Medicare Financing

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Summary

Medicare is the nation's health insurance program for individuals aged 65 and over and certain disabled persons. Medicare consists of four distinct parts: Part A, or Hospital Insurance (HI); Part B, or Supplementary Medical Insurance (SMI); Part C, or Medicare Advantage (MA); and Part D, the prescription drug benefit. The Part A program is financed primarily through payroll taxes levied on current workers and their employers; these are credited to the HI trust fund. The Part B program is financed through a combination of monthly premiums paid by current enrollees and general revenues. Income from these sources is credited to the SMI trust fund. Beneficiaries can choose to receive all their Medicare services, except hospice, through managed care plans under the MA program; payment is made on their behalf in appropriate parts from the HI and SMI trust funds. A separate account in the SMI trust fund accounts for the Part D drug benefit; Part D is financed through general revenues, beneficiary premiums, and state contributions. The HI and SMI trust funds are overseen by a board of trustees that makes annual reports to Congress.

The 2011 report of the Medicare Board of Trustees estimates that the HI trust fund will become insolvent in 2024, five years earlier than it had predicted in the 2010 report. This is due primarily to expectations of lower payroll tax income. These more recent projections still postpone depletion further in the future than the year of 2017, as projected in the 2009 report prior to the passage of the Patient Protection and Affordable Care Act (PPACA, P.L. 111-148), as amended by the Health Care and Education Reconciliation Act of 2010 ("the Reconciliation Act," or HCERA, P.L. 111-152). Because of the way it is financed, the SMI fund can not face insolvency; however, the trustees project that SMI expenditures will continue to grow rapidly, and thus place increasing demands on Medicare beneficiaries and all taxpayers.

Although the Medicare trustees report that the financial outlook for the Medicare program appears to have improved as a result of PPACA, they caution that the projections in the report are more uncertain than normal, due to the potential for future expenditure reductions not to materialize. In addition, the report projections assume that reductions in physician payment rates scheduled under current law will occur, although these reductions have usually been overridden by Congress. As such, similar to last year, the Centers for Medicare and Medicaid Services (CMS) Office of the Actuary issued a supplemental memorandum that provides projections based on an "illustrative alternative" to current law.

This report will be updated upon receipt of the 2012 trustees' report or as circumstances warrant.

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Introduction

Medicare is a federal insurance program that pays for covered health care services of qualified beneficiaries. It was established in 1965 under Title XVIII of the Social Security Act as a federal entitlement program to provide health insurance to individuals 65 and older, and has been expanded over the years to include permanently disabled individuals under 65. Generally, individuals are eligible for premium-free Part A of Medicare if they or their spouse worked for at least 40 quarters in Medicare-covered employment, are 65 years old, and are a citizen or permanent resident of the United States. Individuals under 65 may also qualify for coverage if they have a permanent disability, have End-Stage Renal disease (permanent kidney failure requiring dialysis or transplant), or have amyotrophic lateral sclerosis (Lou Gehrig's disease).

Medicare consists of four parts—A through D. Part A covers hospital services, skilled nursing facility services, home health visits, and hospice services. Part B covers a broad range of medical services, including physician services, laboratory services, durable medical equipment, and outpatient hospital services. Enrollment in Part B is voluntary, however most beneficiaries with Part A also enroll in Part B. Part C provides private plan options, such as managed care, for beneficiaries who are enrolled in both Parts A and B. Part D provides optional outpatient prescription drug coverage.[1]

Medicare serves approximately one in seven Americans and virtually all of the population aged 65 and over. In 2010, the program covered 47.5 million persons (39.6 million aged and 7.9 million disabled) at a total cost of $523 billion, accounting for about 21% of national health spending and 3.6% of Gross Domestic Product (GDP). Medicare is an entitlement program, which means that it is required to pay for covered services provided to enrollees so long as specific criteria are met.

Since 1965, the Medicare program has undergone considerable change. Most recently, the Patient Protection and Affordable Care Act (PPACA, P.L. 111-148), as amended by the Health Care and Education Reconciliation Act of 2010 ("the Reconciliation Act" or HCERA, P.L. 111-152), made numerous changes to the Medicare program that modify provider reimbursements, provide incentives to increase the quality and efficiency of care, and enhance certain Medicare benefits.[2] For example, under the new legislation, annual updates of the prices paid by Medicare for almost all non-physician categories of health services will be reduced by the growth in economy-wide productivity (productivity adjustments). The legislation did not, however, make changes to the physician sustainable growth rate (SGR) payment system; therefore, unless Congress takes action, reductions in physician payment rates of close to 30% will be required in 2012.[3]

This report provides an overview of how the Medicare program is financed, including a description of the Medicare trust funds and a summary of key findings and estimates from the

[1] For additional information on the Medicare program, see CRS Report R40425, *Medicare Primer*, coordinated by Patricia A. Davis and Paulette C. Morgan.

[2] See CRS Report R41196, *Medicare Provisions in the Patient Protection and Affordable Care Act (PPACA): Summary and Timeline*, coordinated by Patricia A. Davis, for additional detail.

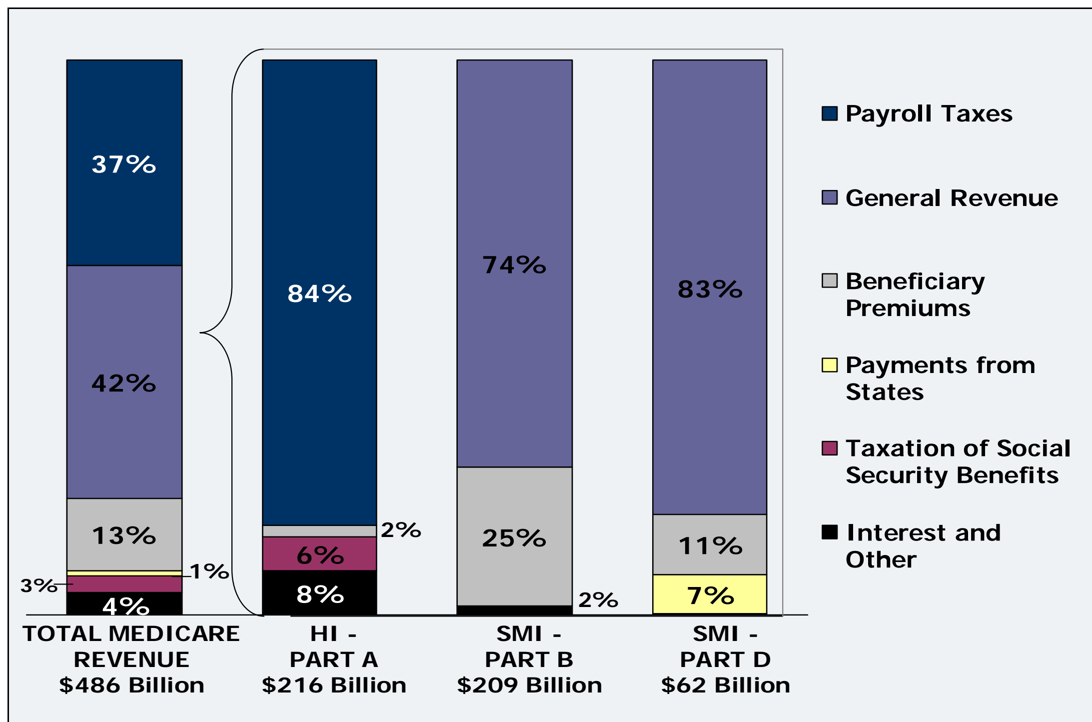
[3] Congress has overridden these required reductions in every year since 2003, most recently by the Medicare and Medicaid Extenders Act of 2010 (P.L. 111-309), signed into law December 15, 2010. See CRS Report R40907, *Medicare Physician Payment Updates and the Sustainable Growth Rate (SGR) System*, by Jim Hahn.

2011 Report of the Medicare Board of Trustees regarding 2010 program operations and future financial soundness.[4]

Medicare Trust Funds

Medicare's financial operations are accounted for through two trust funds maintained by the Department of the Treasury—the Hospital Insurance (HI) trust fund for Part A and the Supplementary Medical Insurance (SMI) trust fund for Parts B and D. For beneficiaries enrolled in Medicare Advantage (Part C), payments are made on their behalf in appropriate portions from the HI and SMI trust funds. HI is primarily funded by payroll taxes, while SMI is primarily funded through general revenue transfers and premiums (see **Figure 1**). The HI and SMI trust funds are overseen by a board of trustees that provides annual reports to Congress.

Figure 1. Sources of Medicare Revenue: 2010



Sources: 2011 Report of the Medicare Trustees, Table II.B1, and the Kaiser Family Foundation.

Notes: Totals may not add to 100% due to rounding.

Hospital Insurance (HI) Trust Fund

Covered Part A benefits, namely, inpatient hospital services, skilled nursing facility services, some home health services, and hospice care are paid for out of the HI trust fund. Payments are also made for administrative costs associated with operating this part of the program.

[4] 2011 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds, http://www.cms.gov/ReportsTrustFunds/downloads/tr2011.pdf.

Similar to the Social Security system, the HI portion of Medicare was designed to be self-supporting, and is financed through dedicated sources of income rather than relying on general tax revenues. The primary source of income credited to the HI trust fund is *payroll taxes* paid by employees and employers; each pays a tax of 1.45% on earnings. The self-employed pay 2.9%. Unlike Social Security, there is no upper limit on earnings subject to the tax.[5] PPACA imposes an additional tax of 0.9% on high-income workers with wages over $200,000 for single filers, and $250,000 for joint filers effective for taxable years beginning in 2013. PPACA also imposes an additional tax on unearned income, beginning in 2013.[6]

Additional income to the HI trust fund consists of: premiums paid by voluntary enrollees who are not entitled to premium-free Medicare Part A through their (or their spouse's) work in covered employment; a portion of the federal income taxes paid on Social Security benefits;[7] and interest on federal securities held by the trust fund.

The HI trust fund is solely an accounting mechanism—there is no actual transfer of money into and out of the fund. When the government receives Medicare revenues (payroll taxes), income is credited by the Treasury to the appropriate trust fund in the form of special issue interest-bearing government securities.[8] (Interest on these securities is also credited to the trust funds.) The tax income exchanged for these securities then goes into the general fund of the Treasury and is indistinguishable from other cash in the general fund; this cash may be used for any government spending purpose.[9] When payments for Medicare Part A benefits are made, the payments are paid out of the general treasury, and a corresponding amount of securities is deleted from (written off) the HI trust fund.

