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THE 2015 ANNUAL REPORT OF THE BOARDS OF TRUSTEES OF THE FEDERAL HOSPITAL INSURANCE AND FEDERAL SUPPLEMENTARY MEDICAL INSURANCE TRUST FUNDS

COMMUNICATION

FROM

THE BOARDS OF TRUSTEES, FEDERAL HOSPITAL INSURANCE AND FEDERAL SUPPLEMENTARY MEDICAL INSURANCE TRUST FUNDS

TRANSMITTING

THE 2015 ANNUAL REPORT OF THE BOARDS OF TRUSTEES OF THE FEDERAL HOSPITAL INSURANCE AND FEDERAL SUPPLEMENTARY MEDICAL INSURANCE TRUST FUNDS

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BOARDS OF TRUSTEES OF THE
FEDERAL HOSPITAL INSURANCE AND
FEDERAL SUPPLEMENTARY MEDICAL INSURANCE TRUST FUNDS,
Washington, D.C., July 22, 2015

HONORABLE JOHN A. BOEHNER,
Speaker of the House of Representatives

HONORABLE JOSEPH R. BIDEN, JR.,
President of the Senate

GENTLEMEN:

We have the honor of transmitting to you the 2015 Annual Report of the Boards of Trustees of the Federal Hospital Insurance Trust Fund and the Federal Supplementary Medical Insurance Trust Fund, the 50th such report.

Respectfully,

JACOB J. LEW,
Secretary of the Treasury,
and Managing Trustee of the Trust Funds.

THOMAS E. PEREZ,
Secretary of Labor, and Trustee.

SYLVIA M. BURWELL,
Secretary of Health and Human Services,
and Trustee.

CAROLYN W. COLVIN,
Acting Commissioner of Social Security,
and Trustee.

CHARLES P. BLAHOUS III,
Trustee.

ROBERT D. REISCHAUER,
Trustee.

MANDY COHEN, M.D., MPH,
Chief of Staff,
Centers for Medicare & Medicaid Services,
and Acting Secretary, Boards of Trustees.

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I. INTRODUCTION

The Medicare program has two components. Hospital Insurance (HI), otherwise known as Medicare Part A, helps pay for hospital, home health following hospital stays, skilled nursing facility, and hospice care for the aged and disabled. Supplementary Medical Insurance (SMI) consists of Medicare Part B and Part D. Part B helps pay for physician, outpatient hospital, home health, and other services for the aged and disabled who have voluntarily enrolled. Part D provides subsidized access to drug insurance coverage on a voluntary basis for all beneficiaries and premium and cost-sharing subsidies for low-income enrollees. Medicare also has a Part C, which serves as an alternative to traditional Part A and Part B coverage. Under this option, beneficiaries can choose to enroll in and receive care from private *Medicare Advantage* and certain other health insurance plans. Medicare Advantage and Program of All-Inclusive Care for the Elderly (PACE) plans receive prospective, capitated payments for such beneficiaries from the HI and SMI Part B trust fund accounts; the other plans are paid from the accounts on the basis of their costs.

The Social Security Act established the Medicare Board of Trustees to oversee the financial operations of the HI and SMI trust funds.[1] The Board has six members. Four members serve by virtue of their positions in the Federal Government: the Secretary of the Treasury, who is the Managing Trustee; the Secretary of Labor; the Secretary of Health and Human Services; and the Commissioner of Social Security. Two other members are public representatives whom the President appoints and the Senate confirms. Charles P. Blahous III and Robert D. Reischauer began serving on September 17, 2010. The Administrator of the Centers for Medicare & Medicaid Services (CMS) serves as Secretary of the Board.

The Social Security Act requires that the Board, among other duties, report annually to the Congress on the financial and actuarial status of the HI and SMI trust funds. The 2015 report is the 50th that the Board has submitted.

The basis for the projections in this report has changed since last year due to the enactment of the Medicare Access and CHIP Reauthorization Act (MACRA) of 2015. This law repealed the sustainable growth rate (SGR) formula that set physician fee schedule payments, which were usually modified.

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[1]The Social Security Act established separate boards for HI and SMI. Both boards have the same membership, so for convenience they are collectively referred to as the Medicare Board of Trustees in this report.

Overview

In the 2014 report, the income, expenditures, and assets for Part B shown throughout the tables reflected the *projected baseline* scenario, which assumed an override of the SGR payment provisions and an increase in the physician fee schedule equal to the average of the most recent 10 years of SGR overrides (through March 2015) or 0.6 percent. Since the new legislation has replaced the SGR system with specified payment updates for physicians, the projections in this year's report, with one exception related to Part A, are based on current law; that is, they assume that laws on the books will be implemented and adhered to with respect to scheduled taxes, premium revenues, and payments to providers and health plans. The one exception is that the projections disregard payment reductions that would result from the projected depletion of the Medicare Hospital Insurance trust fund. Under current law, payments would be reduced to levels that could be covered by incoming tax and premium revenues when the HI trust fund was depleted. If the projections reflected such payment reductions, then any imbalances between payments and revenues would be automatically eliminated, and the report would not serve its essential purpose, which is to inform policy makers and the public about the size of any trust fund deficits that would need to be resolved to avert program insolvency. To date, lawmakers have never allowed the assets of the Medicare HI trust fund to become depleted.

Projections of Medicare costs are highly uncertain, especially when looking out more than several decades. One reason for uncertainty is that scientific advances will make possible new interventions, procedures, and therapies. Some conditions that are untreatable today will be handled routinely in the future. Spurred by economic incentives, the institutions through which care is delivered will evolve, possibly becoming more efficient. While most health care technological advances to date have tended to increase expenditures, the health care landscape is shifting. No one knows whether future developments will, on balance, increase or decrease costs.

While the physician payment updates and new incentives put in place by MACRA avoid the significant short-range physician payment issues that would have resulted from the SGR system approach, they nevertheless raise important long-range concerns. In particular, additional payments of $500 million per year for one group of physicians and 5-percent annual bonuses for another group are scheduled to expire in 2025, resulting in a significant one-time payment reduction for most physicians. In addition, the law specifies the physician payment update amounts for all years in the future, and these amounts do not vary based on underlying economic

conditions, nor are they expected to keep pace with the average rate of physician cost increases. The specified rate updates could be an issue in years when levels of inflation are high and would be problematic when the cumulative gap between the price updates and physician costs becomes large. The Trustees anticipate that physician payment rates under current law will be lower than they would have been under the SGR formula by 2048 and will continue to worsen thereafter. Absent a change in the delivery system or level of update by subsequent legislation, the Trustees expect access to Medicare-participating physicians to become a significant issue in the long term under current law.

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, introduced large policy changes and additional projection uncertainty. This legislation, referred to collectively as the Affordable Care Act or ACA, contains roughly 165 provisions affecting the Medicare program by reducing costs, increasing revenues, improving benefits, combating fraud and abuse, and initiating a major program of research and development to identify alternative provider payment mechanisms, health care delivery systems, and other changes intended to improve the quality of health care and reduce costs. The Board assumes that the various cost-reduction measures—the most important of which are the reductions in the annual payment rate updates for most categories of Medicare providers by the growth in economy-wide private nonfarm business multifactor productivity[2]—will occur as the ACA requires. The Trustees believe that this outcome is achievable if health care providers are able to realize productivity improvements at a faster rate than experienced historically. However, if the health sector cannot transition to more efficient models of care delivery and achieve productivity increases commensurate with economy-wide productivity, and if the provider reimbursement rates paid by commercial insurers continue to follow the same negotiated process used to date, then the availability and quality of health care received by Medicare beneficiaries would, under current law, fall over time relative to that received by those with private health insurance.

In recent years U.S. national health expenditure (NHE) growth has slowed relative to previous historical patterns. There is some debate regarding the extent to which this cost deceleration reflects (i) one-time effects such as the recent economic downturn, (ii) positive reforms in the health care sector that may carry forward to produce

[2]For convenience the term *economy-wide private nonfarm business multifactor productivity* will henceforth be referred to as *economy-wide productivity*.

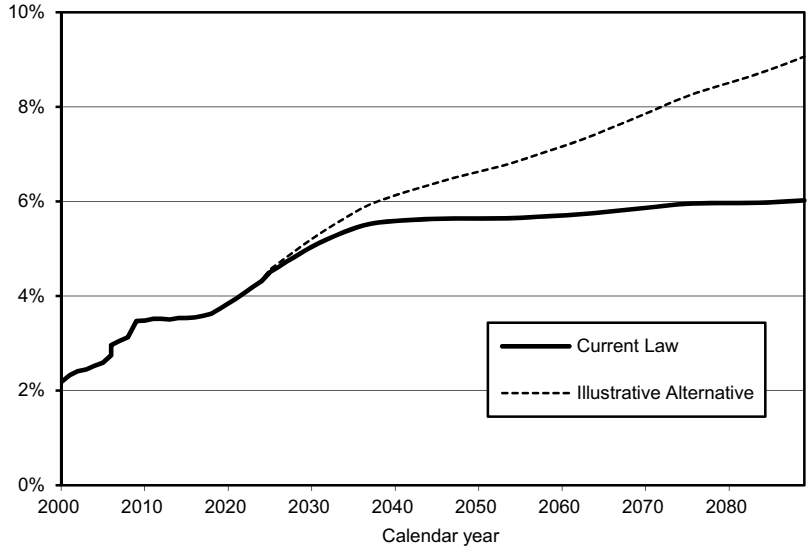
additional cost savings in the years ahead, or (iii) other factors. The Trustees are hopeful that U.S. health care practices are in the process of becoming more efficient as providers anticipate more modest rates of reimbursement growth, in both the public and private sectors, than those experienced in recent decades. The methodology for projecting Medicare finances assumes a substantial long-term reduction in per capita health expenditure growth rates relative to historical experience, to which the ACA's cost-reduction provisions would add substantial further savings.

Notwithstanding recent favorable developments, current-law projections indicate that Medicare still faces a substantial financial shortfall that will need to be addressed with further legislation. Such legislation should be enacted sooner rather than later to minimize the impact on beneficiaries, providers, and taxpayers.

Figure I.1 shows Medicare's projected costs as a percentage of the Gross Domestic Product (GDP) under two sets of assumptions: current law and an illustrative alternative, described below.[3]

[3]At the request of the Trustees, the Office of the Actuary at CMS has prepared a set of illustrative Medicare projections under a hypothetical modification to current law. A summary of the projections under the illustrative alternative is contained in appendix V.C of this report, and a more detailed discussion is available at http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/Downloads/2015TRAlternativeScenario.pdf`. Readers should not infer any endorsement of the policies represented by the illustrative alternative by the Trustees, CMS, or the Office of the Actuary. Appendix V.C also provides additional information on the uncertainties associated with productivity adjustments to certain provider payment updates.

Figure I.1.—Medicare Expenditures as a Percentage of the Gross Domestic Product under Current Law and Illustrative Alternative Projections



Note: Percentages are affected by economic cycles.

The current-law cost projections reflect the physicians' payment levels expected under the MACRA payment rules and the ACA-mandated reductions in other Medicare payment rates, but not the payment reductions and/or delays that would result from the HI trust fund depletion.

The illustrative alternative shown in the top line of figure I.1 assumes legislative changes that result in (i) physician payment updates that transition from the update specified in current law for 2024 to the rate of growth in the Medicare Economic Index (MEI) of 2.3 percent for 2039 and later; (ii) a partial phase-out of the ACA reductions in Medicare payment rates from 2020 through 2034; and (iii) an elimination of the cost-saving actions of the Independent Payment Advisory Board (IPAB). The difference between the illustrative alternative and the current-law projections demonstrates that the long-range costs could be substantially higher than shown throughout much of the report if the MACRA[4] and ACA[5] cost-

[4]Under MACRA, a significant one-time payment reduction is scheduled for most physicians in 2025. In addition, the law specifies physician payment rate updates of 0.75 percent or 0.25 percent annually thereafter. These updates are notably lower than the projected physician cost increases, which are assumed to average 2.3 percent per year in the long range.

reduction measures prove problematic and new legislation scales them back.

As figure I.1 shows, Medicare's costs under current law rise from their current level of 3.5 percent of GDP to 5.6 percent in 2040 and to 6.0 percent in 2089. Under the illustrative alternative, in which adherence to the MACRA and ACA cost-saving measures erodes, projected costs would rise to 6.1 percent of GDP in 2040 and to 9.1 percent in 2089.

As the preceding discussion explains, and as the substantial differences between current-law and illustrative alternative projections demonstrate, Medicare's actual future costs are highly uncertain for reasons apart from the inherent difficulty in projecting health care cost growth over time. The Board recommends that readers interpret the current-law estimates in the report as the result of the outcomes that would be experienced under the Trustees' economic and demographic assumptions if the productivity adjustments and IPAB measures in the ACA and the physician price updates in MACRA can be sustained in the long range. Readers are encouraged to review appendix V.C for further information on this important subject. Where applicable, the Trustees note the key financial outcomes under the illustrative alternative projections in addition to the current-law projections.

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[5]Under the ACA, Medicare's annual payment rate updates for most categories of providers would be reduced below the increase in providers' input prices by the growth in economy-wide productivity (1.1 percent over the long range). In addition, the IPAB would be charged with recommending cost savings as are necessary to hold overall per capita Medicare growth to the average of the Consumer Price Index (CPI-U) and CPI-medical increases in 2015-2019 and to the rate of per capita GDP growth plus 1 percentage point thereafter (subject to certain limits). Unless overridden by lawmakers, these recommendations would be implemented automatically.

II. OVERVIEW

A. HIGHLIGHTS

The major findings of this report under the intermediate set of assumptions appear below. The balance of the Overview and the following Actuarial Analysis section describe these findings in more detail.

In 2014

In 2014, Medicare covered 53.8 million people: 44.9 million aged 65 and older, and 8.9 million disabled. About 30 percent of these beneficiaries have chosen to enroll in Part C private health plans that contract with Medicare to provide Part A and Part B health services. Total expenditures in 2014 were $613.3 billion, and total income was $599.3 billion, which consisted of $588.1 billion in non-interest income and $11.2 billion in interest earnings. Assets held in special issue U.S. Treasury securities decreased by $14.1 billion to $266.4 billion.

Short-Range Results

The estimated depletion date for the HI trust fund is 2030, the same as in last year's report. As in past years, the Trustees have determined that the fund is not adequately financed over the next 10 years. HI tax income in 2014 was somewhat higher than last year's estimate, mostly due to adjustments for prior years,[6] but is projected to be slightly lower through 2019; after 2019, however, projections of earnings throughout the period are higher mostly due to assumptions of slower projected growth in employer-sponsored health insurance—a factor that increases wages. Although HI expenditures in 2014 were nearly equal to the previous estimate, projected expenditures are higher at the end of the 10-year period than shown in last year's report, largely due to increases in provider payment update assumptions that reflect recent trends.

HI expenditures have exceeded income annually since 2008. However, the Trustees project slight surpluses in 2015 through 2023, with a return to deficits thereafter until the trust fund becomes depleted in 2030. In 2014, $8.1 billion in trust fund assets were redeemed to cover the shortfall of income relative to expenditures. The Treasury

[6]Initial appropriations of payroll taxes are made on an estimated basis, and then each year adjustments are made to the appropriations for prior years to reflect actual tax receipts.

also paid from the general fund $8.8 billion in interest to the HI trust fund in 2014. The assets were $205.4 billion at the beginning of 2014, representing about 76 percent of expenditures during the year, which is below the Trustees' minimum recommended level of 100 percent. The HI trust fund has not met the Trustees' formal test of short-range financial adequacy since 2003 (as discussed in section III.B). Growth in HI expenditures has averaged 2.1 percent annually over the last 5 years and is projected to average 4.8 percent over the next 5 years.

The SMI trust fund is adequately financed over the next 10 years and beyond because premium and general revenue income for Parts B and D are reset each year to cover expected costs and ensure a reserve for Part B contingencies. In 2016, however, a *hold-harmless provision* that restricts Part B premium increases for most beneficiaries is expected to cause a substantial increase in the Part B premium rate for other beneficiaries.

Part B and Part D costs have averaged annual growth of 5.3 percent and 5.1 percent, respectively, over the last 5 years, as compared to growth of 3.8 percent for GDP. Under current law, the Trustees project an average annual Part B growth rate of 6.7 percent over the next 5 years. For Part D, the estimated average annual increase in expenditures is 10.9 percent over the next 5 years. The projected average annual rate of growth for the U.S. economy is 5.3 percent during this period, significantly slower than for Part B and Part D.

The difference between Medicare's total outlays and its *dedicated financing sources* is not estimated to reach 45 percent of outlays in fiscal years 2015 through 2021. Therefore, as was the case last year, the Trustees are not issuing a determination of projected excess general revenue Medicare funding in this report. Such determinations were previously made in each of the 2006 through 2013 reports.

Long-Range Results

For the 75-year projection period, the HI actuarial deficit has decreased from 0.87 percent of taxable payroll, as shown in last year's report, to 0.68 percent of taxable payroll. (Under the illustrative alternative projections, the HI actuarial deficit would be 1.70 percent of taxable payroll, compared to 1.92 percent in last year's report.) The 0.19 percent of payroll reduction in the actuarial deficit was primarily due to (i) lower long-range Medicare cost growth resulting from changed assumptions about the effect of increases in income,

technology, and health care prices on health care costs (about 0.23 percent of payroll) and (ii) provider payment reductions due to legislation (about 0.03 percent of payroll). Partially offsetting these favorable changes is the assumption that a higher proportion of Medicare beneficiaries will enroll in MA plans (about 0.07 percent of payroll).

Part B outlays were 1.5 percent of GDP in 2014, and the Board projects that they will grow to just over 2.4 percent by 2089 under current law. These long-range projections are lower than those in last year's report under current law and much lower than under last year's projected baseline mostly due to (i) recent legislation that changed physician payments and (ii) lower assumptions for long-range health care cost growth for other Part B services. (Part B costs in 2089 would be 4.0 percent under the illustrative alternative scenario.)

The Board estimates that Part D outlays will increase from 0.5 percent of GDP in 2014 to about 1.4 percent by 2089. These long-range outlay projections are slightly lower than those shown in last year's report primarily due to the assumptions about long-range health care cost growth as mentioned above.

Transfers from the general fund finance about three-quarters of SMI costs and are central to the automatic financial balance of the fund's two accounts. Such transfers represent a large and growing requirement for the Federal budget. SMI general revenues currently equal 1.4 percent of GDP and would increase to an estimated 2.8 percent in 2089.

Conclusion

Total Medicare expenditures were $613 billion in 2014. The Board projects that expenditures will increase in future years at a somewhat faster pace than either aggregate workers' earnings or the economy overall and that, as a percentage of GDP, they will increase from 3.5 percent in 2014 to 6.0 percent by 2089 (based on the Trustees' intermediate set of assumptions). If the reduced price increases for physicians and other health services under Medicare are not sustained and do not take full effect in the long range as in the illustrative alternative projection, then Medicare spending would instead represent roughly 9.1 percent of GDP in 2089. Growth under any of these scenarios, if realized, would substantially increase the strain on the nation's workers, the economy, Medicare beneficiaries, and the Federal budget.

Overview

The Trustees project that HI tax income and other dedicated revenues will fall short of HI expenditures in most future years. The HI trust fund does not meet either the Trustees' test of short-range financial adequacy or their test of long-range close actuarial balance.

The Part B and Part D accounts in the SMI trust fund are adequately financed because premium and general revenue income are reset each year to cover expected costs. Such financing, however, would have to increase faster than the economy to cover expected expenditure growth.

The financial projections in this report indicate a need for additional steps to address Medicare's remaining financial challenges. Consideration of further reforms should occur in the near future. The sooner solutions are enacted, the more flexible and gradual they can be. Moreover, the early introduction of reforms increases the time available for affected individuals and organizations—including health care providers, beneficiaries, and taxpayers—to adjust their expectations and behavior. The Trustees recommend that Congress and the executive branch work closely together with a sense of urgency to address the depletion of the HI trust fund and the projected growth in HI (Part A) and SMI (Parts B and D) expenditures.

B. MEDICARE DATA FOR CALENDAR YEAR 2014

HI (Part A) and SMI (Parts B and D) have separate trust funds, sources of revenue, and categories of expenditures. Table II.B1 presents Medicare data for calendar year 2014, in total and for each part of the program. For fee-for-service Medicare, the largest category of Part A expenditures is inpatient hospital services, while the largest Part B expenditure category is physician services. Payments to private health plans for providing Part A and Part B services currently represent roughly 30 percent of total A and B benefit outlays.

Table II.B1.—Medicare Data for Calendar Year 2014

		SMI		
	HI or Part A	Part B	Part D	Total
Assets at end of 2013 (billions)	$205.4	$74.1	$1.0	$280.5
Total income	$261.2	$259.8	$78.2	$599.3
Payroll taxes	227.4	—	—	227.4
Interest	8.8	2.4	0.0	11.2
Taxation of benefits	18.1	—	—	18.1
Premiums	3.3	65.6	11.4	80.3
General revenue	2.0	188.5	58.1	248.6
Transfers from States	—	—	8.7	8.7
Other	1.6	3.3	—	5.0
Total expenditures	$269.3	$265.9	$78.1	$613.3
Benefits	264.9	261.9	77.7	604.5
Hospital	139.2	44.1	—	183.3
Skilled nursing facility	28.8	—	—	28.8
Home health care	6.6	11.2	—	17.8
Physician fee schedule services	—	69.2	—	69.2
Private health plans (Part C)	74.0	85.7	—	159.7
Prescription drugs	—	—	77.7	77.7
Other	16.3	51.7	—	68.0
Administrative expenses	$4.5	$4.0	$0.4	$8.8
Net change in assets	−$8.1	−$6.1	$0.1	−$14.1
Assets at end of 2014	$197.3	$68.1	$1.1	$266.4
Enrollment (millions)				
Aged	44.6	41.3	n/a	44.9
Disabled	8.9	8.1	n/a	8.9
Total	53.5	49.3	40.5	53.8
Average benefit per enrollee	$4,951	$5,308	$1,920	$12,179

Notes: 1. Totals do not necessarily equal the sums of rounded components.
2. n/a indicates data are not available.

For HI, the primary source of financing is the payroll tax on covered earnings. Employers and employees each pay 1.45 percent of a worker's wages, while self-employed workers pay 2.9 percent of their net earnings. Starting in 2013, high-income workers pay an additional 0.9-percent tax on their earnings above an unindexed threshold ($200,000 for single taxpayers and $250,000 for married couples). Other HI revenue sources include a portion of the Federal income taxes that Social Security recipients with incomes above

certain unindexed thresholds pay on their benefits, as well as interest paid from the general fund on the U.S. Treasury securities held in the HI trust fund.

For SMI, transfers from the general fund of the Treasury represent the largest source of income and currently cover about 72 percent of program costs. Also, beneficiaries pay monthly premiums for Parts B and D that finance a portion of the total cost. As with HI, the U.S. Treasury securities held in the SMI trust fund earn interest paid from the general fund.

C. MEDICARE ASSUMPTIONS

Future Medicare expenditures will depend on a number of factors, including the size and composition of the population eligible for benefits, changes in the volume and intensity of services, and increases in the price per service. Future HI trust fund income will depend on the size of the covered work force and the level of workers' earnings, and future SMI trust fund income will depend on projected program costs. These factors will depend in turn upon future birth rates, death rates, labor force participation rates, wage increases, and many other economic and demographic factors affecting Medicare. To illustrate the uncertainty and sensitivity inherent in estimates of future Medicare trust fund operations, the Board has prepared projections under a *low-cost* and a *high-cost* set of economic and demographic assumptions as well as under an intermediate set.

Table II.C1 summarizes the key assumptions used in this report. Many of the demographic and economic variables that determine Medicare costs and income are common to the Old-Age, Survivors, and Disability Insurance (OASDI) program, and the OASDI annual report explains these variables in detail. These variables include changes in the Consumer Price Index (CPI) and wages, real interest rates, fertility rates, mortality rates, and net immigration levels. (*Real* indicates that the effects of inflation have been removed.) The assumptions vary, in most cases, from year to year during the first 5 to 30 years before reaching the ultimate values assumed for the remainder of the 75-year projection period.

Other assumptions are specific to Medicare. As with all of the assumptions underlying the financial projections, the Trustees review the Medicare-specific assumptions annually and update them based on the latest available data and analysis of trends. In addition, the assumptions and projection methodology are subject to periodic review by independent panels of expert actuaries and economists. The most recent review occurred with the 2010-2011 Technical Review Panel on the Medicare Trustees Report.[7]

[7]The Panel's final report is available at http://aspe.hhs.gov/health/reports/2013/MedicareTech/TechnicalPanelReport2010-2011.pdf.

Table II.C1.—Ultimate Assumptions

	Intermediate	Low-Cost	High-Cost
Economic:			
Annual percentage change in:			
Gross Domestic Product (GDP) per capita[1]	4.0	5.2	2.7
Average wage in covered employment	3.9	5.2	2.6
Private nonfarm business multifactor productivity[2]	1.1	—	—
Consumer Price Index (CPI)	2.7	3.4	2.0
Real-wage differential (percent)	1.2	1.8	0.6
Real interest rate (percent)	2.9	3.4	2.4
Demographic:			
Total fertility rate (children per woman)	2.00	2.20	1.80
Average annual percentage reduction in total age-sex adjusted death rates from 2039 to 2089	0.71	0.40	1.02
Net annual immigration	1,155,000	1,465,000	850,000
Health cost growth:			
Annual percentage change in per beneficiary Medicare expenditures (excluding demographic impacts)[1]			
HI (Part A)	3.8[3]	[4]	[4]
SMI Part B	3.8[3]	[4]	[4]
SMI Part D	4.7[3]	[4]	[4]
Total Medicare	4.0[3]	[4]	[4]

[1]The assumed ultimate increases in per capita GDP and per beneficiary Medicare expenditures can also be expressed in real terms, adjusted to remove the impact of assumed inflation. When adjusted by the chain-weighted GDP price index, assumed real per capita GDP growth under the intermediate assumptions is 1.7 percent, and real per beneficiary Medicare cost growth is 1.5 percent, 1.3 percent, and 2.4 percent for Parts A, B, and D, respectively.
[2]Private nonfarm business multifactor productivity is published by the Bureau of Labor Statistics and is used as the *economy-wide private nonfarm business multifactor productivity* to adjust certain provider payment updates.
[3]Amounts shown represent the average cost growth assumption in the last 50 years of the projection. The year-by-year assumptions vary by following the path determined by the "factors contributing to growth" model. See text for the basis of these assumptions.
[4]See section III.B3 for further explanation of the Part A alternative (low-cost and high-cost) assumptions. Long-range alternative projections are not prepared for Parts B and D.

Section IV.D describes the methodology used to derive the long-range cost growth assumptions, which are based on the "factors contributing to growth" model and are developed for the following four categories of providers:

(i) *All HI, and some SMI Part B, services that are updated annually by provider input price increases less the increase in economy-wide productivity.*

HI services are inpatient hospital, skilled nursing facility, home health, and hospice. The primary Part B services affected are outpatient hospital, home health, and dialysis. Under the Trustees' intermediate economic assumptions, the year-by-year per capita increases for these provider services start at 4.0 percent in 2039, or GDP plus 0.0 percent, declining gradually to 3.6 percent in 2089, or GDP minus 0.3 percent.

(ii) *Physician services*

Payment rate updates are 0.75 percent per year under the assumption that all physicians would be participating in *alternative payment models* (APMs). The year-by-year per capita growth rates for physician payments are assumed to be 3.3 percent in 2039, or GDP minus 0.7 percent, declining to 2.8 percent in 2089, or GDP minus 1.1 percent.

(iii) *Certain SMI Part B services that are updated annually by the CPI increase less the increase in productivity.*

Such services include durable medical equipment,[8] care at ambulatory surgical centers, ambulance services, and medical supplies. The Trustees assume the per beneficiary year-by-year rates to be 3.3 percent in 2039, or GDP minus 0.7 percent, declining to 2.8 percent in 2089, or GDP minus 1.1 percent.

(iv) *All other Medicare services, for which payments are established based on market processes, such as prescription drugs provided through Part D and the remaining Part B services.*

These Part B outlays constitute an estimated 15 percent of total Part B expenditures in 2024 and consist mostly of payments for laboratory tests, physician-administered drugs, and small facility services. Medicare payments to Part D plans are based on a competitive-bidding process and are not affected by the productivity adjustments. Similarly, payments for the other Part B services are based on market factors.[9] The long-range per beneficiary cost growth rate for Part D and these Part B services is assumed to equal the increase in per capita national health expenditures as determined from the "factors contributing to growth" model. The corresponding year-by-year per capita growth rates for these services are 4.9 percent in 2039, or GDP plus 0.9 percent, declining to 4.4 percent by 2089, or GDP plus 0.5 percent.

After combining the rates of growth from the four long-range assumptions, the weighted average growth rate per beneficiary for Part B is 3.8 percent over the 50-year period 2039 through 2089, or

[8]Certain durable medical equipment (DME) is subject to competitive bidding, and the price is assumed to grow by the CPI increase less the increase in productivity, the same update specified for DME not subject to bidding.

[9]For example, physician-administered Part B drugs are reimbursed at the level of the average sales price in the market plus 6 percent.

GDP minus 0.2 percent, on average. When Parts A, B, and D are combined, the weighted average growth rate for Medicare is 4.0 percent, or GDP plus 0.0 percent, over this same period. Both rates are shown in table II.C1.

As in the past, the Trustees establish detailed growth rate assumptions for the initial 10 years (2015 through 2024) by individual type of service (for example, inpatient hospital care and physician services). These assumptions reflect recent trends and the impact of all provisions of the Medicare Access and CHIP Reauthorization Act of 2015, the Affordable Care Act, the Budget Control Act, and other applicable statutory provisions. For each of Parts A, B, and D, the assumed growth rates for years 11 through 25 of the projection period (adjusted to reflect discontinuities in yearly payment policies) are set by interpolating between the rate at the end of the short-range projection period and the rate at the start of the last 50 years of the long-range period described above.

The basis for the Medicare cost growth rate assumptions, described above, has been chosen primarily to incorporate the productivity adjustments and the physician payment structure in a relatively simple, straightforward manner and with the assumption that these elements of current law will operate in all future years as specified. The Trustees use this approach in part due to the uncertainty associated with these provisions and in part due to the difficulty of modeling such consequences as access to care, health status, and utilization if these provisions of current law do not operate as intended.[10] They have incorporated the effects of changes in payment mechanisms, delivery systems, and other aspects of health care that have been implemented recently, including modest savings from accountable care organizations. However, they have not modeled the possible effects of future changes that could arise in response to the payment limitations and the ACA-directed research activities, nor have they considered the potential effects of sustained slower payment increases on provider participation, beneficiary access to care, quality of services, and other factors.[11]

Consistent with the practice in recent reports, the Trustees asked the Office of the Actuary to develop the illustrative alternative

[10]For a detailed discussion of uncertainty, see appendix V.C.

[11]The 2010-2011 Medicare Technical Review Panel considered these issues at some length. Their final report contains an extensive discussion of alternative long-term scenarios with different possible behavioral reactions by providers and with varying implications for the financial viability of providers and the availability and quality of health care services for beneficiaries.

projections. This information is presented in appendix V.C. An actuarial memorandum on the illustrative alternative is available on the CMS website.[12] For the long range, the illustrative alternative projection assumes that the economy-wide productivity adjustments would be gradually phased out during 2020 to 2034 and replaced with adjustments based on estimated health-specific provider productivity gains of 0.4 percent annually and that physician payment updates would transition from 0.0 percent in 2024 to 2.3 percent for 2039 and later. The year-by-year growth rate assumptions for HI and SMI Part B under the illustrative alternative projections are approximately 4.9 percent in 2039, or GDP plus 0.9 percent, declining to 4.4 percent by 2089, or GDP plus 0.5 percent. On average over this period, the growth rate of per beneficiary expenditures for these services is equal to the growth rate for per capita national health expenditures, as described previously for Part D and other Medicare services for which price updates are based on market processes.

For the HI high-cost assumptions, the assumed annual increase in the ratio of aggregate costs to taxable payroll (the cost rate) during the initial 25-year period is 2 percentage points greater than under the intermediate assumptions. Under the low-cost assumptions, the assumed annual rate of increase in the cost rate for the initial period is 2 percentage points less than under the intermediate assumptions. After 25 years, the Trustees assume that the 2-percentage-point differentials will decline gradually to zero in 2063, after which the growth in cost rates is the same under all three sets of assumptions. The low-cost and high-cost projections shown in this report provide an indication of how Medicare expenditures could vary in the future as a result of different economic and demographic trends.[13]

While it is reasonable to expect that actual economic and demographic experience will fall within the range defined by the three alternative sets of assumptions, there can be no assurances that it will do so in light of the wide variations in these factors over past decades. In general, readers can place a greater degree of confidence in the assumptions and estimates for the earlier years than for the later years. Nonetheless, even for the earlier years, the estimates are only an indication of the expected trends and the general ranges of future Medicare experience. Also, as a result of the uncertain long-range adequacy of physician payments and payments affected by the

[12]See http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/Downloads/2015TRAlternativeScenario.pdf.

[13]Due to the automatic financing provisions for Parts B and D, the Trustees expect that the SMI trust fund will be adequately financed in all future years and so have not conducted a long-range analysis using high-cost and low-cost assumptions.

statutory productivity adjustments, actual future Medicare expenditures could exceed the intermediate projections shown in this report, possibly by quite large amounts. Reference to key results under the illustrative alternative projection demonstrates this potential understatement.

D. FINANCIAL OUTLOOK FOR THE MEDICARE PROGRAM

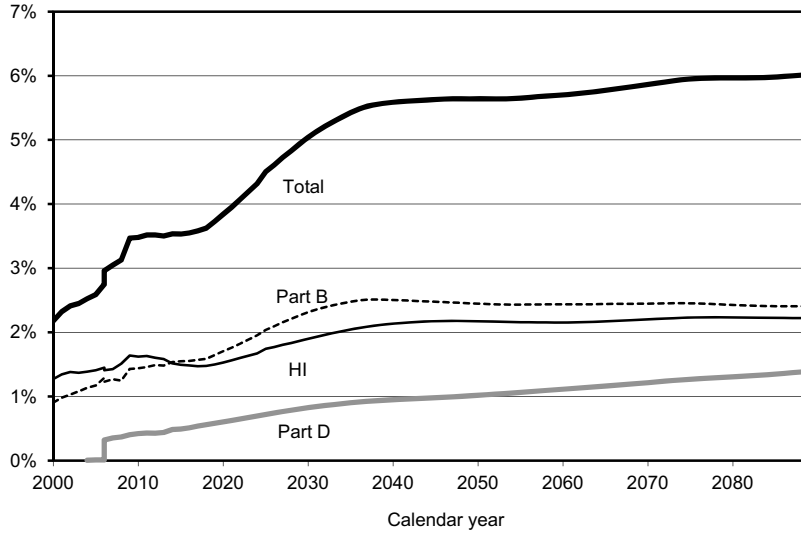
This report evaluates the financial status of the HI and SMI trust funds. For HI, the Trustees apply formal tests of financial status for both the short range and the long range; for SMI, the Trustees assess the ability of the trust fund to meet incurred costs over the period for which financing has been set.

HI and SMI are financed in very different ways. Within SMI, current law provides for the annual determination of Part B and Part D beneficiary premiums and general revenue financing to cover expected costs for the following year. In contrast, HI is subject to substantially greater variation in asset growth, since employee and employer tax rates under current law do not change or adjust to meet expenditures except through new legislation.

Despite the significant differences in benefit provisions and financing, the two components of Medicare are closely related. HI and SMI operate in an interdependent health care system. Most Medicare beneficiaries are enrolled in HI and SMI Parts B and D, and many receive services from all three. Accordingly, efforts to improve and reform either component must necessarily have repercussions for the other component. In view of the anticipated growth in Medicare expenditures, it is also important to consider the distribution among the various sources of revenues for financing Medicare and the manner in which this distribution will change over time.

This section reviews the projected total expenditures for the Medicare program, along with the primary sources of financing. Figure II.D1 shows projected costs as a percentage of GDP. Medicare expenditures represented 3.5 percent of GDP in 2014. Under current law, costs would increase to about 5.4 percent of GDP by 2035, largely due to the rapid growth in the number of beneficiaries, and then to 6.0 percent of GDP in 2089, with growth in health care cost per beneficiary becoming the larger factor later in the valuation period, particularly for Part D costs, which are not affected by legislated price reductions. (If the payment update constraints were phased down as in the illustrative alternative projections, then Medicare expenditures would reach an estimated 9.1 percent of GDP in 2089.)

Figure II.D1.—Medicare Expenditures as a Percentage of the Gross Domestic Product



Note: Percentages are affected by economic cycles.

The Medicare projections reflect (i) continuing growth in the volume and intensity of services provided per beneficiary throughout the projection period; (ii) the impact of a large increase in new beneficiaries, which began in 2011, as members of the 1946-1965 baby boom generation reach age 65 and become eligible to receive benefits (thereby increasing the annual growth in the number of beneficiaries from 2 percent to about 3 percent); and (iii) other key demographic trends, including future birth rates at roughly the same level as the last two decades and continuing improvements in life expectancy. See appendix V.A for recently passed legislation that is also included in the projections.

