever, it will stop." Accordingly, *something* will occur and cause slower growth in health care in the future.

Chart 13–Illustrative long-range NHE projections under alternative health cost growth assumptions



Note: Projections through 2020 are based on current law; after 2020, projections are illustrative only.

Most people would agree that certain developments, which could reduce the rate of health spending growth, would be very undesirable. For example, if individuals' premiums and cost-sharing liabilities were to increase significantly faster than their incomes for a sustained period, then many might find these costs unaffordable and have to drop out of their insurance plans and forgo needed services. Health expenditure growth would slow—but only because an increasing amount of appropriate care would be forgone. A similar situation could occur if employers continue to face cost increases for their group health insurance plans that outstrip their revenue increases, forcing them to scale back or drop their employee coverage to remain financially viable. Alternatively, if payment rates to health care providers were reduced or slowed too much, as may have already occurred for some State Medicaid plans and as may be the case in the

future for Medicare physician and other provider payments, providers could become unable or unwilling to continue treating patients in these programs.

Many ideas have been developed and tried over the years in an effort to reduce health care cost growth. Examples include the development of prospective payment systems and other bundled-payment mechanisms; the widespread adoption of managed care plans; efforts to facilitate more prudent use of health care services through consumer-driven health plans and medical savings accounts; use of "lean production" techniques by hospitals and other facilities; and, most recently, the development of accountable care organizations, medical homes, disease management, and other efforts to better integrate the delivery of care. Most of these efforts have had some positive impact on lowering the *level* of health care costs, but there is relatively little evidence that they have succeeded in reducing cost *growth rates*.

As indicated by the Smith, Newhouse, and Freeland analysis of the causal factors underlying health care cost growth, the two largest contributors have been rising incomes and new medical technology. It is not surprising that increasing incomes prompt both individuals and nations alike to seek better health care. This trend could persist for many years, although demand for continually more and better health care services would presumably slow if meeting that demand could be accomplished only by reduced consumption of other necessities or high-priority goods and services.

The development and adoption of new medical technology may prove to be pivotal in future efforts to slow health care cost growth. Numerous studies have found that most new health technology has been cost-increasing, encouraged by comprehensive insurance coverage that shields individuals from most of the additional direct costs of using the new technology. Over time, as all payers continue to seek ways to reduce costs and as providers can no longer be assured of revenue flows that will automatically adjust to their higher cost levels, the medical research and development community may direct their efforts more toward new treatments, devices, and drugs that can provide health outcomes that are equal to or better than those provided by existing technology but at a lower cost.

Signs of such a change in focus are already apparent. For example, efforts are underway to produce a one-time-use implantable defibrillator, which would be just as effective in an emergency as the existing multiple-use devices but would cost far less. In overseas health markets, most developing nations cannot afford the expensive health technology produced in the U.S., and a market is developing for somewhat less effective—but far less expensive—technology, such as fewer-slice / lower-field-strength MRI machines. As this market grows, U.S. providers, payers, and developers may join in.

A related area of policy consideration is "comparative effectiveness research." While controversial, the potential benefits of these efforts are significant. There have been many examples of new drugs and devices that have offered only a limited improvement (if any) over existing treatments but that cost substantially more. The introduction of the proton pump inhibitor drug Nexium, when the nearly identical drug Prilosec was about to lose patent protection, is a well-known example.[13] It is reasonable to expect that science can be applied to

[13] See, for example, Dr. Marcia Angel, *The Truth About Drug Companies: How They Deceive Us and What To Do About It*, Random House, 2007.

assess whether a new technology's minor gains justify what might be a major increase in expenditure.

Finally, public and private efforts to research alternative health care delivery systems and payment methods could lead to innovative new approaches with the ability to improve the quality of care and/or reduce the cost of care. The program authorized by the Affordable Care Act, through the new Center for Medicare and Medicaid Innovation at CMS, is a comprehensive example of innovations research and testing, with the potential to identify effective ways of achieving these twin goals.

Thank you for this opportunity to meet with your Committee. I applaud your efforts to strengthen Medicare and Medicaid and to find ways to help ensure the financial viability of these important health care programs. And as you work to determine effective means by which to ensure the availability of high-quality health care in the U.S., at a cost the nation can afford, I pledge the Office of the Actuary's continuing assistance. I would be happy to answer any questions you might have.