As long as the HI trust fund has a balance, the Treasury Department is authorized to make payments for Medicare Part A services. To date, the HI trust fund has never run out of money (i.e., become insolvent), and there are no provisions in the Social Security Act that govern what would happen if that were to occur. For example, there is no authority in law for the program to use general revenue to fund Part A services in the event of such a shortfall. Since the beginning of the Medicare program, the payroll tax rate has been adjusted periodically by Congress as one of the mechanisms to maintain the financial adequacy of the HI trust fund.[10]

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[5] Prior to 1991, the upper limit on taxable earnings was the same as for Social Security. The Omnibus Budget Reconciliation Act of 1990 (OBRA 90, P.L. 101-508) raised the limit in 1991 to $125,000. Under automatic indexing provisions, the maximum was increased to $130,200 in 1992 and $135,000 in 1993. The Omnibus Budget Reconciliation Act of 1993 (OBRA 93, P.L. 103-66) eliminated the upper limit entirely beginning in 1994.

[6] See CRS Report R41128, *Health-Related Revenue Provisions in the Patient Protection and Affordable Care Act (PPACA)*, by Janemarie Mulvey, for additional detail.

[7] Since 1994, the HI fund has had an additional funding source—OBRA 93 increased the maximum amount of Social Security benefits subject to income tax from 50% to 85% and provided that the additional revenues would be credited to the HI trust fund.

[8] Unlike marketable securities, special issues can be redeemed at any time at face value. Investment in special issues gives the trust funds the same flexibility as holding cash.

[9] The trust fund surpluses are not reserved for future Medicare benefits, but are simply bookkeeping entries that indicate how much Medicare has lent to the Treasury (or alternatively, what is owed to Medicare by the Treasury).

[10] Historical Medicare payroll tax rates may be found in Appendix B of CRS Report RS20946, *Medicare: History of Insolvency Projections*, by Patricia A. Davis.

Supplementary Medical Insurance (SMI) Trust Fund

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA, P.L. 108-173), which created the Part D outpatient prescription drug benefit, created two separate accounts within the SMI trust fund: one for Part B, to cover physician services, outpatient hospital care, durable medical equipment, diagnostic tests and other services; and one for Part D, to cover outpatient prescription drug benefits. Unlike the HI program, the SMI program was not intended to be fully supported through dedicated sources of income. Instead, it relies primarily on general tax revenues and beneficiary premiums as revenue sources. Beginning in 2011, additional revenues from an annual fee imposed on certain manufacturers and importers of branded prescription drugs (including biological products and excluding orphan drugs) are credited to the SMI trust fund.[11]

Because contributions (general revenue and premiums) into the SMI trust fund are automatically updated each year to ensure that the program has enough money to continue operating, the SMI trust fund is kept in balance and will remain in financial balance indefinitely. Income from these sources is credited to the SMI trust fund, and similar to the HI trust fund, any SMI revenues that exceed SMI spending accumulate in the SMI trust fund; however, SMI trust fund balances are generally small. Also, similar to HI, the basic structure of the SMI financing system can be changed only through an act of Congress.

Part B Financing

Medicare Part B is financed mostly from federal general revenues, with beneficiaries' premiums set to cover 25% of estimated Part B program costs for the aged. The 2011 monthly premium is $96.40 for most Medicare Part B enrollees who are being "held harmless" to the 2009 Part B premium amount.[12] Individuals receiving Social Security benefits have their Part B premium payments automatically deducted from their Social Security benefit checks. Since 2007, higher-income enrollees pay higher premiums. As a result of PPACA, the income thresholds used to determine which beneficiaries are subject to higher Part B premium rates will be frozen at 2010 levels through 2019. Over time, this freeze will result in a larger number of beneficiaries paying the higher premiums and is expected to bring in increased revenue to the SMI trust fund.

Part D Financing

Medicare Part D is primarily financed through a combination of beneficiary premiums and federal general revenues. In addition, certain transfers are made from the states. These transfers, referred to as "clawback payments," represent a portion of the amounts states could otherwise

[11] See CRS Report R41128, *Health-Related Revenue Provisions in the Patient Protection and Affordable Care Act (PPACA)*, by Janemarie Mulvey, for more detail.

[12] About 75% of Part B enrollees were not subject to Part B premium increases in 2010 and 2011. The Social Security Act includes a provision that holds most Social Security beneficiaries harmless for increases in the Medicare Part B premium; affected beneficiaries' Part B premiums are reduced to ensure that their Social Security checks do not decline from one year to the next. Those not protected by the "hold harmless" provision pay a premium of $115.40 in 2011; these include those who pay the high income premium, those eligible for both Medicare and Medicaid (dual-eligibles), those who do not participate in Social Security, and new Part B enrollees. For additional detail, see CRS Report R40561, *Interactions Between the Social Security COLA and Medicare Part B Premiums*, by Jim Hahn and Alison M. Shelton.

have been expected to pay for drugs under Medicaid if drug coverage for the dual-eligible population (those who qualify for both Medicare and Medicaid) had not been transferred to Part D.

In 2011, the base monthly premium is $32.34; however, beneficiaries pay different premiums depending on the plan they have selected (and whether they are entitled to low-income premium subsidies). Part D premium payments may be automatically deducted from Social Security benefit checks, paid directly to the prescription drug plan sponsor, or made through an electronic funds transfer.[13] Premiums for the Part D program are required to cover approximately 25.5% of standard benefit costs; however, as recipients of the Part D low-income subsidies are not required to pay premiums, premiums covered only about 11% of Part D program costs in 2010 (see **Figure 1**). As required by PPACA, beginning in 2011, high-income Part D prescription drug program enrollees are required to pay higher premiums similar to high-income Part B enrollees; the income thresholds are also frozen in the same manner as those under Part B through 2019.

Board of Trustees

The Medicare Board of Trustees was established under the Social Security Act to oversee the financial operations of the HI and SMI trust funds. By law, the six-member Board is composed of the Secretary of the Treasury, the Secretary of Health and Human Services, the Secretary of Labor, the Commissioner of Social Security, and two public members (not of the same political party) nominated by the President and confirmed by the Senate.[14] The Secretary of the Treasury is the Managing Trustee. The Administrator of the Centers for Medicare and Medicaid Services (CMS) is designated Secretary of the Board.

Annual Trustees' Report

The Medicare Board provides an annual report to Congress on the operations of the trust funds. Financial projections included in the report are made by CMS actuaries using major economic and other assumptions selected by the trustees based on current law. Among the variables used are such things as estimations of consumer price index (CPI), fertility rate, mortality rate, workforce size, wage increases, and life expectancy. The assumptions are reviewed annually and updated as warranted by new analyses of trends and data. The report includes three forecasts ranging from pessimistic ("high cost") to mid-range ("intermediate") to optimistic ("low cost"). The intermediate projections represent the trustees' best estimate of economic and demographic trends; they are the projections most frequently cited.

The 2011 report of the Medicare trustees was issued May 13, 2011.[15] However, the 2011 Report warned that estimates based on current-law assumptions may not be realistic. As such, actuaries of CMS issued a separate memorandum that provides projections based on an "illustrative

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[13] The "hold harmless" provision described in the previous footnote does not apply to Part D; beneficiaries are not protected from Part D premium increases.

[14] The nominations of Charles P. Blahous III and Robert D. Reischauer to be public members of the Medicare and Social Security Boards of Trustees were confirmed by the Senate on September 16, 2010. The seats for the two public members had been vacant since 2008.

[15] The 2011 report includes data on actual expenditures and income through 2010, and projections for years 2011 and beyond.

alternative" to current law.[16] The alternative estimates are based on the assumption that the productivity adjustments mandated by PPACA would be made through 2019, but then would be phased out over the following 16 years. The alternative scenario also assumes that, instead of being cut, physician payments will grow annually based on the Medicare Economic Index.[17]

The Board of Trustees also convened an independent panel of expert actuaries and economists to make recommendations to the Board regarding the most appropriate long-range growth assumptions for Medicare projections. The panel members convened in November and issued an interim report in February 2011;[18] however, the panel was not able to recommend changes in time for use in the development of the 2011 Medicare trustees report. In particular, the panel noted "the extreme difficulty involved in developing a long-range average per capita growth assumption, due to the many uncertainties that surround not only the long-term evolution of the U.S. health care system but also its interaction with the provisions of (PPACA)." The panel will continue to discuss the methodology and assumptions used to project long-term Medicare growth rates over the next year.

2010 Medicare Program Operations

In calendar year (CY) 2010, Medicare provided about 47.5 million beneficiaries with benefits at a total cost of $523 billion, or $11,762 per enrollee. (See **Appendix A**, **Appendix B,** and **Appendix C** for historical and projected enrollment, total Medicare income and expenditures, and per capita expenditures.) Because HI and SMI have different funding mechanisms, a description of each fund's 2010 operations is presented separately below.

Hospital Insurance Trust Fund Operations in 2010

As shown in **Table 1**, in CY2010, total income to the HI trust fund was $215.6 billion. Payroll taxes of workers and their employers accounted for $182.0 billion (84.4%), with the remainder from interest and government credits, premiums (from those buying into the program), and taxation of Social Security benefits. The HI program paid out $247.9 billion; most of which was for benefit costs, and about 1.4% was for administrative expenses. Similar to 2008 and 2009, expenditures exceeded income in 2010, and the trust fund balance was reduced to $271.9 billion at the end of 2010 (a loss of $32.3 billion).[19] (See **Appendix D** for funding amounts in prior years and estimates for future years.)

[16] Memo from John D. Shatto and M. Kent Clemens, "Projected Medicare Expenditures under an Illustrative Scenario with Alternative Payment Updates to Medicare Providers," May 13, 2011, http://www.cms.gov/ActuarialStudies/Downloads/2011TRAlternativeScenario.pdf.

[17] The Medicare Economic Index is an inflation measure used to determine reimbursement to Medicare physicians. It includes such factors as the costs of a physician's time and time of medical staff, and overhead costs such as rent and medical equipment.