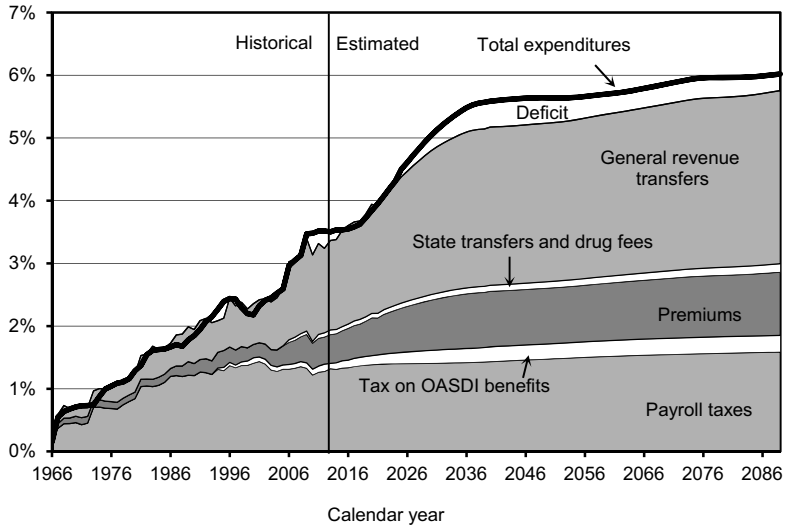
Most beneficiaries have the option to enroll in private health insurance plans that contract with Medicare to provide Part A and Part B medical services. The share of Medicare beneficiaries in such plans has risen rapidly in recent years; it reached 30.2 percent in 2014 from 12.8 percent in 2004. Plan costs for the standard benefit package can be significantly lower or higher than the corresponding cost for beneficiaries in the traditional or fee-for-service Medicare program. Prior to the ACA, private plans were generally paid a higher average amount, and they used the additional payments to reduce enrollee cost-sharing requirements, provide extra benefits, and/or reduce Part B and Part D premiums. These enhancements were valuable to enrollees but also resulted in higher Medicare costs

overall and higher premiums for all Part B beneficiaries, not just those enrolled in Medicare Advantage plans. The ACA requires a phase-in from 2012 through 2017 of payments to plans that are based on benchmarks that range from 95 to 115 percent of local fee-for-service Medicare costs, with bonus amounts payable for plans meeting high quality-of-care standards[14]. The Trustees project that the overall participation rate for private health plans will be almost 32 percent in 2015 and will reach about 35 percent in 2022, which is somewhat higher than assumed in prior reports primarily because enrollment in these plans has been less sensitive to ACA payment reductions than previously assumed.

Figure II.D2 shows the past and projected amounts of Medicare revenues under current law excluding interest income, which will not be a significant part of program financing in the long range as trust fund assets decline. The figure compares total Medicare expenditures to Medicare non-interest income—from HI payroll taxes, HI income from the taxation of Social Security benefits, SMI Part D State transfers for certain Medicaid beneficiaries, HI and SMI premiums, fees under the ACA on manufacturers and importers of brand-name prescription drugs (allocated to Part B), and HI and SMI statutory general revenues. For 2015, the Trustees expect total Medicare expenditures to continue to exceed non-interest revenue, but by only a very small margin due to the revenue increasing more rapidly than expenditures. Modest surpluses are projected for 2016-2020, but deficits are expected to return in 2021 and remain for the balance of the projection, as expenditures grow faster than revenue.

[14]Prior to the ACA, the benchmark range was generally 100 to 140 percent of fee-for-service costs.

Figure II.D2.—Medicare Sources of Non-Interest Income and Expenditures as a Percentage of the Gross Domestic Product



Note: Percentages are affected by economic cycles.

As shown in figure II.D2, for most of the historical period, payroll tax revenues increased steadily as a percentage of GDP due to increases in the HI payroll tax rate and in the limit on taxable earnings, the latter of which lawmakers eliminated in 1994. Under the ACA, beginning in 2013 the HI trust fund receives an additional 0.9-percent tax on earnings in excess of a threshold amount.[15] The Trustees project that, as a result of this provision, payroll taxes will grow slightly faster than GDP.[16] HI revenue from income taxes on Social Security benefits will gradually increase as a share of GDP as additional beneficiaries become subject to such taxes.

[15]The ACA also specifies that individuals with incomes greater than $200,000 per year and couples above $250,000 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.

[16]Although the Trustees expect total worker compensation to grow at the same rate as GDP, wages and salaries would increase more slowly and fringe benefits (health insurance costs in particular) more rapidly. Thus, taxable earnings would gradually decline as a percentage of GDP. Absent any change to the tax rate scheduled under current law, HI payroll tax revenue would similarly decrease as a percentage of GDP (since fringe benefits are not subject to this tax). Over time, however, a growing proportion of workers will exceed the fixed earnings thresholds specified in the ACA ($200,000 and $250,000) and will become subject to the additional 0.9-percent HI payroll tax. The net effect of these factors is an increasing trend in payroll taxes as a percentage of GDP.

The Trustees expect growth in SMI Part B and Part D premiums and general fund transfers to continue to outpace GDP growth and HI payroll tax growth in the future. This phenomenon occurs primarily because SMI revenue increases at the same rate as expenditures, whereas HI revenue does not. Accordingly, as the HI sources of revenue become increasingly inadequate to cover HI costs, SMI revenues will represent a growing share of total Medicare revenues. Beginning in 2009, as HI payroll tax receipts declined due to the recession and general revenue transfers increased, the latter income source became the largest single source of income to the Medicare program as a whole. General revenues are expected to remain level as a share of Medicare financing through 2023, to grow to about 48 percent by 2037, and then to stabilize thereafter. Growth in general revenue financing as a share of GDP adds significantly to the Federal budget pressures. SMI premiums will also grow in proportion to general revenue transfers, placing a growing burden on beneficiaries. For high-income enrollees, SMI premiums began to increase more rapidly in 2011 and will continue to do so as a result of ACA provisions that increase Part D premiums and freeze the income thresholds used to determine Part B and Part D income-related premiums for 2011-2019. MACRA contains further provisions that affect the income-related premium thresholds and that will result in more premium income to Part B and Part D.

The interrelationship between the Medicare program and the Federal budget is an important topic—one that will become increasingly critical over time as the general revenue requirements for SMI continue to grow. Transfers from the general fund are the major source of financing for the SMI trust fund and are central to the automatic financial balance of the fund's two accounts, while representing a large and growing requirement for the Federal budget. SMI general revenues currently equal 1.4 percent of GDP and will increase to an estimated 2.8 percent in 2089 under current law. (This projection is significantly lower than last year's due to the change in physician payments and the modification in the long-range health cost growth assumptions.) Moreover, in the absence of legislation to address the financial imbalance, interest earnings on trust fund assets and redemption of those assets will cover the difference between HI dedicated revenues and expenditures until 2030.[17] Both of these financial resources for the HI trust fund require cash transfers from the general fund of the Treasury, placing a further obligation on the budget. In 2029, these transactions would require

[17]After asset depletion in 2030, as described in the section II.E, no provision exists to use general revenues or any other means to cover the HI deficit.

general fund transfers equal to 0.2 percent of GDP. Appendix F describes the interrelationship between the Federal budget and the Medicare and Social Security trust funds; it illustrates the programs' long-range financial outlook from both a trust fund perspective and a budget perspective.

The Medicare Modernization Act requires the Board of Trustees to test whether the difference between program outlays and dedicated financing sources[18] exceeds 45 percent of Medicare outlays under current law. If this level is attained within the first 7 fiscal years of the projection, Federal law requires a determination of projected excess general revenue Medicare funding. The Trustees made such determinations in the 2006 through 2013 reports. For this year's report, however, the difference between program outlays and dedicated revenues is not expected to exceed 45 percent in fiscal years 2015 through 2021 (the first 7 years of the projection), and therefore the Trustees are not issuing this determination. (Section V.B contains additional details on these tests.)

This section has summarized the total financial obligation posed by Medicare and the manner in which it is financed. However, the HI and SMI components of Medicare have separate and distinct trust funds, each with its own sources of revenues and mandated expenditures. Accordingly, it is necessary to assess the financial status of each Medicare trust fund separately. Sections II.E and II.F present such assessments for the HI trust fund and the SMI trust fund, respectively.

[18]The dedicated financing sources are HI payroll taxes, the HI share of income taxes on Social Security benefits, Part B receipts from the new fees on manufacturers and importers of brand-name prescription drugs, Part D State transfers, and beneficiary premiums. These sources are the first four layers depicted in figure II.D2.

E. FINANCIAL STATUS OF THE HI TRUST FUND

1. 10-Year Actuarial Estimates (2015-2024)

Expenditures from the HI trust fund have exceeded income each year since 2008, with the fund deficit amounting to $8.1 billion in 2014. As a result of recently enacted legislation and the assumed continuation of the economic recovery, the Trustees project that HI income (which includes payments from the general fund) will exceed expenditures by about $2 billion in 2015 and that trust fund surpluses will continue for the next 8 years. Deficits are projected to return beginning in 2024 and to persist for the remainder of the projection period. Beginning in 2024, payment of expenditures in full and on time will continue to require redemption of trust fund assets until the trust fund's depletion in 2030.

Table II.E1 presents the projected operations of the HI trust fund under the intermediate assumptions for the next decade. At the beginning of 2015, HI assets represented 72 percent of annual expenditures. This ratio has declined from 150 percent since 2007. The Board has recommended an asset level at least equal to annual expenditures, to serve as an adequate contingency reserve in the event of adverse economic or other conditions.

The Trustees apply an explicit test of short-range financial adequacy, described in section III.B2 of this report. Based on the 10-year projection shown in table II.E1, the HI trust fund does not meet this test because estimated assets are below 100 percent of annual expenditures and are not projected to attain this level under the intermediate assumptions. This outlook indicates the need for prompt legislative action to achieve financial adequacy for the HI trust fund throughout the short-range period.

Table II.E1.—Estimated Operations of the HI Trust Fund under Intermediate Assumptions, Calendar Years 2014-2024

[Dollar amounts in billions]

Calendar year	Total income[1]	Total expenditures	Change in fund	Fund at year end	Ratio of assets to expenditures[2]
2014[3]	$261.2	$269.3	−$8.1	$197.3	76
2015	277.7	275.7	2.0	199.3	72
2016	295.5	289.0	6.5	205.8	69
2017	317.7	302.9	14.8	220.7	68
2018	339.1	319.8	19.3	240.0	69
2019	360.8	341.1	19.7	259.7	70
2020	382.5	366.0	16.5	276.2	71
2021	405.3	392.6	12.7	288.9	70
2022	428.3	421.3	7.0	295.9	69
2023	450.4	449.6	0.8	296.7	66
2024	472.9	479.6	−6.7	290.0	62

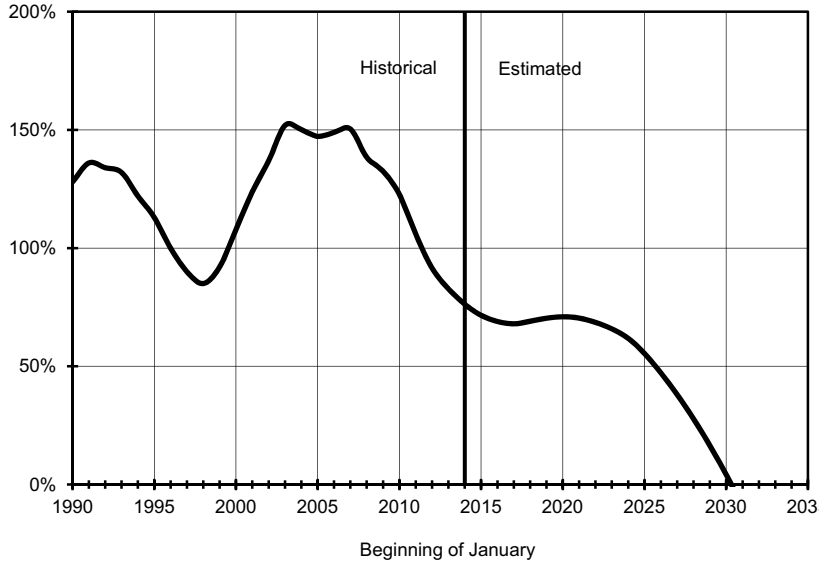
[1]Includes interest income.
[2]Ratio of assets in the fund at the beginning of the year to expenditures during the year.
[3]Figures for 2014 represent actual experience.

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

The short-range financial outlook for the HI trust fund is about the same as projected in last year's annual report, as factors causing improved finances are offset by other changes. Factors improving the outlook include lower utilization assumptions for inpatient hospital services, recent legislation, and improved economic and demographic assumptions. Factors worsening the short-range financial outlook include higher assumed enrollment in MA plans and changed assumptions for the skilled nursing facility market basket.

Under the intermediate assumptions, the assets of the HI trust fund would continue decreasing as a percentage of annual expenditures through the beginning of 2017 and then remain at approximately that level for most of the short-range projection period, as illustrated in figure II.E1. After 2022 the ratio starts to decline quickly until the fund is depleted in 2030, the same date projected last year. If assets were depleted, Medicare could pay health plans and providers of Part A services only to the extent allowed by ongoing tax revenues—and these revenues would be inadequate to fully cover costs. Beneficiary access to health care services would rapidly be curtailed. To date, Congress has never allowed the HI trust fund to become depleted.

Figure II.E1.—HI Trust Fund Balance at Beginning of Year as a Percentage of Annual Expenditures



There is substantial uncertainty in the economic, demographic, and health care projection factors for HI trust fund expenditures and revenues. Accordingly, the date of HI trust fund depletion could differ substantially in either direction from the 2030 intermediate estimate. Under the low-cost assumptions, trust fund assets would start to increase throughout the entire projection period. Under the high-cost assumptions, however, asset depletion would occur in 2022.

2. 75-Year Actuarial Estimates (2015-2089)

Each year, the Board prepares 75-year estimates of the financial and actuarial status of the HI trust fund. Although financial outcomes are inherently uncertain, particularly over periods as long as 75 years, such estimates are helpful for assessing the trust fund's long-term financial condition.

Due to the difficulty in comparing dollar values for different periods without some type of relative scale, the Trustees show income and expenditure amounts relative to the earnings in covered employment that are taxable under HI (referred to as *taxable payroll*). The ratio of HI tax income (including both payroll taxes and income from taxation of Social Security benefits, but excluding interest income) to taxable

payroll is called the *income rate*, and the ratio of expenditures to taxable payroll is the *cost rate*.[19]

The standard HI payroll tax rate is scheduled to remain constant at 2.90 percent (for employees and employers, combined). In addition, high-income workers pay an additional 0.9 percent of their earnings above $200,000 (for single workers) or $250,000 (for married couples filing joint income tax returns) in 2013 and later. Since these income thresholds are not indexed, over time an increasing proportion of workers and their earnings will become subject to the additional HI tax rate. (By the end of the long-range projection period, an estimated 80 percent of workers would be subject to this tax.) Thus, HI payroll tax revenues will increase steadily as a percentage of taxable payroll. HI income from taxation of Social Security benefits will also increase faster than taxable payroll because the income thresholds determining taxable benefits are not indexed for price inflation.

The cost rate declined from 2012 through 2014 and is projected to continue to decline through 2018, largely due to (i) expenditure growth that was constrained in part by the sequester and low payment updates and (ii) a rebound of taxable payroll growth from recession levels. After 2018 the cost rate is projected to rise primarily due to retirements of those in the baby boom generation and partly due to a projected return to modest health services cost growth. This cost rate increase is moderated by the accumulating effect of the productivity adjustments to provider price updates, which are estimated to reduce annual HI per capita cost growth by an average of 1.0 percent through 2024 and 1.1 percent thereafter. After 25, 50, and 75 years, for example, the prices paid to HI providers under current law would be 23 percent, 42 percent, and 56 percent lower, respectively, than prices absent the productivity reductions.

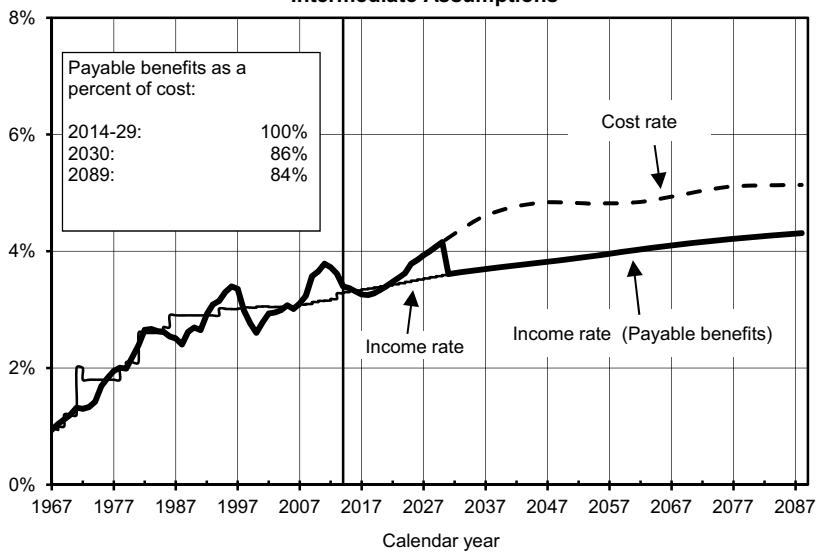
Figure II.E2 shows projected income and cost rates under the intermediate assumptions. As indicated, projected HI expenditures continue to exceed tax income for 2015. Thereafter, the income rate is projected to exceed the cost rate for several years before falling below it in 2022 and later. The HI cost rate increases more rapidly than the income rate through about 2045. The projected annual deficits expressed as a share of taxable payroll increase from a low of

[19]Includes estimated costs attributable to insured beneficiaries only, on an incurred basis. There are certain *uninsured beneficiaries* who are not entitled to HI coverage based on their work history but are eligible through special statutes. The Trustees expect benefits and administrative costs for these uninsured beneficiaries to be financed through general revenue transfers and premium payments, rather than through payroll taxes.

0.04 percent in 2022 to a high of 1.03 percent in 2045, decrease to 0.82 percent by 2060, and then vary within a range of 0.80 percent and 0.90 percent for the remainder of the projection period. The convergence of growth rates for income and costs after 2060 reflects the continuing effects of the slower payment rate updates under the ACA, assumed decelerating growth in the volume and intensity of services, and the increasing portion of earnings that are subjected to the additional 0.9-percent payroll tax. The percentage of expenditures covered by tax revenues is projected to decrease from 86 percent in 2030 to 79 percent in 2039 and then to increase to about 84 percent by the end of the projection period. (Under the illustrative alternative, the expenditures covered by tax revenues are projected to decline from 83 percent in 2030 to 72 percent in 2039 and then to decrease to about 51 percent by the end of the projection period.)

Figure II.E2 shows that expenditures are projected to exceed tax income in 2022. The projected excess of costs over income from 2022 to 2030 is covered by interest earnings and the redemption of trust fund assets. Both of these sources of trust fund financing require transfers from the general fund of the Treasury.

Figure II.E2.—Long-Range HI Income and Cost as a Percentage of Taxable Payroll, Intermediate Assumptions



It is possible to summarize the year-by-year cost rates and income rates shown in figure II.E2 into single values[20] representing, in effect,

[20]See section III.B for details on the summarized income and cost rates.

the average value over a given period. Based on the intermediate assumptions, the Trustees project an HI actuarial deficit of 0.68 percent of taxable payroll for the 75-year period under current law, which represents the difference between the summarized income rate of 3.84 percent and the corresponding cost rate of 4.52 percent. Based on this measure, the HI trust fund fails the Trustees' test for long-range financial balance, as it has for many years. (Under the illustrative alternative projections, the long-range HI deficit would be 1.70 percent of payroll.)

Lawmakers could address the long-range financial imbalance in many ways. They could immediately increase the standard 2.90-percent payroll tax by the amount of the actuarial deficit to 3.58 percent, or they could reduce expenditures by a corresponding amount. These changes would require an immediate 23-percent increase in the standard tax rate or an immediate 15-percent reduction in expenditures.[21] More realistically, the tax and/or benefit changes could occur gradually but would require ultimate adjustments that would be significantly higher than adjustments that were done immediately.

The projected HI cost rates shown in this report are lower than those from the 2014 report for all years in the long range, primarily due to modified income-technology and price elasticity assumptions.

[21]The corresponding immediate changes in the standard tax rate or expenditure levels are 59 percent and 31 percent, respectively, under the illustrative alternative projection. Under either of these two scenarios, tax income would initially be substantially greater than expenditures, and trust fund assets would accumulate rapidly. Subsequently, however, tax income would be inadequate, and assets would be drawn down to cover the difference. This example illustrates that if lawmakers designed legislative solutions only to eliminate the overall actuarial deficit, without consideration of such year-by-year patterns, then a substantial financial imbalance could still remain at the end of the period, and the long-range sustainability of the program could still be in doubt.

F. FINANCIAL STATUS OF THE SMI TRUST FUND

SMI differs fundamentally from HI in regard to the nature of its financing and the method by which its financial status is evaluated. SMI comprises two parts, Part B and Part D, each with its own separate account within the SMI trust fund. The Trustees must determine the financial status of the SMI trust fund by evaluating the financial status of each account separately, since there is no provision in the law for transferring assets or income between the Part B and Part D accounts. The nature of the financing for both parts of SMI is similar in that the law establishes a mechanism by which income from the Part B premium and the Part D premium, and the corresponding transfers from general revenues for each part, are sufficient to cover the following year's estimated expenditures. Accordingly, each account within SMI is automatically in financial balance under current law. This result contrasts with OASDI and HI, for which financing established many years earlier may prove significantly higher or lower than subsequent actual costs. Moreover, Part B and Part D are voluntary (whereas OASDI and HI are generally compulsory), and payroll taxes are not the source of income for these programs. The financial assessment described in this section differs in important ways from that for OASDI or HI.

1. 10-Year Actuarial Estimates (2015-2024)

Table II.F1 shows the estimated operations of the Part B account, the Part D account, and the total SMI trust fund under the intermediate assumptions during calendar years 2014 through 2024. For Part B, expenditures grew at an average annual rate of 5.3 percent over the past 5 years, exceeding GDP growth by 1.6 percentage points annually, on average. Estimated Part B cost increases average about 6.7 percent for the 5-year period 2014 to 2019, faster than the GDP growth rate of 5.3 percent for the same 5-year period.

Due to the nature of Part B financing, Part B income growth is normally quite close to expenditure growth. Assets were within the customary range[22] at the end of 2014, and assets held in the Part B account are projected to be slightly below this range at the end of 2015 due to higher-than-anticipated expenditures. For 2016 and

[22]The traditional measure used to evaluate the status of the Part B account of the SMI trust fund is defined as the ratio of the excess of Part B assets over Part B liabilities to the next year's Part B incurred expenditures. The customary range for this ratio is 15 to 20 percent; the CMS Office of the Actuary developed this range based on private health insurance standards and past studies indicating that this asset reserve level is sufficient to protect against adverse events.

later, financing levels and assets are expected to be increased in order to maintain an adequate contingency reserve.

In 2015 the monthly Part B premium rate is $104.90. For determining an individual's monthly premium rate, there is a hold-harmless provision in the law that limits the dollar increase in the premium to the dollar increase in an individual's Social Security benefit. This provision applies to most beneficiaries who have their premium deducted from their Social Security benefit, or roughly 70 percent of Part B enrollees.[23] Without the hold-harmless provision, beneficiaries would face a premium of $120.70 for 2016. However, because the cost-of-living adjustment for Social Security benefits is expected to be 0.0 percent for 2016, premiums would not increase from the 2015 level for those beneficiaries to whom the provision applies. Under current law, Part B premiums for other beneficiaries must be raised substantially to offset premiums foregone due to the hold-harmless provision, to prevent asset exhaustion, and to maintain a contingency reserve that accommodates normal financial variation. Accordingly, under the intermediate economic assumptions, the estimated monthly premium in 2016 for these other beneficiaries is $159.30, which is matched by general revenue transfers.

The estimates shown in the main body of the report reflect current law. In the 2014 report, the income, expenditures, and assets for Part B shown throughout the tables reflected the *projected baseline* scenario, which assumed an override of the SGR payment provisions and an increase in the physician fee schedule equal to the average of the most recent 10 years of SGR overrides (through March 2015) or 0.6 percent. Since recent legislation has replaced the SGR system with specified payment updates for physicians, the tables in this report reflect current law.

[23]New enrollees during the year, enrollees who do not receive a Social Security benefit check, and enrollees with high incomes who are subject to the income-related premium adjustment are not eligible for the hold-harmless provision. Also, State Medicaid programs pay the full premium for dual Medicare-Medicaid beneficiaries. About 30 percent of Part B enrollees are in these categories.

Table II.F1.—Estimated Operations of the SMI Trust Fund under Intermediate Assumptions, Calendar Years 2014-2024

[Dollar amounts in billions]

Calendar year	Total income[1]	Total expenditures	Change in fund	Fund at year end
Part B account:				
2014[2]	$259.8	$265.9	−$6.1	$68.1
2015	280.9[3]	280.7	0.2	68.3
2016	306.7[3]	298.0	8.7	77.0
2017	326.4	318.0	8.5	85.4
2018	341.4	338.6	2.8	88.2
2019	376.7	366.9	9.7	97.9
2020	424.3[3]	402.2	22.2	120.1
2021	429.7[3]	435.6	−5.9	114.1
2022	481.2	472.1	9.1	123.2
2023	521.4	511.4	9.9	133.1
2024	565.4	552.5	12.9	146.0
Part D account:				
2014[2]	78.2	78.1	0.1	1.1
2015	92.4[3]	92.7	−0.3	0.7
2016	101.1[3]	101.0	0.1	0.8
2017	110.9	110.8	0.1	0.9
2018	119.8	119.7	0.1	1.0
2019	131.3	131.2	0.1	1.1
2020	143.5[3]	143.4	0.1	1.2
2021	155.0[3]	154.9	0.1	1.3
2022	168.3	168.2	0.1	1.4
2023	182.4	182.3	0.1	1.5
2024	197.4	197.3	0.1	1.6
Total SMI:				
2014[2]	338.0	344.0	−6.0	69.1
2015	373.3[3]	373.4	−0.1	69.0
2016	407.8[3]	399.0	8.8	77.8
2017	437.3	428.8	8.5	86.3
2018	461.2	458.4	2.8	89.2
2019	508.0	498.2	9.8	99.0
2020	567.9[3]	545.6	22.3	121.3
2021	584.7[3]	590.5	−5.8	115.4
2022	649.5	640.3	9.2	124.6
2023	703.8	693.7	10.0	134.6
2024	762.8	749.8	13.0	147.6

[1]Includes interest income.
[2]Figures for 2014 represent actual experience.
[3]Section 708 of the Social Security Act modifies the provisions for the payment of Social Security benefits when the regularly designated day falls on a Saturday, Sunday, or legal public holiday. Payment of those benefits normally due January 3, 2016 is expected to occur on December 31, 2015. Consequently, the Part B and Part D premiums withheld from these benefits and the associated Part B general revenue contributions are expected to be added to the respective Part B or Part D account on December 31, 2015. Similarly, the payment date for those benefits normally due January 3, 2021 will be December 31, 2020.

The projected short-range Part B and total SMI expenditures shown in table II.F1 are higher than the corresponding amounts in the 2014 Trustees Report, which were based on the *projected baseline* rather than current law. Among the reasons are (i) higher-than-expected actual spending in 2014 for most types of services; (ii) higher assumed volume and intensity growth for some types of service due to the most recent experience; and (iii) MACRA provisions that increased Part B spending.

Overview

The Medicare prescription drug benefit began full operation in 2006. For the 10-year period 2014 to 2024, the Trustees project that income and expenditures for the Part D account will grow at an average annual rate of 9.7 percent, due to expected further increases in enrollment and growth in per capita drug costs. As with Part B, income and outgo would remain in balance as a result of the annual adjustment of premium and general revenue income to cover costs. The appropriation for Part D general revenues has generally been set such that amounts can be transferred to the Part D account on an as-needed basis. When this process is implemented, there is no need to maintain a contingency reserve.

The projected Part D costs shown in table II.F1 and elsewhere in this report are higher than those in the 2014 report. The difference is primarily attributable to a higher projected drug cost trend, particularly for certain high-cost specialty drugs.

The primary test of financial adequacy for Parts B and D pertains to the level of the financing established for a given period (normally, through the end of the current calendar year). The financing for each part of SMI is considered satisfactory if it is sufficient to fund all services, including benefits and administrative expenses, provided through a given period. In addition, to protect against the possibility that cost increases under either part of SMI will be higher than expected, the accounts of the trust fund would normally need assets adequate to cover a reasonable degree of variation between actual and projected costs. For Part B, as stated previously, the Trustees estimate that the financing established through December 2015 will be sufficient to cover benefits and administrative costs incurred through that time period and that assets will be adequate to cover potential variations in costs as a result of new legislation or cost growth factors that exceed expectations. The estimated financing established for Part D, together with the flexible appropriation authority for this trust fund account, would be sufficient to cover benefits and administrative costs incurred through 2015.

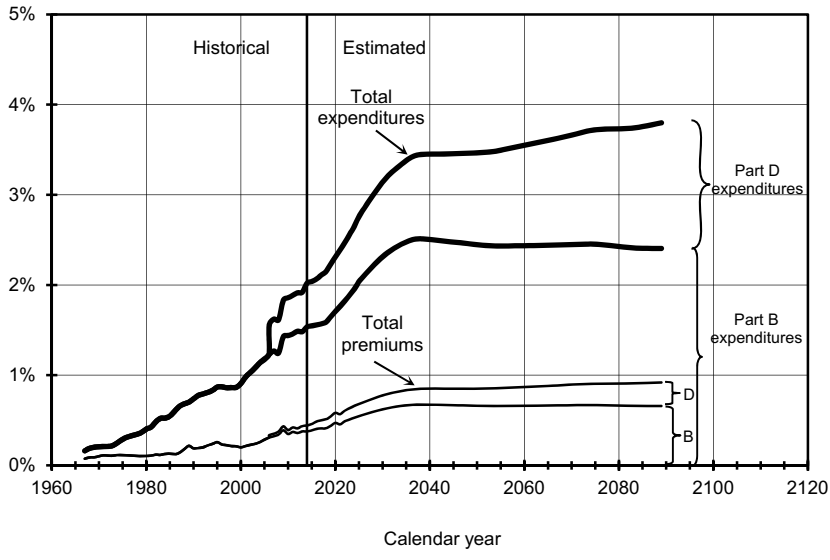
The amount of the contingency reserve needed in Part B is normally much smaller (both in absolute dollars and as a fraction of annual costs) than in HI or OASDI. A smaller reserve is adequate because the premium rate and corresponding general revenue transfers for Part B are determined annually based on estimated future costs, while the HI and OASDI payroll tax rates are fixed under law and are therefore much more difficult to adjust should circumstances change. A statutory competitive bidding process establishes Part D revenues annually to cover estimated costs. Moreover, the flexible

appropriation authority established by lawmakers for Part D allows additional general fund financing if costs are higher than anticipated.

2. 75-Year Actuarial Estimates (2015-2089)

Figure II.F1 shows past and projected total SMI expenditures and premium income as a percentage of the Gross Domestic Product (GDP). Annual SMI expenditures grew from about 1.2 percent of GDP in 2005 to 1.6 percent of GDP in 2006 with the commencement of prescription drug coverage, and currently they amount to 2.0 percent of GDP. Under current law, SMI expenditures would grow to about 3.5 percent of GDP within 25 years and to 3.8 percent by the end of the projection period. (Under the illustrative alternative, total SMI expenditures in 2089 would be 5.4 percent of GDP.)

Figure II.F1.—SMI Expenditures and Premiums as a Percentage of the Gross Domestic Product



Note: Percentages are affected by economic cycles.

3. Implications of SMI Cost Growth

Financing for the SMI trust fund is adequate because beneficiary premiums and general revenue contributions, for both Part B and Part D, are established annually to cover the expected costs for the upcoming year. Should actual costs exceed those anticipated when the financing is determined, future financing rates can include adjustments to recover the shortfall. Likewise, should actual costs be less than those anticipated, the savings would result in lower future

financing rates. As long as the future financing rates continue to cover the following year's estimated costs, both parts of the SMI trust fund will remain financially solvent.

A critical issue for the SMI program is the impact of the rapid growth of SMI costs, which places steadily increasing demands on beneficiaries and taxpayers. This section compares the past and projected growth in SMI costs with GDP growth; it also assesses the implications of the rapid growth on beneficiaries and the budget of the Federal Government.

Table II.F2 compares the growth in SMI expenditures with that of the economy as a whole. SMI costs are projected to continue to outpace growth in GDP but at a slower rate compared to the last 10 years. The relatively high growth during the period 2015-2024 is due to the continuing retirement of the baby boom generation, further economic recovery, and modest increases in cost trends. Growth rates are projected to decline during the 2025-2039 period primarily as a result of a deceleration in beneficiary population growth. For the last 50 years of the projection period, cost growth moderates further due to the continued deceleration in beneficiary population growth and lower ultimate growth rate assumptions.

Table II.F2.—Average Annual Rates of Growth in SMI and the Economy

[In percent]

Calendar years	SMI			U.S. Economy			Growth differential[1]
	Beneficiary population	Per capita expenditures	Total expenditures	Total population	Per capita GDP	Total GDP	
Historical data:							
1968-1994	2.5%	12.2%	15.0%	1.0%	7.2%	8.2%	6.3%
1995-2004	1.1	7.5	8.7	1.0	4.3	5.3	3.2
2005-2014	2.3	7.1[2]	9.7[2]	0.8	2.7	3.6	5.9[2]
Intermediate estimates:							
2015-2024	2.8	5.0	7.9	0.9	4.1	5.0	2.7
2025-2039	1.4	4.8	6.3	0.7	3.8	4.5	1.8
2040-2064	0.6	4.0	4.6	0.5	4.0	4.5	0.2
2065-2089	0.7	3.9	4.6	0.4	4.0	4.4	0.2

[1]Excess of total SMI expenditure growth above total GDP growth, calculated as a multiplicative differential.

[2]Includes the addition of the prescription drug benefit to the SMI program in 2006. Excluding 2006, the average annual per capita expenditure increase is 4.3 percent, the total expenditure increase is 6.7 percent, and the growth differential is 3.4 percent.

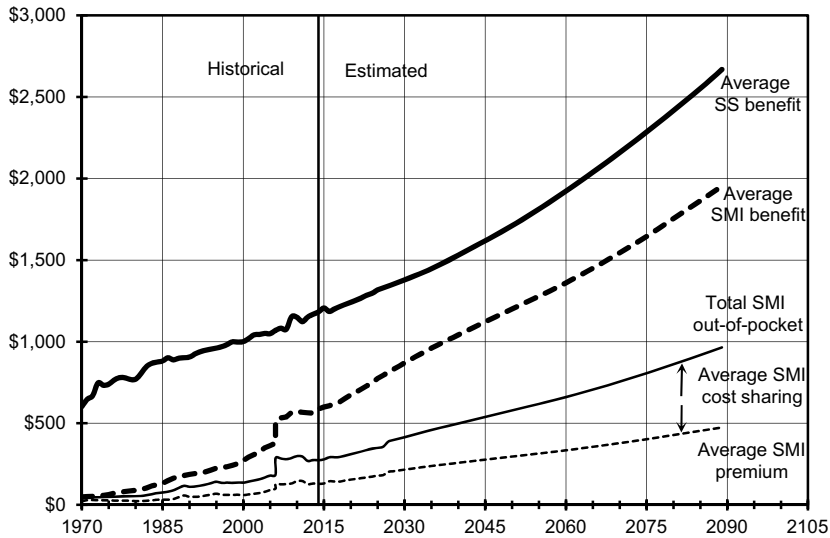
As SMI per capita benefits grow faster than average income or per capita GDP, the premiums and coinsurance amounts paid by beneficiaries represent a growing share of their total income. Figure II.F2 compares past and projected growth in average benefits for SMI versus Social Security. The figure also shows amounts for the average SMI premium payments and average cost-sharing payments.

To facilitate comparison across long time periods, all values are in constant 2014 dollars.

Over time, the average Social Security benefit tends to increase at about the rate of growth in average earnings. Health care costs generally reflect increases in the earnings of health care professionals, growth in the utilization and intensity of services, and other medical cost inflation. As indicated in figure II.F2, average SMI benefits in 1970 were only about one-twelfth the level of average Social Security benefits but had grown to more than one-third by 2005. With the introduction of the Part D prescription drug benefit in 2006, this ratio grew to almost one-half. Under the intermediate projections, SMI benefits would continue increasing at a faster rate and would represent about four-fifths of the average Social Security retired-worker benefit in 2089.

Figure II.F2.—Comparison of Average Monthly SMI Benefits, Premiums, and Cost Sharing to the Average Monthly Social Security Benefit

[Amounts in constant 2014 dollars]



Average beneficiary premiums and cost-sharing payments for SMI will increase at about the same rate as average SMI benefits.[24] Thus, a growing proportion of most beneficiaries' Social Security and other income would be necessary over time to pay total out-of-pocket costs for SMI, including both premiums and cost-sharing amounts. Most

[24]As a result, the projected ratio of average SMI out-of-pocket payments to average SMI benefits is nearly constant over time.

SMI enrollees have other income in addition to Social Security benefits. Other possible sources include earnings from employment, employer-sponsored pension benefits, and investment earnings. In addition, most draw down their accumulated assets to supplement their income in retirement. For simplicity, the comparisons in figure II.F2 apply to Social Security benefits only; a comparison of average SMI premiums and cost-sharing amounts to average total beneficiary income would likely lead to similar conclusions. For illustration, the Trustees estimate that the average Part B plus Part D premium in 2015 would equal about 11 percent of the average Social Security benefit but would increase to an estimated 18 percent in 2089. Similarly, an average cost-sharing amount in 2015 would be equivalent to about 12 percent of the Social Security benefit but would increase to about 18 percent in 2089.

The availability of SMI Part B and Part D benefits greatly reduces the costs that beneficiaries would otherwise pay for health care services. The introduction of the prescription drug benefit increased beneficiaries' costs for SMI premiums and cost sharing, but reduced their costs for previously uncovered services by substantially more. Figure II.F2 highlights the impact of rapid cost growth for a given SMI benefit package.