[18] 2010 Technical Review Panel on the Medicare Trustees Report, "Review of the Long Range Assumptions of the Medicare Trustees' Projections Interim Report," February 2011, http://aspe.hhs.gov/health/medpanel/2010/interim1103.shtml.

[19] In comparison, in CY2009, total income was $225.4 billion, and total disbursements were $242.5 billion, with an end of the year trust fund balance of $304.2 billion; this represents a growth in expenditures of $5.4 billion (increase of 2.2%) from 2009 to 2010 and a decrease in income of $9.8 billion, (decrease of 4.3%).

Table 1. Medicare Data for Calendar Year 2010

	HI - Part A	SMI - Part B	SMI - Part D	Total Medicare
Enrollment (millions)				
Aged	39.2	36.7	n/a	39.6
Disabled	7.9	7.1	n/a	7.9
Total	47.1	43.8	34.5	47.5
Average expenditures per enrollee	**$5,187**	**$4,786**	**$1,789**	**$11,762**
Trust Fund Balance at end of 2009 (billions)	**$304.2**	**$75.5**	**$1.1**	**$380.8**
Total Income	**$215.6**	**$208.8**	**$61.7**	**$486.0**
Payroll Taxes	182.0	—	—	182.0
Interest	13.8	3.1	0.0	16.9
Taxation of Benefits	13.8	—	—	13.8
Premiums	3.3	52.0	6.5	61.8
General Revenue	0.1	153.5	51.1	204.7
Transfers from States	—	—	4.0	4.0
Other	2.7	0.2	—	2.9
Total Expenditures	**$247.9**	**$212.9**	**$62.0**	**$522.8**
Benefits	244.5	209.7	61.7	515.8
Hospital	136.1	31.9	—	168.0
Skilled Nursing	26.9	—	—	26.9
Home Health Care	7.0	12.1	—	19.1
Physician Services	—	64.5	—	64.5
Private plans (Part C)	60.7	55.2	—	115.9
Prescription Drugs	—	—	61.7	61.7
Other	13.8	46.1	—	59.9
Administrative Expenses	3.5	3.2	0.4	7.0
Net Change	-32.3	-4.1	-0.4	-36.8
Trust Fund Balance at end of 2010	**$271.9**	**$71.4**	**$0.7**	**$344.0**

Source: 2011 Report of Medicare Trustees, Table II.B1.

Notes: Totals do not necessarily equal the sums of rounded components; n/a = data not available.

Supplementary Medical Insurance Trust Fund Operations in 2010

In CY2010, the SMI trust fund (Part B and Part D accounts combined) brought in $270.5 billion in revenue ($208.8 billion from Part B and $61.7 billion from Part D), and expended $274.9 billion ($212.9 billion from Part B and $62.0 from Part D). General revenues accounted for 75.6% of total revenues, and premiums accounted for 21.6%.[20] (See **Table 1** for 2010 Parts B and D operations data.)

Of the $208.8 billion in income to Part B, general revenues accounted for $153.5 billion (73.5%), premiums accounted for $52.0 billion (24.9%), and interest and other income made up the remaining $3.3 billion (1.6%). The program paid out $212.9 billion; similar to HI, almost all of this amount was used to cover benefits and 1.5% covered administrative expenses.[21] (See **Appendix E** for historical and projected income and expenditures in the SMI Part B account.)

Of the $61.7 billion in Part D income, general revenues accounted for $51.1 billion (82.8%), premiums accounted for $6.5 billion (10.5%), and transfers from states for $4.0 billion (6.5%). Almost all of the 2010 Part D program expenditures of $62.0 billion were used to pay benefit costs and 0.6% was used for administrative expenses.[22] (See **Appendix F** for historical and projected income and expenditures in the SMI Part D account.)

Short-Range Financial Soundness (10 Years)

The 2011 Medicare trustees report predicts a slightly higher growth rate of Medicare expenditures compared to their projections in last year's report. Over the next 10 years, Medicare expenditures are projected to increase at an average annual rate of 6.0% compared to 5.8% as projected in the prior report.[23] The 2011 report estimates that Medicare spending will grow from $523 billion in 2010 to $932 billion in 2020 (see **Figure 2 and Appendix B**). The average growth rate reflects the expected growth in the number of individuals eligible for Medicare as well as expected increases in utilization and complexity of services per beneficiary and in the prices of those services. The growth rate also factors in PPACA changes that affect cost growth rates, such as the productivity adjustments to the annual payment updates to certain providers and changes in payments to Medicare Advantage plans. These growth rates also assume that the scheduled physician payment reductions of 29.4% in 2012 will go into effect.

[20] In comparison, in CY2009, total income for SMI was $282.8 billion and total expenditures were $266.5 billion. This represents a growth in SMI expenditures of $8.4 billion, or an increase of 3.2%, from 2009 to 2010.

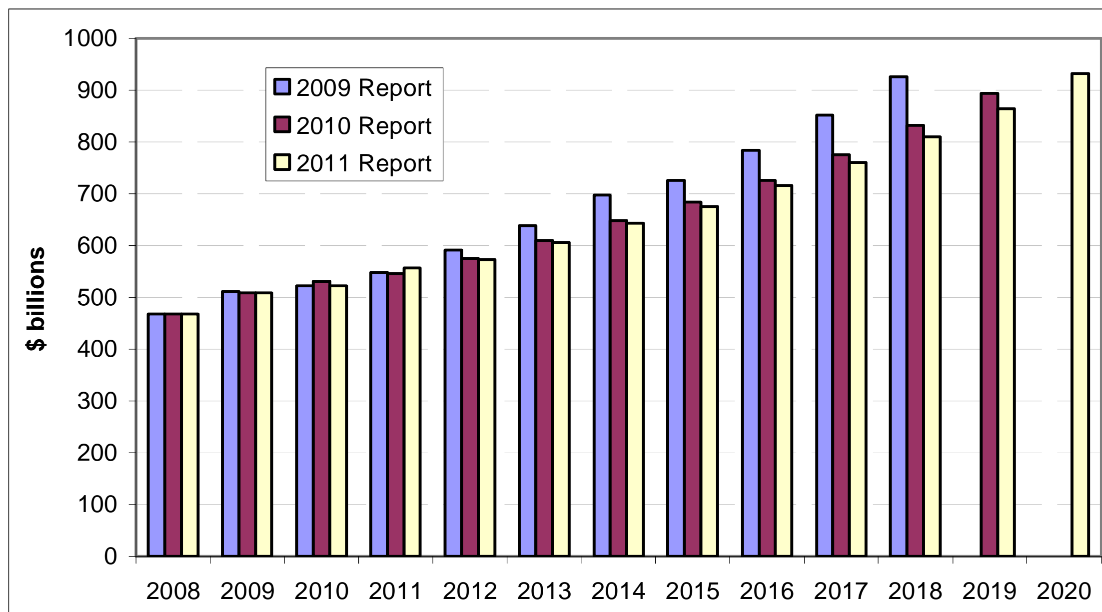
[21] This represents an expenditure increase of 3.5% over the $205.7 billion in Part B expenditures in 2009.

[22] The 2010 Part D expenditures represent a 2.0% growth over the 2009 expenditures of $60.8 billion.

[23] By comparison, Medicare expenditures grew at an average annual rate of 8.2% from 1985 to 2010.

Figure 2. Medicare Expenditures

Comparison of Estimates of 2009, 2010 and 2011 Medicare Trustees Reports



Source: Data from the 2009, 2010, and 2011 Reports of the Medicare Boards of Trustees, Table III.A1.

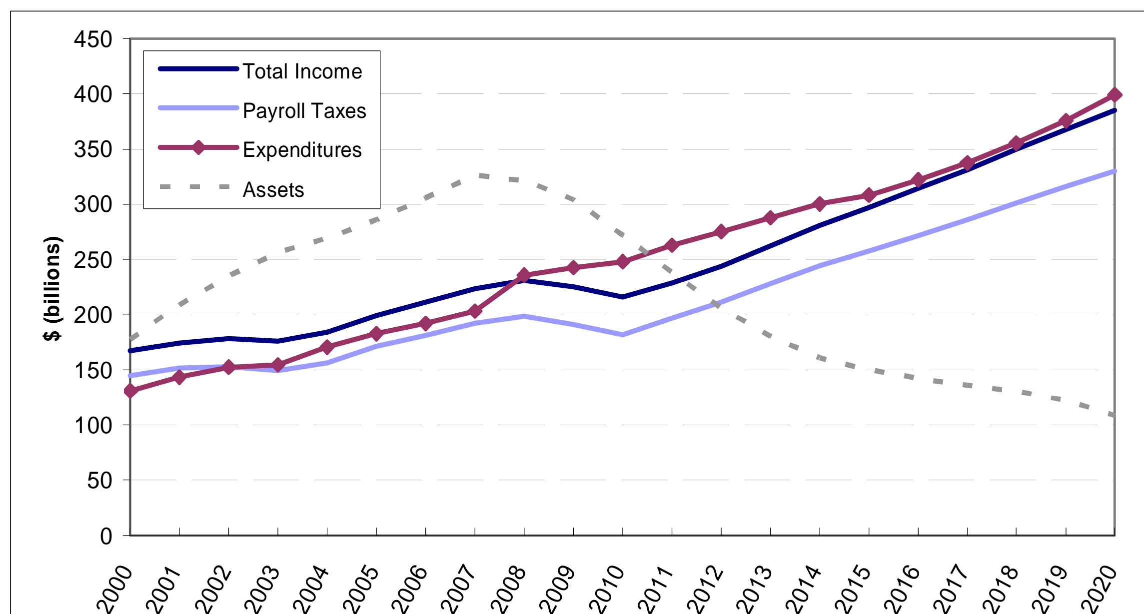
Note: The 10-year projection window for the 2009 report only extended to 2018; there is no corresponding 2019 or 2020 estimate. Similarly, the 2010 report projections only extend to 2019, and there is no estimate for 2020.

HI Short-Range Financial Status

In the short term, the adequacy of the HI trust fund is determined by comparing its assets at the beginning of the year to expected costs for that year. The trustees consider the fund to be adequate if the level of assets is expected to be at least equal to projected costs in a year.[24] The trustees note that the HI fund is not adequately financed over the next 10 years. Specifically, the new report states that the fund fails to meet the short-range (i.e., 10-year, 2011-2020) test of financial adequacy because total HI assets at the start of the year are expected to decline below 100% of expenditures during 2011. Expenditures have exceeded income every year since 2008 and are projected to continue doing so under current law over the next 10 years. In 2009 and 2010, income from payroll taxes decreased substantially due to higher unemployment and slow growth in wages. In 2010, the HI trust fund experienced a deficit of $32.3 billion. Income from payroll taxes is expected to increase at a faster rate than expenditures during 2011 through 2018 due to the projected economic recovery and the application of an additional 0.9% HI payroll tax for high-income enrollees beginning in 2013; however, income will still be insufficient to cover projected HI expenses during this period (see **Figure 3**).

[24] This amount is considered a sufficient contingency reserve to allow Congress enough time to address any anticipated short-term financing problems.

Figure 3. Short-Term HI Expenditures and Income



Source: Data from 2011 Report of Medicare Trustees, Table III.B4.

Note: The trustees report does not project dollar figures beyond 2020.

SMI Short-Range Financial Status

As premium and general revenue income for Medicare Parts B and D are reset each year to match expected costs, the SMI trust fund is deemed to be adequately financed over the next 10 years and beyond. However, over the past five years, Medicare Part B costs have been increasing rapidly—by an average of 6.9% annually, exceeding GDP growth by 3.9 percentage points. If the physician payment cuts are allowed to go into effect at the end of 2011, Part B expenditures (and corresponding income) are expected to grow at a slower average growth rate of 4.7% annually over the next five years (2011-2015), about the same as GDP growth. However if Congress overrides these reductions, as it has done in the past, the Part B growth rate during this period is projected to instead average about 7.5% each year. For Part D, in part due to the costs associated with the gradual elimination of the coverage gap,[25] the average annual increase in expenditures and income is estimated to be 9.7% through 2020. (By comparison, GDP is projected to grow at an average annual rate of 5.2% during this 10-year period.) Part D cost estimates are somewhat lower than projected in the prior trustees report due to lower than expected spending in 2009 and 2010, and future expectations of increased use of generic drugs and a decline in the number of new drug products.

[25] After the beneficiary and the prescription drug plan have spent a certain amount of money for covered drugs during a year, there is a gap in Part D coverage. During the coverage gap (also known as the "doughnut hole"), the beneficiary pays a large portion of his or her prescription drug expenditures. Once a certain threshold is reached, Medicare again begins providing coverage.

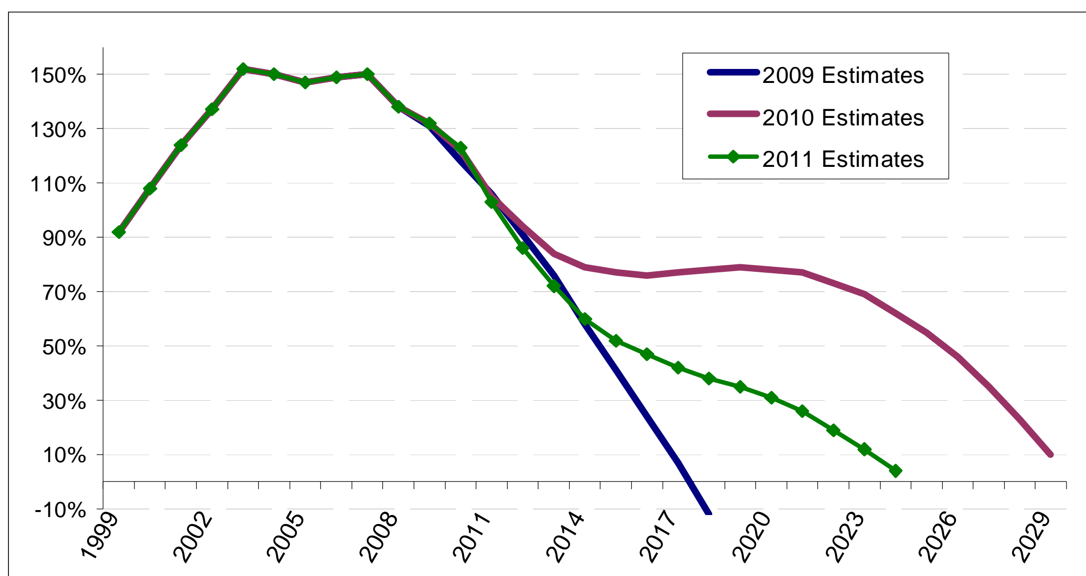
Projected Date of HI Insolvency

Medicare's fiscal health is often gauged by the projected solvency of the HI trust fund.[26] The 2011 trustees report estimates that the HI trust fund will become insolvent in 2024, five years earlier than projected in last year's report (see **Figure 4**). The estimated date of exhaustion has been moved up to 2024 from 2029 (projected in the 2010 report) due to expectations of higher HI expenditures and lower payroll tax revenues. As noted above, HI taxable earnings in 2010 were considerably lower than projected in last year's report, but expenditures were close to the prior estimate. For the 2011 through 2024 period, total projected HI payroll taxes are expected to be lower by 1.3% and expenditures higher by 3.6% compared to last year's projections. The financial status of the HI trust fund, however, has still improved from the 2009 report, which estimated that HI insolvency would occur in 2017; the more favorable projections in more recent reports are primarily due to the lower expenditures and higher tax revenues expected as a result of PPACA.

Because the impact of the PPACA productivity adjustments is relatively modest in the short term, the expected trust fund exhaustion date provided in the *alternative illustration* is the same as that under the current law scenario, 2024; however, the trust fund is projected to be depleted slightly earlier in the year under the alternate scenario.

Figure 4. HI Trust Fund Assets at Beginning of Year as a Percentage of Annual Expenditures

Estimates from 2009, 2010, and 2011 Trustees Reports



Sources: Data from the 2009 Medicare Trustees Report, Table II.E1, and Summaries of the 2010 and 2011 Annual Reports of the Social Security and Medicare Boards of Trustees, Chart D.

[26] For a history of projections of insolvency dates, see CRS Report RS20946, *Medicare: History of Insolvency Projections*, by Patricia A. Davis.

Beginning in 2004, *tax* income (from payroll taxes and from the taxation of Social Security benefits) began to be less than expenditures. Expenditures began to exceed *total* income (tax income plus all other sources of revenue) in 2008. (Refer to **Figure 3** for illustration of expenditure and income trends through 2020.) At that time, HI assets (the balance of the HI trust fund at the beginning of the year) were used to meet the portion of expenditures that exceeded income (the *HI deficit*). The trustees project that expenditures will exceed income through 2024. The HI trust fund will need to redeem its assets (U.S. government securities) in order to pay for benefits each year until the trust fund is exhausted in 2024. At that time, there will be insufficient funds to fully pay for Part A benefits. Unless action is taken prior to that date to increase revenue or decrease expenditures, Congress would need to pass legislation that would provide for another source of funding (e.g., general revenues or increased taxes) to make up for these deficits.

Long-Range Financial Soundness (75 Years)

For projections beyond 2020, the Medicare trustees do not provide actual dollar figures due to the difficulty of making meaningful comparisons of dollar values for different time periods over a long timeframe. Instead, the long-term financial soundness of the Medicare program is generally determined using one or more of the following measures:

- A comparison of the program's income and its cost as a percentage of taxable payroll (how much would need to be added to the payroll tax to keep HI solvent; this measure is only applicable to the HI trust fund);
- A determination of the present value of the program's unfunded liabilities over a particular period (the amount in today's dollars that would be needed to be in the trust fund for the program to remain financially sound for a specified period); and/or
- A comparison of expected benefit costs with GDP, the most frequently used measure of the total output of the U.S. economy (the amount spend on Medicare compared to the economy in general).

The trustees caution that while these estimates can provide indications as to whether the trust funds are in adequate financial condition, financial outcomes are inherently uncertain, especially over a very long time period.

HI Income and Costs Relative to Payroll Taxes

Long-range financial soundness of the HI trust fund is often determined by comparing the fund's *income rate* (the ratio of tax income to taxable payroll) with its *cost rate* (the ratio of program expenditures to taxable payroll). The term *taxable payroll* refers to the total amount of wages, salaries, and self-employment income in the economy that is subject to the HI tax. By relating income and expenditure projections to expected future taxable payroll, comparisons can be made for long periods of time without distortions caused by the changing value of the dollar (e.g., through inflation). Additionally, it indicates the relative amount of the nation's earnings that may be needed to cover the program's commitments in the future when compared to what is needed today.

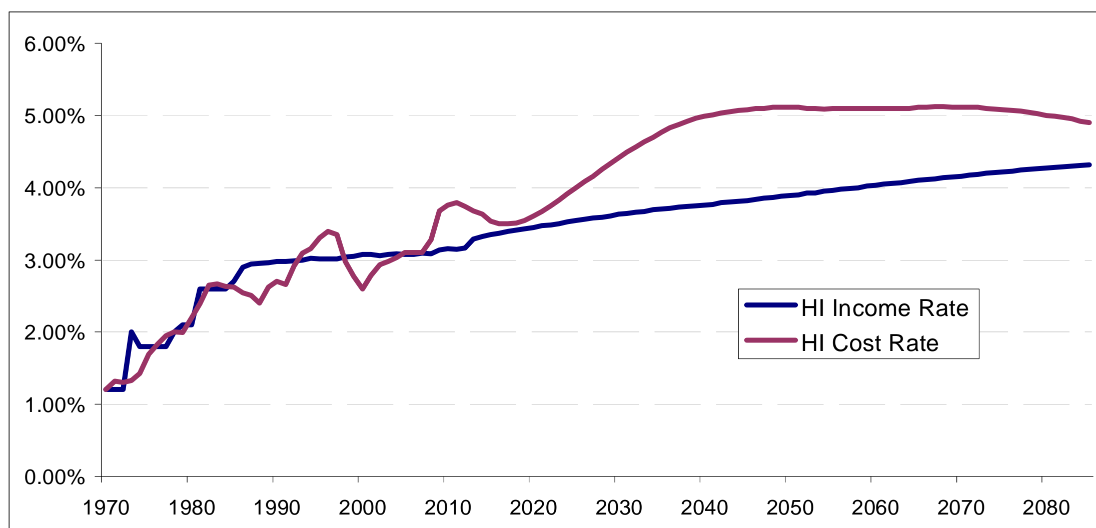
Year-by-Year Estimates

In the past, *cost rates* have generally increased over time, rising from 0.94% in 1967 to 3.39% in 1996 (see **Figure 5**). This growth reflects both the more rapid rate of increase in medical care costs than in average earnings subject to HI taxes and the higher rate of increase in the number of HI beneficiaries than in the number of covered workers. Cost rates since that time have fluctuated primarily due to the passage of legislation affecting Medicare expenditures including the Balanced Budget Act of 1997 (P.L. 105-33) and the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA, P.L. 108-173), as well as favorable economic performance. Rates increased again in 2008, 2009 and 2010 (3.28%, 3.68% and 3.76% respectively) due to the lower amount of taxable payroll reflecting the impact of the recession. The 2011 trustees report projects that over the long run expenditures as a percentage of taxable payroll will increase, from 3.76% in 2010 to 4.90% in 2085. (Under the *alternative illustration*, the expected HI cost rate for 2085 is 9.39%, more than twice the rate projected under current law.)