The average OASI benefit amount for all retired workers is the basis for the Social Security benefits shown in figure II.F2; individual retirees may receive significantly more or less than the average, depending on their past earnings. For purposes of illustration, figure II.F2 shows the average SMI benefit value and cost-sharing liability for all beneficiaries. The value of SMI benefits to individual enrollees and their cost-sharing payments vary even more substantially than OASI benefits, depending on their income, assets, and use of covered health services in a given year. In particular, Medicaid pays Part B premiums and cost-sharing amounts for beneficiaries with very low incomes, and the Medicare low-income drug subsidy pays the corresponding Part D amounts (except for nominal copayments). Moreover, Part B beneficiaries with high incomes have been required to pay a higher income-related premium since 2007, and Part D enrollees have been required to pay an income-related premium since 2011. Further information on the nature of this comparison, and on the variations from the average results, is available in a memorandum by the CMS Office of the Actuary at http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/Beneficiaryoop.html.

Another way to evaluate the implications of rapid SMI cost growth is to compare government contributions to the SMI trust fund with total Federal income taxes (personal and corporate income taxes). Table II.F3 indicates that SMI general revenues were equivalent to about 12.0 percent of total Federal income taxes in fiscal year 2008 and were equivalent to 13.7 percent of such taxes in fiscal year 2014. This ratio was noticeably higher in the interim due to the effects of the recession. Should such taxes in the future maintain their historical average level of the last 50 years relative to the national economy, then, based on the intermediate assumptions, SMI general revenue financing in 2089 would represent about 26.0 percent of total income taxes.

Table II.F3.—SMI General Revenues as a Percentage of Personal and Corporate Federal Income Taxes

Fiscal year	Percentage of income taxes[1]
Historical data:	
1970	0.8%
1980	2.2
1990	5.9
2000	5.4
2008	12.0
2009	17.7
2010	19.2
2011	17.2
2012	14.7
2013	13.7
2014	13.7
Intermediate estimates:	
2015	13.9
2020	16.2
2030	21.9
2040	24.1
2050	24.1
2060	24.6
2070	25.3
2080	25.7

[1]Includes the Part D prescription drug benefit beginning in 2006.

These examples illustrate the significant impact of SMI expenditure growth on beneficiaries, taxpayers, and the Federal budget. The projected SMI expenditure increases associated with the cost of providing health care, plus the impact of the baby boom generation reaching eligibility age, would continue to require a growing share of the economic resources available to finance these costs. This outlook reinforces the Trustees' recommendation for development and enactment of further reforms to reduce the rate of growth in SMI expenditures.

G. CONCLUSION

Total Medicare expenditures were $613 billion in 2014, and the Board projects that they will increase in most future years at a somewhat faster pace than either aggregate workers' earnings or the economy overall. The faster increase is primarily due to the number of beneficiaries increasing more rapidly than the number of workers, and partly due to per beneficiary expenditure growth slightly exceeding growth in per capita GDP. Based on the intermediate set of assumptions under current law, expenditures as a percentage of GDP would increase from the current 3.5 percent to a projected 6.0 percent by 2089.

The HI trust fund fails to meet the Board of Trustees' short-range test of financial adequacy. In addition, as in past reports, the HI trust fund fails to meet the Trustees' long-range test of close actuarial balance.

HI has experienced deficits from 2008 through 2014, but annual surpluses are expected for the next 9 years before deficits return for the remainder of the 75-year projection period. The projected trust fund depletion date is 2030, the same as estimated in last year's report. Actual HI expenditures in 2014 were about the same as the previous estimate; however, the projections are slightly higher in the short range and then are lower in the long range due to lower health care cost growth assumptions. Actual HI tax income in 2014 was slightly higher than previously projected, and projections for HI tax income after 2019 are higher, mostly due to slower assumed growth in employer-sponsored health insurance—a factor that increases wages.

The HI actuarial deficit in this year's report is 0.68 percent of taxable payroll, down from 0.87 percent in last year's report. This result is due primarily to changed assumptions about the effect of increases in income, technology, and health care prices on health care costs.

The financial outlook for SMI is fundamentally different than for HI due to the statutory differences in the methods of financing for these two components of Medicare. The Trustees project that both the Part B and Part D accounts of the SMI trust fund will remain in financial balance for all future years because beneficiary premiums and general revenue transfers will be set at a level to meet expected costs each year. However, SMI costs are projected to almost double as a share of GDP over the next 75 years, from 2.0 percent to 3.8 percent under current law. The projected Part B costs in this report are

higher over the short-range period than the comparable projections in the previous report due to higher-than-expected costs in recent years. The Part D short-range projections are higher than in past years' reports, largely due to a higher projected drug cost trend, particularly for high-cost specialty drugs. Part B long-range projections are lower than both the current-law and projected baseline estimates in last year's report due to the lower physician price updates under MACRA. Lower long-range health care cost growth assumptions relative to those in the 2014 report decrease costs for all parts of Medicare, including Parts B and D.

The financial projections shown for the Medicare program in this report reflect substantial, but very uncertain, cost savings deriving from provisions of the ACA and MACRA that lower increases in Medicare payment rates to most categories of health care providers. Without fundamental change in the current delivery system, these adjustments would probably not be viable indefinitely.

In view of these issues with provider payment rates, the Trustees note that the actual future costs for Medicare could exceed those shown in this report. Use of alternative projections, as provided in appendix V.C and in a memorandum from the Office of the Actuary,[25] can help illustrate the magnitude of this understatement under one possible scenario. For example, the total cost of Medicare in 2089 is 9.1 percent of GDP under the alternative projections (versus 6.0 percent under current law), and the HI actuarial deficit would be 1.70 percent of taxable payroll (versus 0.68 percent). (The projected depletion date for the HI trust fund would be one year earlier.) Readers should interpret the projections shown in this report as illustrations of the very favorable impact of permanently slower growth in health care costs, if such slower growth is achievable. The illustrative alternative projections show the higher costs if not for these elements of current law.

Policy makers should determine effective solutions to the long-range HI financial imbalance. Even assuming that the provider payment rates will be adequate, the HI program does not meet either the Trustees' short-range test of financial adequacy or long-range test of close actuarial balance. Scheduled HI tax income would cover only 86 percent of estimated expenditures in 2030 and 80 percent in 2050. By the end of the 75-year projection period, HI revenues could pay 84 percent of HI costs. Policy makers should also consider the

[25]See http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/Downloads/2015TRAlternativeScenario.pdf.

likelihood that the price adjustments in current law may prove difficult to adhere to fully and may require even more changes to address the financial imbalance.

The projections in this year's report continue to demonstrate the need for timely and effective action to address Medicare's remaining financial challenges—including the projected depletion of the HI trust fund, this fund's long-range financial imbalance, and the rapid growth in Medicare expenditures. Furthermore, if the growth in Medicare costs is comparable to growth under the illustrative alternative projections, then these further policy reforms will have to address much larger financial challenges than those assumed under current law. The Board of Trustees believes that solutions can and must be found to ensure the financial integrity of HI in the short and long term and to reduce the rate of growth in Medicare costs through viable means. Consideration of such reforms should not be delayed. The sooner the solutions are enacted, the more flexible and gradual they can be. Moreover, the early introduction of reforms increases the time available for affected individuals and organizations—including health care providers, beneficiaries, and taxpayers—to adjust their expectations and behavior. The Board recommends that Congress and the executive branch work closely together with a sense of urgency to address these challenges.

III. ACTUARIAL ANALYSIS

A. INTRODUCTION

The Actuarial Analysis section focuses on the costs and financing of the individual HI and SMI trust fund accounts. The Trustees perform an analysis for each trust fund individually, to determine whether each account's income and expenditures are balanced as necessary to maintain solvency. (It is also valuable to consider Medicare's total expenditures and the sources and relative magnitudes of the program's revenues. Appendix V.B presents such information for Medicare overall.)

For this report, projections are shown in two different ways. The cash basis reflects the date when payment for the service was made, whereas the incurred basis reflects the date when the service was performed. The projections are first prepared on an incurred basis, and then adjustments are made to account for costs on a cash basis. Generally, trust fund operations show the actual or projected income and expenditures on a cash basis, while analysis and methodology are presented on an incurred basis.

The HI and SMI trust funds are separate and distinct, each with its own sources of financing. There are no provisions for using HI revenues to finance SMI expenditures, or vice versa, or for lending assets between the two trust funds. Moreover, the benefit provisions, financing methods, and, to a lesser degree, eligibility rules are very different between these Medicare components. In particular, both accounts of the SMI trust fund are automatically in financial balance, whereas the HI fund is not.

For these reasons, the Trustees can evaluate the financial status of the Medicare trust funds only by separately assessing the status of each fund. Sections III.B, III.C, and III.D of this report present such assessments for HI (Part A), SMI Part B, and SMI Part D, respectively. The Trustees also provide key results based on an illustrative alternative scenario in appendix V.C.

B. HI FINANCIAL STATUS

This section presents actual HI trust fund operations in 2014 and HI trust fund projections for the next 75 years. Section III.B1 discusses HI financial results for 2014, and sections III.B2 and III.B3 discuss the short-range HI projections and the long-range projections, respectively. The projections shown in sections III.B2 and III.B3 assume no changes will occur in the statutory provisions and regulations under which HI now operates.[26]

1. Financial Operations in Calendar Year 2014

On July 30, 1965, the Social Security Act established the Federal Hospital Insurance Trust Fund as a separate account in the U.S. Treasury. All the HI financial operations occur within this fund.

Table III.B1 presents a statement of the revenue and expenditures of the fund in calendar year 2014, and of its assets at the beginning and end of the calendar year.

The total assets of the trust fund amounted to $205.4 billion on December 31, 2013. During calendar year 2014, total revenue amounted to $261.2 billion, and total expenditures were $269.3 billion. Total assets thus decreased by $8.1 billion during the year to $197.3 billion on December 31, 2014.

[26]The one exception is that the projections disregard payment reductions that would result from the projected depletion of the HI trust fund.

Table III.B1.—Statement of Operations of the HI Trust Fund during Calendar Year 2014

[In thousands]

Total assets of the trust fund, beginning of period	$205,365,608
Revenue:	
Payroll taxes	$227,445,084
Income from taxation of OASDI benefits	18,066,000
Interest on investments	8,800,564
Premiums collected from voluntary participants	3,250,764
Premiums collected from Medicare Advantage participants	285,945
ACA Medicare shared savings program receipts	2,638
Transfer from Railroad Retirement account	580,700
Reimbursement, transitional uninsured coverage	204,000
Reimbursement, program management general fund	1,501,699
Interfund interest receipts[1]	509
Interest on reimbursements, Railroad Retirement	30,897
Other	1,524
Reimbursement, union activity	1,094
Fraud and abuse control receipts:	
Criminal fines	344,379
Civil monetary penalties	22,366
Civil penalties and damages, Department of Justice	346,646
Asset forfeitures, Department of Justice	18,479
3% administrative expense reimbursement, Department of Justice	10,758
General fund appropriation fraud and abuse, FBI	255,468
General fund transfer, Discretionary	69,749
Total revenue	$261,239,263
Expenditures:	
Net benefit payments	$264,852,192
Administrative expenses:	
Treasury administrative expenses	109,809
Salaries and expenses, SSA[2]	814,955
Salaries and expenses, CMS[3]	1,824,415
Salaries and expenses, Office of the Secretary, HHS	46,969
Medicare Payment Advisory Commission	6,724
Administration on aging funding	5,566
CMS program management–Affordable Care Act	27,815
Transfer to Patient-Centered Outcomes Research Trust Fund[4]	54,554
Fraud and abuse control expenses:	
HHS Medicare integrity program	827,413
HHS Office of Inspector General	311,164
Department of Justice	36,281
FBI	114,364
HCFAC Department of Justice Discretionary, CMS	22,748
HCFAC Office of Inspector General Discretionary, CMS	130,960
HCFAC Other HHS Discretionary, CMS	30,580
HCFAC Discretionary, CMS	95,924
Total administrative expenses	4,460,240
Total expenditures	$269,312,432
Net addition to the trust fund	−8,073,168
Total assets of the trust fund, end of period	$197,292,440

[1]Reflects interest adjustments on the reallocation of administrative expenses among the Medicare trust funds, the OASDI trust funds, and the general fund of the Treasury. Estimated payments are made from the trust funds and then are reconciled, with interest, the next year when the actual costs are known. A positive figure represents a transfer to the HI trust fund from the other trust funds. A negative figure represents a transfer from the HI trust fund to the other funds.

[2]For facilities, goods, and services provided by SSA.

[3]Includes administrative expenses of the intermediaries.

[4]Represents amount transferred from the HI trust fund to the Patient-Centered Outcomes Research trust fund, as authorized by the Patient Protection and Affordable Care Act of 2010.

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

a. Revenues

The trust fund's primary source of income consists of amounts appropriated to it, under permanent authority, on the basis of taxes paid by workers, their employers, and individuals with self-employment earnings, in work covered by HI. Included in HI are workers covered under the OASDI program, those covered under the Railroad Retirement program, and certain Federal, State, and local employees not otherwise covered under the OASDI program.

HI taxes are payable without limit on a covered individual's total wages and self-employment earnings. For calendar years prior to 1994, taxes were computed on a person's annual earnings up to a specified maximum annual amount called the *maximum tax base*. Table III.B2 presents the maximum tax bases for 1966-1993. Legislation enacted in 1993 removed the limit on taxable income beginning in calendar year 1994.

Table III.B2 also shows the HI tax rates applicable in each of calendar years 1966 and later. For 2016 and thereafter, the tax rates shown are the rates scheduled in current law. As indicated in the footnote to the table, in 2013 and later employees and self-employed individuals pay an additional HI tax of 0.9 percent on their earnings above certain thresholds.

Table III.B2.—Tax Rates and Maximum Tax Bases

Calendar years	Maximum tax base	Tax rate (Percentage of taxable earnings) Employees and employers, each	Self-employed
Past experience:			
1966	$6,600	0.35%	0.35%
1967	6,600	0.50	0.50
1968-71	7,800	0.60	0.60
1972	9,000	0.60	0.60
1973	10,800	1.00	1.00
1974	13,200	0.90	0.90
1975	14,100	0.90	0.90
1976	15,300	0.90	0.90
1977	16,500	0.90	0.90
1978	17,700	1.00	1.00
1979	22,900	1.05	1.05
1980	25,900	1.05	1.05
1981	29,700	1.30	1.30
1982	32,400	1.30	1.30
1983	35,700	1.30	1.30
1984	37,800	1.30	2.60
1985	39,600	1.35	2.70
1986	42,000	1.45	2.90
1987	43,800	1.45	2.90
1988	45,000	1.45	2.90
1989	48,000	1.45	2.90
1990	51,300	1.45	2.90
1991	125,000	1.45	2.90
1992	130,200	1.45	2.90
1993	135,000	1.45	2.90
1994-2012	no limit	1.45	2.90
2013-2015	no limit	1.45[1]	2.90[1]
Scheduled in current law:			
2016 & later	no limit	1.45[1]	2.90[1]

[1]Beginning in 2013, workers pay an additional 0.9 percent of their earnings above $200,000 (for those who file an individual tax return) or $250,000 (for those who file a joint income tax return).

Total HI payroll tax income in calendar year 2014 amounted to $227.4 billion—an increase of 3.0 percent over the amount of $220.8 billion for the preceding 12-month period. This increase in tax income resulted primarily from increases in the number of workers and their average earnings.

Up to 85 percent of an individual's or couple's OASDI benefits may be subject to Federal income taxation if their income exceeds certain thresholds. The income tax revenue attributable to the first 50 percent of OASDI benefits is allocated to the OASI and DI trust funds. The revenue associated with the amount between 50 and 85 percent of benefits is allocated to the HI trust fund. Income from the taxation of OASDI benefits amounted to $18.1 billion in calendar year 2014.

Another substantial source of trust fund income is interest credited from investments in government securities held by the fund. In calendar year 2014, the fund received $8.8 billion in such interest. A

description of the trust fund's investment procedures appears later in this section.

Section 1818 of the Social Security Act provides that certain persons not otherwise eligible for HI protection may obtain coverage by enrolling in HI and paying a monthly premium. In 2014, premiums collected from such voluntary participants (or paid on their behalf by Medicaid) amounted to about $3.3 billion.

The Railroad Retirement Act provides for a system of coordination and financial interchange between the Railroad Retirement program and the HI trust fund. This financial interchange requires a transfer that would place the HI trust fund in the same position in which it would have been if the Social Security Act had always covered railroad employment. In accordance with these provisions, a transfer of $581 million in principal and about $21 million in interest from the Railroad Retirement program's Social Security Equivalent Benefit Account to the HI trust fund balanced the two systems as of September 30, 2013. The trust fund received this transfer, together with interest to the date of transfer totaling about $10 million, in June 2014.

Legislation in 1982 added transitional entitlement for those Federal employees who retire before having had a chance to earn sufficient quarters of Medicare-qualified Federal employment. The general fund of the Treasury provides reimbursement for the costs of this coverage, including administrative expenses. In calendar year 2014, such reimbursement amounted to $204 million for estimated benefit payments for these beneficiaries.

The Health Insurance Portability and Accountability Act of 1996 established a health care fraud and abuse control account within the HI trust fund. Monies derived from the fraud and abuse control program are transferred from the general fund of the Treasury to the HI trust fund. During calendar year 2014, the trust fund received about $1,068 million from this program.

b. Expenditures

The HI trust fund pays expenditures for HI benefit payments and administrative expenses. All HI administrative expenses incurred by the Department of Health and Human Services, the Social Security Administration, the Department of the Treasury (including the Internal Revenue Service), and the Department of Justice in administering HI are charged to the trust fund. Such administrative

duties include payment of benefits, the collection of taxes, fraud and abuse control activities, and experiments and demonstration projects designed to determine various methods of increasing efficiency and economy in providing health care services, while maintaining the quality of such services, under HI and SMI.

In addition, Congress has authorized expenditures from the trust funds for construction, rental and lease, or purchase contracts of office buildings and related facilities for use in connection with the administration of HI. Although trust fund expenditures include these costs, the statement of trust fund assets presented in this report does not carry the net worth of facilities and other fixed capital assets because the proceeds of sales of such assets revert to the General Services Administration. Since the value of fixed capital assets does not represent funds available for benefit or administrative expenditures, the Trustees do not consider it in assessing the actuarial status of the funds.

Of the $269.3 billion in total HI expenditures, $264.9 billion represented net benefits paid from the trust fund for health services.[27] Net benefit payments increased 1.1 percent in calendar year 2014 over the corresponding amount of $261.9 billion paid during the preceding calendar year. This small increase was due to the continuing effects of implementation of certain provisions of the ACA, a reduction in hospital admissions as more patients were being treated as outpatients, and the sequestration of Medicare benefits. Further information on HI benefits by type of service is available in section IV.A.

The remaining $4.5 billion in expenditures was for net HI administrative expenses, after adjustments to the preliminary allocation of administrative costs among the Social Security and Medicare trust funds and the general fund of the Treasury. This amount included $1.6 billion for the health care fraud and abuse control program.

c. Actual experience versus prior estimates

Table III.B3 compares the actual experience in calendar year 2014 with the estimates presented in the 2013 and 2014 annual reports. A number of factors can contribute to differences between estimates and subsequent actual experience. In particular, actual values for key

[27]Net benefits equal the total gross amounts initially paid from the trust fund during the year, less recoveries of overpayments identified through fraud and abuse control activities.

economic and other variables can differ from assumed levels, and legislative and regulatory changes may occur after a report's preparation. The comparison in table III.B3 indicates that actual HI tax income in 2014 was slightly higher than estimated in the 2014 report—mostly because it had been assumed in the 2014 report that fairly large negative adjustments would need to be made during the year for prior periods. Although negative adjustments were made, they were not as large as estimated. The 2014 actual amount was slightly lower than estimated in the 2013 report mostly because of these same adjustments (no adjustments were assumed in the 2013 report). Actual HI benefit payments in calendar year 2014 were about the same as projected in the 2014 report but were lower than projected in the 2013 report largely due to lower utilization of all types of services than previously estimated.

Table III.B3.—Comparison of Actual and Estimated Operations of the HI Trust Fund, Calendar Year 2014

[Dollar amounts in millions]

		Comparison of actual experience with estimates for calendar year 2014 published in—			
		2014 report		2013 report	
Item	Actual amount	Estimated amount[1]	Actual as percentage of estimate	Estimated amount[1]	Actual as percentage of estimate
Payroll taxes	$227,445	$221,578	103%	$230,358	99%
Benefit payments[2]	264,852	265,007	100	271,080	98

[1]Under the intermediate assumptions.

[2]Benefit payments include additional premiums for Medicare Advantage plans that are deducted from beneficiaries' Social Security benefits, costs of Quality Improvement Organizations, and health information technology payments.

d. Assets

The Department of Treasury invests, on a daily basis, the portion of the trust fund not needed to meet current expenditures for benefits and administration in interest-bearing obligations of the U.S. Government. The Social Security Act authorizes the issuance of special public-debt obligations for purchase exclusively by the trust fund. The law requires that these special public-debt obligations bear interest at a rate based on the average market yield (computed on the basis of market quotations as of the end of the calendar month immediately preceding the date of such issue) for all marketable interest-bearing obligations of the United States forming a part of the public debt that are not due or callable until after 4 years from the end of that month. Currently, all invested assets of the HI trust fund are in the form of such special-issue securities.[28] Table V.H9,

[28]The Department of Treasury may also make investments in obligations guaranteed as to both principal and interest by the United States, including certain federally sponsored agency obligations.

presented in appendix H, shows the assets of the HI trust fund at the end of fiscal years 2013 and 2014.

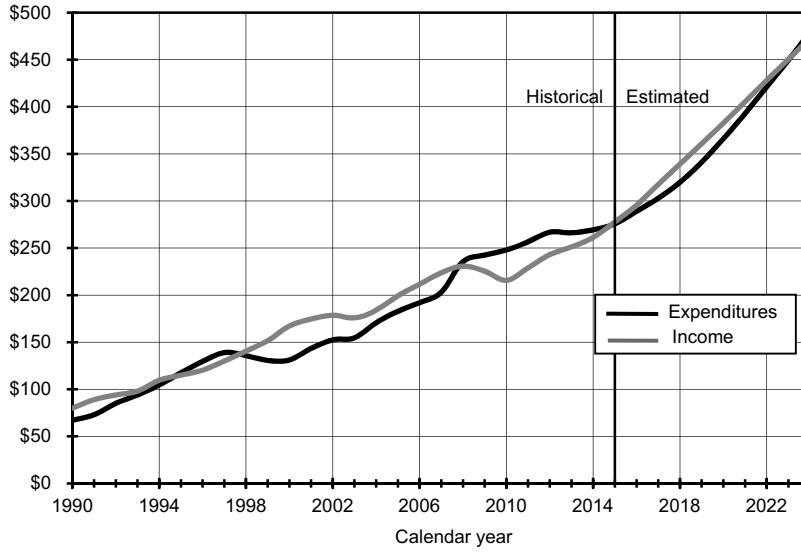
2. 10-Year Actuarial Estimates (2015-2024)

This section provides detailed information concerning the short-range financial status of the trust fund, including projected annual income, outgo, differences between income and outgo, and trust fund balances. Also discussed is the Trustees' test of short-range financial adequacy.

To illustrate the sensitivity of future costs to different economic and demographic factors and to portray a reasonable range of possible future trends, the Trustees show estimates under three alternative sets of economic and demographic assumptions–intermediate, low-cost, and high-cost assumptions. Due to the uncertainty inherent in such projections, however, the actual operations of the HI trust fund in the future could differ significantly from these estimates.

Figure III.B1 shows past and projected income and expenditures for the HI trust fund under the Trustees' intermediate assumptions. Following the Balanced Budget Act of 1997, the fund experienced annual surpluses in the range of $21 billion to $36 billion through 2003. This difference decreased to between $13 billion and $16 billion in 2004 and 2005, but then reached about $20 billion in 2006 and 2007—in large part as a result of a misallocation of certain hospice benefit costs to the Part B trust fund account. CMS corrected this accounting error in 2008. Beginning in 2008, expenditures exceeded total income, and this situation continued through 2014. Annual surpluses are expected from 2015 through 2023, and annual deficits are expected to return in 2024 and to continue throughout the remainder of the projection period.

Figure III.B1.—HI Expenditures and Income
[In billions]



The impact of the December 2007 through June 2009 recession on HI payroll tax income is apparent in figure III.B1. In 2009 and 2010, payroll taxes decreased substantially as a result of higher unemployment and slow growth in wages along with collection lags; these factors contributed to the $32.3-billion trust fund deficit in 2010. For 2011 through 2013, revenues rebounded somewhat but not enough to reach the level of expenditures, which continued to grow due to increased enrollment and the regular updating of the payment rates. Together these factors resulted in a decline in trust fund deficits from $27.7 billion in 2011 to $8.1 billion in 2014.

The provisions of the ACA and other recent legislation, and an assumed strengthening economic recovery, sharply reduce the magnitude of, and for most years eliminate, trust fund deficits in the short-range period. A downward adjustment to price updates for all HI providers by the growth in economy-wide productivity will slow expenditure growth rates by 0.5 to 1.0 percentage point from 2014 through 2023. The significant reductions in Medicare Advantage payment benchmarks under the ACA have reduced the per person level of expenditures and will continue do so in 2015, with less of an impact for the rest of the projection period, and the additional 0.9-percent tax rate for high-income workers in 2013 and later will increase HI payroll tax revenues.

HI expenditures are further affected by the sequestration of non-salary Medicare expenditures. The sequestration reduces benefit payments by 2 percent from April 1, 2013 through March 31, 2023, by 2.9 percent from April 1, 2023 through September 30, 2023, by 1.1 percent from October 1, 2023 through March 31, 2024, and by 4 percent from April 1, 2024 through September 30, 2024. Due to sequestration, non-salary administrative expenses are reduced by an estimated 5 percent from March 1, 2013 through September 30, 2024. Due to these various statutory and economic factors, trust fund surpluses would occur from 2015 through 2023. After 2023, annual deficits would return.

As figure III.B1 illustrates, estimated HI income increases at a faster rate during 2011-2018 than projected HI expenditures, in contrast to the situation that has prevailed during most of the program's history. The projected recovery from the economic recession (which ended in 2009) accelerates income growth during this period. The additional 0.9-percent HI payroll tax rate, which began in 2013, also accelerates growth, since, over time, a growing proportion of workers will exceed the fixed earnings thresholds specified in the ACA ($200,000 for single taxpayers and $250,000 for married couples) and will become subject to this additional tax. At the same time, the other ACA provisions mentioned previously will slow expenditure growth significantly.

Table III.B4 shows the expected operations of the HI trust fund during calendar years 2015 to 2024 based on the intermediate set of assumptions, together with the past experience. Section IV.A of this report presents the detailed assumptions underlying the intermediate projections.

Table III.B4.—Operations of the HI Trust Fund during Calendar Years 1970-2024

[In billions]

	Income								Expenditures			Trust fund	
Calendar year	Payroll taxes	Income from taxation of benefits	Railroad Retirement account transfers	Reimburse-ment for uninsured persons	Premiums from voluntary enrollees	Payments for military wage credits	Interest and other[1,2]	Total	Benefit payments[2,3]	Adminis-trative expenses[4]	Total	Net change	Fund at end of year
Historical data:													
1970	$4.9	—	$0.1	$0.9	—	$0.0	$0.2	$6.0	$5.1	$0.2	$5.3	$0.7	$3.2
1975	11.5	—	0.1	0.6	$0.0	0.0	0.7	13.0	11.3	0.3	11.6	1.4	10.5
1980	23.8	—	0.2	0.7	0.0	0.1	1.1	26.1	25.1	0.5	25.6	0.5	13.7
1985	47.6	—	0.4	0.8	0.0	−0.7[5]	3.4	51.4	47.6	0.8	48.4	4.8[6]	20.5
1990	72.0	—	0.4	0.4	0.1	−1.0[7]	8.5	80.4	66.2	0.8	67.0	13.4	98.9
1995	98.4	$3.9	0.4	0.5	1.0	0.1	10.8	115.0	116.4	1.2	117.6	−2.6	130.3
2000	144.4	8.8	0.5	0.5	1.4	0.0	11.7	167.2	128.5[8]	2.6	131.1	36.1	177.5
2005	171.4	8.8	0.4	0.3	2.4	0.0	16.1	199.4	180.0	2.9	182.9	16.4	285.8
2006	181.3	10.3	0.5	0.4	2.6	0.0	16.4	211.5	189.0	2.9	191.9	19.6	305.4
2007	191.9	10.6	0.5	0.5	2.8	0.0	17.5	223.7	200.2	2.9	203.1	20.7	326.0
2008	198.7	11.7	0.5	0.5	2.9	0.0	16.4	230.8	232.3[9]	3.3	235.6	−4.7	321.3
2009	190.9	12.4	0.5	0.6	2.9	1.0[10]	17.1	225.4	239.3	3.2	242.5	−17.1	304.2
2010	182.0	13.8	0.5	−0.1	3.3	0.0	16.1	215.6	244.5	3.5	247.9	−32.3	271.9
2011	195.6	15.1	0.5	0.3	3.3	0.0	14.2	228.9	252.9	3.8	256.7	−27.7	244.2
2012	205.7	18.6	0.5	0.3	3.4	0.0	14.5	243.0	262.9	3.9	266.8	−23.8	220.4
2013	220.8	14.3	0.6	0.2	3.4	0.0	11.8	251.1	261.9	4.3	266.2	−15.0	205.4
2014	227.4	18.1	0.6	0.2	3.3	0.0	11.7	261.2	264.9	4.5	269.3	−8.1	197.3
Intermediate estimates:													
2015	241.0	20.8	0.6	0.2	3.4	0.0	11.7	277.7	271.0	4.8	275.7	2.0	199.3
2016	256.2	23.0	0.6	0.2	3.6	0.0	11.9	295.5	283.9	5.1	289.0	6.5	205.8
2017	274.8	26.0	0.7	0.2	3.7	0.0	12.4	317.7	297.4	5.5	302.9	14.8	220.7
2018	292.3	28.5	0.7	0.2	3.9	0.0	13.6	339.1	313.9	5.9	319.8	19.3	240.0
2019	309.5	31.3	0.7	0.1	4.1	0.0	15.1	360.8	334.8	6.3	341.1	19.7	259.7
2020	326.7	34.1	0.7	0.1	4.4	0.0	16.5	382.5	359.3	6.7	366.0	16.5	276.2
2021	344.4	37.7	0.8	0.1	4.6	0.0	17.7	405.3	385.4	7.2	392.6	12.7	288.9
2022	362.4	41.5	0.8	0.1	4.9	0.0	18.6	428.3	413.6	7.7	421.3	7.0	295.9
2023	380.2	44.8	0.8	0.1	5.2	0.0	19.3	450.4	441.4	8.2	449.6	0.8	296.7
2024	398.2	48.4	0.8	0.1	5.5	0.0	19.9	472.9	470.7	8.9	479.6	−6.7	290.0

[1]Other income includes recoveries of amounts reimbursed from the trust fund that are not obligations of the trust fund, receipts from the fraud and abuse control program, and a small amount of miscellaneous income. These receipts amount to $2.5-$4.9 billion each year for the 10-year projection period. In 2008, other income includes an adjustment of −$0.9 billion for interest earned as a result of Part A hospice costs that were misallocated to the Part B trust fund account.

[2]Values after 2005 include additional premiums for Medicare Advantage plans that are deducted from beneficiaries' Social Security benefits. These additional premiums are beneficiary obligations and occur when a beneficiary chooses an MA plan whose monthly plan payment exceeds the benchmark amount. Beneficiaries subject to such premiums may choose to either reimburse the plans directly or have the premiums deducted from their Social Security benefits. The premiums deducted from the Social Security benefits are transferred to the HI and SMI trust funds and then transferred from the trust funds to the plans.

[3]Includes costs of Peer Review Organizations from 1983 through 2001 (beginning with the implementation of the prospective payment system on October 1, 1983) and costs of Quality Improvement Organizations beginning in 2002.

[4]Includes costs of experiments and demonstration projects. Beginning in 1997, includes fraud and abuse control expenses, as provided for by Public Law 104-191.

[5]Includes the lump-sum general revenue adjustment of −$0.8 billion, as provided for by section 151 of Public Law 98-21.

[6]Includes repayment of loan principal, from the OASI trust fund, of $1.8 billion.

[7]Includes the lump-sum general revenue adjustment of −$1.1 billion, as provided for by section 151 of Public Law 98-21.

[8]For 1998 to 2003, includes monies transferred to the SMI trust fund for home health agency costs, as provided for by Public Law 105-33.

[9]Includes the $8.5 billion transferred to the general fund of the Treasury for Part A hospice costs that were previously misallocated to the Part B trust fund account.

[10]Includes the lump-sum general revenue adjustment of $1.0 billion, as provided for by section 151 of Public Law 98-21.

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

The increases in estimated income shown in table III.B4 primarily reflect increases in payroll tax income to the trust fund since such taxes are the main source of HI financing. As noted, payroll tax revenues increase in 2013 and later as a result of the additional 0.9-percent tax rate on earnings for high-income workers. For all other workers, while the payroll tax rate will remain constant under current law, covered earnings would increase every year after 2010 under the intermediate assumptions due to projected increases in both the number of HI workers covered and the average earnings of these workers.

The Trustees project that over the next 10 years most of the smaller sources of financing for the HI trust fund will increase as well. More detailed descriptions of these sources of income were discussed earlier in this section.

Interest earnings have been a significant source of income to the trust fund for many years, surpassed only by payroll taxes and, recently, income from the taxation of OASDI benefits. As the trust fund balance begins to increase again in the next several years, interest earnings would follow the same pattern.

The Trustees have recommended maintenance of HI trust fund assets at a level of at least 100 percent of annual expenditures throughout the projection period. Such a level would provide a cushion of several years in the event that income falls short of expenditures, thereby allowing time for policy makers to implement legislative corrections.

The Trustees have also prepared projections using two alternative sets of assumptions. Table III.B5 summarizes the estimated operations under all three alternatives. Section IV.A presents in substantial detail the assumptions underlying the intermediate assumptions, as well as the assumptions used in preparing estimates under the low-cost and high-cost alternatives.

Table III.B5.—Estimated Operations of the HI Trust Fund during Calendar Years 2014-2024, under Alternative Sets of Assumptions

[Dollar amounts in billions]

Calendar year	Total income	Total expenditures	Net increase in fund	Fund at end of year	Ratio of assets to expenditures[1] (percent)	Expenditures as a percent of taxable payroll
Intermediate:						
2014[2]	$261.2	$269.3	−$8.1	$197.3	76%	3.42%
2015	277.7	275.7	2.0	199.3	72	3.37
2016	295.5	289.0	6.5	205.8	69	3.31
2017	317.7	302.9	14.8	220.7	68	3.26
2018	339.1	319.8	19.3	240.0	69	3.25
2019	360.8	341.1	19.7	259.7	70	3.28
2020	382.5	366.0	16.5	276.2	71	3.34
2021	405.3	392.6	12.7	288.9	70	3.40
2022	428.3	421.3	7.0	295.9	69	3.48
2023	450.4	449.6	0.8	296.7	66	3.55
2024	472.9	479.6	−6.7	290.0	62	3.62
Low-cost:						
2014[2]	261.2	269.3	−8.1	197.3	76	3.41
2015	280.1	270.9	9.3	206.6	73	3.26
2016	305.6	280.7	24.9	231.5	74	3.11
2017	333.9	293.2	40.7	272.2	79	3.00
2018	363.3	308.4	55.0	327.1	88	2.94
2019	394.2	326.5	67.7	394.8	100	2.90
2020	424.6	347.1	77.5	472.3	114	2.90
2021	457.7	368.8	88.8	561.2	128	2.90
2022	493.1	392.4	100.7	661.9	143	2.91
2023	532.1	416.0	116.0	777.9	159	2.91
2024	572.2	441.0	131.2	909.1	176	2.91
High-cost:						
2014[2]	261.2	269.3	−8.1	197.3	76	3.44
2015	274.5	281.6	−7.1	190.2	70	3.50
2016	283.1	296.9	−13.9	176.3	64	3.56
2017	298.9	311.9	−13.0	163.4	57	3.57
2018	314.4	331.1	−16.7	146.7	49	3.62
2019	329.4	355.8	−26.4	120.2	41	3.73
2020	342.7	384.9	−42.2	78.0	31	3.87
2021	356.8	416.5	−59.6	18.4	19	4.02
2022[3]	372.0	450.9	−78.9	−60.6	4	4.19
2023[3]	384.8	485.5	−100.7	−161.3	−12	4.36
2024[3]	395.1	521.1	−126.0	−287.3	−31	4.53

[1]Ratio of assets in the fund at the beginning of the year to expenditures during the year.
[2]Figures for 2014 represent actual experience.
[3]Estimates for 2021 and later are hypothetical, since the HI trust fund would be depleted in those years.

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

These alternatives provide two possible Part A scenarios but represent a narrow range of possible outcomes for total expenditures. Given the considerable variation in future demographic, economic, and healthcare-usage factors, actual Part A expenditure experience could easily fall outside of this range. The low- and high-cost scenarios in this year's report once again result in a narrower dollar expenditure range than in reports before 2014, due to a change in the

alternative CPI assumptions.[29] The taxable payroll assumptions for the alternative scenarios are also affected by the assumption change. Therefore, spending as a percent of taxable payroll provides better insight into the variability of spending than the nominal dollar amounts, as shown in table III.B5.