The HI *income rate* is projected to increase gradually from 3.15% in 2010 to 4.32% in 2085 due to PPACA's increase in payroll taxes for high income earners starting in 2013. As the thresholds are not indexed to grow with inflation, it is expected that more workers will be subject to this higher tax rate over time. Additionally, it is expected that income from taxation of Social Security benefits will increase as the number of recipients increases over time. (Because the *alternative illustration* only assumes changes in payments, the income rate is the same as that in the trustees report.)

As indicated earlier, expenditures in future years are expected to exceed tax income, resulting in a negative difference between cost and income rates. In 2024, payroll taxes are expected to cover 90% of HI expenditures, decline to 75% by 2045; and by the end of the 75-year period, taxes are expected to cover 88% of the expected costs. The decreasing cost rate beyond 2045 is due to the expected compounding of the PPACA reductions in provider payment updates.

Figure 5. Long-Range HI Income and Cost as a Percentage of Taxable Payroll



Source: Data from Summary of the 2011 Annual Reports of the Social Security and Medicare Boards of Trustees, http://ssa.gov/OACT/TRSUM/index.html, Chart B.

The 2011 trustees report estimates that at the end of the 75-year period (in 2085), there will be an HI deficit of 0.58% of taxable payroll. Under the *illustrative alternative* scenario, which assumes that the PPACA productivity adjustments will eventually be phased out, the HI deficit at the end of the 75-year period is expected to be about 5.07% of taxable payroll. Both estimates are still lower than the 2009 report estimate of 8.55%, which was based on law prior to PPACA.

Actuarial Balance

The *actuarial balance* can be interpreted as the percentage that would need to be added to the current-law income rates and/or subtracted from the current-law cost rates in each of the next 75 years in order for the financing to support HI costs and to meet the targeted trust fund balance at the end of the projection period. The actuarial balance of the HI trust fund is defined as the difference between the sum of the *income rate* expected for each year in the 75-year projection period (including the beginning trust fund balance) and the sum of the *cost rates* for each year, expressed as a percentage of taxable income. This summarized rate is based on the present values of future income, costs, and taxable payroll.

The 2011 trustees report estimates that the summarized HI *income rate* for the entire 75-year period is 3.84% of taxable payroll and the summarized *cost rate* is expected to be 4.63%. The difference, the *actuarial balance*, is -0.79%. Because this is a negative number, the HI trust fund fails to meet the trustees' long-range test of actuarial balance. This means that the income rate would need to increase by 0.79% of taxable payroll throughout the next 75 years for the trust fund to reach actuarial balance, program spending would need to be reduced by a corresponding amount, or some combination of the two would need to occur. The HI actuarial balance estimated in the 2011 report has decreased from -3.88% of taxable payroll projected in the 2009 report, but higher than the -0.66% projected in the 2010 report. If the productivity adjustments to HI provider payment updates cannot be continued in the long run, the CMS actuaries estimate that the actuarial deficit would be much higher, -2.15% of taxable payroll, under their *illustrative alternative* scenario.

Unfunded Obligations

The *unfunded obligation* is a measure of the long-term funding shortfall (or surplus) of the Medicare program. It is defined as the difference between the present value of the expected cost of the Medicare program over a specified time period and the present value of projected income (including the initial value of the trust fund). Put another way, the unfunded obligation is the amount of money that would have to be added to the trust fund today to make the program financially sound over a specified time period.

HI Long-Term Obligations

The 2011 trustees report estimates that the unfunded obligation of the HI trust fund is $3.0 trillion, or 0.3% of GDP over the next 75 years. This means that if $3.0 trillion were added to (or expenditures reduced from) the trust fund at the beginning of 2011, the program could meet the projected cost of current-law expenditures over the next 75 years. This is substantially lower than the 2009 estimate of $13.4 trillion, but higher than the $2.4 trillion in the 2010 estimate. (Under the *illustrative alternative* projections, the 75-year HI unfunded obligation is expected to be about $8.3 trillion.)

The trustees note that limiting the estimates of HI unfunded obligations to 75 years understates the full magnitude of these obligations because the 75-year measures only reflect the full amount of taxes paid by the next few generations of workers, but not the full amount of their expected benefits. Therefore, since 2004, the trustees report has included a measure of unfunded obligations that extends indefinitely (through infinity). Such extended projections can help indicate whether the HI financial imbalance would be improving or continuing to worsen beyond the 75-year period. In making these estimates, the trustees assume that the current-law HI program, demographic, and economic trends used for the 75-year projection will continue indefinitely, except that average HI expenditures per beneficiary will increase at the same rate as GDP per capita less the productivity adjustments beginning in 2085. Under these assumptions, over the infinite horizon, the HI program is projected to have a surplus of $0.1 trillion (see **Table 2**). (Under the *illustrative alternative* scenario, the HI unfunded obligation thorough the infinite horizon is estimated to be $8.3 trillion.)

Table 2. Unfunded HI Obligations

(Present values as of January 1, 2011)

	Present Value	% of GDP
Unfunded obligations through 2085	$3.0 trillion	0.3%
Unfunded obligations through infinite horizon	-$0.1 trillion	0.0%

Source: 2011 Medicare Trustees' Report, Table III.B10.

SMI Long-Term Obligations

Due to its automatic financing provisions, the SMI account is expected to be adequately financed into the indefinite future; therefore the unfunded obligations are considered to be $0 (see **Table 3**). However, the 2011 trustees report estimates that SMI expenditures of $28.8 trillion over the next 75 years will exceed premium revenues and state payments by $21.3 trillion; general fund transfers of this amount will be needed to keep the SMI trust fund in balance for the next 75 years.[27]

The estimated present value of Part B expenditures through the infinite horizon is $30.7 trillion, of which $18.9 trillion would occur during the first 75 years. Approximately 27% of expenditures for each time period would be financed through beneficiary premiums, and a fraction of a percent would be financed through fees collected related to brand-name prescription drugs. The remaining 73% is expected to be paid by general revenues. (However, as noted previously, the trustees consider Part B expenditures after 2010 to be substantially understated due to the large physician payment reductions scheduled under current law.) Similarly, the estimated present value of Part D expenditures through the infinite horizon is $21.5 trillion, of which $9.9 trillion would occur during the first 75 years. Approximately 16% of expenditures would be financed through beneficiary premiums, 9% through state transfers, and the remaining 75% paid by general revenues.

[27] These transfers represent a formal budget requirement under current law.

Table 3. Unfunded Part B and Part D Obligations

(Present values as of January 1, 2011; dollar amounts in trillions)

	SMI—Part B		SMI—Part D	
	Present Value	**% of GDP**	**Present Value**	**% of GDP**
Unfunded obligations through 2085	$0.0	0.0%	$0.0	0.0%
Expenditures through 2085	$18.9	2.1%	$9.9	1.1%
General Revenue Contributions	13.9	1.6	7.5	0.8
Beneficiary Premiums	5.0	0.6	1.6	0.2
State Transfers	—	—	0.9	0.1
Fees related to brand-name drugs	0.1	0.0	—	—
Unfunded obligations through infinite horizon	$0.0	0.0%	$0.0	0.0%
Expenditures through infinite horizon	$30.7	2.1%	$21.5	1.5%
General Revenue Contributions	22.4	1.5	16.1	1.1
Beneficiary Premiums	8.2	0.6	3.4	0.2
State Transfers	—	—	2.0	0.1
Fees Related to brand-name drugs	0.1	0.0	—	—

Source: 2011 Medicare Trustees' Report, Tables III.C15 and III.C23.

Note: Totals may not add due to rounding.

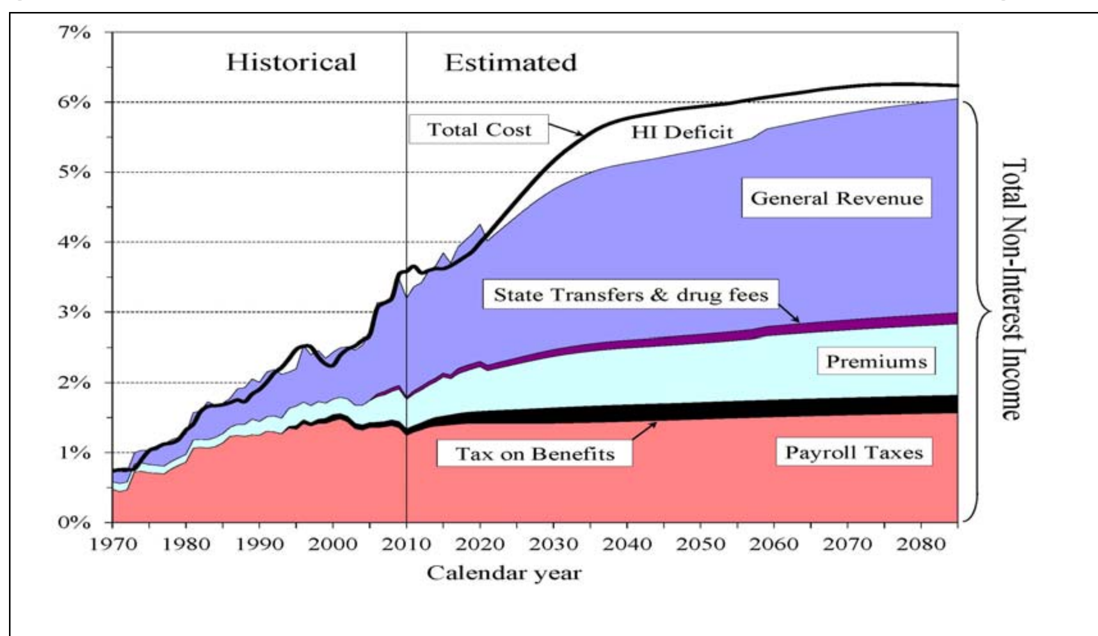
Medicare Costs as a Percentage of GDP

A comparison of Medicare costs (for Medicare Parts A through D combined) to GDP provides a measure of the amount of financial resources that will be necessary to pay for Medicare services relative to the output of the U.S. economy. The rising cost of health services, increasing utilization rates, and anticipated increases in the complexity of services are expected to contribute to the rising costs of Medicare relative to GDP. Additionally, it is expected that as increasing numbers of people become eligible for Medicare, there will be a significant growth in benefit expenditures. Under current law, the trustees expect Medicare costs to increase from 3.6% in 2010 to 5.6% of GDP in 2035 and to 6.2% in 2085.[28] Under the *illustrative alternative*, similar to estimates made under prior law, projected Medicare costs are expected to represent about 10.7% of GDP in 2085. (See **Appendix G** for a comparison of projections of Medicare expenditures as a percentage of GDP from the 2009 Trustees Report, the 2010 Trustees Report, the 2011 Trustees report, and the 2011 Illustrative Alternative Scenario.)

Over the next 75 years, general revenues and beneficiary premiums are expected to play an increasing role in financing the program. **Figure 6** shows actual and projected expenditures and non-interest revenues for HI and SMI combined as a percentage of GDP.

[28] By comparison, last year's report projected that Medicare costs would increase to 5.5% of GDP by 2035 and reach 6.4% by the end of the 75-year projection period.

Figure 6. Medicare Cost and Non-interest Income by Source as a Percentage of GDP



Source: Summary of the 2011 Annual Reports of the Social Security and Medicare Boards of Trustees, http://ssa.gov/OACT/TRSUM/index.html, Chart C.

General revenue transfers to the SMI trust fund are projected to increase from 1.5% of GDP in 2011 to 3.1% in 2085, and beneficiary premiums from 0.5% of GDP in 2011 to 1.0% in 2085. As shown, the share of Medicare income from payroll taxes and taxation of benefits is expected to fall substantially during that period (from 41% to 30%), while the share of general fund revenue is expected to rise (from 44% to 51%) as are premiums (from 13% to 17%). Any excess in projected spending over revenues represents the HI deficit; in 2085, the HI deficit is projected to represent 0.2% of GDP.

Medicare Funding Warning ("Medicare Trigger")

As noted, HI and SMI are financed very differently. HI is funded by current workers through a payroll tax, while SMI is funded by premiums from current beneficiaries and federal general revenues. Because of this financing, the SMI trust fund's income is projected to equal expenditures for all future years. However, there is concern that over time the economy will be unable to support the increasing reliance on general revenues which in large measure comes from taxes paid by the under-65 population. In response, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA, P.L. 108-173) required the trustees report to include an expanded analysis of Medicare expenditures and revenues. Specifically, a determination must be made as to whether general revenue financing will exceed 45% of total Medicare outlays within the next seven years (on a fiscal year basis). The law specifies that if an excess general revenue funding determination is made for two successive years, a "Medicare funding warning" is triggered, and the President is to submit a legislative proposal to respond to

the warning.[29] The Congress is required to consider the proposals on an expedited basis. However, passage of legislation within a specific time frame is not required.

The 2006 trustees report projected that the 45% level would first be exceeded in FY2012; the 2007 report projected that it would first be exceeded in 2013, and both the 2008 and 2009 trustees reports projected the first year at 2014. In the 2010 trustees report, the level of general revenue financing was projected to exceed 45% in FY2010; the 2011 report confirmed that the threshold was breached in FY2010 and is expected to do so again in FY2011 and FY2012.[30] This represents the sixth consecutive time that the threshold was estimated to be exceeded within the first seven years of the projection. However, changes made by PPACA affecting future Medicare spending are expected to reduce the ratio below 45% in years 2013 through 2021. (This is assuming that the physician payment rate reductions go into effect.)

Proponents of the 45% threshold measurement believe that it can serve as an effective early warning system and that it forces fiscal responsibility. Opponents of the measure suggest that it doesn't adequately recognize a shift towards the provision of more services on an outpatient basis or the impact of the Part D program on general revenue increases, and that other measures, such as Medicare spending as a percentage of GDP, Medicare spending as a portion of total federal spending, or the number of workers subject to payroll taxes per Medicare beneficiary, are better ways to measure the health of the Medicare program. On January 6, 2009, the House approved a rules package (H.Res. 5) that nullified the trigger provision for the 111th Congress.[31] The 112th Congress has not passed a similar measure; therefore, the trigger provision has gone back into effect in 2011 in the House.[32]

Medicare Expenditures and the Federal Budget

By law, the annual Medicare trustees reports focus on the financial status of the Medicare HI and SMI trust funds. Trust fund accounting methods are used to determine whether dedicated sources of Medicare revenue, together with any asset balances, are sufficient to pay expected expenditures on a timely basis. In contrast, when examining Medicare finances under budget accounting methods, the total flow of money into and out of the U.S. Treasury is typically examined regardless of the source of revenue.[33]

The expected shortfall in payroll taxes needed to fully cover HI expenses and the rapid growth of SMI, which relies primarily on general revenues for financing, have made it increasingly important to look at Medicare expenditures from the perspective of the federal budget as a whole. To illustrate, over the next 75 years, revenues from payroll taxes are projected to fall short of HI

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[29] See CRS Report RS22796, *Medicare Trigger*, by Hinda Chaikind and Christopher M. Davis.

[30] The trustees estimate that additional revenues of at least $25 billion or expenditure reductions of at least $46 billion (or some combination of the two) would be needed to reduce the ratio below 45% in 2011 and 2012.

[31] H.Res. 5 declared that the accelerated legislative procedures required by MMA for a presidential legislative proposal in response to a Medicare funding warning shall not apply during the 111th Congress.

[32] The President did not submit a legislative proposal in 2011 to address the funding warning issued in the 2010 trustees report.

[33] Spending is normally categorized either as mandatory (not subject to the appropriations process) or discretionary (must be appropriated). Medicare benefit spending is mandatory, while some administrative costs are discretionary.

expenditures by $3.3 trillion in present value terms.[34] This is the additional amount that is expected to be needed in order to pay HI benefits at the level expected under current law over the next 75 years. Additionally, general revenue transfers in present value terms of $21.3 trillion are expected to be needed to cover SMI expenditures (Parts B and D combined) over the next 75 years.[35] The Medicare trustees estimate that, assuming personal and corporate income taxes in the future maintain their historical average level relative to the national economy, the portion of income taxes that will be needed to fund the general revenue portion of SMI will grow from 19.2% in 2010 to 26.3% in 2080 (see **Table 4**).

Table 4. SMI General Revenues as a Percentage of Personal and Corporate Federal Income Tax

Fiscal Year	Percentage of Income Taxes - 2009 Report	Percentage of Income Taxes - 2010 Report	Percentage of Income Taxes - 2011 Report
Historical			
1970	0.8%	0.8%	0.8%
1980	2.2	2.2	2.2
1990	5.9	5.9	5.9
2000	5.4	5.4	5.4
2008	10.9	12.0	12.0
2009	n/a	17.7	17.7
2010	12.2	18.6	19.2
Intermediate Estimates			
2011	n/a	n/a	18.0
2020	15.8	15.0	17.1
2030	24.0	19.5	19.9
2040	28.9	21.8	22.1
2050	31.9	22.7	23.0
2060	35.1	24.6	24.7
2070	38.1	25.7	25.7
2080	40.5	26.6	26.3

Source: 2009, 2010, and 2011 Medicare Trustees reports, Table III.C4.

Note: Includes the Part D prescription drug benefit beginning in 2006; n/a = not available.

As previously described, PPACA contains numerous provisions that are expected to reduce Medicare spending growth (both HI and SMI) in future years. From the trust fund perspective, the slower growth in HI spending, coupled with payroll tax increases, is expected to extend the

[34] The federal liability from a budget perspective includes the beginning accumulated assets in the HI trust fund ($0.3 trillion, as of January 1, 2011) as they represent federal payment obligations. The net 75-year unfunded liability from the trust fund perspective of $3.0 trillion in present value terms, does not include the trust fund assets. (See "Unfunded Obligations".)

[35] This amount could be substantially higher than that if Congress modifies the physician payment system to eliminate scheduled payment reductions.

solvency of the HI trust fund for an additional seven years beyond 2017, the insolvency date that was projected in the 2009 report prior to the enactment of PPACA (but five years earlier than the insolvency date of 2029 projected in the 2010 report; see "Projected Date of HI Insolvency "). Under federal budget accounting rules (used by CBO when scoring legislation) these expected savings represent a reduction in expected future federal spending compared to spending levels estimated before the passage of PPACA. If total federal spending is expected to stay at the same level as under prior law, then funds that are no longer expected to be needed to pay for Medicare expenditures (savings) become available to fund new, or supplement existing, government programs.