The Board of Trustees has established an explicit test of short-range financial adequacy. The requirements of this test are as follows: (i) if the HI trust fund ratio is at least 100 percent at the beginning of the projection period, then it must remain at or above 100 percent throughout the 10-year projection period; (ii) alternatively, if the fund ratio is initially less than 100 percent, it must reach a level of at least 100 percent within 5 years (with no depletion of the trust fund at any time during this period) and then remain at or above 100 percent throughout the rest of the 10-year period. The Trustees apply this test based on the intermediate projections.

Failure of the trust fund to meet this test is an indication that HI solvency over the next 10 years is in question and that action is necessary to improve the short-range financial adequacy of the fund. The HI trust fund does not meet this short-range test. While the short-range test is stringent, its purpose is to ensure that health care benefits continue to be available without interruption to the millions of aged and disabled Americans who rely on such coverage. Table III.B6 shows the ratios of assets in the HI trust fund at the beginning of a calendar year to total expenditures during that year. As table III.B6 shows, the Trustees project that the trust fund ratio, which was below the 100-percent level at the beginning of 2015, will generally decrease through 2024. Accordingly, the financing for HI is not considered adequate in the short-range projection period (2015-2024).

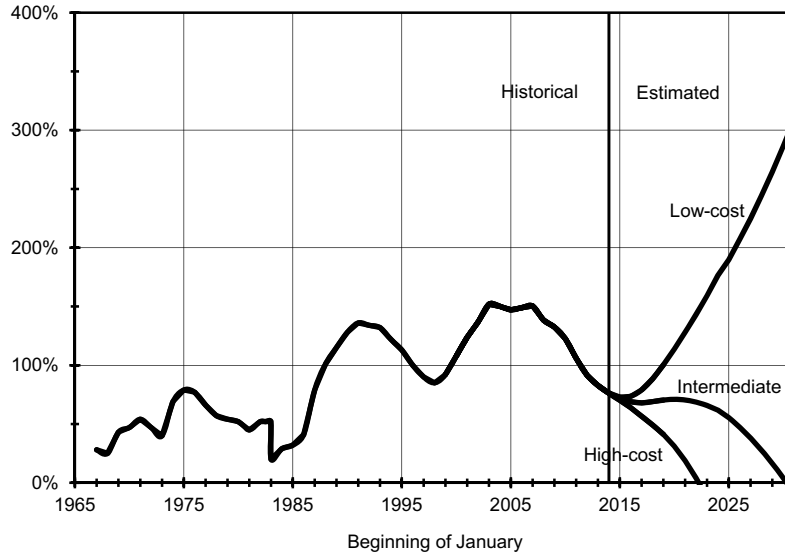
[29]Starting with the 2014 report, the Trustees' alternative CPI assumptions are reversed compared with those in previous reports, so that the high-cost assumptions are now the low-cost assumptions, and vice versa. Inflation rates are now ordered across alternatives according to their effect on the OASDI actuarial balance. This change resulted in a narrow range of impacts.

Table III.B6.—Ratio of Assets at the Beginning of the Year to Expenditures during the Year for the HI Trust Fund

Calendar year	Ratio
Historical data:	
1967	28%
1970	47
1975	79
1980	52
1985	32
1990	128
1995	113
2000	108
2005	147
2006	149
2007	150
2008	138
2009	132
2010	123
2011	106
2012	92
2013	83
2014	76
Intermediate Estimates:	
2015	72
2016	69
2017	68
2018	69
2019	70
2020	71
2021	70
2022	69
2023	66
2024	62

Figure III.B2 shows the historical trust fund ratios and the projected ratios under the three sets of assumptions. It also shows the declining level of assets (as a percentage of expenditures) through the beginning of 2015 under all three sets of assumptions, reflecting the current financial imbalance as exacerbated by the lingering effects of the economic recession. The fund ratio would continue declining under the intermediate and high-cost assumptions. Only under conditions of robust economic growth and extremely low health care cost increases, as assumed in the low-cost alternative, would HI assets grow significantly relative to expenditures under current law.

Figure III.B2.—HI Trust Fund Balance at the Beginning of the Year as a Percentage of Annual Expenditures



3. Long-Range Estimates

This section examines the long-range actuarial status of the trust fund under the three alternative sets of economic and demographic assumptions, while section IV.A summarizes the assumptions used in preparing projections. Since the vast majority of total HI costs are related to insured beneficiaries, and since general revenue appropriations and premium payments support the uninsured segments (those paying the HI premium and those receiving HI coverage through special statutes requiring general revenue transfers to cover their costs), the remainder of this section will focus on the financing for insured beneficiaries only.

The Trustees measure the long-range actuarial status of the HI trust fund by comparing, on a year-by-year basis, the income (from payroll taxes and from taxation of OASDI benefits) with the corresponding incurred costs, expressed as percentages of taxable payroll.[30] These percentages are referred to as *income rates* and *cost rates*, respectively.

Table III.B7 shows historical and projected HI costs and income under the intermediate assumptions, expressed as percentages of

[30]Taxable payroll is the total amount of wages, salaries, tips, self-employment income, and other earnings subject to the HI payroll tax.

taxable payroll. The ratio of expenditures to taxable payroll has generally increased over time; it rose from 0.94 percent in 1967 to 3.39 percent in 1996, an increase that reflected rapid growth in HI expenditures, which more than offset growth in average earnings per worker, and increases in (and eventual elimination of) the maximum taxable wage base for HI. Cost rates declined significantly between 1996 and 2000 to 2.61 percent due to favorable economic performance, the impact of the Balanced Budget Act of 1997, and efforts to curb fraud and abuse in the Medicare program. The cost rate increased to 3.12 percent by 2005 as a result of legislation and, after remaining about level through 2007, increased rapidly to 3.67 percent in 2009, reflecting the impact of the recession, which lowered taxable payroll. The resulting deficit in 2009 as a percentage of taxable payroll was the largest since the program began (0.55 percent). Cost rates then increased slightly in 2010 and 2011 due to the lower taxable payroll, which was not offset by lower spending. In 2012, the cost rate decreased to 3.61 percent due to a lower increase in spending, and in 2013 it decreased again to 3.60 percent. In 2014 taxable payroll increased by about 5 percent while spending remained at approximately the 2013 level, leading to a further decrease in the cost rate to 3.42 percent.

Table III.B7.—HI Cost and Income Rates[1]

Calendar year	Cost rates[2]	Income rates	Difference[3]
Historical data:			
1967	0.94%	1.00%	+0.06%
1970	1.34	1.20	−0.14
1975	1.85	1.80	−0.05
1980	2.20	2.10	−0.10
1985	2.64	2.70	+0.06
1990	2.70	2.90	+0.20
1995	3.30	3.01	−0.29
2000	2.61	3.07	+0.46
2005	3.12	3.07	−0.05
2006	3.11	3.07	−0.04
2007	3.12	3.09	−0.03
2008	3.30	3.06	−0.24
2009	3.67	3.12	−0.55
2010	3.69	3.15	−0.55
2011	3.70	3.15	−0.55
2012	3.61	3.18	−0.43
2013	3.60	3.25	−0.35
2014	3.42	3.26	−0.16
Intermediate estimates:			
2015	3.37	3.32	−0.05
2016	3.31	3.33	0.02
2017	3.26	3.35	0.09
2018	3.25	3.36	0.11
2019	3.28	3.38	0.10
2020	3.34	3.40	0.06
2021	3.40	3.41	0.01
2022	3.48	3.43	−0.04
2023	3.55	3.45	−0.09
2024	3.62	3.47	−0.15
2025	3.79	3.50	−0.29
2030	4.16	3.59	−0.57
2035	4.50	3.67	−0.83
2040	4.72	3.73	−0.99
2045	4.82	3.79	−1.03
2050	4.84	3.86	−0.98
2055	4.82	3.93	−0.89
2060	4.83	4.00	−0.82
2065	4.89	4.07	−0.82
2070	5.00	4.14	−0.86
2075	5.09	4.19	−0.89
2080	5.12	4.24	−0.88
2085	5.13	4.28	−0.85

[1]Based on the Trustees' intermediate assumptions, and expressed as a percentage of taxable payroll.
[2]Estimated costs attributable to insured beneficiaries only, on an incurred basis. The Trustees expect benefits and administrative costs for noninsured persons to be financed through general revenue transfers and premium payments, rather than through payroll taxes. Taxable payroll includes statutory wage credits for military service for 1957-2001.
[3]Difference between the income rates and cost rates. Negative values represent deficits.

The Trustees expect the recovery from the recession and recently enacted legislation, including the ACA, to generate a small surplus from 2016 through 2021. Then the impact of demographic shifts—notably, the aging of the baby boom population—causes the annual deficits to increase rapidly through about 2045. After 2050, the income rates are still insufficient, but the size of the projected deficit largely levels off at roughly 0.9 percent of taxable payroll. Projected HI expenditures are 4.84 and 5.13 percent of taxable payroll in 2050 and 2085, respectively. (Under the illustrative alternative projections,

the HI cost rates for 2050 and 2085 would equal 5.83 and 8.12 percent, respectively.)

Figure III.B3 shows the year-by-year costs as a percentage of taxable payroll for each of the three sets of assumptions. It also shows the income rates, but only for the intermediate assumptions in order to simplify the presentation—and because the variation in the income rates by alternative is very small (the annual income rates under the low-cost and high-cost alternatives differ by less than 0.1 percent of taxable payroll in all years).

Figure III.B3.—Estimated HI Cost and Income Rates as a Percentage of Taxable Payroll

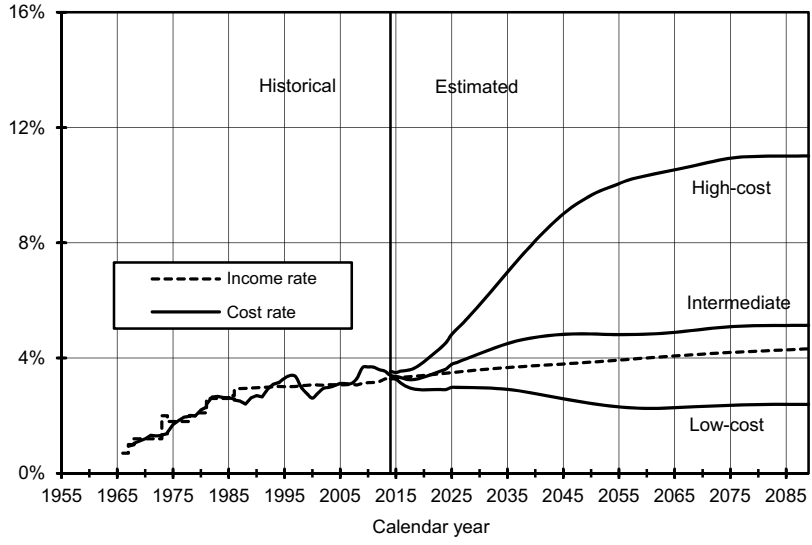


Figure III.B3 shows the remaining projected financial imbalance, based on the intermediate assumptions. The Trustees project that cost rates will continue to exceed income rates in most years, with the exception of 2016 through 2021, when small surpluses are expected. After 2021, deficits begin to increase. By the end of the 75-year period, the difference between income rates and cost rates would be about 0.8 percent of taxable payroll. Throughout the period, cost rate growth is constrained by the productivity reductions in provider payments, and income rates continue to increase as a larger share of earnings become subject to the additional 0.9-percent payroll tax and a larger share of Social Security benefits become subject to income tax that is credited to the HI trust fund.

Under the more favorable economic and demographic conditions assumed in the low-cost assumptions, HI costs would be lower than scheduled income during 2015-2089, and surpluses would steadily grow throughout the entire 75-year projection period. This very favorable result is due in large part to HI expenditure growth rates that would average only about 4 percent per year, reflecting the combined effects of slower growth in utilization and intensity of services, and slower improvement in beneficiary life expectancies.

The high-cost projections illustrate the large financial imbalance that could occur if future economic conditions resemble those of the 1973-95 period, if HI expenditure growth accelerates toward pre-1997 levels, and if fertility rates decline.[31]

The Trustees project costs beyond the initial 25-year period for the intermediate estimate based on the assumption that average HI expenditures per beneficiary will increase at a rate determined by the economic model described in sections II.C and IV.D, less the price update adjustments based on economy-wide productivity gains. This net rate is about equal to the increase in Gross Domestic Product (GDP) per capita in 2039 and declines to about 0.3 percent *slower* than the growth in GDP by 2089. This pattern reflects the changing demographic composition of the population and average benefits that grow more rapidly than average wages through about 2054 and more slowly thereafter. Beyond the initial 25-year projection period, the low-cost and high-cost alternatives assume that HI cost increases, relative to taxable payroll increases, are initially 2 percentage points less rapid and 2 percentage points more rapid, respectively, than the results under the intermediate assumptions. The assumed initial 2-percentage-point differentials decrease gradually until the year 2064, when HI cost increases (relative to taxable payroll) are assumed to be the same as under the intermediate assumptions.

Figure III.B3 shows the cost rates and income rates over a 75-year valuation period in order to present fully the future economic and demographic developments that one may reasonably expect to occur, such as the impact of the large increase in the number of people over age 65 that began to take place in 2011. Growth occurs in part because the ratio of workers to beneficiaries will decrease as persons born during the period between the end of World War II and the mid-1960s (known as the baby boom generation) reach eligibility age and begin to receive benefits.

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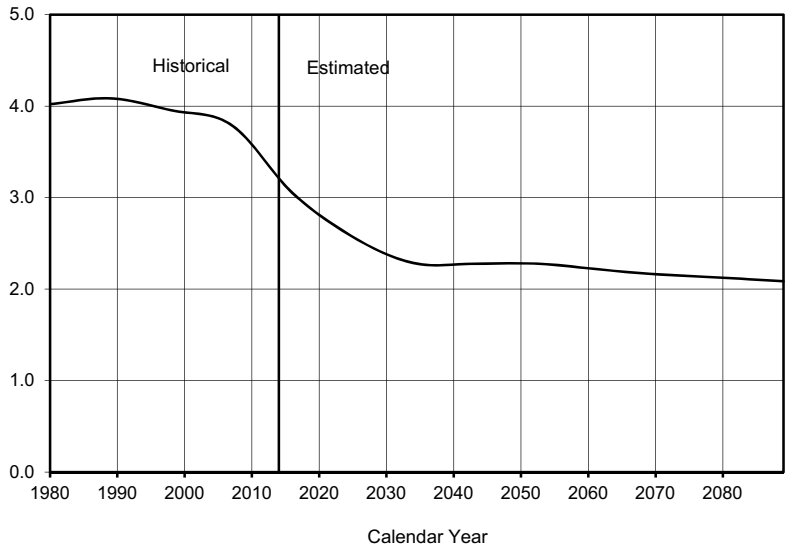
[31]Actual experience during these periods was similar on average to the high-cost economic and programmatic assumptions for the future.

Figure III.B4 shows the projected ratio of workers per HI beneficiary from 1980 to 2089. As figure III.B4 indicates, the ratio was relatively stable at about 4 workers per beneficiary from 1980 through 2008. It began to decline initially due to the recession but then declined further due to the retirement of the baby boom generation.

Figure III.B4.—Workers per HI Beneficiary
[Based on intermediate assumptions]



While every beneficiary in 2014 had about 3.2 workers to pay for his or her HI benefit, in 2030 under the intermediate demographic assumptions there would be only about 2.4 workers for each beneficiary. This ratio would then continue to decline until there were only 2.1 workers per beneficiary in 2089. This reduction implies an increase in the HI cost rate of about 50 percent by 2089, relative to its current level, solely due to this demographic factor.[32]

While year-by-year comparisons of revenues and costs are necessary to measure the adequacy of HI financing, the financial status of the trust fund is often summarized, over a specific valuation period, by a single measure known as the *actuarial balance*. The actuarial balance of the HI trust fund is defined as the difference between the

[32]In addition to this factor, the projected increase in the HI cost rate reflects greater use of health care services as the beneficiary population ages and higher average costs per service due to medical price inflation and technological advances in care. The slower growth in Medicare payment rates to HI providers under the ACA substantially offsets these increases.

summarized income rate for the valuation period and the summarized cost rate for the same period.

The summarized income rates, cost rates, and actuarial balance are based upon the present values of future income, costs, and taxable payroll. The Trustees calculate the present values, as of the beginning of the valuation period, by discounting the future annual amounts of income and outgo using the projected effective rates of interest credited to the HI trust fund for the first 10 years and grade to the ultimate interest rate assumption by year 15. They then determine the summarized income and cost rates over the projection period by dividing the present value of income and cost, respectively, by the present value of taxable payroll. The difference between the summarized income rate and cost rate over the long-range projection period (after an adjustment to take into account the fund balance at the valuation date and a target trust fund balance at the end of the valuation period) is the actuarial balance.

The summarized cost rate includes the cost of maintaining a trust fund balance at the end of the period equal to the following year's estimated costs. While a zero or positive actuarial balance implies that the end-of-period trust fund balance is at least as large as the target trust fund balance, there is no such implication for the trust fund balance at other times during the projection period.

Table III.B8 shows the actuarial balances based on the Trustees' three sets of economic and demographic assumptions, for the next 25, 50, and 75 years. Based on the intermediate set of assumptions, the summarized income rate for the entire 75-year period is 3.84 percent of taxable payroll and the summarized cost rate is 4.52 percent. As a result, the actuarial balance is −0.68 percent, and the HI trust fund fails to meet the Trustees' long-range test of close actuarial balance.[33]

One can interpret the actuarial balance as the percentage that could be added to the income rates and/or subtracted from the cost rates immediately and throughout the entire valuation period in order for the financing to support HI costs and provide for the targeted trust fund balance at the end of the projection period. The income rate increase according to this method is 0.68 percent of taxable payroll. However, if no such changes occurred until 2030, when the trust fund

[33]This test is defined in section V.I.

would be depleted, then the required increase would be 0.91 percent of taxable payroll under the intermediate assumptions.[34]

Table III.B8.—HI Actuarial Balances under Three Sets of Assumptions

	Intermediate assumptions	Alternative	
		Low-Cost	High-Cost
Valuation periods:[1]			
25 years, 2015-2039:			
Summarized income rate	3.62	3.60	3.65
Summarized cost rate	4.07	3.05	5.53
Actuarial balance	−0.45	0.55	−1.88
50 years, 2015-2064:			
Summarized income rate	3.73	3.74	3.74
Summarized cost rate	4.37	2.75	7.19
Actuarial balance	−0.64	0.99	−3.44
75 years, 2015-2089:			
Summarized income rate	3.84	3.86	3.84
Summarized cost rate	4.52	2.65	7.94
Actuarial balance	−0.68	1.22	−4.11

[1]Income rates include beginning trust fund balances, and cost rates include the cost of attaining a trust fund balance at the end of the period equal to 100 percent of the following year's estimated expenditures.

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

The divergence in outcomes among the three sets of assumptions is apparent both in the estimated operations of the trust fund on a cash basis (as discussed in section III.B2) and in the 75-year summarized costs. Under the low-cost economic and demographic assumptions, the summarized cost rate for the 75-year valuation period is 2.65 percent of taxable payroll, and the summarized income rate is 3.86 percent of taxable payroll; accordingly, HI income rates would be adequate under the highly favorable conditions assumed in the low-cost alternative. Under the high-cost assumptions, the summarized cost rate for the 75-year projection period is 7.94 percent of taxable payroll, which is more than twice the summarized income rate of 3.84 percent of taxable payroll.

As suggested earlier, past experience has indicated that economic and demographic conditions that are as financially adverse as those assumed under the high-cost alternative can, in fact, occur. Readers should view all of the alternative sets of economic and demographic assumptions as plausible. The wide range of results under the three sets of assumptions is indicative of the uncertainty of HI's future cost and its sensitivity to future economic and demographic conditions. Accordingly, it is important to maintain an adequate balance in the HI trust fund as a reserve for contingencies and to promptly address financial imbalances through corrective legislation.

[34]Actuarial balance could also be reached by reducing benefits by 15 percent every year immediately, or by making no change until 2030 and then reducing benefits by 19 percent.

Actuarial Analysis

Table III.B9 shows the long-range actuarial balance under the intermediate projections with its component parts—the present values of tax income, expenditures, and asset requirement of the HI program over the next 75 years.

Table III.B9.—Components of 75-Year HI Actuarial Balance under Intermediate Assumptions (2015-2089)

Present value as of January 1, 2015 (in billions):	
a. Payroll tax income	$15,361
b. Taxation of benefits income	2,348
c. Fraud and abuse control receipts	192
d. Total income (a + b + c)	17,902
e. Expenditures	21,089
f. Expenditures minus income (e − d)	3,187
g. Trust fund assets at start of period	197
h. Open-group unfunded obligation (f − g)	2,990
i. Ending target trust fund[1]	199
j. Present value of actuarial balance (d − e + g − i)	−3,189
k. Taxable payroll	470,724
Percent of taxable payroll:	
Actuarial balance (j ÷ k)	−0.68%

[1]The calculation of the actuarial balance includes the cost of accumulating a target trust fund balance equal to 100 percent of annual expenditures by the end of the period.

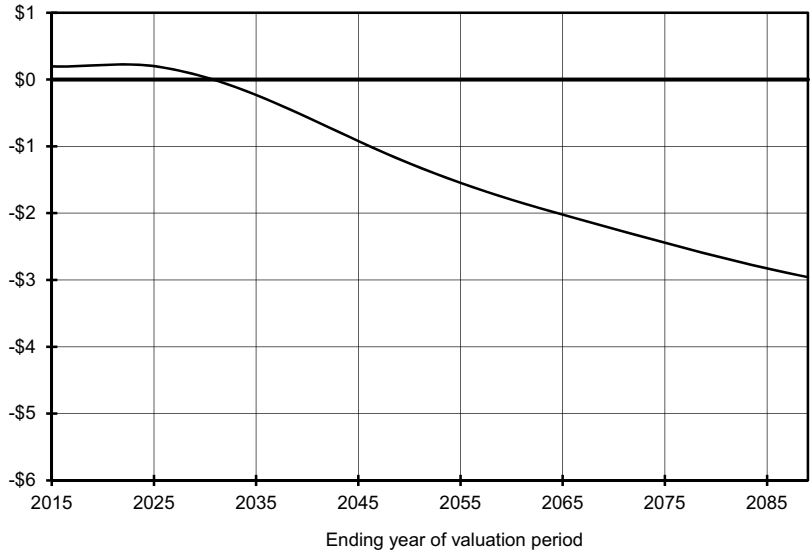
Note: Totals do not necessarily equal the sums of rounded components.

The present value of future expenditures less future tax income, decreased by the amount of HI trust fund assets on hand at the beginning of the projection, amounts to $3.0 trillion. This value is referred to as the 75-year unfunded obligation for the HI trust fund, and it is considerably lower than last year's value of $3.6 trillion. The actuarial balance is like the unfunded obligation except that (i) it is a measure of the degree to which the program is funded rather than unfunded and so is opposite in sign; (ii) it includes the trust fund balance at the end of 75 years as a cost; and (iii) it is expressed as a percent of taxable payroll. Specifically, the actuarial balance is −0.68 percent of taxable payroll and is calculated as the trust fund balance plus the present value of revenues less the present value of costs (−$3.0 trillion), less the present value of the target trust fund balance ($199 billion), all divided by the present value of future taxable payroll ($470.7 trillion).

Figure III.B5 shows the present values, as of January 1, 2015, of cumulative HI taxes less expenditures (plus the 2015 trust fund) through each of the next 75 years. The Trustees estimate these values under current-law expenditures and tax rates.

Figure III.B5.—Present Value of Cumulative HI Taxes Less Expenditures through Year Shown, Evaluated under Current-Law Tax Rates and Legislated Expenditures

[Present value as of January 1, 2015; in trillions]



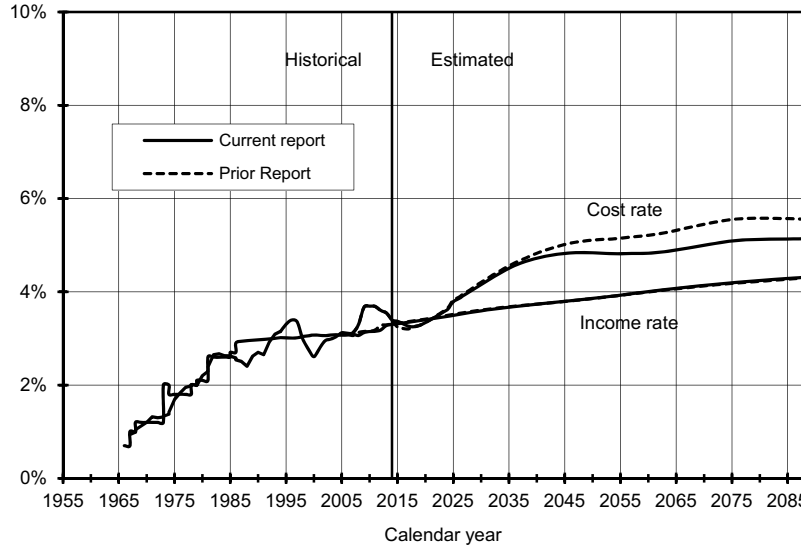
The cumulative annual balance of the trust fund at the beginning of 2015 is about $0.2 trillion. The cumulative present value increases slightly before it trends steadily downward over the projection period due to the anticipated shortfall of tax revenues, relative to expenditures, in all years beginning in 2023. The projected depletion date of the trust fund is 2030, at which time cumulative expenditures would have exceeded cumulative tax revenues by enough to equal the initial fund assets accumulated with interest. The continuing downward slope in the line thereafter further illustrates the difference between the HI expenditures projected under current law and the financing currently scheduled to support these expenditures. As noted previously, over the full 75-year period, the fund has a projected present value unfunded obligation of $3.0 trillion. This unfunded obligation indicates that if $3.0 trillion were added to the trust fund at the beginning of 2015, the program would meet the projected cost of expenditures over the next 75 years. More realistically, additional annual revenues and/or reductions in expenditures, with a present value totaling $3.0 trillion, would be necessary to reach financial balance (but with zero trust fund assets at the end of 2089).

The estimated unfunded obligation of $3.0 trillion and the closely associated present value of the actuarial deficit ($3.2 trillion) are

useful indicators of the sizable financial burden facing the American public. In other words, increases in revenues and/or reductions in benefit expenditures—equivalent to a lump-sum amount today of about $3 trillion—would be necessary to bring the HI trust fund into long-range financial balance. At the same time, long-range measures expressed in dollar amounts can be difficult to interpret, even when calculated as present values, which are sensitive to the underlying discount rate assumptions. For this reason, the Board of Trustees has customarily emphasized relative measures, such as the income rate and cost rate comparisons shown earlier in this section, and comparisons to the present value of future taxable payroll or GDP.

Figure III.B6 compares the year-by-year HI cost and income rates for the current annual report with the corresponding projections from the 2014 report.

Figure III.B6.—Comparison of HI Cost and Income Rate Projections: Current versus Prior Year's Reports



As figure III.B6 indicates, the intermediate HI cost rate projections in this year's report are generally lower than those in the 2014 report primarily due to lower long-range growth rates. The projected income rates are very slightly higher.

The Trustees' estimate of the 75-year HI actuarial balance under the intermediate assumptions, −0.68 percent of taxable payroll, is 0.19 percentage point larger (more favorable) than estimated in the

2014 annual report. The reasons for this change, which are listed in table III.B10, are explained below:

(1) Change in valuation period: Updating the valuation period from 2014-2088 to 2015-2089 adds a larger deficit year to the calculation of the actuarial balance. The effect on the actuarial balance is −0.02 percent of taxable payroll.
(2) Updating the projection base: Actual 2014 incurred HI expenditures were slightly higher than previously estimated, and taxable payroll was slightly lower. The result is a slightly higher cost as a percentage of taxable payroll for 2014 than estimated previously. These base-year differences change the actuarial balance by −0.02 percent of taxable payroll.
(3) Private health plan assumptions: Compared to last year's report, this year more beneficiaries are assumed to be enrolled in Medicare Advantage plans, where their benefits will be more costly. The impact on the actuarial balance of this assumption change and other minor adjustments is −0.07 percent of taxable payroll.
(4) Hospital assumptions: The primary change in hospital assumptions in this report is lower utilization than assumed in last year's report. The impact of this and other minor modifications is a +0.02-percent change in the actuarial balance.
(5) Other provider assumptions: The Trustees assume lower spending growth in hospice care, as well as a slightly higher market basket differential for skilled nursing facilities. These changes have no effect on the actuarial balance.
(6) Long-range cost-growth assumptions: As described in section IV.D, the assumptions for long-range per beneficiary cost growth rates have decreased in this year's report. The result is a +0.23-percent change in the actuarial balance.
(7) Other economic and demographic assumptions: The net effect of several adjustments to the economic and demographic assumptions is a +0.02-percent change in the actuarial balance. The major changes in these assumptions in this year's report are the higher increases in productivity and the higher ultimate real-wage growth assumption.
(8) Legislative changes: Certain provisions of recently enacted legislation affected the HI program. In particular, MACRA made changes to provider updates beginning in 2018. These

impacts are described in section V.A. The result of these modifications is a +0.03-percent change in the actuarial balance.

Table III.B10.—Change in the 75-Year Actuarial Balance since the 2014 Report

1. Actuarial balance, intermediate assumptions, 2014 report	−0.87%
2. Changes:	
a. Valuation period	−0.02
b. Base estimate	−0.02
c. Private health plan assumptions	−0.07
d. Hospital assumptions	0.02
e. Other provider assumptions	0.00
f. Long-range cost-growth assumptions	0.23
g. Other economic and demographic assumptions	0.02
h. Legislative changes	0.03
Net effect, above changes	+0.19
3. Actuarial balance, intermediate assumptions, 2015 report	−0.68

4. Long-Range Sensitivity Analysis

This section presents estimates that illustrate the sensitivity of the long-range HI cost rate, income rate, and actuarial balance of HI to changes in selected individual assumptions. The estimates based on the three alternative sets of assumptions (intermediate, low-cost, and high-cost) demonstrate the effects of varying all of the principal assumptions simultaneously in order to portray a generally more optimistic or pessimistic future for the projected financial status of the HI trust fund. In the sensitivity analysis presented in this section, the intermediate set of assumptions is the reference point, and one assumption at a time varies within that alternative. In each case, the Trustees assume that the provisions of current law remain unchanged throughout the 75-year projection period.

Each table that follows shows the effects of changing a particular assumption on the HI summarized income rates, summarized cost rates, and actuarial balances for 25-year, 50-year, and 75-year valuation periods. The discussion of the tables generally does not include the income rate, since it varies only slightly with changes in assumptions. The change in each of the actuarial balances is approximately equal to the change in the corresponding cost rate, but in the opposite direction. For example, a lower projected cost rate would result in an improvement or increase in the corresponding projected actuarial balance.

a. Real-Wage Differential

Table III.B11 shows projected HI income rates, cost rates, and actuarial balances on the basis of the intermediate assumptions, with

various assumptions about the real-wage differential (the difference between the percent increase in the average wage in covered employment and the CPI). The ultimate real-wage differential will be 0.6 percentage point (high-cost alternative), 1.2 percentage points (intermediate projections), and 1.8 percentage points (low-cost alternative). In each case, the assumed ultimate annual increase in the Consumer Price Index (CPI) is 2.7 percent (as assumed for the intermediate projections), yielding ultimate percentage increases in nominal average annual wages in covered employment of 3.3, 3.9, and 4.5 percent under the three illustrations, respectively.

Past increases in real earnings have exhibited substantial variation. During 1951-1970, real earnings grew by an average of 2.2 percent per year. During 1972-1996, however, the average annual increase in real earnings amounted to only 0.53 percent.[35] Poor performance in real-wage growth would have substantial consequences for the HI trust fund; as shown in table III.B11, projected HI cost rates are fairly sensitive to the assumed growth rates in real wages. For the 75-year period 2015-2089, the summarized cost rate decreases from 4.86 percent (for a real-wage differential of 0.6 percentage point) to 4.19 percent (for a differential of 1.8 percentage points). The HI actuarial balance over this period shows a corresponding improvement for faster rates of growth in real wages.

Table III.B11—Estimated HI Income Rates, Cost Rates, and Actuarial Balances, Based on Intermediate Estimates with Various Real-Wage Assumptions

[As a percentage of taxable payroll]

	Ultimate percentage increase in wages-CPI[1]		
Valuation period	3.3−2.7	3.9−2.7	4.5−2.7
Summarized income rate:			
25-year: 2015-2039	3.63	3.62	3.62
50-year: 2015-2064	3.69	3.73	3.81
75-year: 2015-2089	3.75	3.84	3.95
Summarized cost rate:			
25-year: 2015-2039	4.21	4.07	3.95
50-year: 2015-2064	4.62	4.37	4.14
75-year: 2015-2089	4.86	4.52	4.19
Actuarial balance:			
25-year: 2015-2039	−0.58	−0.45	−0.33
50-year: 2015-2064	−0.93	−0.64	−0.34
75-year: 2015-2089	−1.11	−0.68	−0.24

[1]The first value in each pair is the assumed ultimate annual percentage increase in average wages in covered employment. The second value is the assumed ultimate annual percentage increase in the CPI. The difference between the two values is the real-wage differential.

The sensitivity of the HI actuarial balance to different real-wage assumptions is significant, but not as substantial as one might

[35]The Trustees chose this period because it begins and ends with years in which the economy reached full employment. The period thus allows measurement of trend growth over complete economic cycles.

intuitively expect. Higher real-wage differentials immediately increase both HI expenditures for health care and wages for all workers. Though there is a full effect on wages and payroll taxes, the effect on benefits is only partial, since not all health care costs are wage-related. The HI cost rate decreases with increasing real-wage differentials because the higher real-wage levels increase the taxable payroll to a greater extent than they increase HI benefits. In particular, each 0.5-percentage-point increase in the assumed real-wage differential increases the long-range HI actuarial balance, on average, by about 0.36 percent of taxable payroll.

b. Consumer Price Index

Table III.B12 shows projected HI income rates, cost rates, and actuarial balances on the basis of the intermediate alternative, with various assumptions about the rate of increase for the CPI. The ultimate annual increase in the CPI will be 3.4 percent (low-cost alternative), 2.7 percent (intermediate projections), and 2.0 percent (high-cost alternative).[36] In each case, the assumed ultimate real-wage differential is 1.2 percent (as assumed for the intermediate projections), which yields ultimate percentage increases in average annual wages in covered employment of 4.6, 3.9, and 3.2 percent under the three illustrations.

Table III.B12.—Estimated HI Income Rates, Cost Rates, and Actuarial Balances, Based on Intermediate Estimates with Various CPI-Increase Assumptions

[As a percentage of taxable payroll]

	Ultimate percentage increase in wages-CPI[1]		
Valuation period	4.6−3.4	3.9−2.7	3.2−2.0
Summarized income rate:			
25-year: 2015-2039	3.67	3.62	3.59
50-year: 2015-2064	3.89	3.73	3.60
75-year: 2015-2089	4.01	3.84	3.63
Summarized cost rate:			
25-year: 2015-2039	4.06	4.07	4.07
50-year: 2015-2064	4.37	4.37	4.37
75-year: 2015-2089	4.52	4.52	4.53
Actuarial balance:			
25-year: 2015-2039	−0.39	−0.45	−0.48
50-year: 2015-2064	−0.48	−0.64	−0.78
75-year: 2015-2089	−0.51	−0.68	−0.90

[1]The first value in each pair is the assumed ultimate annual percentage increase in average wages in covered employment. The second value is the assumed ultimate annual percentage increase in the CPI.

The variation in the rate of change assumed for the CPI has only a small impact on the actuarial balance, as the summarized income rates are slightly affected while the summarized cost rates are virtually unchanged.

[36]Prior to this year's report, the Trustees used the lower CPI for the low-cost alternative and the higher CPI for the high-cost alternative.

Faster assumed growth in the CPI results in a somewhat larger HI income rate because the income thresholds for the taxation of Social Security benefits and for the additional 0.9-percent payroll tax rate are not indexed. As a result, the share of Social Security benefits subject to income tax, as well as the share of earnings subject to the additional tax, increases over time. This impact accelerates under conditions of faster CPI growth. In contrast, the cost rate remains about the same with greater assumed rates of increase in the CPI. The relative insensitivity of projected HI cost rates to different levels of general inflation occurs because of the assumption that inflation proportionately affects both the taxable payroll of workers and medical care costs about equally.[37]

In practice, differing rates of inflation could occur between the economy in general and the medical-care sector. Readers can judge the effect of such a difference from the sensitivity analysis shown in section III.B4d on health care cost factors.

c. Real-Interest Rate

Table III.B13 shows projected HI income rates, cost rates, and actuarial balances under the intermediate alternative, with various assumptions about the annual real-interest rate for special public-debt obligations issuable to the trust fund. The ultimate annual real-interest rate will be 2.4 percent (high-cost alternative), 2.9 percent (intermediate projections), and 3.4 percent (low-cost alternative). In each case, the assumed ultimate annual increase in the CPI is 2.7 percent (as assumed for the intermediate projections), which results in ultimate annual yields of 5.1, 5.6, and 6.1 percent under the three illustrations.

[37]The slight sensitivity shown in the table results primarily from the fact that the fiscal year 2015 payment rates for all providers have already been set before publication of the actual CPI.