Both CBO and the CMS Office of the Actuary caution against combining trust fund accounting conventions with budget accounting rules. For example, reductions in Medicare Part A expenditures can be used to extend the solvency of the HI trust fund *or* used to offset other costs of the federal government; using both accounting methods at the same time would result in double-counting a large share of those savings. CBO concluded that "(i)n effect, the majority of the HI trust fund savings under [PPACA] and [the Reconciliation Act] would be used to pay for other spending and therefore would not enhance the ability of the government to pay for future Medicare benefits."[36]

Concluding Observations

As shown in this report, a wide array of measures can be used to describe the short- and long-term financial status of the Medicare program. While trust fund solvency issues are important, they only present part of the picture. When viewed from the perspective of the entire federal budget and the economy, Medicare spending obligations, even under the more optimistic scenario presented in the 2011 Medicare trustees report, are expected to consume an increasing portion of federal budgetary resources over time. Budget experts have expressed concern about the long-run implications of Medicare expenditures on federal deficits; for example, CBO noted that the growth in spending on federal health care programs, including Medicare, remains the "central fiscal challenge facing the nation."[37]

The Medicare trustees caution that it is difficult to forecast health and economic indicators over an extended period of time. For example, forecasts are based on the assumption that health spending will outpace GDP growth in the future because it has consistently done so in the past. It is possible that in the future, advances in medical technology, changes in consumer preferences, shifts in the health status of the population, or changes in the way health services are delivered could result in very different financial outcomes from those estimated in the trustees report.[38] Further, as evidenced by the issuance of an illustrative alternative to the 2011 trustees report, if changes to current health care policies are enacted (most notably these affecting physician reimbursement or productivity adjustments), future Medicare costs could be significantly different from current projections.

[36] CBO letter to Rep. Paul Ryan, March 19, 2010, http://www.cbo.gov/ftpdocs/113xx/doc11376/RyanLtrhr4872.pdf.

[37] "Long-Term Budget Outlook," Congressional Budget Office Director's Blog, June 30, 2010, http://cboblog.cbo.gov/?p=1112.

[38] For example, information learned from pilot programs and demonstrations mandated by recent legislation, such as changing financial incentives of health care providers and improving the care coordination of beneficiaries with chronic conditions, could lead to long-term changes in how health care is delivered and in the cost of that care.

There are no simple solutions to address the problems raised by the rapid growth in health care costs, the economic conditions, and the aging of the population. Additionally, as an entitlement program, Medicare must pay for all medically necessary covered benefits for enrollees; except for constraints placed on the program by the HI financing mechanism, there are no limits on overall Medicare spending. As such, policy options to restrain the growth of Medicare spending will continue to attract considerable interest.

Proposals to reduce Medicare spending generally fall into one of two categories: (1) those that would reduce the federal share of Medicare spending (for example, by increasing beneficiary premiums and/or cost-sharing; changing Medicare eligibility criteria such as age; reducing the range of covered benefits; establishing defined federal contributions;[39] or setting federal spending limits), and (2) those that would reduce the total amount of health care spending regardless of who is paying (e.g., reducing prices paid for items and services;[40] decreasing medical errors; reducing unneeded, duplicative and/or ineffective care; and eliminating fraud and abuse). On the revenue side, options to increase program income may include modifying dedicated Medicare payroll taxes or general income taxes, and/or imposing new fees.[41] Some of the above changes could be made while still retaining Medicare's current structure, while others could only be made in the context of major program restructuring. Many of the proposals could be combined as part of an overall reform package.

The challenge to policy makers will be to slow the growth in Medicare spending over the long-term, to establish fair levels of contributions from beneficiaries and taxpayers, and to ensure continued beneficiary access to needed health care services. The Medicare trustees suggest that prompt action is needed to address both the short- and the long-range financial challenges of the Medicare program; the sooner that solutions can be enacted, the more flexible these solutions can be, and the more gradually they may be phased in.

[39] See CRS Report R41767, *Overview of Health Care Changes in the FY2012 Budget Offered by House Budget Committee Chairman Ryan*, by Patricia A. Davis, Alison Mitchell, and Bernadette Fernandez, for a description of the premium support model proposed in H.Con.Res. 34.

[40] Some may argue that reducing prices for some payers, such as Medicare, can lead to shifting costs to other payers, such as private insurers, and thus not decrease the overall cost of health care.

[41] Additionally, broadening the tax base through increased levels of employment and/or wages (e.g. through economic recovery) would also result in increased Medicare payroll tax income.

Appendix A. Medicare Enrollment

Table A-1. Medicare Enrollment, 1970 - 2085

(in thousands)

Year	HI - Part A	SMI - Part B	SMI - Part D	Part C	Total
Historical					
1970	20,104	19,496	—	—	20,398
1975	24,481	23,744	—	—	24,864
1980	28,002	27,278	—	—	28,433
1985	30,621	29,869	—	1,271	31,081
1990	33,747	32,567	—	2,017	34,251
1995	37,175	35,641	—	3,467	37,594
2000	39,257	37,335	—	6,856	39,688
2001	39,669	37,667	—	6,166	40,103
2002	40,065	37,982	—	5,538	40,508
2003	40,738	38,584	—	5,302	41,188
2004	41,485	39,123	1,217	5,375	41,902
2005	42,233	39,752	1,841	5,794	42,606
2006	43,065	40,361	30,536	7,292	43,436
2007	44,010	41,093	31,217	8,667	44,368
2008	45,150	41,975	32,413	10,009	45,500
2009	46,220	42,879	33,484	11,101	46,575
2010	47,134	43,816	34,465	11,688	47,492
Estimated					
2011	48,549	45,102	35,427	12,380	48,908
2012	50,224	46,589	37,318	12,478	50,584
2013	52,006	48,179	38,467	12,119	52,365
2014	53,619	49,619	39,490	11,356	53,977
2015	55,197	51,020	40,528	10,292	55,554
2016	56,754	52,406	41,567	9,640	57,111
2017	58,344	53,817	42,677	9,272	58,701
2018	59,994	55,283	43,788	9,203	60,350
2019	61,714	56,817	44,939	9,372	62,072
2020	63,499	58,467	46,504	9,653	63,858
2025	72,608	66,700	53,146	11,211	72,979
2030	80,410	73,816	58,836	12,381	80,791
2035	85,254	78,170	62,367	—	85,640
2040	87,872	80,649	64,275	—	88,260

Year	HI - Part A	SMI - Part B	SMI - Part D	Part C	Total
2045	89,740	82,333	65,637	—	90,130
2050	92,396	84,766	67,576	—	92,793
2055	95,643	87,720	69,945	—	96,046
2060	99,411	91,200	72,694	—	99,820
2065	103,025	94,511	75,326	—	103,434
2070	106,941	98,106	78,175	—	107,346
2075	111,037	101,869	81,153	—	111,436
2080	115,065	105,572	84,076	—	115,449
2085	119,131	109,318	87,023	—	119,496

Source: 2011 Medicare Trustees Report, Table III.A3.

Notes: The trustees report did not provide enrollment projections separately for Part C beyond 2030.

Appendix B. Total Medicare Income and Expenditures (HI and SMI Combined)

Table B-1. Medicare Income and Expenditures, Calendar Years 1970-2020

($ in billions)

	Income						Expenditures		
Year	Payroll Taxes	General Revenue	Premiums	State Transfers	Interest and Other	Total	Benefit Payments	Admin Expenses	Total
Historical Data									
1970	$4.9	$1.1	$1.1	-	$1.2	$8.2	$7.1	$0.4	$7.5
1975	11.5	2.6	1.9	-	1.5	17.7	15.6	0.8	16.3
1980	23.8	7.5	3.0	-	2.5	37.0	35.7	1.1	36.8
1985	47.6	18.3	5.6	-	5.1	76.5	70.5	1.7	72.3
1990	72.0	33.0	11.4	-	9.9	126.3	108.7	2.3	111.0
1995	98.4	39.0	20.7	-	17.3	175.3	181.4	2.8	184.2
2000	144.4	65.9	22.0	-	24.9	257.1	217.4	4.4	221.8
2005	171.4	119.2	39.9	-	27.0	357.5	330.3	6.1	336.4
2006	181.3	171.9	49.0	$5.5	29.4	437.0	402.0	6.3	408.3
2007	191.9	178.4	53.6	6.9	31.3	462.1	425.4	6.3	431.7
2008	198.7	184.1	58.1	7.1	32.7	480.8	461.6	6.6	468.1
2009	190.9	209.9	65.2	7.6	34.7	508.2	502.4	6.6	509.0
2010	182.0	204.6	61.8	4.0	33.6	486.0	515.9	7.1	522.8
Intermediate Estimate									
2011	196.6	222.9	68.5	6.9	34.5	529.6	550.7	6.8	557.4
2012	211.0	232.0	74.6	8.2	35.8	561.7	564.9	7.3	572.2
2013	228.3	261.4	82.2	8.8	38.6	619.2	598.5	8.1	606.6
2014	244.1	280.0	90.2	9.3	43.6	667.2	634.5	8.9	643.4
2015	257.8	315.1	104.4	9.8	48.7	735.7	666.0	9.8	675.8
2016	271.9	306.9	100.2	10.5	54.0	743.4	705.4	10.7	716.1
2017	285.9	347.9	115.4	11.3	61.1	821.7	749.0	11.5	760.3
2018	301.1	376.6	125.6	12.3	68.3	883.9	797.2	12.5	809.6
2019	315.8	408.1	137.0	13.3	74.9	949.2	851.1	13.4	864.5
2020	330.0	450.4	149.1	14.4	83.8	1,027.9	917.8	14.3	932.1

Source: Data from 2011 Medicare Trustees Report, Tables III.A1, III.B4, III.C8, and III.C19.

Notes: Totals do not necessarily equal the sums of rounded components.

Appendix C. Medicare Per Capita Expenditures

Table C-1. Average Medicare Benefit Costs Per Beneficiary, Calendar Years 1970-2020

		SMI		
Year	**HI**	**Part B**	**Part D**	**Total**
Historical Data				
1970	$255	$101	—	$356
1975	462	180	—	642
1980	895	390	—	1,285
1985	1,554	768	—	2,322
1990	1,963	1,304	—	3,267
1995	3,130	1,823	—	4,953
2000	3,272	2,381	—	5,653
2005	4,262	3,754	—	8,016
2006	4,388	4,111	$1,709	10,209
2007	4,548	4,293	1,563	10,404
2008	5,145	4,296	1,511	10,952
2009	5,177	4,725	1,805	11,707
2010	5,187	4,786	1,789	11,762
Intermediate Estimates				
2011	5,337	4,973	1,886	12,195
2012	5,402	4,666	2,038	12,105
2013	5,446	4,781	2,208	12,436
2014	5,513	4,999	2,299	12,811
2015	5,483	5,163	2,463	13,109
2016	5,573	5,335	2,635	13,544
2017	5,673	5,541	2,803	14,017
2018	5,807	5,765	2,975	14,547
2019	5,964	6,006	3,149	15,119
2020	6,159	6,337	3,358	15,855

Source: 2011 Report of Medicare Trustees, Table V.B1.