Table III.B13.—Estimated HI Income Rates, Cost Rates, and Actuarial Balances, Based on Intermediate Estimates with Various Real-Interest Assumptions

[As a percentage of taxable payroll]

Valuation period	Ultimate annual real-interest rate		
	2.4 percent	2.9 percent	3.4 percent
Summarized income rate:			
25-year: 2015-2039	3.62	3.62	3.62
50-year: 2015-2064	3.74	3.73	3.73
75-year: 2015-2089	3.87	3.84	3.82
Summarized cost rate:			
25-year: 2015-2039	4.09	4.07	4.04
50-year: 2015-2064	4.41	4.37	4.33
75-year: 2015-2089	4.58	4.52	4.46
Actuarial balance:			
25-year: 2015-2039	−0.47	−0.45	−0.42
50-year: 2015-2064	−0.67	−0.64	−0.60
75-year: 2015-2089	−0.71	−0.68	−0.64

For all periods, the cost rate decreases slightly with increasing real-interest rates. Over 2015-2089, for example, the summarized HI cost rate would decline from 4.58 percent (for an ultimate real-interest rate of 2.4 percent) to 4.46 percent (for an ultimate real-interest rate of 3.4 percent). Accordingly, each 1.0-percentage-point increase in the assumed real-interest rate increases the long-range actuarial balance, on average, by about 0.07 percent of taxable payroll.

d. Health Care Cost Factors

Table III.B14 shows projected HI income rates, cost rates, and actuarial balances on the basis of the intermediate set of assumptions, with two variations on the relative annual growth rate in the aggregate cost of providing covered health care services to HI beneficiaries. Starting in 2015, the ratio of costs to taxable payroll will grow 1 percentage point more slowly than the intermediate projections, the same as the intermediate projections, and 1 percentage point faster than the intermediate projections. In each case, the taxable payroll will be the same as assumed for the intermediate projections.[38]

As noted previously, factors such as wage and price increases may simultaneously affect HI tax income and the costs incurred by hospitals and other providers of medical care to HI beneficiaries. (Sections III.B4a and III.B4b evaluate the sensitivity of the trust fund's financial status to these factors.) Other factors, such as the utilization of services by beneficiaries or the relative complexity of the services provided, can have an impact on provider costs without

[38]These variations in HI cost growth rates are not equivalent to the high- and low-cost alternative assumptions, which use a different level and pattern of growth differentials and vary other assumptions in addition to the cost growth factors.

affecting HI tax income. The sensitivity analysis shown in table III.B14 illustrates the financial effect of any combination of these factors that results in the ratio of cost to payroll taxes increasing by 1 percentage point faster or slower than the intermediate assumptions.

Table III.B14.—Estimated HI Income Rates, Cost Rates, and Actuarial Balances, Based on Intermediate Estimates with Various Health Care Cost Growth Rate Assumptions

[As a percentage of taxable payroll]

Valuation period	Annual cost/payroll relative growth rate		
	−1 percentage point	0 percentage point	+1 percentage point
Summarized income rate:			
25-year: 2015-2039	3.62	3.62	3.62
50-year: 2015-2064	3.73	3.73	3.73
75-year: 2015-2089	3.84	3.84	3.84
Summarized cost rate:			
25-year: 2015-2039	3.54	4.07	4.68
50-year: 2015-2064	3.42	4.37	5.68
75-year: 2015-2089	3.24	4.52	6.57
Actuarial balance:			
25-year: 2015-2039	0.08	−0.45	−1.06
50-year: 2015-2064	0.31	−0.64	−1.94
75-year: 2015-2089	0.60	−0.68	−2.72

As illustrated in table III.B14, the financial status of the HI trust fund is extremely sensitive to the relative growth rates for health care service costs versus taxable payroll. For the 75-year period, the cost rate increases from 3.24 percent (for an annual cost/payroll growth rate of 1 percentage point less than the intermediate assumptions) to 6.57 percent (for an annual cost/payroll growth rate of 1 percentage point more than the intermediate assumptions). Each 1.0-percentage-point increase in the assumed cost/payroll relative growth rate decreases the long-range actuarial balance, on average, by about 1.66 percent of taxable payroll.

C. PART B FINANCIAL STATUS

This section presents actual operations of the Part B account in the SMI trust fund in 2014 and Part B projections for the next 75 years. Section III.C1 discusses Part B financial results for 2014, and sections III.C2 and III.C3 discuss the short-range Part B projections and the long-range projections, respectively. The projections shown in sections III.C2 and III.C3 assume no changes will occur in the statutory provisions and regulations under which Part B now operates.

1. Financial Operations in Calendar Year 2014

Table III.C1 presents a statement of the revenue and expenditures of the Part B account of the SMI trust fund in calendar year 2014, and of its assets at the beginning and end of the year.

Table III.C1.—Statement of Operations of the Part B Account in the SMI Trust Fund during Calendar Year 2014

[In thousands]

Total assets of the Part B account in the trust fund, beginning of period		$74,125,338
Revenue:		
Premiums from enrollees:		
Enrollees aged 65 and over	$55,164,268	
Disabled enrollees under age 65	10,479,236	
Total premiums		65,643,504
Premiums collected from Medicare Advantage participants		309,527
Government contributions:		
Enrollees aged 65 and over	152,453,092	
Disabled enrollees under age 65	33,073,004	
Health information technology receipts	2,950,697	
Total government contributions		188,476,793
Other		5,806
Interest on investments		2,386,878
Interfund interest receipts[1]		205
ACA Medicare shared savings program receipts		2,832
Annual fees–branded Rx manufacturers and importers		3,000,865
Total revenue		$259,826,410
Expenditures:		
Net Part B benefit payments		$261,924,275
Administrative expenses:		
Transfer to Medicaid[2]	687,552	
Treasury administrative expenses	612	
Salaries and expenses, CMS[3]	2,070,348	
Salaries and expenses, Office of the Secretary, HHS	46,969	
Salaries and expenses, SSA	993,601	
Medicare Payment Advisory Commission	4,482	
Administration on aging funding	5,194	
Railroad Retirement administrative expenses	29,297	
Transfer to Patient-Centered Outcomes Research trust fund[4]	61,506	
CMS program management–Affordable Care Act	53,993	
Total administrative expenses		3,953,553
Total expenditures		$265,877,828
Net addition to the trust fund		−6,051,418
Total assets of the Part B account in the trust fund, end of period		$68,073,920

[1]Reflects interest adjustments on the reallocation of administrative expenses among the Medicare trust funds, the OASDI trust funds, and the general fund of the Treasury. Estimated payments are made from the trust funds and then are reconciled, with interest, the next year when the actual costs are known. A positive figure represents a transfer to the Part B account in the SMI trust fund from the other trust funds. A negative figure represents a transfer from the Part B account of the SMI trust fund to the other funds.
[2]Represents amount transferred from the Part B account in the SMI trust fund to Medicaid to pay the Part B premium for certain qualified individuals, as legislated by the Balanced Budget Act of 1997.
[3]Includes administrative expenses of the carriers and intermediaries.
[4]Represents amount transferred from the Part B account of the SMI trust fund to the Patient-Centered Outcomes Research trust fund, as authorized by the Patient Protection and Affordable Care Act of 2010.

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

The total assets of the account amounted to $74.1 billion on December 31, 2013. During calendar year 2014, total revenue

amounted to $259.8 billion, and total expenditures were $265.9 billion. Total assets thus decreased $6.1 billion during the year, to $68.1 billion as of December 31, 2014. The decrease in assets occurred primarily because of higher-than-expected Part B expenditures.

a. Revenues

The major sources of revenue for the Part B account are (i) contributions of the Federal Government that the law authorizes to be appropriated and transferred from the general fund of the Treasury and (ii) premiums paid by eligible persons who voluntarily enroll. Another source of revenues, which began in 2011 as specified by the ACA, is the annual fees assessed on manufacturers and importers of brand-name prescription drugs. The ACA directs that these fees be allocated to the Part B trust fund account, where they will serve to slightly reduce the need for premium revenues and Federal general revenues. Eligible persons aged 65 and over have been able to enroll in Part B since its inception in July 1966. Since July 1973, disabled persons who are under age 65 and who have met certain eligibility requirements have also been able to enroll.

Of the total Part B revenue, $65.6 billion represented premium payments by (or on behalf of) aged and disabled enrollees—an increase of 4.0 percent over the amount of $63.1 billion for the preceding year.

Government contributions matched the premiums paid for fiscal years 1967 through 1973 dollar for dollar. Beginning July 1973, the amount of government contributions corresponding to premiums paid by each of the two groups of enrollees is determined by applying a matching rate, prescribed in the law for each group, to the amount of premiums received from that group. This ratio is equal to twice the monthly actuarial rate applicable to the particular group of enrollees, minus the standard monthly premium rate, divided by the standard monthly premium rate.

The Secretary of Health and Human Services promulgates standard monthly premium rates and actuarial rates each year. Table III.C2 shows past monthly premium rates and actuarial rates together with the corresponding percentages of Part B costs covered by the premium rate. Estimated future premium amounts under the intermediate set of assumptions appear in section V.E.

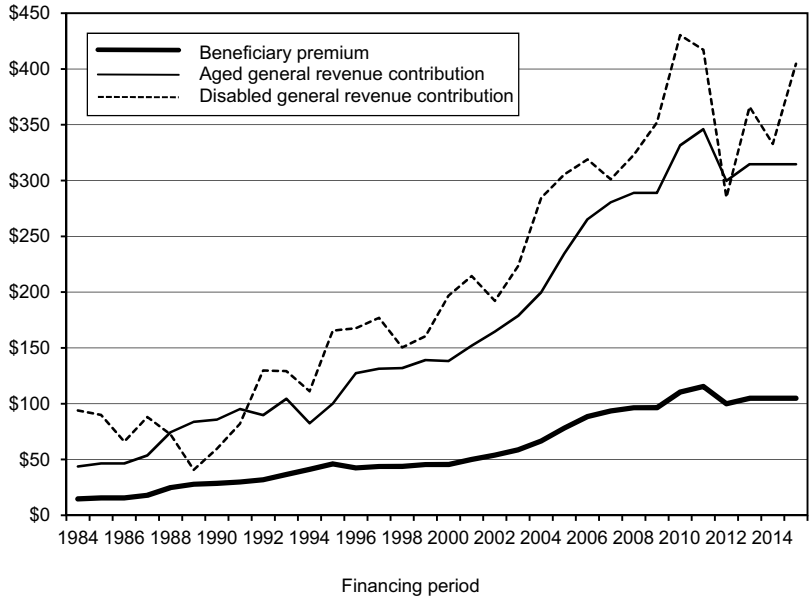
Table III.C2.—Standard Part B Monthly Premium Rates, Actuarial Rates, and Premium Rates as a Percentage of Part B Cost

		Monthly actuarial rate		Premium rates as a percentage of Part B cost	
	Standard monthly premium rate[1]	Enrollees aged 65 and over	Disabled enrollees under age 65	Enrollees aged 65 and over	Disabled enrollees under age 65
July 1966-March 1968	$3.00	—	—	50.0%	—
April 1968-June 1970	4.00	—	—	50.0	—
12-month period ending June 30 of					
1975	6.70	6.70	18.00	50.0	18.6
1980	8.70	13.40	25.00	32.5	17.4
Calendar year					
1985	15.50	31.00	52.70	25.0	14.7
1990	28.60	57.20	44.10	25.0	32.4
1991	29.90	62.60	56.00	23.9	26.7
1992	31.80	60.80	80.80	26.2	19.7
1993	36.60	70.50	82.90	26.0	22.1
1994	41.10	61.80	76.10	33.3	27.0
1995	46.10	73.10	105.80	31.5	21.8
1996	42.50	84.90	105.10	25.0	20.2
1997	43.80	87.60	110.40	25.0	19.8
1998	43.80	87.90	97.10	24.9	22.6
1999	45.50	92.30	103.00	24.6	22.1
2000	45.50	91.90	121.10	24.8	18.8
2001	50.00	101.00	132.20	24.8	18.9
2002	54.00	109.30	123.10	24.7	21.9
2003	58.70	118.70	141.00	24.7	20.8
2004	66.60	133.20	175.50	25.0	19.0
2005	78.20	156.40	191.80	25.0	20.4
2006	88.50	176.90	203.70	25.0	21.7
2007	93.50	187.00	197.30	25.0	23.7
2008	96.40	192.70	209.70	25.0	23.0
2009	96.40	192.70	224.20	25.0	21.5
2010	110.50	221.00	270.40	25.0	20.4
2011	115.40	230.70	266.30	25.0	21.7
2012	99.90	199.80	192.50	25.0	25.9
2013	104.90	209.80	235.50	25.0	22.3
2014	104.90	209.80	218.90	25.0	24.0
2015	104.90	209.80	254.80	25.0	20.6

[1]The amount shown for each year represents the standard Part B premium paid by, or on behalf of, most Part B enrollees. It does not reflect other amounts that certain beneficiaries must pay, such as the income-related monthly adjustment amount for beneficiaries with high incomes and the premium surcharge for beneficiaries who enroll late. In addition, it does not reflect a reduction in premium for beneficiaries covered by the hold-harmless provision. As a result of this provision, most Part B beneficiaries had their 2010 and 2011 monthly premium held to the 2009 rate of $96.40. Section V.E describes these amounts in more detail.

Figure III.C1 is a graph of the monthly per capita financing rates in all financing periods after 1983 for enrollees aged 65 and over and for disabled individuals under age 65. The graph shows the portion of the financing contributed by the beneficiaries and by general revenues. As indicated, general revenue financing is the largest income source for Part B.

Figure III.C1.—Part B Aged and Disabled Monthly Per Capita Trust Fund Income



Note: The amounts shown do not include the catastrophic coverage monthly premium rate for 1989.

In calendar year 2014, premium matching contributions received from the general fund of the Treasury amounted to $185.5 billion, which accounted for 71.4 percent of total revenue. Transfers from the general fund of the Treasury for the health information technology incentive payments were $3.0 billion in 2014. The annual fees assessed on manufacturers and importers of brand-name prescription drugs amounted to $3.0 billion in revenue.

Another source of Part B revenue is interest received on investments held by the Part B account. A description of the investment procedures of the Part B account appears later in this section. In calendar year 2014, $2.4 billion of revenue was from interest on the investments of the account.

The Department of the Treasury may accept and deposit in the Part B account unconditional money gifts or bequests made for the benefit of the fund. The Part B account received contributions in the amount of $6 million in calendar year 2014.

b. Expenditures

The account pays expenditures for Part B benefit payments and administrative expenses. All expenses incurred by the Department of

Health and Human Services, the Social Security Administration, and the Department of the Treasury in administering Part B are charged to the account. Such administrative duties include payment of benefits, fraud and abuse control activities, and experiments and demonstration projects designed to determine various methods of increasing efficiency and economy in providing health care services while maintaining the quality of these services.

In addition, Congress has authorized expenditures from the trust funds for construction, rental and lease, or purchase contracts of office buildings and related facilities for use in connection with the administration of Part B. The account expenditures include such costs. The net worth of facilities and other fixed capital assets, however, does not appear in the statement of Part B assets presented in this report, since the value of fixed capital assets does not represent funds available for benefit or administrative expenditures and is not, therefore, pertinent in assessing the actuarial status of the funds.

Of total Part B expenditures, $261.9 billion represented net benefits paid from the account for health services.[39] Net benefits increased 7.4 percent over the corresponding amount of $243.8 billion paid during the preceding calendar year. This spending growth reflects the net change in both the number of beneficiaries and the price, volume, and intensity of services. Additional information on Part B benefits by type of service is available in section IV.B1.

The remaining $4.0 billion of expenditures was for administrative expenses and represented 1.5 percent of total Part B expenditures in 2014.[40] Administrative expenses are shown on a net basis, after adjustments to the preliminary allocation of such costs among the Social Security and Medicare trust funds and the general fund of the Treasury.

c. Actual experience versus prior estimates

Table III.C3 compares the actual experience in calendar year 2014 with the estimates presented in the 2013 and 2014 annual reports. A number of factors can contribute to differences between

[39]Net benefits equal the total gross amounts initially paid from the trust fund during the year less recoveries of overpayments identified through fraud and abuse control activities.

[40]In 2014, the Part B salaries and expenses for CMS, including the administrative expenses of the carriers and intermediaries, amounted to $2.0 billion, or 0.8 percent of total Part B expenditures.

estimates and subsequent actual experience. In particular, actual values for key economic and other variables can differ from assumed levels, and lawmakers may adopt legislative and regulatory changes after a report's preparation. Table III.C3 indicates that actual Part B benefit payments were slightly higher than estimated in the 2014 report and, because legislation increased physician payments for 2014 after the release of the 2013 report, were somewhat higher than estimated in the 2013 report. Actual premiums and government contributions were close to those estimated in 2014, as the financing rates were determined in the fall of 2013 and were included in the 2014 report, but premiums were higher and government contributions were lower than estimated in 2013. The actual disabled general revenue matching rate was lower than assumed in the 2013 report.

Table III.C3.—Comparison of Actual and Estimated Operations of the Part B Account in the SMI Trust Fund, Calendar Year 2014

[Dollar amounts in millions]

		Comparison of actual experience with estimates for calendar year 2014 published in:			
		2014 report[3]		2013 report	
Item	Actual amount	Estimated amount[1]	Actual as a percentage of estimate	Estimated amount[1]	Actual as a percentage of estimate
Premiums from enrollees	$65,644	$65,633	100%	$64,611	102%
Government contributions	188,477	188,445	100	194,621	97
Benefit payments[2]	261,924	260,061	101	249,852	105

[1]Under the intermediate assumptions.

[2]Benefit payments include additional premiums for Medicare Advantage plans that are deducted from beneficiaries' Social Security benefits, costs of Quality Improvement Organizations, and health information technology payments.

[3]The estimates in the 2014 report were shown not on a current-law basis but instead using a *projected baseline* scenario, which assumed an override of the current-law physician payment updates.

d. Assets

The Department of the Treasury invests the portion of the Part B account not needed to meet current expenditures for benefits and administration in interest-bearing obligations of the U.S. Government.

The Social Security Act authorizes the issuance of special public-debt obligations for purchase exclusively by the account. The law requires that these special public-debt obligations shall bear interest at a rate based on the average market yield (computed on the basis of market quotations as of the end of the calendar month immediately preceding the date of such issue) for all marketable interest-bearing obligations of the United States forming a part of the public debt that are not due or callable until after 4 years from the end of that month. Since the inception of the SMI trust fund, the Department of the Treasury has

always invested the assets in special public-debt obligations.[41] Table V.H10, presented in appendix H, shows the assets of the SMI trust fund (Parts B and D) at the end of fiscal years 2013 and 2014.

2. 10-Year Actuarial Estimates (2015-2024)

Section III.C2 provides detailed information concerning the short-range financial status of the Part B account, including projected annual income, outgo, differences between income and outgo, and trust fund balances. The bases of the projected future operations of the Part B account are the Trustees' economic and demographic assumptions, as detailed in the OASDI Trustees Report, as well as other assumptions unique to Part B. Section IV.B1 presents an explanation of the effects of these assumptions on the estimates in this report. The Trustees also assume that financing for future periods will be determined according to the statutory provisions described in section III.C1a, although Part B financing rates have been set only through December 31, 2015.

In 2015 the monthly Part B premium rate is $104.90, which is unchanged from the 2014 monthly premium. For determining an individual's monthly premium rate, there is a hold-harmless provision in the law that limits the dollar increase in the premium to the dollar increase in an individual's Social Security benefit. This provision applies to most beneficiaries who have their premium deducted from their Social Security benefit, or roughly 70 percent of Part B enrollees.[42] Without the hold-harmless provision, beneficiaries would face a premium of $120.70 for 2016. However, because the cost-of-living adjustment for Social Security benefits is expected to be 0.0 percent for 2016, premiums would not increase from the 2015 level for those beneficiaries to whom the provision applies. Under current law, Part B premiums for other beneficiaries must be raised substantially to offset premiums foregone due to the hold-harmless provision, to prevent asset exhaustion, and to maintain a contingency reserve that accommodates normal financial variation. Accordingly, under the intermediate economic assumptions, the estimated monthly premium for 2016 is $159.30, which is matched by general revenue transfers.

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[41]The Department of the Treasury may also make investments in obligations guaranteed as to both principal and interest by the United States, including certain federally sponsored agency obligations.

[42]New enrollees during the year, enrollees who do not receive a Social Security benefit check, and enrollees with high incomes who are subject to the income-related premium adjustment are not eligible for the hold-harmless provision. Also, State Medicaid programs pay the full premium for dual Medicare-Medicaid beneficiaries. About 30 percent of Part B enrollees are in these categories.

The basis for the Part B projections has changed since last year's report. MACRA has replaced the physician payment updates under the sustainable growth rate (SGR) formula, which would have required a large negative update in 2015, with specified physician payment updates for every future year. Physician payments will be frozen at current levels for the first 6 months of 2015 and will then increase 0.5 percent for the last 6 months of the year. In 2016, physician payments will be 0.5 percent higher than payment levels at the end of 2015. The physician payment update for 2017 through 2019 will be 0.5 percent. For 2020 through 2025, the update will be 0.0 percent. For 2026 and later, there will be two payment rates: for providers paid through an *alternative payment model* (APM), payment rates will be increased by 0.75 percent each year, while payment rates for all other providers will be increased each year by 0.25 percent. Other provisions and impacts of MACRA are discussed in section V.A. The income, expenditures, and assets for Part B reflect these provisions.

Projected Part B expenditures are further affected by the sequestration of Medicare expenditures required by current law. The sequestration reduces benefit payments by 2 percent from April 1, 2013 through March 31, 2023, by 2.9 percent from April 1, 2023 through September 30, 2023, by 1.1 percent from October 1, 2023 through March 31, 2024, and by 4 percent from April 1, 2024 through September 30, 2024. Due to sequestration, non-salary administrative expenses are reduced by an estimated 5 percent from March 1, 2013 through September 30, 2024.

Table III.C4 shows the estimated operations of the Part B account under the intermediate assumptions on a calendar-year basis through 2024.

Table III.C4.—Operations of the Part B Account in the SMI Trust Fund (Cash Basis) during Calendar Years 1970-2024

[In billions]

	Income				Expenditures			Account	
Calendar year	Premium income	General revenue[1]	Interest and other[2,3]	Total	Benefit payments[3,4]	Adminis-trative expenses	Total	Net change	Balance at end of year[5]
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[6]	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[7]	3.0	183.3	17.3	59.4
2009	56.0[8]	162.8[8]	3.1	221.9	202.6	3.1	205.7	16.2	75.5
2010	52.0[8]	153.5[8]	3.3	208.8	209.7	3.2	212.9	−4.1	71.4
2011	57.5	170.2	5.9	233.6	221.7	3.6	225.3	8.3	79.7
2012	58.0	163.8	5.2	227.0	236.5	3.9	240.5	−13.5	66.2
2013	63.1	185.8	6.1	255.0	243.8	3.3	247.1	7.9	74.1
2014	65.6	188.5	5.7	259.8	261.9	4.0	265.9	−6.1	68.1
Intermediate estimates:									
2015	70.3[8]	205.0[8]	5.6	280.9	277.3	3.4	280.7	0.2	68.3
2016	77.8[8]	223.2[8]	5.7	306.7	294.4	3.6	298.0	8.7	77.0
2017	83.1	235.8	7.5	326.4	314.1	3.8	318.0	8.5	85.4
2018	88.0	245.3	8.1	341.4	334.5	4.1	338.6	2.8	88.2
2019	98.5	270.8	7.3	376.7	362.5	4.4	366.9	9.7	97.9
2020	111.6[8]	304.8[8]	8.0	424.3	397.5	4.7	402.2	22.2	120.1
2021	113.1[8]	307.9[8]	8.6	429.7	430.6	5.0	435.6	−5.9	114.1
2022	127.4	344.5	9.3	481.2	466.7	5.4	472.1	9.1	123.2
2023	138.4	372.9	10.0	521.4	505.7	5.7	511.4	9.9	133.1
2024	150.5	403.9	10.9	565.4	546.4	6.2	552.5	12.9	146.0

[1]General fund matching payments, plus certain interest-adjustment items.

[2]Other income includes recoveries of amounts reimbursed from the trust fund that are not obligations of the trust fund and other miscellaneous income. In 2008, includes an adjustment of $0.8 billion for interest earned as a result of Part A hospice costs that were misallocated to the Part B trust fund account.

[3]See footnote 2 of table III.B4.

[4]Includes costs of Peer Review Organizations from 1983 through 2001 and costs of Quality Improvement Organizations beginning in 2002.

[5]The financial status of Part B depends on both the assets and the liabilities of the trust fund (see table III.C8).

[6]Benefit payments less monies transferred from the HI trust fund for home health agency costs, as provided for by the Balanced Budget Act of 1997.

[7]Benefits shown for 2008 are lower by the $8.5 billion transferred from the general fund of the Treasury to reimburse Part B for Part A hospice costs that were previously misallocated to the Part B trust fund account.

[8]Section 708 of the Social Security Act modifies the provisions for the payment of Social Security benefits when the regularly designated day falls on a Saturday, Sunday, or legal public holiday. Payment of those benefits normally due January 3, 2010 actually occurred on December 31, 2009. Consequently, the Part B premiums withheld from these benefits and the associated general revenue contributions were added to the SMI trust fund on December 31, 2009. Similarly, the payment date for those benefits normally due on January 3, 2016 will be December 31, 2015, and the payment date for those benefits normally due on January 3, 3021 will be December 31, 2020.

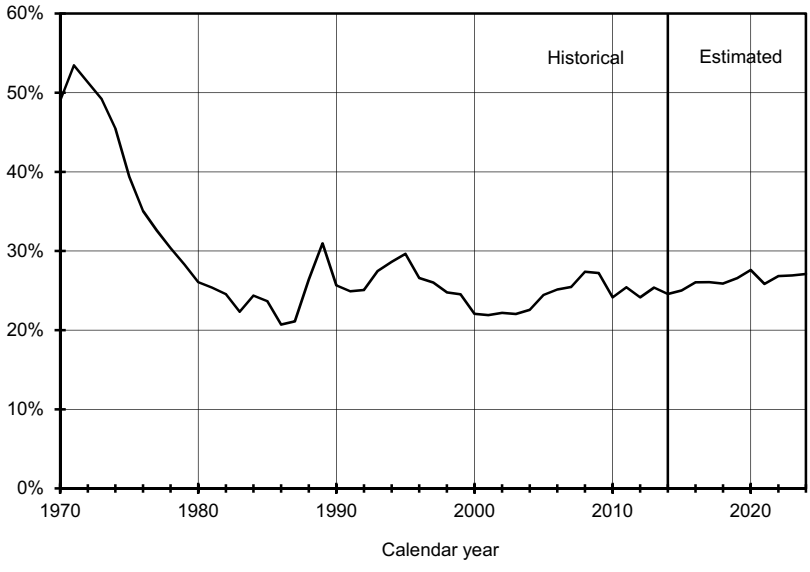
Note: Totals do not necessarily equal the sums of rounded components.

As shown in table III.C4, the Part B account would slightly increase by the end of 2015 to an estimated $68.3 billion. However, about $10 billion, consisting of Part B premium income and the associated

general revenue for January 2016, will be received by the Part B account on December 31, 2015. This income would normally be received on January 3, 2016, which will fall on a Sunday, but instead will be received on the day before this date that does not occur on a holiday or weekend. Prior to this cashflow oddity on the last day of 2015, the Part B account would decrease to roughly $58.0 billion during 2015. Legislation enacted at the end of 2014 and the beginning of 2015 raised Part B physician expenditures substantially compared to the law in effect in the fall of 2014 when the 2015 financing was established. Maintenance of an asset reserve that is sufficient to handle this type of contingency is an important element in ensuring solvency for the Part B trust fund account.

The statutory provisions governing Part B financing have changed over time. Most recently, the Balanced Budget Act of 1997 provided for the permanent establishment of the standard Part B premium at the level of about 25 percent of average expenditures for beneficiaries aged 65 and over.[43] Figure III.C2 shows historical and projected ratios of premium income to Part B expenditures.

Figure III.C2.—Premium Income as a Percentage of Part B Expenditures



Beneficiary premiums are also affected by a provision of the ACA that imposes fees on the manufacturers and importers of brand-name prescription drugs and allocates the fees to the Part B account of the

[43]Part B beneficiaries with high incomes pay a higher income-related premium beginning in 2007.

SMI trust fund. The new legislation does not modify the determination of the Part B actuarial rates, premiums, or general revenue matching contributions; consequently, the normal financing, plus the new fees, would result in an excessive level of program financing without other action. Thus, there will be a reduction in the premium margin for maintaining an appropriate level of trust fund assets such that total revenues from premiums, matching general revenues, and the earmarked fees relating to brand-name prescription drugs will equal the appropriate level needed for program financing.

The amount and rate of growth of benefit payments have caused concern for many years. Table III.C5 shows payment amounts in the aggregate, on a per capita basis, and relative to the Gross Domestic Product (GDP). Rates of growth appear historically and for the next 10 years based on the intermediate assumptions.

Part B benefit growth has averaged 5.3 percent annually over the past 5 years. A one-time hospice payment correction in 2008 led to higher growth in 2009. During 2014, Part B benefits grew 7.4 percent on an aggregate basis and were 1.50 percent of GDP.

Table III.C5.—Growth in Part B Benefits (Cash Basis) through December 31, 2024

Calendar year	Aggregate benefits [billions]	Percent change	Per capita benefits	Percent change	Part B benefits as a percentage of GDP
Historical data:					
1970	$2.0	5.9%	$101	3.5%	0.18%
1975	4.3	28.8	180	24.6	0.25
1980	10.6	22.1	390	19.3	0.37
1985	22.9	16.7	768	14.5	0.53
1990	42.5	10.9	1,304	9.1	0.71
1995	65.0	10.8	1,823	9.2	0.85
2000	90.6[1]	11.4	2,425	10.5	0.88
2005	149.2	10.6	3,754	8.8	1.14
2006	165.9	11.2	4,111	9.5	1.20
2007	176.4	6.3	4,293	4.4	1.22
2008	180.3[2]	2.2	4,296	0.1	1.23
2009	202.6	12.4	4,721	9.9	1.41
2010	209.7	3.5	4,779	1.2	1.40
2011	221.7	5.7	4,936	3.3	1.43
2012	236.5	6.7	5,089	3.1	1.46
2013	243.8	3.1	5,085	−0.1	1.45
2014	261.9	7.4	5,308	4.4	1.50
Intermediate estimates:					
2015	277.3	5.9	5,461	2.9	1.53
2016	294.4	6.2	5,645	3.4	1.53
2017	314.1	6.7	5,860	3.8	1.55
2018	334.5	6.5	6,067	3.5	1.56
2019	362.5	8.4	6,394	5.4	1.61
2020	397.5	9.6	6,814	6.6	1.68
2021	430.6	8.3	7,179	5.4	1.73
2022	466.7	8.4	7,569	5.4	1.79
2023	505.7	8.4	7,983	5.5	1.86
2024	546.4	8.0	8,407	5.3	1.92

[1]See footnote 6 of table III.C4.

[2]See footnote 7 of table III.C4.

The Part B expenditures in 2013-2024 are affected by the sequestration of Medicare benefits required under current law. Projected Part B costs continue to increase faster than GDP in most years, as indicated in table III.C5.

The Trustees have prepared the estimates shown throughout the report using the intermediate set of assumptions. They have also prepared estimates using two alternative sets of assumptions. Table III.C6 summarizes the estimated operations of the Part B account for all three alternatives. Section IV.B1 presents in substantial detail the assumptions underlying the intermediate estimates, as well as the assumptions used in preparing estimates under the low-cost and high-cost alternatives.

Table III.C6.—Estimated Operations of the Part B Account in the SMI Trust Fund during Calendar Years 2014-2024, under Alternative Sets of Assumptions

[Dollar amounts in billions]

Calendar year	Premiums from enrollees	Other income[1]	Total income	Total expenditures	Balance in fund at end of year	Expenditures as a percent of GDP
Intermediate:						
2014[2]	$65.6	$194.2	$259.8	$265.9	$68.1	1.53%
2015	70.3[3]	210.6[3]	280.9	280.7	68.3	1.55
2016	77.8[3]	228.9[3]	306.7	298.0	77.0	1.55
2017	83.1	243.3	326.4	318.0	85.4	1.57
2018	88.0	253.4	341.4	338.6	88.2	1.58
2019	98.5	278.1	376.7	366.9	97.9	1.63
2020	111.6[3]	312.8[3]	424.3	402.2	120.1	1.70
2021	113.1[3]	316.5[3]	429.7	435.6	114.1	1.75
2022	127.4	353.8	481.2	472.1	123.2	1.81
2023	138.4	382.9	521.4	511.4	133.1	1.88
2024	150.5	414.8	565.4	552.5	146.0	1.94
Low-cost:						
2014[2]	65.6	194.2	259.8	265.9	68.1	1.53
2015	70.3[3]	210.5[3]	280.7	278.3	70.5	1.51
2016	76.0[3]	224.3[3]	300.3	294.7	76.1	1.49
2017	81.3	238.7	320.0	313.5	82.6	1.47
2018	86.5	249.3	335.8	332.1	86.3	1.46
2019	95.6	270.5	366.2	357.2	95.2	1.47
2020	107.3[3]	301.4[3]	408.7	388.1	115.8	1.51
2021	107.8[3]	302.5[3]	410.3	416.4	109.7	1.52
2022	120.3	335.3	455.6	447.7	117.7	1.55
2023	129.9	360.5	490.5	481.6	126.5	1.57
2024	140.2	387.6	527.9	516.7	137.7	1.59
High-cost:						
2014[2]	65.6	194.2	259.8	265.9	68.1	1.53
2015	70.3[3]	210.6[3]	280.9	281.8	67.2	1.58
2016	78.3[3]	230.3[3]	308.6	298.7	77.1	1.61
2017	83.7	244.7	328.3	319.5	85.9	1.66
2018	89.2	256.4	345.6	342.4	89.1	1.71
2019	100.5	283.3	383.8	373.4	99.5	1.80
2020	114.7[3]	320.9[3]	435.6	412.0	123.1	1.91
2021	117.3[3]	327.3[3]	444.5	449.7	117.9	2.01
2022	133.1	368.9	502.0	491.6	128.3	2.12
2023	145.9	402.5	548.3	537.2	139.4	2.24
2024	159.7	438.6	598.3	584.0	153.7	2.36

[1]Other income contains government contributions, fees on manufacturers and importers of brand-name prescription drugs, and interest.
[2]Figures for 2014 represent actual experience.
[3]See footnote 8 of table III.C4.

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

These alternatives provide two possible Part B scenarios but represent a narrow range of possible outcomes for total expenditures. Given the considerable variation in future demographic, economic, and healthcare-usage factors, actual Part B experience could easily fall outside of this range. The low- and high-cost scenarios in this year's report result in a narrower dollar range than shown prior to 2014, due to a change in the alternative assumptions beginning with

the 2014 report.[44] The GDP assumptions for the alternative scenarios are also affected by the assumption change. Therefore, spending as a percent of GDP provides better insight into the variability of spending than the nominal dollar amounts, as shown in table III.C6.

The alternative projections shown in table III.C6 illustrate two important aspects of the financial operations of the Part B account:

- Despite the differing assumptions underlying the three alternatives, the balance between Part B income and expenditures remains relatively stable. This result occurs because the Secretary of Health and Human Services annually reestablishes the premiums and general revenue contributions underlying Part B financing to cover each year's anticipated incurred benefit costs and other expenditures and then increases these amounts by a margin that reflects the uncertainty of the projection. Thus, Part B income will automatically track Part B expenditures fairly closely, regardless of the specific economic and other conditions.

- As a result of the close matching of income and expenditures described above, projected account assets show similar, stable patterns of change under all three sets of assumptions.

Adequacy of Part B Financing Established for Calendar Year 2015

The traditional concept of financial adequacy, as it applies to Part B, is closely related to the concept as it applies to many private group insurance plans. Part B is somewhat similar to private yearly renewable term insurance, with financing established each year based on estimated costs for the year. For Part B, premium income paid by the enrollees and general revenues contributed by the Federal Government provide financing. As with private plans, the income during a 12-month period for which financing is being established should be sufficient to cover the costs of services expected to be rendered during that period (including associated administrative costs), even though payment for some of these services will not occur until after the period closes. The portion of income required to cover those benefits not paid until after the end of the year is added to the account; thus assets in the account at any time should not be less

[44]Starting with the 2014 report, the Trustees' alternative CPI assumptions are reversed compared with those in previous reports, so that the high-cost assumptions are now the low-cost assumptions, and vice versa. Inflation rates are now ordered across alternatives according to their effect on the OASDI actuarial balance. This change resulted in a narrow range of impacts.

than the costs of the benefits and the administrative expenses incurred but not yet paid.

Since the Secretary of Health and Human Services establishes the income per enrollee (premium plus government contribution) prospectively each year, it is subject to projection error. Additionally, legislation enacted after the financing has been established, but effective for the period for which financing has been set, may affect costs. Account assets, therefore, should be maintained at a level that is adequate to cover not only the value of incurred-but-unpaid expenses but also a reasonable degree of variation between actual and projected costs (in case actual costs exceed projected).

The Trustees traditionally evaluate the actuarial status or financial adequacy of the Part B account over the period for which the enrollee premium rates and level of general revenue financing have been established. The primary tests are that (i) the assets and income for years for which financing has been established should be sufficient to meet the projected benefits and associated administrative expenses incurred for that period; and (ii) the assets should be sufficient to cover projected liabilities for benefits that have not yet been paid as of the end of the period. If Part B does not meet these adequacy tests, it can still continue to operate if the account remains at a level adequate to permit the payment of claims as presented. However, to protect against the possibility that costs will be higher than assumed, assets should be sufficient to include contingency levels that cover a reasonable degree of variation between actual and projected costs.

As noted above, the tests of financial adequacy for Part B rely on the incurred experience of the account, including a liability for the costs of services performed in a year but not yet paid. Table III.C7 shows the estimated transactions of the account on an incurred basis. Readers should view the incurred experience as an estimate, even for historical years.[45]

[45]Part B experience is substantially more difficult to determine on an incurred basis than on a cash basis. For some services, reporting of payment occurs only on a cash basis, and it is necessary to infer the incurred experience from the cash payment information. Moreover, for recent time periods the tabulations of bills are incomplete due to normal processing time lags.

Table III.C7.—Estimated Part B Income and Expenditures (Incurred Basis) for Financing Periods through December 31, 2015

[In millions]

Financing period	Income: Premium income	Income: General revenue	Income: Interest and other	Income: Total	Expenditures: Benefit payments	Expenditures: Administrative expenses	Expenditures: Total	Net operations in year
Historical data:								
12-month period ending June 30,								
1970	$936	$936	$12	$1,884	$1,928	$213	$2,141	−$257
1975	1,887	2,396	105	4,388	3,957	438	4,395	−7
1980	2,823	6,627	421	9,871	9,840	645	10,485	−614
Calendar year								
1985	5,613	18,243	1,248	25,104	22,750	986	23,736	1,368
1990	11,320	33,035	1,558	45,913	42,577	1,541	44,118	1,795
1995	19,717	45,743	1,739	67,199	64,923	1,607	66,531	668
2000	20,555	65,898	3,450	89,903	91,059[1]	1,770	92,828	−2,925
2005	37,535	118,091	1,365	156,992	151,416	3,185	154,601	2,390
2006	42,853	132,673	1,791	177,317	167,014	3,062	170,075	7,242
2007	46,773	148,717[2]	2,238	197,728	177,463	2,492	179,955	17,773
2008	50,232	137,731[2]	3,591	191,554	180,587	2,990	183,577	7,977
2009	52,376	151,944	3,084	207,403	202,647	3,135	205,782	1,621
2010	55,649	164,302	3,281	223,232	211,616	3,153	214,769	8,462
2011	57,514	170,224	5,867	233,605	222,312	3,609	225,921	7,684
2012	58,024	163,827	5,164	227,015	236,111	3,947	240,058	−13,042
2013	63,085	185,894	6,068	255,046	244,899	3,280	248,179	6,867
2014	65,644	188,398	5,706	259,747	264,339	3,954	268,293	−8,545
Intermediate estimates:								
2015	67,658	197,421	5,555	270,634	277,844	3,381	281,225	−10,591

[1]See footnote 6 of table III.C4.

[2]A July 1, 2008 general revenue transfer was made in the amount of $9.3 billion to restore the Part B account assets for hospice benefit accounting errors that occurred from 2005 through September 2007. An estimated $9.1 billion was due but unpaid by the end of 2007 when the error was discovered, and an additional estimated $0.2 billion in interest accrued until July 1, 2008 when the corrective payment was made.

Estimates of the liability amounts for benefits incurred but unpaid as of the end of each financing period, and of the administrative expenses related to processing these benefits, appear in table III.C8. In some years, account assets have not been as large as liabilities. Nonetheless, the fund has remained positive, which has allowed payment of all claims.

Table III.C8.—Summary of Estimated Part B Assets and Liabilities as of the End of the Financing Period, for Periods through December 31, 2015

[Dollar amounts in millions]

	Balance in trust fund	General revenue due but unpaid	Total assets	Benefits incurred but unpaid	Administrative costs incurred but unpaid	Total liabilities	Excess of assets over liabilities	Ratio[1]
Historical data:								
As of June 30,								
1970	$57	$15	$72	$567	—	$567	−$495	−0.21
1975	1,424	67	1,491	1,257	$14	1,271	—	0.04
1980	4,657	—	4,657	2,621	188	2,809	1,848	0.15
As of December 31,								
1985	10,924	—	10,924	3,142	−38	3,104	7,820	0.28
1990	15,482	—	15,482	4,060	20	4,080	11,402	0.24
1995	13,130	6,893[2]	20,023	4,298	−214	4,084	15,939	0.23
2000	44,027	—	44,027	8,715	−285	8,430	35,597	0.35
2005	24,008	—	24,008	13,520	0	13,520	10,488	0.06
2006	32,325	—	32,325	14,597	0	14,597	17,728	0.10
2007	42,062	9,296[3]	51,358	15,633	0	15,633	35,725	0.19
2008	59,382	—	59,382	15,907	0	15,907	43,475	0.21
2009	75,545	—	75,545	15,947	0	15,947	59,598	0.28
2010	71,435	—	71,435	17,900	0	17,900	53,536	0.24
2011	79,882	—	79,882	18,385	0	18,385	61,497	0.26
2012	68,093	—	68,093	17,883	0	17,883	50,210	0.20
2013	74,204	—	74,204	19,104	0	19,104	55,101	0.21
2014	68,074	—	68,074	21,514	0	21,514	46,559	0.17
Intermediate estimates:								
2015	58,039	—	58,039	22,076	0	22,076	35,963	0.12

[1]Ratio of the excess of assets over liabilities to the following year's total incurred expenditures.
[2]This amount includes both the principal of $6,736 million and the accumulated interest through December 31, 1995 for the shortfall in the fiscal year 1995 appropriation for government contributions. Normally, this transfer would have occurred on December 31, 1995, and the trust fund balance would have reflected it. However, due to absence of funding, there was a delay in the transfer of the principal and the appropriate interest until March 1, 1996.
[3]Part B erroneously paid certain Part A benefits from 2005 through September 2007. Therefore, on July 1, 2008 the Part B account of the SMI trust fund received a general revenue transfer of $9,296 million to restore the Part B account. Beginning in 2007, the year in which the errors were discovered, the table shows these amounts to be repaid to the Part B account. The 2007 amount shown includes both the estimated principal of $8,484 million and the estimated accumulated interest through December 31, 2007.

The amount of assets minus liabilities, compared with the estimated incurred expenditures for the following calendar year, forms a relative measure of the Part B account's financial status. The last column in table III.C8 shows such ratios for past years and the estimated ratio at the end of 2015. Actuarial analysis has indicated that a ratio of roughly 15-20 percent is sufficient to protect against unforeseen contingencies, such as unusually large increases in Part B expenditures.

The Secretary of Health and Human Services established Part B financing through December 31, 2015. Estimated incurred expenditures exceed estimated income in 2015, as shown in table III.C7. The excess of assets over liabilities decreases by an estimated $10.6 billion by the end of December 2015, as indicated in table III.C8. This decrease occurs partly because 2015 Part B

financing was set at a level that would reduce the contingency reserve and mostly because Part B expenditures were higher in 2014 and are projected to be higher in 2015 than they were expected to be when the financing was determined.

Since the financing rates are set prospectively, variations between assumed cost increases and subsequent actual experience could affect the actuarial status of the Part B account. To test the status of the account under varying assumptions, the Trustees prepared a lower-growth-range projection and an upper-growth-range projection by varying the key assumptions for 2014 and 2015. These two alternative sets of assumptions provide a range of financial outcomes within which one might reasonably expect the actual experience of Part B to fall. The values for the lower- and upper-growth-range assumptions were determined from a statistical analysis of the historical variation in the respective increase factors.

This sensitivity analysis differs from the low-cost and high-cost projections discussed previously in this section in that this analysis examines the variation in the projection factors in the period for which the financing has been established (2015 for this report). The low-cost and high-cost projections, on the other hand, illustrate the financial impact of slower or faster growth trends throughout the short-range projection period.

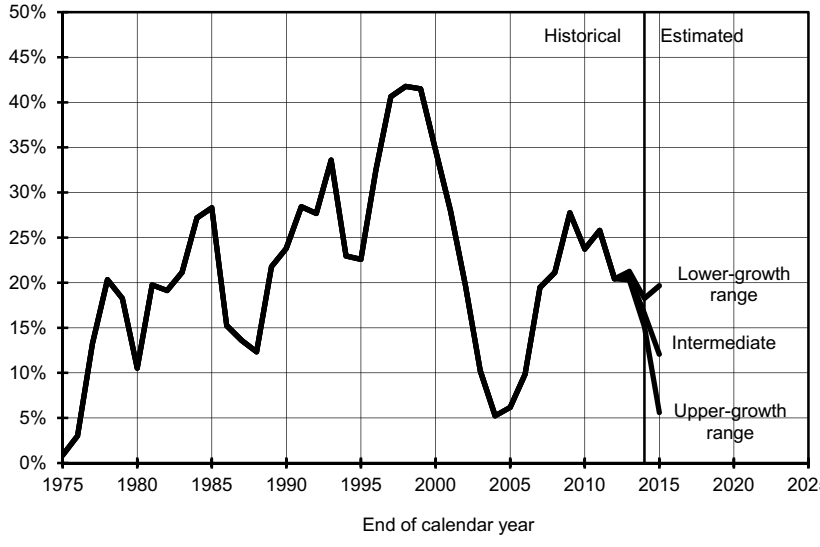
Table III.C9 indicates that, under the lower-growth-range scenario, account assets would exceed liabilities at the end of December 2015 by a margin equivalent to 19.7 percent of the following year's incurred expenditures. Under the upper-growth-range scenario, account assets would still exceed liabilities, but by a margin of 5.6 percent of incurred expenditures in 2015. Under either scenario, assets would be sufficient to cover outstanding liabilities. However, under the intermediate and upper-growth-range scenarios, future financing rates would need to increase to provide an adequate margin for adverse contingencies. Figure III.C3 shows the reserve ratio for historical years and for 2015 under the three cost growth scenarios.

Table III.C9.—Actuarial Status of the Part B Account in the SMI Trust Fund under Three Cost Sensitivity Scenarios for Financing Periods through December 31, 2015

As of December 31,	2013	2014	2015
Intermediate scenario:			
Actuarial status (in millions)			
Assets	$74,204	$68,074	$58,039
Liabilities	19,104	21,514	22,076
Assets less liabilities	55,101	46,559	35,963
Ratio[1]	20.8%	16.6%	12.1%
Lower-range scenario:			
Actuarial status (in millions)			
Assets	$74,204	$68,074	$72,764
Liabilities	19,104	20,887	20,471
Assets less liabilities	55,101	47,187	52,293
Ratio[1]	21.3%	18.3%	19.7%
Upper-range scenario:			
Actuarial status (in millions)			
Assets	$74,204	$68,074	$42,473
Liabilities	19,104	22,123	23,774
Assets less liabilities	55,101	45,950	18,699
Ratio[1]	20.3%	15.1%	5.6%

[1]Ratio of assets less liabilities at the end of the year to the total incurred expenditures during the following year, expressed as a percent.

Figure III.C3.—Actuarial Status of the Part B Account in the SMI Trust Fund through Calendar Year 2015



Note: The Trustees measure the actuarial status of the Part B account in the SMI trust fund by the ratio of (i) assets minus liabilities at the end of the year to (ii) the following year's incurred expenditures.

Based on the tests described above, the Trustees conclude that the financing established for the Part B account for calendar year 2015 is adequate to cover 2015 expected expenditures but would need to be

increased in future years in order to restore the financial status of the Part B account to a satisfactory level.

3. Long-Range Estimates

Section III.C2 presented the expected operations of the Part B account over the next 10 years. This section examines the long-range expenditures of the account under the intermediate assumptions. Due to its automatic financing provisions, the Trustees expect the Part B account to be adequately financed into the indefinite future and so have not conducted a long-range analysis using high-cost and low-cost assumptions.

Table III.C10 shows the estimated Part B incurred expenditures under the intermediate assumptions expressed as a percentage of GDP for selected years over the calendar-year period 2014-2089.[46] The 75-year projection period fully allows for the presentation of future trends that one may reasonably expect to occur, such as the impact of the large increase in enrollees as the baby boom generation begins to receive benefits.

Table III.C10.—Part B Expenditures (Incurred Basis) as a Percentage of the Gross Domestic Product[1]

Calendar year	Part B expenditures as a percentage of GDP
2014	1.54%
2015	1.55
2016	1.55
2017	1.57
2018	1.59
2019	1.65
2020	1.71
2021	1.76
2022	1.82
2023	1.89
2024	1.95
2025	2.04
2030	2.31
2035	2.48
2040	2.51
2045	2.48
2050	2.45
2055	2.43
2060	2.44
2065	2.44
2070	2.45
2075	2.45
2080	2.43
2085	2.41

[1]Expenditures are the sum of benefit payments and administrative expenses.

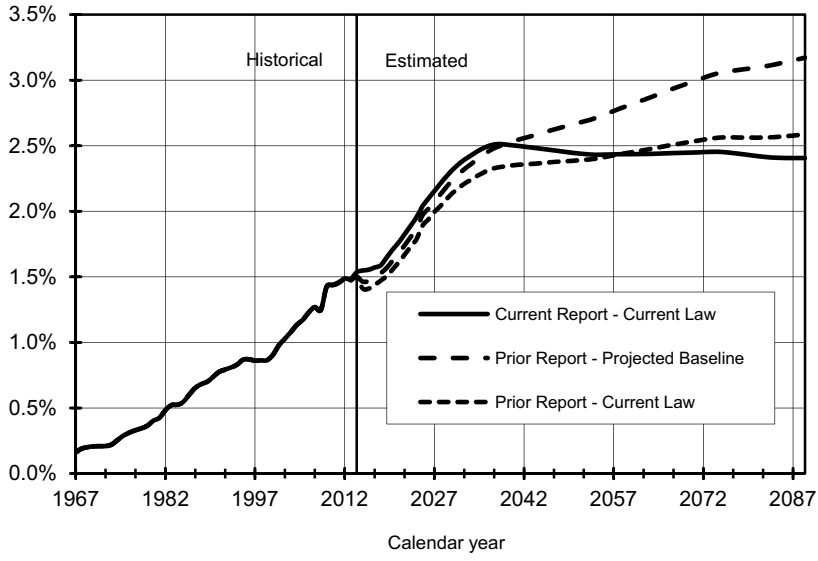
Note: Percentages are affected by economic cycles.

[46]These estimated incurred expenditures are for benefit payments and administrative expenses combined, unlike the values in table III.C5, which express only benefit payments on a cash basis as a percentage of GDP.

Sections II.C and IV.D describe the basis for the long-range assumptions. (Based on these assumptions and the projected demographic changes, incurred Part B expenditures as a percentage of GDP would increase from 1.54 percent in 2014 to 2.41 percent in 2089. Part B expenditures would instead increase to 4.03 percent in 2089 under the illustrative alternative scenario.)

Figure III.C4 compares (i) the year-by-year Part B expenditures as a percentage of GDP for the 2015 report with (ii) the projections from the 2014 report under the projected baseline and (iii) the projections from the 2014 report under current law. In this year's report, the Part B expenditures reflect the physician payment updates and other changes from MACRA. The expenditures for the early part of the projection period are higher than under the projected baseline in the 2014 report primarily due to higher Part B spending and a lower estimate for GDP. The legislated updates, particularly those used for physician payments, cause a decline in the share of Part B spending as a percentage of GDP, and accordingly this percentage is lower than estimated under the projected baseline in last year's report beginning in 2039. The expenditures in this report are initially much higher than the current-law projections in the 2014 report due to an assumed 21-percent physician payment reduction included in the 2014 current-law estimates. This large gap diminishes over time due to the physician payment updates specified in MACRA, resulting in lower Part B spending as a percentage of GDP beginning in 2059 as compared to the 2014 current-law projections.

Figure III.C4.—Comparison of Part B Projections as a Percentage of the Gross Domestic Product: Current versus Prior Year's Reports



Note: Percentages are affected by economic cycles.

D. PART D FINANCIAL STATUS

This section presents actual operations of the Part D account in the SMI trust fund in 2014 and Part D projections for the next 75 years. Section III.D1 discusses Part D financial results for 2014, and sections III.D2 and III.D3 discuss the short-range Part D projections and the long-range projections, respectively. The projections shown in sections III.D2 and III.D3 assume no changes will occur in the statutory provisions and regulations under which Part D now operates.

1. Financial Operations in Calendar Year 2014

The total assets of the account amounted to approximately $1.0 billion on December 31, 2013. During calendar year 2014, total Part D expenditures were approximately $78.1 billion. General revenue was provided on an as-needed basis to cover the portion of these expenditures supported through Medicare subsidies. Total Part D receipts were $78.2 billion. As a result, total assets in the Part D account increased to $1.1 billion as of December 31, 2014.

Table III.D1 presents a statement of the revenue and expenditures of the Part D account of the SMI trust fund in calendar year 2014, and of its assets at the beginning and end of the calendar year.

Table III.D1—Statement of Operations of the Part D Account in the SMI Trust Fund during Calendar Year 2014
[In thousands]

Total assets of the Part D account in the trust fund, beginning of period		$993,041
Revenue:		
Premiums from enrollees:		
Premiums deducted from Social Security benefits	$3,608,378	
Premiums paid directly to plans[1]	7,772,410	
Total premiums		11,380,788
Government contributions:		
Prescription drug benefits	57,721,495	
Prescription drug administrative expenses	412,426	
Total government contributions		58,133,921
Payments from States		8,667,152
Interest on investments		10,530
Total revenue		$78,192,391
Expenditures:		
Part D benefit payments[1]		$77,712,770
Part D administrative expenses		412,426
Total expenditures		$78,125,196
Net addition to the trust fund		67,195
Total assets of the Part D account in the trust fund, end of period		$1,060,236

[1]Premiums paid directly to plans are not displayed on Treasury statements and are estimated. These premiums have been added to the benefit payments reported on the Treasury statement to obtain an estimate of total Part D benefits. Direct data on such benefit amounts are not yet available.

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

a. Revenues

The major sources of revenue for the Part D account are (i) contributions of the Federal Government authorized to be apportioned and transferred from the general fund of the Treasury; (ii) premiums paid by eligible persons who voluntarily enroll; and (iii) contributions from the States.

Of the total Part D revenue, $3.6 billion represented premium amounts withheld from Social Security benefits or other Federal benefit payments. Total premium payments, including those paid directly to the Part D plans, amounted to an estimated $11.4 billion or 14.6 percent of total revenue.

In calendar year 2014, contributions received from the general fund of the Treasury amounted to $58.1 billion, which accounted for 74.3 percent of total revenue. The payments from the States were $8.7 billion.

Another source of Part D revenue is interest received on investments held by the Part D account. Since this account holds a very low amount of assets, and only for brief periods of time, the interest on the investments of the account in calendar year 2014 was negligible ($11 million).

b. Expenditures

Part D expenditures include both the costs of prescription drug benefits provided by Part D plans to enrollees and Medicare payments to retiree drug subsidy (RDS) plans on behalf of beneficiaries who obtain their primary drug coverage through such plans. Unlike Parts A and B of Medicare, the Part D account in the SMI trust fund does not directly make or support all Part D expenditures. In particular, enrollee premiums that are paid directly to Part D plans, and thus do not flow through the Part D account, finance a portion of these expenditures. However, these premium amounts are included in the Part D account operations (both income and expenditures) presented in this report. Total expenditures are characterized as either benefits (representing the gross cost of enrollees' prescription drug coverage plus RDS amounts) or Federal administrative expenses.

All expenses incurred by the Department of Health and Human Services, the Social Security Administration, and the Department of the Treasury in administering Part D are charged to the account. Such administrative duties include making payments to Part D plans, fraud and abuse control activities, and experiments and demonstration projects designed to improve the quality, efficiency, and economy of health care services.

In addition, Congress has authorized expenditures from the trust funds for construction, rental and lease, or purchase contracts of office buildings and related facilities for use in connection with the administration of Part D. The account expenditures include such costs. However, the statement of Part D assets presented in this report does not carry the net worth of facilities and other fixed capital assets, because the value of fixed capital assets does not represent funds available for benefit or administrative expenditures and is not, therefore, pertinent in assessing the actuarial status of the funds.

Of the $78.1 billion in total Part D expenditures, $77.7 billion represented benefits, as defined above, and the remaining $0.4 billion was for Federal administrative expenses. The Medicare direct premium subsidy and reinsurance subsidy, together with enrollee

premiums, implicitly cover administrative expenses incurred by Part D plans.

c. Actual experience versus prior estimates

Table III.D2 compares the actual experience in calendar year 2014 with the estimates presented in the 2013 and 2014 annual reports. A number of factors can contribute to differences between estimates and subsequent actual experience. In particular, actual values for key economic and other variables can differ from assumed levels, lawmakers may adopt legislative and regulatory changes after a report's preparation, and new, high-impact drugs can enter the market. Actual premiums in calendar year 2014 were 2 percent less than projected in last year's report mainly due to slightly lower enrollment and, of those enrolled, higher participation in lower premium plans. The government contributions and benefit payments were also 2 percent less than projected in the 2014 report partly due to lower enrollment and the smaller RDS reimbursement. The actual State transfer was higher than projected last year because the number of low-income beneficiaries was higher.

The actual government contributions and the benefit payments were somewhat lower than projected in the 2013 report because the plan bids reflected a higher-than-expected impact from the patent expiration of certain high-cost drugs. The actual premiums, however, were only 1 percent lower than projected due to the higher-than-expected income-related premium collections.

Table III.D2.—Comparison of Actual and Estimated Operations of the Part D Account in the SMI Trust Fund, Calendar Year 2014

[Dollar amounts in millions]

		Comparison of actual experience with estimates for calendar year 2014 published in:			
		2014 report		2013 report	
Item	Actual amount	Estimated amount[1]	Actual as a percentage of estimate	Estimated amount[1]	Actual as a percentage of estimate
Premiums from enrollees	$11,380	$11,602	98%	$11,551	99%
State transfers	8,667	8,349	104	8,732	99
Government contributions	58,134	59,150	98	63,344	92
Benefit payments	77,713	79,036	98	83,230	93

[1]Under the intermediate assumptions.

d. Assets

The Department of the Treasury invests the portion of the Part D account not needed to meet current expenditures for benefits and administration in interest-bearing obligations of the U.S. Government.

The Social Security Act authorizes the issuance of special public-debt obligations for purchase exclusively by the account. The law requires that these special public-debt obligations shall bear interest at a rate based on the average market yield (computed on the basis of market quotations as of the end of the calendar month immediately preceding the date of such issue) for all marketable interest-bearing obligations of the United States forming a part of the public debt that are not due or callable until after 4 years from the end of that month. Since the inception of the SMI trust fund, the Department of the Treasury has always invested the assets in special public-debt obligations.[47] Table V.H10, presented in appendix H, shows the assets of the SMI trust fund (Parts B and D) at the end of fiscal years 2013 and 2014.

As explained in section III.D2, the flexible apportionment of general revenues for Part D eliminates the need to maintain a contingency reserve. As a result, Part D assets are very low and are held only briefly in anticipation of immediate expenditures.

2. 10-Year Actuarial Estimates (2015-2024)

Section III.D2 provides detailed information concerning the short-range financial status of the Part D account, including projected annual income, outgo, differences between income and outgo, and trust fund balances. The projected future operations of the Part D account are based on the Trustees' economic and demographic assumptions, as detailed in the OASDI Trustees Report, as well as other assumptions unique to Part D. Section IV.B2 presents an explanation of the effects of the Trustees' intermediate assumptions and other assumptions unique to Part D on the estimates in this report. This section presents estimates of the trust fund's operations and financial status for the next 10 years. Section III.D3 discusses the long-range actuarial status of the trust fund.

Generally, the income to the Part D account includes the beneficiary premiums described above and transfers from the general fund of the Treasury to cover each year's incurred benefit costs and other expenditures. The language that has generally been included in the Part D appropriation provides, without further Congressional action, resources for benefit payments under the Part D drug benefit program on an as-needed basis. The transfers from the Treasury reflect the direct premium subsidy, amounts of reinsurance payments, RDS amounts, low-income subsidies, net risk-sharing

[47]The Department of the Treasury may also make investments in obligations guaranteed for both principal and interest by the United States, including certain federally sponsored agency obligations.

payments, administrative expenses, and advanced discount payments. This income requirement is reduced by the anticipated State transfers for the full-benefit dually eligible beneficiaries who used to be covered under Medicaid.

The beneficiary premiums and direct subsidy rate are calculated based on the national average bid amounts and defined prior to each year's operations. The average basic premium constitutes 25.5 percent of the expected total plan costs for basic Part D coverage. Beginning in 2011, beneficiaries with modified adjusted gross incomes exceeding a specified threshold pay income-related premiums in addition to the premiums charged by the plans in which the individuals have enrolled. The extra premiums are credited to the Part D trust fund account and reduce the general fund financing amounts. Starting in 2011, the drug manufacturers provide a 50-percent ingredient cost discount for brand-name drugs in the coverage gap that reduces beneficiary out-of-pocket expenses. Medicare Part D pays advanced discount payments prospectively to the non-employer Part D plans and will be reimbursed for these amounts once the plans receive the discounts from the drug manufacturers.

Expenditures from the account include the premiums withheld from beneficiaries' Social Security benefits and transferred to the private drug plans, the direct premium subsidy payments, reinsurance payments, RDS amounts, low-income subsidy payments, net risk-sharing payments, administrative expenses, and advanced discount payments. As noted previously, the Trustees supplement these expenditures to include the amount of enrollee premiums paid directly to Part D plans, thereby providing an estimate of total Part D benefit payments and other expenditures.

Projected Part D expenditures on direct premium subsidy payments, RDS amounts, advanced discount payments, and administrative expenses are affected by the sequestration of Medicare expenditures required by current law. Reinsurance, low-income cost-sharing subsidy amounts, and net risk-sharing payments are not affected. The sequestration reduces benefit payments by 2 percent from April 1, 2013 through March 31, 2023, by 2.9 percent from April 1, 2023 through September 30, 2023, by 1.1 percent from October 1, 2023 through March 31, 2024, and by 4 percent from April 1, 2024 through September 30, 2024. Due to sequestration, non-salary administrative expenses are reduced by an estimated 5 percent from March 1, 2013 through September 30, 2024.

Table III.D3 shows the estimated operations of the Part D account under the intermediate assumptions on a calendar-year basis through 2024.

Table III.D3.—Operations of the Part D Account in the SMI Trust Fund (Cash Basis) during Calendar Years 2004-2024

[In billions]

	Income					Expenditures			Account	
Calendar year	Premium income[1]	General revenue[2]	Transfers from States[3]	Interest and other	Total	Benefit payments[4]	Administrative expense	Total	Net change	Balance at end of year[5]
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	$0.0	48.2	47.1	$0.3	47.4	$0.8	$0.8
2007	4.1	38.8	6.9	0.0	49.7	48.8	0.9	49.7	0.0	0.8
2008	5.0	37.3	7.1	0.0	49.4	49.0	0.3	49.3	0.1	0.9
2009	6.3[6]	47.1	7.6	0.0	61.0	60.5	0.3	60.8	0.1	1.1
2010	6.5[6]	51.1	4.0	0.0	61.7	61.7	0.4	62.1	−0.4	0.7
2011	7.7	52.6	7.1	0.0	67.4	66.7	0.4	67.1	0.3	1.0
2012	8.3	50.1	8.4	0.0	66.9	66.5	0.4	66.9	0.0	1.0
2013	9.9	51.0	8.8	0.0	69.7	69.3	0.4	69.7	−0.0	1.0
2014	11.4	58.1	8.7	0.0	78.2	77.7	0.4	78.1	0.1	1.1
Intermediate estimates:										
2015	12.9[6]	70.8	8.6	0.0	92.4	92.3	0.4	92.7	−0.3	0.7
2016	15.5[6]	75.8	9.8	0.0	101.1	100.5	0.5	101.0	0.1	0.8
2017	18.8	81.4	10.7	0.0	110.9	110.4	0.5	110.8	0.1	0.9
2018	21.2	86.9	11.7	0.0	119.8	119.2	0.5	119.7	0.1	1.0
2019	23.6	95.0	12.7	0.0	131.3	130.7	0.5	131.2	0.1	1.1
2020	26.4[6]	103.2	13.9	0.0	143.5	142.9	0.5	143.4	0.1	1.2
2021	28.0[6]	111.9	15.1	0.0	155.0	154.4	0.6	154.9	0.1	1.3
2022	31.1	120.8	16.4	0.0	168.3	167.6	0.6	168.2	0.1	1.4
2023	34.0	130.6	17.8	0.0	182.4	181.7	0.6	182.3	0.1	1.5
2024	37.1	141.1	19.2	0.0	197.4	196.6	0.6	197.3	0.1	1.6

[1]Premiums include both amounts withheld from Social Security benefits or other Federal payments and those paid directly to Part D plans.

[2]Includes, net of transfers from States, all government transfers required to fund benefit payments, administrative expenses, and State expenses for making low-income eligibility determinations.

[3]Payments from States with respect to the Federal assumption of Medicaid responsibility for drug expenditures for full-benefit dually eligible individuals.

[4]Includes payments to Part D plans, payments to retiree drug subsidy plans, payments to States for making low-income eligibility determinations, Part D drug premiums collected from beneficiaries, and transfers to Medicare Advantage plans and private drug plans. Includes amounts for the Transitional Assistance program of $0.4, $1.0, and $0.1 billion in 2004-2006, respectively.

[5]See text concerning nature of general revenue appropriations process and implications for contingency reserve assets.

[6]Section 708 of the Social Security Act modifies the provisions for the payment of Social Security benefits when the regularly designated day falls on a Saturday, Sunday, or legal public holiday. Payment of those benefits normally due January 3, 2010 actually occurred on December 31, 2009; consequently, the Part D premiums withheld from these benefits were added to the Part D account on December 31, 2009. The premium income for 2010 excludes this amount. Similarly, the expected payment date for those benefits normally due January 3, 2016 is December 31, 2015, and the expected date for those benefits normally due January 3, 2021 is December 31, 2020.

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

Table III.D4 shows prescription drug payment amounts in the aggregate, on a per capita basis, and relative to the Gross Domestic Product (GDP). It also shows rates of growth for the next 10 years based on the intermediate set of assumptions.

Over the past 8 years, Part D expenditures have increased by an annual rate of 6.5 percent in aggregate and by only 1.5 percent on a per enrollee basis. These results reflect the rapid growth in enrollment as the new program began, together with a substantial increase in the proportion of prescriptions filled with low-cost generic drugs and patent expiration for certain major drugs in 2012.

For 2014, per capita benefits are expected to increase faster than they have historically due to price increases for both brand-name and generic drugs. These per capita benefits are projected to accelerate in 2015 because of the significant growth in cost for specialty drugs. In particular, the additional plan spending for several high-cost drugs to treat hepatitis C was not factored into plan bids for the 2014 plan year, resulting in significant reconciliation payments from Part D to plans in 2015.

Table III.D4.—Growth in Part D Benefits (Cash Basis) through December 31, 2024

Calendar year	Aggregate benefits [billions]	Percent change	Per capita benefits	Percent change	Part D benefits as a percentage of GDP
Historical data:					
2004	$0.4	—	$362	—	0.00%
2005	1.1	—	596	—	0.01
2006	47.1	—	1,708	—	0.34
2007	48.8	3.7%	1,556	−8.9%	0.34
2008	49.0	0.4	1,504	−3.3	0.33
2009[1]	60.5[1]	23.4	1,798	19.6	0.42
2010[1]	61.7[1]	2.0	1,775	−1.3	0.41
2011	66.7	8.1	1,868	5.3	0.43
2012	66.5	−0.4	1,776	−5.0	0.41
2013	69.3	4.2	1,772	−0.2	0.41
2014	77.7	12.1	1,920	8.3	0.45
Intermediate estimates:					
2015[1]	92.3[1]	18.7	2,209	15.1	0.51
2016[1]	100.5[1]	8.9	2,325	5.2	0.52
2017	110.4	9.8	2,464	6.0	0.54
2018	119.2	8.1	2,590	5.1	0.56
2019	130.7	9.6	2,760	6.5	0.58
2020[1]	142.9[1]	9.3	2,931	6.2	0.60
2021[1]	154.4[1]	8.0	3,078	5.0	0.62
2022	167.6	8.6	3,249	5.6	0.64
2023	181.7	8.4	3,426	5.5	0.67
2024	196.6	8.2	3,612	5.4	0.69

[1]See footnote 6 of table III.D3.

In the future, the per capita drug cost growth rate is expected to exceed the rate of increase in other categories of medical spending due to an expected slowing of the trend toward greater generic usage and a continuing increase in the use and price of specialty drugs. The relatively rapid projected aggregate cost growth reflects the expected per capita cost increase, projected increases in Part D enrollment, and changes in the distribution of enrollees by coverage category. Over the next 10 years, aggregate benefits are projected to increase at

9.7 percent annually, on average, while the per enrollee rate is 6.5 percent, as shown in table III.D4.

The payment structure of the Part D program causes the somewhat volatile pattern of annual growth rates; prospective payments to the plans are made based on the plan bids and then are reconciled with actual prescription drug expenditures after the end of the year. For example, since actual prescription drug expenditures in 2006 were substantially less than the plan bids, the plans owed the Part D program over $4 billion in the form of risk-sharing returns and reimbursement of overpayments for reinsurance and low-income subsidy capitation amounts. These reconciliation payments reduced Part D spending in 2007 and 2008, resulting in per capita drug cost growth rates that are lower than normal for those years. For 2014, the Trustees expect that spending will exceed plan bids and will result in more than $13 billion in reconciliation payments to be paid by Part D in 2015. As noted previously, one reason for the large anticipated reconciliation payment is that new hepatitis C drugs entered the market and significantly increased drug spending in 2014 but were not accounted for in the 2014 bid submissions.

Legislation also contributes to the volatility of the annual growth rates. For example, the ACA will close the coverage gap from 2012 through 2020, a factor that will increase plan benefits and result in higher Part D expenditures and premiums.

The Trustees have also prepared estimates using two alternative sets of assumptions. Table III.D5 summarizes the estimated operations of the Part D account for all three alternatives. Section IV.B2 presents in substantial detail the assumptions underlying the intermediate estimates, as well as the assumptions used in preparing estimates under the low-cost and high-cost alternatives.

Table III.D5.—Estimated Operations of the Part D Account in the SMI Trust Fund during Calendar Years 2014-2024, under Alternative Sets of Assumptions

[Dollar amounts in billions]

Calendar year	Premiums from enrollees	Other income[1]	Total income	Total expenditures	Balance in account at end of year	Expenditures as a percent of GDP
Intermediate:						
2014	$11.4	$66.8	$78.2	$78.1	$1.1	0.45%
2015	12.9[2]	79.5	92.4	92.7	0.7	0.51
2016	15.5[2]	85.6	101.1	101.0	0.8	0.53
2017	18.8	92.1	110.9	110.8	0.9	0.55
2018	21.2	98.6	119.8	119.7	1.0	0.56
2019	23.6	107.7	131.3	131.2	1.1	0.58
2020	26.4[2]	117.1	143.5	143.4	1.2	0.61
2021	28.0[2]	127.0	155.0	154.9	1.3	0.62
2022	31.1	137.2	168.3	168.2	1.4	0.65
2023	34.0	148.4	182.4	182.3	1.5	0.67
2024	37.1	160.3	197.4	197.3	1.6	0.69
Low-cost:						
2014	11.4	66.8	78.2	78.1	1.1	0.45
2015	12.9[2]	77.3	90.2	90.5	0.7	0.49
2016	14.5[2]	79.1	93.6	93.5	0.8	0.47
2017	16.9	83.8	100.6	100.6	0.8	0.47
2018	18.6	88.9	107.6	107.5	0.9	0.47
2019	20.3	94.9	115.3	115.2	0.9	0.48
2020	22.3[2]	100.9	123.2	123.2	1.0	0.48
2021	23.3[2]	106.8	130.1	130.0	1.0	0.48
2022	25.4	112.8	138.1	138.1	1.1	0.48
2023	27.3	119.3	146.6	146.5	1.1	0.48
2024	29.2	126.1	155.4	155.3	1.2	0.48
High-cost:						
2014	11.4	66.8	78.2	78.1	1.1	0.45
2015	12.9[2]	81.7	94.7	95.0	0.7	0.53
2016	16.6[2]	92.4	109.0	108.9	0.9	0.59
2017	20.9	100.5	121.4	121.3	1.0	0.63
2018	24.1	109.3	133.4	133.3	1.1	0.67
2019	27.2	122.0	149.1	149.0	1.2	0.72
2020	31.0[2]	135.6	166.5	166.4	1.4	0.77
2021	33.5[2]	150.6	184.1	183.9	1.6	0.82
2022	37.9	166.7	204.6	204.4	1.7	0.88
2023	42.3	184.8	227.0	226.8	2.0	0.95
2024	46.9	204.2	251.1	250.9	2.2	1.01

[1]Other income contains Federal and State government contributions and interest.
[2]See footnote 6 of table III.D3.

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

These alternatives provide two possible Part D scenarios. However, given the considerable variation in future demographic, economic, and healthcare-usage factors, actual Part D experience could fall outside of this range. The low- and high-cost scenarios in this year's report result in a narrower dollar range than in years prior to 2014 due to a change in the alternative assumptions in the 2014 Trustees Report.[48] The GDP assumptions for the alternative scenarios are also

[48]The Trustees' alternative CPI assumptions were reversed in the 2014 report compared with those in previous reports, so that the high-cost assumptions in prior reports are the low-cost assumptions for the 2014 and later reports, and vice versa. Inflation rates are now ordered across alternatives according to their effect on the OASDI actuarial balance. This change resulted in a narrow range of impacts.

affected by the assumption change. Therefore, spending as a percent of GDP provides better insight into the variability of spending than the nominal dollar amounts, as shown in table III.D5.

The alternative projections shown in table III.D5 illustrate two important aspects of the financial operations of the Part D account:

- Despite the differing assumptions underlying the three alternatives, the balance between Part D income and expenditures remains relatively stable. This result occurs because the premiums and general revenue contributions underlying the Part D financing will be reestablished annually. Thus, Part D income will automatically track Part D expenditures fairly closely, regardless of the specific economic and other conditions.

- As a result of the close matching of income and expenditures described above, together with anticipated continuing flexibility in the apportionment of general revenues, the need for a contingency reserve to handle unanticipated fluctuations is minimal.