Notes: These amounts do not include administrative costs. The expenditure figures do not net out premiums and state transfers.

Appendix D. Operation of the Hospital Insurance Trust Fund

Table D-1. Operation of the Hospital Insurance Trust Fund, Calendar Years 1970-2020

($ in billions)

	Income			Expenditures			Trust Fund	
Year	Payroll Taxes	Interest, Transfers, Other	**Total**	Benefit Payments	Admin. Expenses	**Total**	Net Change	Balance at End of Year
Historical Data								
1970	$4.9	$1.2	$6.0	$5.1	$0.2	$5.3	$0.7	$3.2
1975	11.5	1.4	13.0	11.3	0.3	11.6	1.4	10.5
1980	23.8	2.1	26.1	25.1	0.5	25.6	0.5	13.7
1985	47.6	3.9	51.4	47.6	0.8	48.4	4.8	20.5
1990	72.0	8.4	80.4	66.2	0.8	67.0	13.4	98.9
1995	98.4	16.7	115.0	116.4	1.2	117.6	-2.6	130.3
2000	144.4	22.9	167.2	128.5	2.6	131.1	36.1	177.5
2005	171.4	28.0	199.4	180.0	2.9	182.9	16.4	285.8
2006	181.3	30.2	211.5	189.0	2.9	191.9	19.6	305.4
2007	191.9	31.9	223.7	200.2	2.9	203.1	20.7	326.0
2008	198.7	32.0	230.8	232.3	3.3	235.6	-4.7	321.3
2009	190.9	34.5	225.4	239.3	3.2	242.5	-17.1	304.2
2010	182.0	33.6	215.6	244.5	3.5	247.9	-32.3	271.9
Intermediate Estimate								
2011	196.6	32.2	228.7	259.1	3.7	262.8	-34.1	237.9
2012	211.0	32.5	243.5	271.3	4.0	275.3	-31.8	206.1
2013	228.3	33.9	262.2	283.2	4.4	287.7	-25.5	180.6
2014	244.1	36.8	280.8	295.6	4.9	300.5	-19.7	160.9
2015	257.8	39.6	297.3	302.7	5.4	308.1	-10.7	150.2
2016	271.9	42.3	314.1	316.3	5.9	322.2	-8.1	142.1
2017	285.9	45.5	331.3	331.3	6.4	337.4	-6.0	136.0
2018	301.1	48.6	349.7	348.4	6.9	355.3	-5.6	130.5
2019	315.8	51.6	367.5	368.1	7.4	375.5	-8.0	122.5
2020	330.0	54.9	384.9	391.1	7.9	399.0	-14.1	108.4

Source: 2011 Medicare Trustees Report, Table III.B4.

Notes: Sums may not equal totals due to rounding.

Appendix E. Operation of the Supplementary Insurance Trust Fund, Part B Account

Table E-1. Operation of the Part B Account of the SMI Trust Fund, Calendar Years 1970-2020

($ in billions)

	Income				Expenditures			Trust Fund	
Year	Premiums	General Revenue	Interest and Other	**Total**	Benefit Payments	Admin. Expenses	**Total**	Net Change	Balance at End of Year
Historical Data									
1970	$1.1	$1.1	$0.0	$2.2	$2.0	$0.2	$2.2	-$0.0	$0.2
1975	1.9	2.6	0.1	4.7	4.3	0.5	4.7	-0.1	1.4
1980	3.0	7.5	0.4	10.9	10.6	0.6	11.2	-0.4	4.5
1985	5.6	18.3	1.2	25.1	22.9	0.9	23.9	1.2	10.9
1990	11.3	33.0	1.6	45.9	42.5	1.5	44.0	1.9	15.5
1995	19.7	39.0	1.6	60.3	65.0	1.6	66.6	-6.3	13.1
2000	20.6	65.9	3.4	89.9	88.9	1.8	90.7	-0.8	44.0
2005	37.5	118.1	1.4	157.0	149.2	3.2	152.4	4.6	24.0
2006	42.9	132.7	1.8	177.3	165.9	3.1	169.0	8.3	32.3
2007	46.8	139.6	2.2	188.7	176.4	2.5	178.9	9.7	42.1
2008	50.2	146.8	3.6	200.6	180.3	3.0	183.3	17.3	59.4
2009	56.0	162.8	3.1	221.9	202.6	3.1	205.7	16.2	75.5
2010	52.0	153.5	3.3	208.8	209.7	3.2	212.9	-4.1	71.4
Intermediate Estimates									
2011	57.5	170.4	5.7	233.8	224.8	2.8	227.6	6.2	77.6
2012	61.5	173.5	6.8	241.8	217.5	3.0	220.5	21.3	99.0
2013	66.9	196.6	8.3	271.7	230.3	3.4	233.7	38.0	137.0
2014	73.4	211.3	10.5	295.2	248.1	3.7	251.8	43.4	180.4
2015	85.2	240.1	12.9	338.2	263.5	4.1	267.6	70.6	251.0
2016	80.2	223.6	15.6	319.4	279.6	4.5	284.1	35.3	286.3
2017	93.0	257.6	19.7	370.4	298.1	4.8	303.0	67.4	353.7
2018	101.2	278.4	23.9	403.4	318.5	5.2	323.7	79.8	433.5
2019	110.5	301.6	27.7	439.7	341.5	5.6	347.1	92.6	526.1
2020	119.7	332.9	33.6	486.3	370.5	6.0	376.5	109.8	635.9

Source: 2011 Medicare Trustees Report, Table III.C8.

Notes: Sums may not equal totals due to rounding.

Appendix F. Operation of the Supplementary Insurance Trust Fund, Part D Account

Table F-1. Operation of the Part D Account in the SMI Trust Fund, Calendar Years 2004-2020

($ in billions)

	Income				Expenditures			Trust Fund	
Year	Premiums	General Revenue	Transfers from States	**Total**	Benefit Payments	Admin. Expenses	**Total**	Net Change	Balance at End of Year
Historical Data									
2004	—	$0.4	—	$0.4	$0.4	—	$0.4	—	—
2005	—	1.1	—	1.1	1.1	—	1.1	—	—
2006	$3.5	39.2	$5.5	48.2	47.1	$0.3	47.4	$0.8	$0.8
2007	4.0	38.8	6.9	49.7	48.8	0.9	49.7	0.0	0.8
2008	5.0	37.3	7.1	49.4	49.0	0.3	49.3	0.1	0.9
2009	6.3	47.1	7.6	60.9	60.5	0.3	60.8	0.1	1.1
2010	6.5	51.1	4.0	61.7	61.7	0.4	62.0	-0.4	0.7
Intermediate Estimates									
2011	7.6	52.5	6.9	67.0	66.8	0.3	67.1	-0.0	0.6
2012	9.6	58.5	8.2	76.4	76.1	0.3	76.3	0.0	0.7
2013	11.7	64.8	8.8	85.3	85.0	0.3	85.2	0.0	0.7
2014	13.1	68.7	9.3	91.1	90.8	0.3	91.1	0.0	0.8
2015	15.4	75.0	9.8	100.2	99.8	0.3	100.2	0.0	0.8
2016	16.1	83.3	10.5	109.9	109.5	0.3	109.9	0.1	0.9
2017	18.3	90.3	11.3	120.0	119.6	0.3	120.0	0.1	1.0
2018	20.2	98.2	12.3	130.7	130.3	0.4	130.6	0.1	1.0
2019	22.1	106.5	13.3	142.0	141.5	0.4	141.9	0.1	1.1
2020	24.7	117.5	14.4	156.6	156.2	0.4	156.6	0.1	1.2

Source: 2011 Medicare Trustees Report, Table III.C19.

Notes: Sums may not equal totals due to rounding.

Appendix G. Medicare Expenditures as a Percentage of GDP

Table G-1. Projected HI and SMI Expenditures as a Percentage of GDP

Comparison of 2009, 2010 and 2011 Medicare Trustees Reports and 2011 Alternative Scenario

	HI				SMI-B				SMI-D[a]			Total Medicare			
Year	**2009 Report**	**2010 Report**	**2011 Report**	**2011 Altern.**	**2009 Report**	**2010 Report**	**2011 Report**	**2011 Altern.**	**2009 Report**	**2010 Report**	**2011 Report**	**2009 Report**	**2010 Report**	**2011 Report**	**2011 Altern.**
2009	1.71%	1.67%	1.67%	1.67%	1.44%	1.45%	1.46%	1.46%	0.43%	0.41%	0.41%	3.59%	3.53%	3.54%	3.54%
2010	1.71	1.66	1.69	1.69	1.38	1.49	1.46	1.46	0.45	0.43	0.43	3.54	3.59	3.58	3.58
2020	2.05	1.63	1.70	1.70	1.76	1.61	1.63	1.95	0.71	0.67	0.67	4.53	3.91	3.99	4.31
2030	2.75	1.99	2.03	2.14	2.30	2.10	2.15	2.77	1.08	1.02	0.98	6.43	5.11	5.16	5.88
2040	3.43	2.24	2.27	2.66	3.15	2.30	2.34	3.33	1.28	1.21	1.15	7.96	5.76	5.77	7.14
2050	3.85	2.27	2.30	3.00	3.47	2.33	2.36	3.68	1.42	1.35	1.28	8.74	5.94	5.94	7.96
2060	4.21	2.23	2.26	3.29	3.82	2.39	2.40	4.08	1.57	1.50	1.42	9.60	6.12	6.09	8.79
2070	4.61	2.21	2.24	3.63	4.16	2.45	2.44	4.47	1.69	1.63	1.55	10.46	6.29	6.22	9.65
2080	4.96	2.17	2.16	3.92	4.43	2.47	2.43	4.78	1.80	1.75	1.66	11.18	6.37	6.25	10.36

Sources: Projected Medicare Expenditures under an Illustrative Scenario with Alternative Payment Updates to Medicare Providers, May 13, 2011, Tables 2, 4, and 5; and 2009, 2010 and 2011 Reports of the Medicare Trustees, Table III.A2.

a. Alternative Scenario assumed no changes to current law affecting Part D; alternative projection same as projections in 2011 Report.