Adequacy of Part D Financing Established for Calendar Year 2015

As noted previously, the Part D account in the SMI trust fund will be in financial balance indefinitely because the premiums paid by enrollees and the amounts apportioned from the general fund of the Treasury are determined each year so as to adequately finance Part D expenditures. Moreover, the appropriation for Part D general revenues has generally included an indefinite authority provision allowing for amounts to be transferred to the Part D account on an as-needed basis. This provision allows previously apportioned amounts to change without additional Congressional action if those amounts are later determined to be insufficient. Consequently, once an appropriation with this provision has been made, no deficit will occur in the Part D account, and no contingency fund will be necessary to cover deficits.[49]

As described in section III.C on the financial status of the Part B account, it is important to maintain an appropriate level of assets to cover the liability for claims that have been incurred but not yet reported or paid. In the case of Part D, however, most such claims are the responsibility of the prescription drug plans rather than the Part D program. Accordingly, the Part D account is generally not at

[49]The indefinite authority applies to all Part D outlays other than Federal administrative expenses. Those amounts are specifically appropriated each year.

risk for incurred-but-unreported claim amounts, and no asset reserve is necessary for this purpose.

Another potential Part D liability exists to the extent that Part D reinsurance payments and low-income cost-sharing subsidy payments are based on plan estimates.[50] Since actual Part D costs, as subsequently determined, will generally differ from the plan bids, payment adjustments are made after the close of the year as needed to reconcile the accounts. When the plan bids have been below actual costs, Medicare has made such settlements in favor of the plans from the following year's appropriated general revenues; thus, creation of a reserve for payment of such settlement amounts is not required.

For these reasons, the Trustees have concluded that maintenance of Part D account assets for contingency or liability purposes is unnecessary at this time. Accordingly, evaluation of the adequacy of Part D assets is also unnecessary, and the Part D account is considered to be in satisfactory financial condition for 2014 and all future years as a consequence of its basis for financing.

To the extent that actual future account transactions and apportionment measures differ from the current expectations, it may be necessary to reconsider this conclusion.

3. Long-Range Estimates

Section III.D2 presented the expected operations of the Part D account over the next 10 years. This section describes the long-range expenditures of the account under the intermediate assumptions. Due to its automatic financing provisions, the Trustees expect adequate financing of the Part D account into the indefinite future and so have not conducted a long-range analysis using high-cost and low-cost assumptions. The 10-year projections under the alternative assumptions are presented in section IV.B2.

Table III.D6 shows the estimated Part D incurred expenditures under the intermediate assumptions expressed as a percentage of GDP, for selected years over the calendar-year period 2014-2089.[51] The 75-year projection period fully allows for the presentation of likely future trends, such as the large increase in enrollees after 2010 as the baby boom generation begins to receive benefits.

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[50]These estimates are subject to actuarial review by the CMS Office of the Actuary.

[51]These estimated incurred expenditures are for benefit payments and administrative expenses combined, unlike the values in table III.D4, which express only benefit payments on a cash basis as a percentage of GDP.

Table III.D6.—Part D Expenditures (Incurred Basis) as a Percentage of the Gross Domestic Product[1]

Calendar year	Part D expenditures as a percentage of GDP
2014	0.48%
2015	0.49
2016	0.51
2017	0.54
2018	0.56
2019	0.58
2020	0.60
2021	0.63
2022	0.65
2023	0.67
2024	0.70
2025	0.72
2030	0.83
2035	0.90
2040	0.95
2045	0.98
2050	1.02
2055	1.06
2060	1.11
2065	1.16
2070	1.21
2075	1.27
2080	1.30
2085	1.35

[1]Expenditures are the sum of benefit payments and administrative expenses.

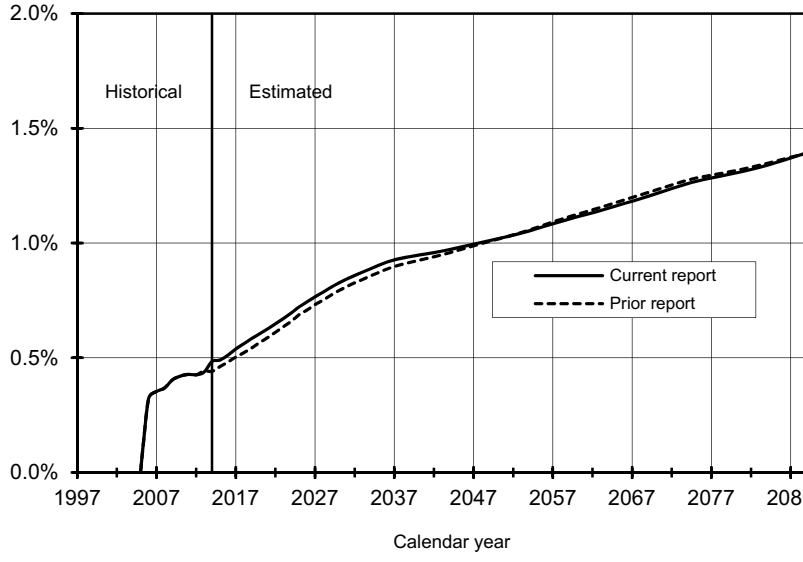
Note: Percentages are affected by economic cycles.

The Trustees assume that increases in Part D costs per enrollee during the initial 25-year period will decline gradually to the growth rates described in sections II.C and IV.D. Based on these assumptions and projected demographic changes, incurred Part D expenditures as a percentage of GDP would nearly triple from 0.48 percent in 2014 to 1.39 percent in 2089.

The long-range Part D projections are based on the cost growth assumptions described previously. More information on these assumptions is available in section IV.D of this report. Section IV.B2 describes the data sources and assumptions underlying the updated Part D estimates.

Figure III.D1 compares the year-by-year Part D costs as a percentage of GDP for the current annual report with the corresponding projections from 2014. This year's estimates are slightly higher in the short term primarily due to the introduction of high-cost specialty drugs used to treat hepatitis C. The long-range projections are slightly lower than in last year's report for the later years, primarily due to lower assumptions regarding long-term health care cost growth.

Figure III.D1.—Comparison of Part D Projections as a Percentage of the Gross Domestic Product: Current versus Prior Year's Reports



Note: Percentages are affected by economic cycles.

IV. ACTUARIAL METHODOLOGY AND PRINCIPAL ASSUMPTIONS FOR COST ESTIMATES FOR THE HOSPITAL INSURANCE AND SUPPLEMENTARY MEDICAL INSURANCE TRUST FUNDS

This section describes the basic methodology and assumptions used in the estimates for the HI and SMI trust funds under the intermediate assumptions and presents projections of HI and SMI costs under two alternative sets of assumptions.

The economic and demographic assumptions underlying the projections of HI and SMI costs shown in this report are consistent with those in the 2015 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds. That report describes these assumptions in more detail.

A. HOSPITAL INSURANCE

1. Cost Projection Methodology

The principal steps involved in projecting future HI costs are (i) establishing the present cost of services provided to beneficiaries, by type of service, to serve as a projection base; (ii) projecting increases in HI payments for inpatient hospital services; (iii) projecting increases in HI payments for skilled nursing, home health, and hospice services covered; (iv) projecting increases in payments to private health plans; and (v) projecting increases in administrative costs.

a. Projection Base

To establish a suitable base from which to project future HI costs, the incurred payments for services provided must be constructed for the most recent period for which a reliable determination can be made. Accordingly, payments to providers must be attributed to dates of service, rather than to payment dates; in addition, the nonrecurring effects of any changes in regulations, legislation, or administration, and of any items affecting only the timing and flow of payments to providers, must be eliminated. As a result, the rates of increase in the HI incurred costs differ from the increases in cash expenditures shown in the tables in section III.B.

For those expenses still reimbursed on a reasonable-cost basis, the costs for covered services are determined on the basis of provider cost reports. Due to the time required to obtain cost reports from

providers, to verify these reports, and to perform audits (where appropriate), final settlements have lagged behind the original costs by as much as several years for some providers. Additional complications arise from legislative, regulatory, and administrative changes, the effects of which cannot always be determined precisely.

The process of allocating the various types of HI payments made to the proper incurred period—using incomplete data and estimates of the impact of administrative actions—presents difficult problems, and the solutions to these problems can be only approximate. Under the circumstances, the best that one can expect is that the actual HI incurred cost for a recent period can be estimated within a few percent. This process increases the projection error directly by incorporating any error in estimating the base year into all future years.

b. Fee-for-Service Payments for Inpatient Hospital Costs

Payment for almost all inpatient hospital services for fee-for-service beneficiaries occurs under a prospective payment system. The law stipulates that the annual increase in the payment rate for each admission relate to a hospital input price index (also known as the hospital market basket), which measures the increase in prices for goods and services purchased by hospitals for use in providing care to hospital inpatients. For fiscal year 2015, the prospective payment rates have already been determined. For fiscal years 2016 and later, the statute mandates that the annual increase in the payment rate per admission equal the annual increase in the hospital input price index (for those hospitals submitting required quality measure data), minus a specified percentage. For this report, the Trustees assume that all hospitals will submit these data.

Increases in aggregate payments for inpatient hospital care covered under HI can be analyzed in five broad categories, presented in table IV.A1:

(1) Hospital input price index—the increase in prices for goods and services purchased by the hospital;

(2) Unit input intensity allowance—an amount added to or subtracted from the input price index (generally called for in legislation) to yield the prospective payment update factor;

(3) Volume of services—the increase in total output of units of service (as measured by covered HI hospital admissions);

(4) Case mix—the financial effect of changes in the average complexity of hospital admissions; and

(5) Other sources—a residual category reflecting all other factors affecting hospital cost increases (such as enacted legislative changes).

Table IV.A1 shows the estimated historical values of these principal components, as well as the projected trends used in the estimates. Unless otherwise indicated, the following discussions apply to projections under the intermediate assumptions.

Table IV.A1.—Components of Historical and Projected Increases in HI Inpatient Hospital Payments[1]

			Volume of services					
Calendar year	Input price index	Unit input intensity allowance[2]	HI enrollment	Managed care shift effect	Admission incidence	Case mix	Other sources	HI inpatient hospital payments
Historical data:								
2005	3.4%	0.0%	1.8%	−0.9%	−0.3%	0.4%	1.3%	5.8%
2006	3.6	0.0	2.0	−3.7	−1.3	0.7	−0.7	0.4
2007	3.4	0.0	2.2	−3.4	1.0	−0.2	−2.3	0.6
2008	3.4	0.0	2.6	−3.1	−4.4	1.9	2.6	2.8
2009	3.2	0.0	2.5	−2.4	−2.3	2.7	−2.1	1.4
2010	2.2	−0.2	2.4	−0.9	−0.9	0.6	−1.1	2.0
2011	2.7	−0.5	2.5	−1.1	−1.6	0.0	−0.1	1.9
2012	2.9	−1.0	4.1	−1.8	−4.7	0.7	1.7	1.6
2013	2.6	−0.8	3.2	−2.2	−4.0	1.4	1.3	1.3
2014	2.6	−0.8	2.6	−2.7	−2.5	1.5	−2.2	−1.7
Intermediate estimates:								
2015	3.1	−0.8	3.7	−2.0	−2.7	0.5	−2.1	−0.4
2016	3.7	−1.1	2.8	−1.4	−1.2	0.5	−0.9	2.4
2017	4.0	−1.6	2.9	−1.0	−0.1	0.5	−1.7	2.9
2018	3.9	−1.8	3.0	−0.1	0.2	0.5	−0.4	5.3
2019	3.9	−1.7	3.0	−0.4	−0.0	0.5	0.6	5.9
2020	3.8	−1.0	3.0	−0.7	−0.2	0.5	0.5	6.0
2021	3.8	−1.1	2.9	−0.5	−0.1	0.5	0.6	6.2
2022	3.7	−1.0	2.9	−0.4	−0.1	0.5	0.4	6.2
2023	3.6	−1.1	2.8	−0.3	0.0	0.5	0.1	5.7
2024	3.6	−1.1	2.7	−0.1	0.0	0.5	0.0	5.7

[1]Percent increase in year indicated over previous year, on an incurred basis.
[2]Reflects the allowances provided for in the prospective payment update factors. Also reflects the downward adjustments to price updates based on the 10-year moving average of economy-wide productivity growth in 2012 and later, and additional decreases in updates ranging from 0.1 percentage point to 0.75 percentage point from 2010 through 2019, as introduced by the ACA.

The input price index is a weighted average of the price proxies (prices of specific inputs) used in delivery of HI inpatient services. This year's report introduces a revised methodology for projecting this index that utilizes least-squared regression models for each price proxy. The process begins by regressing the historical time series for each price proxy on one of three independent variables: average

hourly compensation, GDP deflator, and CPI. The regression results are then applied to the projected independent variables to produce projections for each detailed price proxy, which are weighted together to produce the aggregate input price index. This methodological change results in a slight decrease in the projected input price index compared with the approach used in prior reports, which was modeled as the weighted average between labor and non-labor factors.

The unit input intensity allowance is generally a downward adjustment provided for by law in the prospective payment update factor; that is, it is the amount subtracted from the input price index to yield the update factor.[52] Beginning in fiscal year 2004, the law provides that increases in payments to prospective payment system hospitals for covered admissions will equal the increase in the hospital input price index for those hospitals that submit the required quality measure data. For other hospitals, the increase will be slightly smaller. For this report, the Trustees assume that all hospitals will submit these data. Beginning in fiscal year 2010, the ACA mandates amounts to be subtracted from the input price index, including the increase in economy-wide productivity in 2012 and later, and amounts ranging from 0.1 percentage point to 0.75 percentage point for 2010 through 2019. As a result of these adjustments, the unit input intensity allowance, as indicated in table IV.A1, is negative throughout the first 25-year projection period.

Increases in payments for inpatient hospital services also reflect growth in the number of inpatient hospital admissions covered under HI. As shown in table IV.A1, increases in admissions are attributable to growth in both HI fee-for-service enrollment and admission incidence (admissions per beneficiary).[53] The historical and projected growth in enrollment reflects a more rapid increase in the population aged 65 and over than in the total population of the United States, as well as increasing numbers of disabled beneficiaries and persons with end-stage renal disease. Growth in enrollment is expected to continue

[52]The update factors are generally prescribed on a fiscal-year basis, while table IV.A1 is on a calendar-year basis. Calculations have therefore been performed to estimate the unit input intensity allowance on the basis of calendar years. The sum of the input price index and the unit input intensity allowance generally reflects the prescribed prospective payment update factor, but on a calendar-year, rather than a fiscal-year, basis.

[53]This factor is estimated to be negative for most of the projection period, reflecting the influx of beneficiaries aged 65 (and the resulting reduction in the average age of beneficiaries) due to the retirement of the baby boom generation. By the end of the projection period, the aging of this group is expected to increase the incidence of admissions.

and to mirror the ongoing demographic shift into categories of the population eligible for HI benefits.

In recent years the choice of more beneficiaries to join private health plans was an offsetting factor to the HI enrollment growth, as shown in the "managed care shift effect" column of table IV.A1. In other words, greater enrollment in private health plans reduced the number of beneficiaries with fee-for-service Medicare coverage and thereby reduced hospital admissions paid through fee-for-service. Private Medicare health plan membership is projected to continue to grow for most of the projection period.

Since the beginning of the prospective payment system (PPS), inpatient hospital payments have varied based on the complexity of admissions. These variations are primarily due to (i) the changes in diagnosis-related group (DRG) coding as hospitals continue to adjust to the PPS and (ii) the trend toward treating less complicated (and thus less expensive) cases in outpatient settings, which results in an increase in the average prospective payment per admission.

The average complexity of hospital admissions (case mix) is expected to increase by 0.5 percent annually in fiscal years 2015 through 2024 as a result of an assumed continuation of the current trend toward treating less complicated cases in outpatient settings, ongoing changes in DRG coding, and the overall impact of new technology. This assumption is based on Recommendation II-9 of the 2010-2011 Medicare Technical Review Panel.

Hospital payments are also affected by other factors, as reflected in the "other sources" column of table IV.A1. For example, statutory budget neutrality adjustments offset costs from significant increases in case mix that occurred when the new MS-DRG system was introduced in 2008. Although the law limited the size of these adjustments in 2008 and 2009, it allows subsequent recovery of any extra payments that resulted. The "other sources" column reflects all of these actual and anticipated effects and adjustments. In addition, one can attribute part of the increase from "other sources" to the increase in payments for certain costs, not included in the DRG payment, that are generally growing at a rate slower than the input price index. These other costs include capital, medical education (both direct and indirect), disproportionate share (DSH) payments, and payments to hospitals not included in the prospective payment system. A particularly important change affecting these costs is the reduction in Medicare DSH payments under the ACA. This change

reflects the major coverage expansions that began in 2014 and that continue to result in significantly fewer uninsured hospital patients.

Additional possible sources of changes in payments include (i) a shift to higher-cost or lower-cost admissions due to changes in the demographic characteristics of the covered population; (ii) changes in medical practice patterns; and (iii) adjustments in the relative payment levels for various DRGs, or addition/deletion of DRGs, in response to changes in technology.

The "other sources" column reflects, as appropriate, the impact of certain enacted legislation, including the sequestration process, which requires a reduction of about 2 percent for April 2013 through September 2024. Also reflected in this column is the impact of the estimated bonus payments and penalties for hospitals due to the health information technology incentive provisions of the American Recovery and Reinvestment Act of 2009.

The increases in the input price index (less any intensity allowance specified in the law), units of service, and other sources are compounded to calculate the total increase in payments for inpatient hospital services. The last column of table IV.A1 shows these overall increases.

c. Fee-for-Service Payments for Skilled Nursing Facility, Home Health Agency, and Hospice Services

Historically, the number of days of care covered in skilled nursing facilities (SNFs) under HI has varied widely. This extremely volatile experience has resulted, in part, from legislative and regulatory changes and from judicial decisions affecting the scope of coverage. Since 2005, utilization rates have increased by fairly high amounts in most years. Recently, this trend has leveled off. The intermediate projections assume that these increases in covered SNF days will reflect the growth and aging of the population plus 1 percent annually, as an underlying trend beginning in 2016. This assumption is based on Recommendation II-10 of the 2010-2011 Medicare Technical Review Panel.

As with hospitals, a least-squared regression model was used to develop the market basket increases for the first time in this year's report. Cost per day also increases by a case mix increase. The implementation of the new resource utilization group-53 (RUG-53) system of payment in 2006 was accompanied by an increase of over 7 percent in case mix for 2006 and more than 3 percent for 2007

through 2009. In 2010, a reduction of about 3.3 percent was applied to all the rates to better match payments from the old payment system to the new payment system. The implementation of a new RUG system again caused a very large increase in case mix in 2011, and a reduction of about 12.6 percent was applied in 2012 to once again match payments. The required reduction in costs due to sequestration (about 2 percent for the period April 2013 through September 2024) is also reflected in the projected expenditures. The case mix increases are assumed to grow at a level of 1.5 percent annually, based on Recommendation II-9 of the 2010-2011 Medicare Technical Review Panel. These assumed trends result in projected rates of increase in cost per day that are assumed to decline to a level slightly higher than increases in general earnings throughout the projection period.

Table IV.A2 shows the resulting increases in fee-for-service expenditures for SNF services.

Table IV.A2.—Relationship between Increases in HI Expenditures and Increases in Taxable Payroll[1]

Calendar year	Inpatient hospital[2,3]	Skilled nursing facility[3]	Home health agency[3,6]	Hospice[3]	Private plans	Weighted average[3]	HI administrative costs[3,4]	HI expenditures[3,4]	HI taxable payroll	Growth rate differential[5]
Historical data:										
2005	5.6	10.7	6.9	17.1	21.0	8.6	−2.6	8.4	5.5	2.8
2006	0.5	7.8	2.4	17.0	28.0	6.0	0.0	5.9	6.2	−0.3
2007	0.6	8.3	3.9	12.3	22.6	5.9	−1.0	5.8	5.4	0.3
2008	2.8	9.3	7.8	8.5	21.6	7.7	10.6	7.8	1.9	5.7
2009	1.4	5.5	4.4	7.7	19.2	6.3	−2.5	6.2	−4.7	11.4
2010	1.4	5.8	2.9	5.9	2.9	2.6	8.0	2.7	2.0	0.6
2011	1.9	11.8	−5.4	7.2	6.6	4.3	7.0	4.4	4.2	0.2
2012	1.6	−9.5	−1.3	7.2	8.9	2.3	7.8	2.4	4.9	−2.3
2013	1.3	1.5	−0.2	1.7	4.8	2.3	8.4	2.4	2.8	−0.4
2014	−1.7	1.2	−1.2	1.0	0.4	−0.6	4.8	−0.5	4.6	−4.9
Intermediate estimates:										
2015	−0.4	4.3	2.0	4.8	7.5	2.7	6.7	2.8	4.4	−1.6
2016	2.4	6.9	3.9	7.3	8.4	5.0	6.9	5.0	6.7	−1.6
2017	2.9	7.1	4.3	7.5	6.5	4.8	7.0	4.9	6.6	−1.6
2018	5.3	6.6	5.9	6.5	6.1	5.8	7.9	5.8	6.1	−0.3
2019	5.9	7.4	7.7	7.7	7.8	6.7	7.4	6.8	5.8	1.0
2020	6.0	7.9	7.6	7.9	8.9	7.3	6.8	7.3	5.5	1.7
2021	6.2	8.2	7.7	7.9	8.6	7.3	6.9	7.3	5.3	1.9
2022	6.2	8.5	8.0	7.7	8.4	7.3	6.9	7.3	5.0	2.2
2023	5.8	8.3	7.8	7.3	7.6	6.8	6.7	6.8	4.7	2.0
2024	5.7	8.7	7.9	8.3	7.0	6.7	8.0	6.7	4.5	2.1

[1]Percent increase in year indicated over previous year.
[2]This column may differ slightly from the last column of table IV.A1, since table IV.A1 includes all persons eligible for HI protection while this table excludes noninsured persons.
[3]Costs attributable to insured beneficiaries only, on an incurred basis. Benefits and administrative costs for noninsured persons are expected to be financed through general revenue transfers and premium payments, rather than through payroll taxes.
[4]Includes costs of Quality Improvement Organizations.
[5]The ratio of the increase in HI costs to the increase in taxable payroll. This ratio is equivalent to the percent increase in the ratio of HI expenditures to taxable payroll (the cost rate).
[6]Includes the declining share of costs drawn from HI for coverage of certain home health services transferred from HI to SMI Part B.

For most historical years, HI experience with home health agency (HHA) payments had shown an upward trend, frequently with sharp increases in the number of visits from year to year. For 2005 through 2009, the increases were large. Moreover, in certain areas of the country, outlier payments for treatment episodes increased at extraordinary rates during this period, prompting special rules to limit abusive practices. In 2010, limits were placed on the proportion of total payments that an agency could receive in the form of outlier payments, and prosecution of fraud cases resulted in the closing of a number of purported home health agencies. There was a slight decrease in utilization in 2010, followed by large decreases in 2011 and 2012 and a rebound in 2013. Preliminary data for 2014 show a slight increase in utilization. For 2015 and the rest of the projection period, these utilization and intensity increases are assumed to be equal to the growth and aging of the population plus 1 percent annually. This assumption is based on Recommendation II-11 of the 2010-2011 Medicare Technical Review Panel.

Reimbursement per episode of care[54] is assumed to increase at a slightly higher rate than increases in general earnings, but adjustments to reflect statutory limits on HHA reimbursement per episode are included where appropriate. As with other services, a least-squared regression model was used to develop market basket increases. Costs also increase by a case mix increase factor. Under the ACA, HHA payment rates are rebased starting in 2014, with an estimated 14-percent reduction in payments to be phased in over a 4-year period. Case mix increases have been modest and decreased over the last several years before rebounding in 2013. CMS adjusted HHA payment levels from 2008 through 2013 to offset gradually the financial effect of the unduly high mix of services in the first and subsequent years. Projected HHA costs reflect these regulatory adjustments. Based on Recommendation II-9 of the 2010-2011 Medicare Technical Review Panel, HHA case mix increases are projected to increase until reaching 1.5 percent annually beginning in 2016. As is the case for all types of Medicare benefits, the projected home health expenditures also reflect the specified reductions due to sequestration (about 2 percent for the period April 2013 through September 2024). Table IV.A2 shows the resulting increases in fee-for-service expenditures for HHA services.

HI covers certain hospice care for terminally ill beneficiaries. Hospice payments were originally very small relative to total HI benefit

[54]Under the HHA prospective payment system, Medicare payments are made for each episode of care, rather than for each individual home health visit.

payments, but they have grown rapidly in most years and now substantially exceed the level of HI home health expenditures. This growth rate increased sharply through 2007, slowed from 2008 to 2014, and is expected to rebound slightly and increase at the 2006-2012 level for the remainder of the projection period. Although detailed hospice data are scant at this time, estimates for hospice benefit payment increases are based on mandated daily payment rates and annual payment caps, and these estimates assume a deceleration in the growth in the number of covered days.

d. Private Health Plan Costs

HI payments to private health plans have generally increased significantly from the time that such plans began to participate in the Medicare program in the 1970s. Most of the growth in expenditures has been attributable to the increasing numbers of beneficiaries who have enrolled in these plans. Section IV.C of this report contains a description of the private health plan assumptions and methodology.

e. Administrative Expenses

Historically, the cost of administering the HI trust fund has remained relatively small in comparison with benefit amounts. The ratio of administrative expenses to benefit payments has generally fallen within the range of 1 to 3 percent. The short-range projection of administrative cost is based on estimates of workloads and approved budgets for intermediaries and CMS. In addition, the administrative costs reflect an assumed 5-percent reduction due to the sequester for the period April 2013 through September 2024. In the long range, administrative cost increases are based on assumed increases in workloads, primarily due to growth and aging of the population, and on assumed unit cost increases of slightly less than the increases in average hourly compensation that appear in table IV.A1.

2. Summary of Aggregate Reimbursement Amounts on an Incurred Basis under the Intermediate Assumptions

Table IV.A3 shows aggregate historical and projected reimbursement amounts by type of service on an incurred basis under the intermediate assumptions.[55]

[55]In the 2014 report, the projections shown in this table were on a cash basis.

Table IV.A3.—Aggregate Part A Reimbursement Amounts on an Incurred Basis

[In millions]

Calendar year	Inpatient hospital	Skilled nursing facility	Home health agency	Hospice	Total FFS	Private health plans	Total Part A
Historical data:							
2005	$124,837	$19,506	$5,898	$8,016	$158,257	$25,943	$184,200
2006	125,287	21,005	6,031	9,368	161,691	33,204	194,895
2007	126,000	22,753	6,268	10,518	165,540	40,703	206,242
2008	129,513	24,855	6,756	11,404	172,527	49,493	222,021
2009	131,340	26,216	7,052	12,274	176,882	58,971	235,853
2010	134,027	27,919	7,295	13,088	182,328	60,700	243,029
2011	136,513	31,228	6,905	14,034	188,680	64,719	253,399
2012	138,701	28,290	6,817	15,044	188,853	70,455	259,307
2013	140,492	28,729	6,805	15,300	191,325	73,827	265,152
2014	138,144	29,096	6,725	15,463	189,428	74,135	263,563
Intermediate estimates:							
2015	137,565	30,346	6,864	16,210	190,985	79,711	270,695
2016	140,881	32,447	7,134	17,401	197,862	86,382	284,244
2017	144,998	34,743	7,440	18,709	205,890	92,015	297,905
2018	152,654	37,028	7,876	19,913	217,471	97,648	315,119
2019	161,596	39,754	8,480	21,432	231,262	105,310	336,572
2020	171,269	42,871	9,124	23,128	246,393	114,707	361,100
2021	181,853	46,363	9,827	24,940	262,983	124,592	387,575
2022	193,066	50,286	10,611	26,847	280,810	135,016	415,826
2023	204,147	54,432	11,434	28,789	298,802	145,243	444,045
2024	215,725	59,117	12,332	31,176	318,349	155,366	473,715

Note: Amounts do not reflect the effects of the Independent Payment Advisory Board (IPAB).

3. Financing Analysis Methodology

Because payroll taxes are the primary basis for financing the HI trust fund, HI costs can be compared on a year-by-year basis with the taxable payroll in order to analyze costs and evaluate the financing. Since the vast majority of total HI costs relate to insured beneficiaries, and since general revenue appropriations and premium payments are expected to support the uninsured segments, the remainder of this section will focus on the financing for insured beneficiaries only.

a. Taxable Payroll

Taxable payroll increases occur as a result of increases in both average covered earnings and the number of covered workers. The taxable payroll projection used in this report is based on the same economic assumptions used in the 2015 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds (OASDI). Table IV.A2 shows the projected increases in taxable payroll for this report, under the intermediate assumptions.

b. Relationship between HI Costs and Taxable Payroll

The most meaningful measure of HI cost increases, with regard to the financing of the system, is the relationship between cost increases and taxable payroll increases. If costs increase more rapidly than taxable payroll, either income rates must be increased or costs reduced (or some combination thereof) to finance the system in the future. Table IV.A4 shows the projected increases in HI costs relative to taxable payroll over the 10-year projection period. These relative increases fluctuate, starting at −1.6 percent per year in 2015, remaining negative through 2018 as the assumed continuation of the economic recovery leads to faster growth in employment and earnings, changing to a positive differential of about 1.0 percent per year in 2019, and then increasing to about 2.1 percent per year by 2024 for the intermediate assumption.

The result of these relative growth rates is an initial decrease, followed by a steady increase, in the year-by-year ratios of HI expenditures to taxable payroll, as shown in table IV.A4. Under the low-cost alternative, increases in HI expenditures follow a similar pattern relative to increases in taxable payroll, but at a somewhat lower rate; the rate for expenditures becomes about 4.4 percent less than the rate for taxable payroll by 2015 but then increases, reaching about 0.1 percent more per year than taxable payroll by 2024. Under the high-cost alternative, the ratio of expenditures to payroll sharply increases from about 1.7 percent in 2015 to about 4.1 percent by 2024.

Table IV.A4.—Summary of HI Alternative Projections
[In percent]

Calendar year	Increase in aggregate inpatient hospital payments[2]	Changes in the relationship between expenditures and payroll[1]: HI expenditures[2,3,4]	Taxable payroll	Ratio of expenditures to payroll
Intermediate estimates:				
2015	−0.4%	2.8%	4.4%	−1.6%
2016	2.4	5.0	6.7	−1.6
2017	2.9	4.9	6.6	−1.6
2018	5.3	5.8	6.1	−0.3
2019	5.9	6.8	5.8	1.0
2020	6.0	7.3	5.5	1.7
2021	6.2	7.3	5.3	1.9
2022	6.2	7.3	5.0	2.2
2023	5.7	6.8	4.7	2.0
2024	5.7	6.7	4.5	2.1
Low-cost:				
2015	−2.8	1.1	5.7	−4.4
2016	2.0	3.8	8.8	−4.5
2017	2.5	4.5	8.5	−3.7
2018	4.6	5.4	7.7	−2.2
2019	5.0	5.9	7.1	−1.0
2020	5.0	6.3	6.5	−0.2
2021	5.1	6.3	6.2	0.0
2022	5.3	6.4	6.2	0.2
2023	5.0	6.1	6.1	0.0
2024	5.0	6.1	5.9	0.1
High-cost:				
2015	1.9	4.4	2.7	1.7
2016	2.2	5.7	4.1	1.6
2017	3.2	5.1	4.7	0.4
2018	6.0	6.4	4.8	1.6
2019	6.7	7.6	4.5	2.9
2020	6.9	8.2	4.2	3.8
2021	7.1	8.2	4.1	4.0
2022	7.2	8.3	3.9	4.2
2023	6.7	7.7	3.7	3.9
2024	6.4	7.4	3.1	4.1

[1]Percent increase for the year indicated over the previous year.
[2]On an incurred basis.
[3]Includes expenditures attributable to insured beneficiaries only.
[4]Includes hospital, SNF, HHA, private health plan, and hospice expenditures; administrative costs; and costs of Quality Improvement Organizations.

4. Projections under Alternative Assumptions

Projected HI expenditures under current law are subject to considerable uncertainty.[56] To illustrate this uncertainty, HI costs have been projected under three alternative sets of assumptions. Table IV.A4 shows a summary of the results. The assumed increases

[56]Uncertainty in projecting HI expenditures also exists because of the possibility that future legislation will affect unit payment levels, particularly for inpatient hospital services. The projections presented throughout this report are on a current-law basis, but it should be noted that legislation has been enacted that has affected the inpatient PPS payment levels to hospitals in most of the past 30 years.

in the economic factors affecting HI expenditures for the three alternatives are consistent with those underlying the OASDI report.

Under the intermediate assumptions, HI costs beyond the first 25-year projection period are based on the assumption that average per beneficiary expenditures (excluding demographic impacts) will increase at the baseline rates determined by the economic model described in sections II.C and IV.D less the economy-wide productivity adjustments. This rate is about the same as the increase in the Gross Domestic Product (GDP) per capita in 2039 but would decelerate to about 0.3 percent slower than GDP per capita by 2089. HI expenditures, which were 3.4 percent of taxable payroll in 2014, increase to 4.5 percent by 2035 and to 5.1 percent by 2089 under the intermediate assumptions. Accordingly, if all of the projection assumptions were realized over time, the HI income rates (3.84 percent of taxable payroll summarized over 75 years) would be inadequate to support the HI cost.

During the first 25-year projection period, the low-cost and high-cost alternatives contain assumptions that result in HI costs increasing, relative to taxable payroll increases, approximately 2 percentage points less rapidly and 2 percentage points more rapidly, respectively, than the results under the intermediate assumptions. Costs beyond the first 25-year projection period assume that the 2-percentage-point differential gradually decreases until 2064, when HI cost increases relative to taxable payroll are approximately the same as under the intermediate assumptions.

B. SUPPLEMENTARY MEDICAL INSURANCE

SMI consists of Part B and, since 2004, Part D. The benefits provided by each part are quite different. The actuarial methodologies used to produce the estimates for each part reflect these differences and thus appear in separate sections (IV.B1 and IV.B2).

1. Part B

a. Cost Projection Methodology

Estimates under the intermediate assumptions are calculated separately for each category of enrollee and for each type of service. The estimates are prepared by establishing the allowed charges or costs incurred per enrollee for a recent year (to serve as a projection base) and then projecting these charges through the estimation

period. The per enrollee charges are then converted to reimbursement amounts by subtracting the per enrollee values of the deductible and coinsurance. Aggregate reimbursement amounts are calculated by multiplying the per enrollee reimbursement amounts by the projected enrollment. In order to estimate cash expenditures, an allowance is made for the delay between receipt of, and payment for, the service.

(1) Projection Base

To establish a suitable base from which to project the future Part B costs, the incurred payments for services provided must be constructed for the most recent period for which a reliable determination can be made. Accordingly, payments to providers must be attributed to dates of service, rather than to payment dates; in addition, the nonrecurring effects of any changes in regulations, legislation, or administration, and of any items affecting only the timing and flow of payments to providers, must be eliminated. As a result, the rates of increase in the Part B incurred cost differ from the increases in cash expenditures.

(a) Carrier Services

Private contractors acting for the Centers for Medicare & Medicaid Services (CMS) pay reimbursement amounts for physician services, durable medical equipment (DME), laboratory tests performed in physician offices and independent laboratories, and other services (such as physician-administered drugs, free-standing ambulatory surgical center facility services, ambulance, and supplies). These contractors, referred to as *carriers*, use CMS guidelines to determine whether Part B covers billed services, establish the allowed charges for covered services, and transmit to CMS a record of the allowed charges, the applicable deductible and coinsurance, and the amount reimbursed after reduction for coinsurance and the deductible.

The data are tabulated on an incurred basis. As a check on the validity of the projection base, incurred reimbursement amounts are compared with carrier cash expenditures.

(b) Intermediary Services

The same fiscal intermediaries that pay for HI services pay reimbursement amounts for institutional services under Part B. Institutional care covered under Part B includes outpatient hospital services, home health agency services, laboratory services performed in hospital outpatient departments, and such services as renal

dialysis performed in free-standing dialysis facilities, services in outpatient rehabilitation facilities, and services in rural health clinics.

Separate payment systems exist for almost all the Part B institutional services. For these systems, the intermediaries determine whether Part B covers billed services, establish the allowed payment for covered services, and send to CMS a record of the allowed payment, the applicable deductible and coinsurance, and the amount reimbursed after reduction for coinsurance and the deductible.

For those services still reimbursed on a reasonable-cost basis, the costs for covered services are determined on the basis of provider cost reports. Reimbursement for these services occurs in two stages. First, bills are submitted by providers to the intermediaries, and interim payments are made on the basis of these bills. The second stage takes place at the close of a provider's accounting period, when a cost report is submitted and lump-sum payments or recoveries are made to correct for the difference between interim payments and final settlement amounts for providing covered services (net of coinsurance and deductible amounts). Tabulations of the bills are prepared by date of service, and the lump-sum settlements, which are reported only on a cash basis, are adjusted (using approximations) to allocate them to the time of service.

(c) Private Health Plan Services

Private health plans with contracts to provide Part B services to Medicare beneficiaries are reimbursed directly by CMS on either a reasonable-cost or capitation basis. Section IV.C of this report contains a description of the assumptions and methodology used to estimate payments to private plans.

(2) Projected Fee-for-Service Payments for Aged Enrollees and Disabled Enrollees without End-Stage Renal Disease (ESRD)

Part B enrollees with ESRD have per enrollee costs that are substantially higher and quite different in nature from those of most other beneficiaries. Accordingly, the analysis in this section excludes their Part B costs. Those costs, as well as costs associated with beneficiaries enrolled in private health plans, are discussed later in this section.

Actuarial Methodology

(a) Carrier Services

i. Physician Services

Medicare payments for physician services are based on a fee schedule, which reflects the relative level of resources required for each service. The fee schedule amount is equal to the product of the procedure's relative value, a conversion factor, and a geographic adjustment factor. Payments are based on the lower of the actual charge and the fee schedule amount.

Table IV.B1 shows the actual and projected physician update for 2005 through 2024. The physician fee schedule updates are specified by law. MACRA was enacted into law earlier in 2015 and specifies the physician update for every future year. The update will be 0 percent for January-June 2015 and 0.5 percent for July-December 2015. The update for 2016, relative to the payment level that applies for the last 6 months of 2015, will be 0.5 percent. For 2017-2019, the update each year will be 0.5 percent, and for 2020-2025 the annual update will be 0 percent. Starting in 2026, the annual update for physicians in *alternative payment models* (APMs) will be 0.75 percent, and, for all other physicians, the update each year will be 0.25 percent. The modified update shown in column 3 reflects the physician update and all legislative impacts, such as the addition of certain preventive services under the ACA. The sequestration of all Medicare payments in 2013 through September 2024 does not affect allowed charges and therefore is not reflected in table IV.B1; rather, that impact is included in table IV.B2.

Table IV.B1.—Components of Increases in Total Allowed Charges per Fee-for-Service Enrollee for Carrier Services

[In percent]

Calendar year	Physician fee schedule: MEI	Physician update	Modified update[1]	Residual factors	Total increase[2]	CPI	DME	Lab	Other carrier
Aged:									
2005	3.1%	1.5%	2.1%	3.2%	5.4%	3.5%	1.4%	6.3%	3.1%
2006	2.8	0.2	0.2	4.6	4.7	3.2	5.0	7.7	5.5
2007	2.1	0.0	−1.4	3.5	2.1	2.9	2.9	9.8	4.7
2008	1.8	0.5	−0.3	4.0	3.7	4.1	6.4	7.3	4.2
2009	1.6	1.1	1.4	1.6	3.0	−0.7	−7.4	8.4	7.9
2010	1.2	1.3[3]	2.3	1.6	3.9	2.1	1.2	1.4	3.3
2011	0.4	0.9	0.8	2.3	3.1	3.6	−3.7	−2.8	4.4
2012	0.6	0.0	−1.2	1.0	−0.2	2.1	0.6	6.4	3.2
2013	0.8	0.0	−0.1	0.2	0.1	1.4	−10.3	0.2	2.6
2014	0.8	0.5	0.5	0.7	1.2	1.5	−14.9	5.4	3.1
2015	0.8	0.2[4]	−0.4	−0.8	−1.2	0.2	4.0	4.3	2.0
2016	1.0	0.8	0.1	1.1	1.2	3.0	−6.6	4.6	0.9
2017	2.4	0.5	0.4	2.6	3.0	2.8	1.9	−1.4[5]	4.4
2018	3.0	0.5	0.1	2.8	2.9	2.7	5.5	4.9	4.1
2019	2.8	0.5	0.8	5.7[6]	6.5	2.7	5.0	4.4	4.2
2020	2.6	0.0	0.0	4.3	4.3	2.7	4.6	13.2	4.5
2021	2.3	0.0	0.0	3.8	3.8	2.7	4.8	4.1	4.6
2022	2.5	0.0	0.0	4.0	4.0	2.7	4.7	4.1	4.7
2023	2.3	0.0	0.0	3.9	3.9	2.7	4.8	12.8	4.7
2024	2.3	0.0	0.0	3.9	3.9	2.7	4.7	4.2	4.7
Disabled (excluding ESRD):									
2005	3.1	1.5	2.1	1.9	4.1	3.5	2.1	5.8	5.8
2006	2.8	0.2	0.2	2.7	2.8	3.2	5.6	8.0	−4.4
2007	2.1	0.0	−1.4	1.7	0.3	2.9	2.2	10.4	4.1
2008	1.8	0.5	−0.3	3.7	3.4	4.1	6.3	11.8	8.7
2009	1.6	1.1	1.4	4.5	5.9	−0.7	−2.4	21.0	9.7
2010	1.2	1.3[3]	2.3	2.5	4.9	2.1	1.4	−4.3	2.8
2011	0.4	0.9	0.8	1.8	2.7	3.6	−3.0	6.6	3.5
2012	0.6	0.0	−1.2	2.2	0.9	2.1	0.9	24.5	2.2
2013	0.8	0.0	−0.1	1.5	1.4	1.4	−9.2	10.8	1.0
2014	0.8	0.5	0.5	2.4	2.9	1.5	−11.3	12.1	4.5
2015	0.8	0.2[4]	−0.4	−0.6	−1.1	0.2	4.1	4.5	2.0
2016	1.0	0.8	0.1	1.2	1.3	3.0	−6.6	4.7	1.0
2017	2.4	0.5	0.4	2.6	3.0	2.8	1.8	−1.4[5]	4.2
2018	3.0	0.5	0.1	2.7	2.8	2.7	5.4	4.8	3.9
2019	2.8	0.5	0.8	5.7[6]	6.5	2.7	4.9	4.4	4.0
2020	2.6	0.0	0.0	4.3	4.3	2.7	4.5	13.2	4.4
2021	2.3	0.0	0.0	3.8	3.8	2.7	4.7	4.0	4.4
2022	2.5	0.0	0.0	3.8	3.8	2.7	4.6	4.0	4.4
2023	2.3	0.0	0.0	3.8	3.8	2.7	4.7	12.6	4.4
2024	2.3	0.0	0.0	3.8	3.8	2.7	4.6	4.0	4.4

[1]Reflects the physician update and all legislation affecting physician services—for example, the addition of new preventative services enacted in 1997, 2000, and 2010.
[2]Equals combined increases in the modified update and residual factors.
[3]A physician payment price change occurred on June 1, 2010.
[4]A physician payment price change will occur on July 1, 2015.
[5]Beginning in 2017, payments under the laboratory fee schedule will no longer include an adjustment for economy-wide productivity. Instead, payments will reflect a survey of private sector lab payments and will be updated every 3 years.
[6]For 2019-2024, physicians in an APM will receive an incentive payment amounting to 5 percent of their Medicare payments for the year. For those same years, a total of $500 million is available for additional payment adjustment under the *merit-based incentive payment system* (MIPS) for certain high-performing physicians.

Per capita physician charges have also changed each year as a result of a number of other factors besides fee increases, including more

physician visits and related services per enrollee, the aging of the Medicare population, greater use of specialists and more expensive techniques, and certain administrative actions. The fourth column of table IV.B1 shows the increases in physician charges per enrollee resulting from these residual factors. Because the measurement of increased allowed charges per service is subject to error, residual causes implicitly include any such errors. Part B expenditures are further affected by the sequestration of non-salary Medicare expenditures, which applies from April 1, 2013 to September 30, 2024. Under the sequestration, Medicare benefit payments will be reduced by a specified percentage (usually around 2 percent), and administrative expenses will be reduced by an assumed 5 percent. Based on the increases in table IV.B1, and incorporating the sequestration of Medicare expenditures, table IV.B2 shows the estimates of the average incurred reimbursement for carrier services per fee-for-service enrollee.

MACRA introduced changes to physician payments beyond the physician updates. Starting in 2019, physicians who are part of an APM will receive payments that are different from those received by physicians who are not part of an APM. For 2019 through 2024, physicians in an APM will receive an annual incentive payment equal to 5 percent of their Medicare payments. Physicians who are not in an APM will instead be under the *merit-based incentive payment system* (MIPS) and will receive a payment adjustment according to their performance. The performance adjustment could range from −4 percent to 12 percent in 2019, from −5 percent to 15 percent in 2020, from −7 percent to 21 percent in 2021, and from −9 percent to 27 percent for 2022 and later. For 2019 through 2024, MIPS physicians could receive an additional payment adjustment for high performance of up to 10 percent. The total of all additional payment adjustments made to MIPS physicians in a year must not exceed $500 million. For 2025 and later, physicians in an APM will receive an update of 0.75 percent while MIPS physicians will receive a 0.25-percent update. Based on these payment mechanisms, the existing demonstration and payment models, and the requirements for becoming an APM physician, the Trustees assume that physician participation in APMs will grow from 60 percent of spending in 2019 to 100 percent by 2039.

Table IV.B2.—Incurred Reimbursement Amounts per Fee-for-Service Enrollee for Carrier Services

Calendar year	Fee-for-service enrollment [millions]	Physician fee schedule	DME	Lab	Other carrier
Aged:					
2005	28.433	$1,724.29	$215.43	$103.01	$440.39
2006	27.613	1,801.14	225.20	110.95	464.47
2007	26.936	1,836.65	231.38	121.86	486.45
2008	26.457	1,905.33	246.10	130.70	506.47
2009	26.230	1,963.18	227.83	141.76	546.20
2010	26.427	2,037.15	229.66	143.74	564.03
2011	26.592	2,114.66	221.19	139.70	590.39
2012	26.900	2,132.16	223.36	148.69	610.19
2013	27.105	2,103.23	197.45	146.69	616.97
2014	27.196	2,129.96	168.13	153.95	634.31
2015	27.384	2,099.12	173.93	160.90	633.74
2016	27.822	2,108.74	161.39	168.30	638.17
2017	28.392	2,174.05	164.59	165.92	666.78
2018	29.225	2,233.88	173.98	173.98	694.21
2019	30.041	2,392.83	182.45	181.64	722.89
2020	30.860	2,498.69	190.68	205.62	755.22
2021	31.763	2,593.27	199.76	213.95	790.06
2022	32.732	2,695.49	209.14	222.80	826.85
2023	33.738	2,794.16	218.69	250.79	864.15
2024	34.792	2,900.67	228.80	261.05	904.30
Disabled (excluding ESRD):					
2005	5.339	1,396.77	329.21	90.57	428.49
2006	5.267	1,433.59	346.69	97.97	409.06
2007	5.297	1,440.08	353.99	108.16	426.27
2008	5.311	1,491.27	376.01	120.85	462.48
2009	5.374	1,581.12	367.01	146.23	506.85
2010	5.556	1,668.85	371.41	140.05	521.45
2011	5.730	1,721.76	360.46	149.37	540.95
2012	5.773	1,764.24	364.81	186.01	553.85
2013	5.777	1,763.47	326.61	202.84	550.48
2014	5.687	1,839.16	289.77	226.56	575.19
2015	5.570	1,839.29	302.91	238.35	587.96
2016	5.470	1,849.89	281.68	249.60	592.63
2017	5.398	1,905.99	286.86	246.01	618.12
2018	5.451	1,956.63	302.75	257.80	642.58
2019	5.423	2,095.08	317.33	269.06	667.83
2020	5.333	2,187.43	331.50	304.56	696.90
2021	5.232	2,268.74	347.06	316.72	727.73
2022	5.120	2,354.77	362.99	329.36	759.75
2023	5.012	2,436.40	379.16	370.14	791.60
2024	4.910	2,524.85	396.30	384.65	825.95

Note: Amounts do not reflect the effects of the Independent Payment Advisory Board (IPAB).

ii. Durable Medical Equipment (DME), Laboratory, and Other Carrier Services

Unique fee schedules or reimbursement mechanisms have been established not only for physician services but also for virtually all other non-physician carrier services. Table IV.B1 shows the increases in the allowed charges per fee-for-service enrollee for DME, laboratory services, and other carrier services. As noted previously, allowed charges are not affected by the sequestration of payment. Based on the increases in table IV.B1, table IV.B2 shows the

corresponding estimates of the average incurred reimbursement amounts for these services per fee-for-service enrollee; these amounts are affected by the sequestration.

The fee schedules for each of these expenditure categories are updated by increases in the CPI, together with any applicable legislated limits on payment updates. In particular, under the ACA, starting in 2011 these fees are updated by the increase in the CPI minus the increase in the 10-year moving average of economy-wide productivity. Starting in 2017, laboratory services will no longer be affected by the annual productivity adjustments, as the Protecting Access to Medicare Act of 2014 links payments for Medicare laboratory services to private payment rates.[57] Per capita charges for these expenditure categories have also grown as a result of other factors, including increased number of services provided, the aging of the Medicare population, more expensive services, and certain administrative actions. This expenditure growth is projected based on recent past trends in growth per enrollee.

(b) Intermediary Services

Over the years, legislation has established new payment systems for virtually all Part B intermediary services, including a fee schedule for tests performed in laboratories in hospital outpatient departments. The Balanced Budget Act (BBA) of 1997 implemented a prospective payment system (PPS), which began on August 1, 2000, for services performed in the outpatient department of a hospital. It also implemented a PPS for home health agency services, which began on October 1, 2000. Table IV.B3 shows the historical and projected increases in charges and costs per fee-for-service enrollee for intermediary services, excluding the impact of sequestration.

[57]This change to laboratory payments also applies to outpatient hospital laboratory services.

Table IV.B3.—Increases in Costs per Fee-for-Service Enrollee for Intermediary Services

[In percent]

Calendar year	Outpatient hospital	Home health agency	Outpatient lab	Other intermediary
Aged:				
2005	10.8%	15.9%	5.4%	13.5%
2006	5.1	17.6	4.4	7.5
2007	8.3	18.9	3.0	7.5
2008	6.3	12.4	5.1	6.0
2009	5.7	14.7	−5.9	21.2
2010	6.6	2.0	2.7	4.0
2011	7.1	−6.2	4.4	4.2
2012	7.1	−3.4	3.9	5.1
2013	7.4	−0.7	−0.7	−0.5
2014	12.9[1]	−1.3	−28.7[1]	5.0
2015	7.3	1.7	3.5	4.9
2016	7.1	2.7	3.9	5.1
2017	8.4	2.5	−2.6[2]	5.0
2018	8.4	3.0	4.5	−7.8
2019	7.9	5.1	4.2	4.3
2020	8.1	5.2	13.2	4.5
2021	8.0	5.1	4.1	4.2
2022	8.1	5.3	4.1	4.4
2023	7.9	5.0	12.8	4.4
2024	7.9	5.1	4.1	4.4
Disabled (excluding ESRD):				
2005	10.7	16.8	6.5	13.2
2006	5.4	20.2	6.1	11.5
2007	7.9	20.2	6.4	14.2
2008	7.4	14.4	6.0	5.9
2009	11.1	16.3	−1.4	7.4
2010	6.5	−0.4	0.6	4.2
2011	6.3	−5.3	5.9	4.1
2012	7.3	−2.9	4.2	7.1
2013	6.8	3.9	−1.7	1.9
2014	14.1[1]	−1.1	−35.4[1]	7.8
2015	7.8	1.7	3.5	5.1
2016	7.1	3.1	3.9	5.2
2017	8.3	2.9	−2.6[2]	5.1
2018	7.9	3.2	4.4	−5.1
2019	7.6	5.4	4.2	4.7
2020	8.0	5.6	13.2	5.0
2021	7.9	5.4	4.0	4.8
2022	7.9	5.4	4.0	4.9
2023	7.7	5.0	12.6	5.0
2024	7.7	4.9	4.0	5.0

[1]Effective January 1, 2014, a large portion of outpatient laboratory services were bundled into the outpatient prospective payment system.
[2]See footnote 5 of table IV.B1.

Note: Amounts do not reflect the effects of the IPAB.

Based on the increases in table IV.B3, table IV.B4 shows the estimates of the incurred reimbursement for the various intermediary services per fee-for-service enrollee. Each of these expenditure categories is projected on the basis of recent trends in growth per enrollee, along with applicable legislated limits on payment updates and the effects of sequestration.

Table IV.B4.—Incurred Reimbursement Amounts per Fee-for-Service Enrollee for Intermediary Services

Calendar year	Fee-for-service enrollment [millions]	Outpatient hospital	Home health agency	Outpatient lab	Other intermediary
Aged:					
2005	28.433	$555.13	$217.43	$98.14	$267.20
2006	27.613	604.29	255.72	102.43	284.40
2007	26.936	664.56	303.92	105.51	304.20
2008	26.457	723.71	341.56	110.89	323.18
2009	26.230	786.78	391.61	104.35	386.73
2010	26.427	843.17	399.29	107.12	399.76
2011	26.592	909.19	374.63	111.89	416.86
2012	26.900	979.06	361.95	116.24	437.73
2013	27.105	1,043.29	359.37	113.65	426.79
2014	27.196	1,178.15[1]	354.78	80.59[1]	445.19
2015	27.384	1,273.55	360.80	83.38	469.17
2016	27.822	1,363.26	370.38	86.64	492.56
2017	28.392	1,478.89	379.81	84.42	517.33
2018	29.225	1,603.86	391.36	88.21	472.27
2019	30.041	1,730.22	411.26	91.95	492.16
2020	30.860	1,870.51	432.49	104.13	513.95
2021	31.763	2,020.94	454.62	108.37	534.94
2022	32.732	2,184.13	478.66	112.83	558.20
2023	33.738	2,350.91	502.79	126.97	581.08
2024	34.792	2,534.66	528.21	132.11	605.67
Disabled (excluding ESRD):					
2005	5.339	638.68	166.18	107.99	180.51
2006	5.267	693.93	199.78	114.57	197.65
2007	5.297	757.32	240.05	121.90	225.08
2008	5.311	828.95	274.65	129.25	237.54
2009	5.374	947.26	319.29	127.40	246.52
2010	5.556	1,011.59	318.02	128.22	254.48
2011	5.730	1,081.56	301.13	135.72	263.64
2012	5.773	1,167.26	292.32	141.46	282.32
2013	5.777	1,238.10	303.62	136.94	281.35
2014	5.687	1,420.64[1]	300.24	87.99[1]	301.62
2015	5.570	1,541.71	305.29	91.11	319.13
2016	5.470	1,650.91	314.69	94.67	334.97
2017	5.398	1,789.58	323.83	92.19	352.60
2018	5.451	1,932.53	334.10	96.24	329.74
2019	5.423	2,079.86	352.02	100.25	344.94
2020	5.333	2,247.43	371.76	113.48	362.05
2021	5.232	2,426.33	391.76	118.01	379.26
2022	5.120	2,619.23	412.82	122.72	397.95
2023	5.012	2,815.30	433.51	137.90	416.68
2024	4.910	3,031.28	454.90	143.30	436.97

[1]Effective January 1, 2014, a large portion of outpatient laboratory services were bundled into the outpatient prospective payment system.

Note: Amounts do not reflect the effects of the IPAB.

Expenditures for outpatient hospital services increased significantly from 2001 through 2014 due to provisions in the BBA, the Balanced Budget Refinement Act of 1999, and the Benefits Improvement and Protection Act of 2000 that reduced beneficiaries' coinsurance payments to levels more consistent with other Part B services but maintained the same total payment to the hospital. The result is that Medicare pays a larger portion of the total outpatient hospital costs.

Part B expenditures for home health services had been increasing very rapidly through 2009, in part due to suspected fraud and abuse in South Florida and certain other parts of the country. In late 2008, CMS suspended payments to a number of home health agencies and increased program integrity efforts for this category of services. From 2010 onward, outlier payments to agencies have been capped as a percentage of total payments. Assumed growth rates for home health expenditures reflect this initiative, along with the ongoing effects of growth in the number of beneficiaries, payment rates, utilization of services, and legislated changes affecting future payments.

(3) Projected Fee-for-Service Payments for Persons with End-Stage Renal Disease (ESRD)

Most persons with ESRD are eligible to enroll for Part B coverage. For analytical purposes, this section includes two groups of enrollees: (i) those who qualify for Medicare due to ESRD alone and (ii) those who qualify not only because they have ESRD but also because they are disabled. Enrollees in this latter group, who are eligible as Disability Insurance beneficiaries, are included in this section because their per enrollee costs are both higher and different in nature from those of most other disabled persons. Specifically, most of the Part B reimbursements for both groups are related to kidney transplants and renal dialysis.

The estimates under the intermediate assumptions reflect the payment mechanism for reimbursing ESRD services. Payment for dialysis services occurs through a bundled payment system, which began in 2011. The bundled payment rate is updated annually by an annual ESRD market basket less the increase in economy-wide productivity. Also, the estimates assume a continued increase in enrollment. Table IV.B5 shows the historical and projected enrollment and costs for Part B benefits, including the effects of sequestration.

Table IV.B5.—Fee-for-Service Enrollment and Incurred Reimbursement for End-Stage Renal Disease

	Average enrollment [thousands]		Reimbursement [millions]	
Calendar year	Disabled	Non-disabled	Disabled	Non-disabled
2005	104	83	$3,312	$2,213
2006	105	84	3,641	2,434
2007	107	86	3,801	2,577
2008	109	87	4,017	2,658
2009	112	88	4,566	2,662
2010	116	90	4,781	2,720
2011	120	92	4,859	2,812
2012	122	94	5,121	2,976
2013	122	96	5,179	3,039
2014	120	98	5,359	3,021
2015	117	100	5,399	3,178
2016	116	101	5,497	3,334
2017	115	103	5,651	3,507
2018	116	104	5,913	3,666
2019	116	105	6,178	3,874
2020	115	106	6,380	4,070
2021	113	106	6,556	4,259
2022	112	107	6,731	4,456
2023	111	108	6,902	4,648
2024	109	108	7,086	4,852

Note: Amounts do not reflect the effects of the IPAB.

(4) Private Health Plan Costs

Part B payments to private health plans have generally increased significantly from the time that such plans began to participate in the Medicare program in the 1970s. Most of the growth in expenditures has been due to the increasing numbers of beneficiaries who have enrolled in these plans. Section IV.C of this report contains a description of the assumptions and methodology for the private health plans that provide coverage of Part B services for certain enrollees.

(5) Administrative Expenses

The ratio of Part B administrative expenses to total expenditures has declined to roughly 1.5 percent in recent years. Projections of administrative costs are based on estimates of changes in average annual wages, fee-for-service enrollment, and an assumed 5-percent reduction in expenditures due to sequestration, beginning in 2013.

b. Summary of Aggregate Reimbursement Amounts on an Incurred Basis under the Intermediate Assumptions

Table IV.B6 shows aggregate historical and projected reimbursement amounts by type of service on an incurred basis under the intermediate assumptions.[58]

[58]In prior reports, the projections in this table were shown on a cash basis.

Table IV.B6.—Aggregate Part B Reimbursement Amounts on an Incurred Basis

[In millions]

Calendar year	Carrier: Physician fee schedule	Carrier: DME	Carrier: Lab	Carrier: Other	Carrier: Total	Intermediary: Hospital	Intermediary: Lab	Intermediary: Home health agency	Intermediary: Other	Intermediary: Total	Total FFS	Private health plans	Total Part B
Historical data:													
2005	$57,532	$7,986	$3,555	$15,191	$84,265	$19,608	$3,446	$7,069	$11,916	$42,039	$126,304	$22,940	$149,244
2006	58,467	8,170	3,747	15,432	85,816	20,837	3,513	8,114	12,467	44,931[1]	130,747	32,033	162,780
2007	58,379	8,257	4,048	15,887	86,572	22,424	3,571	9,458	13,023	48,476[1]	135,048	39,454	174,502
2008	59,686	8,671	4,304	16,416	89,078	24,087	3,707	10,495	13,579	51,869[1]	140,947	47,953	188,900
2009	61,467	8,112	4,720	17,663	91,963	26,338	3,505	11,988	15,535	57,366	149,329	53,320	202,649
2010	64,712	8,301	4,800	18,371	96,184	28,574	3,628	12,319	16,159	60,681	156,864	55,248	212,113
2011	67,810	8,113	4,620	19,353	99,895	31,108	3,834	11,688	16,973	63,603	163,498	59,118	222,616
2012	69,317	8,281	5,126	20,168	102,892	33,900	4,028	11,424	18,043	67,395	170,287	66,110	236,397
2013	68,966	7,381	5,198	20,451	101,996	36,279	3,954	11,495	17,971	69,699	171,696	73,462	245,158
2014	70,205	6,343	5,528	21,058	103,135	41,088	2,737	11,356	18,656	73,837	176,972	86,245	263,217
Intermediate estimates:													
2015	69,526	6,578	5,789	21,178	103,070	44,499	2,838	11,581	19,588	78,506	181,576	95,393	276,969
2016	70,601	6,149	6,106	21,548	104,404	48,068	2,977	12,026	20,669	83,740	188,144	105,886	294,030
2017	73,875	6,342	6,096	22,843	109,156	52,848	2,942	12,531	21,887	90,208	199,364	114,831	314,195
2018	77,879	6,863	6,550	24,396	115,688	58,717	3,152	13,259	21,095	96,223	211,912	122,590	334,502
2019	85,313	7,336	6,979	25,971	125,598	64,670	3,358	14,263	22,339	104,630	230,228	135,420	365,649
2020	90,933	7,792	8,041	27,683	134,449	71,235	3,877	15,329	23,630	114,072	248,521	150,062	398,583
2021	96,469	8,306	8,527	29,590	142,892	78,525	4,120	16,490	24,953	124,088	266,980	164,647	431,627
2022	102,587	8,855	9,055	31,671	152,168	86,662	4,384	17,781	26,426	135,253	287,421	180,466	467,887
2023	108,851	9,435	10,402	33,866	162,555	95,308	5,045	19,136	27,933	147,422	309,977	197,323	507,300
2024	115,762	10,069	11,059	36,292	173,182	105,086	5,373	20,611	29,595	160,665	333,847	214,121	547,968

[1]Amounts shown exclude payments inadvertently made from the Part B account in 2005-2007 to cover the costs of certain Part A hospice benefits.

Note: Amounts do not reflect the effects of the IPAB.

c. Projections under Alternative Assumptions

Projections of Part B cash expenditures under the low-cost and high-cost alternatives were developed by modifying the growth rates estimated under the intermediate assumptions. Beginning in calendar year 2014, the low-cost and high-cost alternatives contain assumptions that result in benefits increasing, relative to the Gross Domestic Product (GDP), 2 percent less rapidly and 2 percent more rapidly, respectively, than the results under the intermediate assumptions. Administrative expenses under the low-cost and high-cost alternatives are projected on the basis of their respective wage series growth.

2. Part D

Part D is a voluntary Medicare prescription drug benefit that offers beneficiaries a choice of private drug insurance plans. Low-income beneficiaries can receive additional assistance on the cost sharing and premiums. Each year drug plan sponsors submit bids that include estimated total plan costs, reinsurance payments, and low-income cost-sharing subsidies for the coming year. Upon approval of these bids, a national average bid amount is calculated, and the result is used to determine the national average premium. The individual plan premium is calculated as the difference between the plan bid and the national average bid, which is then applied to the national average premium.

Each drug plan receives risk-adjusted direct subsidies, prospective reinsurance payments, and prospective low-income cost-sharing subsidies from Medicare, as well as premiums from the beneficiaries and premium subsidies from Medicare on behalf of low-income enrollees. At the end of the year, the prospective reinsurance and low-income cost-sharing subsidy payments are reconciled to match the plan's actual experience. During the reconciliation process, if actual experience differs from the plan's bid beyond specified risk corridors, Medicare shares in the plan's experience gain or loss.

Expenditures for this voluntary prescription drug benefit were determined by combining estimated Part D enrollment with projections of per capita spending. Actual Part D spending information for 2014 was used as the base year.

Medicare also pays special subsidies on behalf of beneficiaries retaining primary drug coverage through retiree drug subsidy (RDS) plans. General revenues primarily finance the various Medicare drug

subsidies. Since Medicaid is no longer the primary payer of drug costs for full-benefit dually eligible beneficiaries, States are subject to a contribution requirement and must pay the Part D account in the SMI trust fund a portion of their estimated forgone drug costs for this population. Starting in 2006, States must pay 90 percent of the estimated costs; this percentage phases down over a 10-year period to 75 percent in 2015. Beneficiaries can choose to have their drug insurance premiums withheld from their Social Security benefits and then forwarded to the drug plans on their behalf.[59] In 2014, around 27 percent of the non-low-income enrollees in Part D drug plans exercised this option.

a. Participation Rates

All individuals entitled to Medicare Part A or enrolled in Part B are eligible to enroll in the voluntary prescription drug benefit.

(1) Employer-Sponsored Plans

There are two ways that employer-sponsored plans can benefit from the Part D program. One way is the retiree drug subsidy (RDS), in which, for qualifying employer-sponsored plans, Medicare subsidizes a portion of their qualifying retiree drug expenses. As a result of the ACA, RDS program participation has declined significantly and is assumed to decline further in the next several years. The Trustees expect that the majority of the retirees losing drug coverage through RDS plans will participate in other Part D plans.

The other way that an employer-sponsored plan can benefit from Part D is to enroll in an employer/union-only group waiver plan (EGWP) by either wrapping around an existing Part D plan or becoming a prescription drug plan itself. The subsidies for these types of arrangements will generally be calculated in the same way as for other Part D plans. The Trustees expect that such plans will offer additional benefits beyond the standard Part D benefit package. EGWP enrollment has increased significantly, primarily due to the participation of a large percentage of the beneficiaries who lost RDS coverage.

(2) Low-Income Subsidy

Qualifying low-income beneficiaries can receive various degrees of additional Part D subsidies based on their resource levels to help

[59]The Part D income-related premium adjustment amount for each beneficiary is deposited into the Part D account.

finance premium and cost-sharing payments. The number of low-income enrollees constitutes about 29 percent of total Part D beneficiaries in 2015 and is assumed to grow at the same rate as that for Medicare beneficiaries who are eligible for Part D. Because the participation rate for Part D enrollees who do not qualify for the low-income subsidy is projected to increase somewhat until 2017, the proportion of enrollees with low-income subsidies is projected to decrease slightly until that year and to remain at approximately 28 percent of total Part D beneficiaries thereafter.

(3) Other Part D Beneficiaries

Medicare beneficiaries not covered by employer-sponsored plans and not qualified for the low-income subsidy have the option to enroll in a Part D plan. Once enrolled, they pay for premiums and any applicable deductible, coinsurance, and/or copayment. In 2014, about 59 percent of non-employer and non-low-income Medicare beneficiaries[60] opted to enroll in a Part D plan. Based on recent experience, this participation rate is projected to grow to 62 percent by 2017 and to then level off for the remaining years of the projection period.

Table IV.B7 provides a summary of the estimated average enrollment in Part D, by category.

[60]A significant portion of the remaining eligible beneficiaries who do not participate in Part D plans receive creditable coverage through another source (such as the Federal Employees Health Benefits Program, TRICARE for Life, the Veterans Administration, and the Indian Health Service).

Table IV.B7.—Part D Enrollment

[In millions]

Calendar year	Retiree drug subsidy[1]	EGWP	Low-income subsidy: Medicaid full-benefit dual eligible	Low-income subsidy: Other, with full subsidy	Low-income subsidy: Other, with partial subsidy	Low-income subsidy: Total	All others	Total
Historical data:								
2006	7.2	1.4	5.7	2.3	0.2	8.3	10.7	27.6
2007	7.1	1.8	5.9	3.0	0.3	9.2	13.3	31.4
2008	6.8	2.1	6.3	3.2	0.3	9.7	13.9	32.6
2009	6.7	2.3	6.4	3.3	0.3	10.0	14.6	33.6
2010	6.8	2.4	6.6	3.5	0.3	10.4	15.1	34.8
2011	6.2	2.8	6.6	3.7	0.3	10.6	16.0	35.7
2012	5.6	3.6	6.9	3.7	0.3	11.0	17.2	37.4
2013	3.3	5.9	7.2	4.0	0.3	11.5	18.4	39.1
2014	2.7	6.5	7.4	4.1	0.3	11.8	19.6	40.5
Intermediate estimates:								
2015	2.2	6.5	7.4	4.3	0.3	12.0	21.0	41.8
2016	1.8	6.9	7.6	4.4	0.4	12.4	22.2	43.2
2017	1.4	7.3	7.8	4.5	0.4	12.7	23.4	44.8
2018	1.1	7.6	8.1	4.6	0.4	13.1	24.2	46.0
2019	0.9	7.9	8.3	4.8	0.4	13.5	25.1	47.4
2020	0.9	8.2	8.5	4.9	0.4	13.9	25.8	48.8
2021	0.9	8.4	8.8	5.1	0.4	14.3	26.5	50.2
2022	1.0	8.7	9.0	5.2	0.4	14.7	27.3	51.6
2023	1.0	8.9	9.3	5.4	0.4	15.1	28.0	53.0
2024	1.0	9.1	9.5	5.5	0.5	15.5	28.8	54.4

[1]Excludes Federal Government and military retirees covered by either the Federal Employees Health Benefit Program or the TRICARE for Life program. Such programs qualify for the retiree drug subsidy, but the subsidy will not be paid since it would amount to the Federal Government subsidizing itself.

b. Cost Projection Methodology on an Incurred Basis

(1) Drug Benefit Categories

Projected drug expenses are allocated to the beneficiary premium, direct subsidy, and reinsurance subsidy by the Part D premium formula based on the benefit formula specifications. Meanwhile, the additional premium and cost-sharing subsidies are projected for low-income beneficiaries.

The statute specifies that the base beneficiary premium is equal to 25.5 percent of the sum of the national average monthly bid amount and the estimated catastrophic reinsurance. The average premium amount per enrollee is estimated based on the base beneficiary premium with an adjustment to reflect enrollees' tendency to select plans with below-average premiums. Moreover, Part D collects income-related premiums for individuals whose modified adjusted gross income exceeds a specified threshold. The amount of the income-related premium depends upon the individual's income level. The extra premium amount is the difference between 35, 50, 65, or 80 percent and 25.5 percent applied to the national average monthly bid amount adjusted for reinsurance.

(2) Projections

The projections are based in part on actual Part D spending data through 2014. These data include amounts for total prescription drug costs, costs above the catastrophic threshold, plan payments, and low-income cost-sharing payments.

The estimates under the intermediate assumptions are calculated by establishing the total prescription drug costs for 2014 and then projecting these costs with both Part D expenditure and enrollment growth rates through the estimation period. As was the case in the 2014 Trustees Report, the fundamental growth rate assumptions for Part D expenditures are based in part on the national health expenditure (NHE) growth rate assumptions. However, the approach in this year's report is different from the approach used last year. In particular, based on Recommendation II-28 of the 2010-2011 Medicare Technical Review Panel, a drug-specific and therapeutic-class-specific micro model was developed to project Part D growth rates. For this report, the model was used to estimate the growth rates for 2015-2017, and then a transition was applied for 2018 and 2019 in order to converge to the NHE projections in 2020. Based on the micro model, growth factors were somewhat higher than the corresponding overall NHE drug spending growth rates.

The projected Part D expenditure growth rate is adjusted to account for the financial effects of the closing of the coverage gap under the ACA. Table IV.B8 shows the historical and projected Part D per capita growth rates along with the NHE trends.

To determine the estimated benefits for Part D, the total per capita drug costs are adjusted for two key factors. First, Part D benefit costs are reduced for the total amount of rebates that the prescription drug plans receive from drug manufacturers. Second, the plans incur administrative costs for plan operation and earn profits. Table IV.B8 displays these key factors affecting Part D expenditure estimates.

Table IV.B8.—Key Factors for Part D Expenditure Estimates[1]

Calendar year	National health expenditure (NHE) drug trend[2]	Part D per capita cost trend[3]	Manufacturer rebates[4]	Plan administrative expenses and profits[5]
Historical data:				
2006	—	—	8.6%	12.4%
2007	4.2%	1.4%	9.6	13.6
2008	1.9	3.8	10.4	13.2
2009	4.2	2.9	11.1	12.7
2010	−0.3	1.3	11.3	13.6
2011	2.0	3.7	11.5	13.1
2012	−0.2	−1.8	11.7	12.1
2013	1.7	2.6	12.9	12.2
Intermediate estimates:				
2014	9.3	10.1	14.4	11.6
2015	5.8	5.2	16.6	11.6
2016	4.9	5.5	16.8	11.5
2017	5.3	6.1	16.8	11.6
2018	5.2	5.9	16.8	11.4
2019	5.3	5.7	16.8	11.2
2020	5.4	5.6	16.8	11.1
2021	5.4	5.5	16.7	11.0
2022	5.5	5.6	16.7	10.9
2023	5.5	5.5	16.7	10.8
2024	5.5	5.5	16.7	10.7

[1]These factors do not reflect the impact of the sequestration for 2013-2024.
[2]The CMS Office of the Actuary expects to publish full information on the updated NHE projections in July 2015. Values do not reflect the additional Part D expenditure growth that will result from the gradual elimination of the coverage gap from 2011 to 2020.
[3]Values reflect ACA add-on and other law changes.
[4]Expressed as a percentage of total drug costs.
[5]Expressed as a percentage of plan benefit payments.

(3) Manufacturer Rebates

Prescription drug plans can negotiate rebates with drug manufacturers. Actual rebates for 2013 were approximately 12.9 percent of total prescription drug costs, which was higher than the plans estimated in their bid submissions. In the 2015 plan bids, plans significantly increased the projected rebates. However, because of the intensified competition in the hepatitis C drug market, the actual rebate level is assumed to be higher than the average rebate level submitted in the 2015 plan bids. As a result, rebates are projected to increase significantly in 2015, as shown in table IV.B8.[61]

(4) Administrative Expenses

Administrative costs and profit margins are estimated from 2015 plan bids. Administrative expenses are projected to grow at the same rate as wages, and profit margins are projected to grow at the same rate as per capita benefits. Since drug expenses grow faster than

[61]These are average rebate percentages across all prescription drugs. Generic drugs, which represent about 85 percent of all Part D drug use in 2014, typically do not carry manufacturer rebates. Many brand-name prescription drugs carry substantial rebates.

administrative costs, the administrative expenses as a percentage of benefits slowly decrease over time even though health insurance plans are assessed an annual insurer fee by the ACA beginning in 2014, as shown in table IV.B8.

(5) Incurred Per Capita Reimbursements

Table IV.B9 shows estimated enrollments and average per capita reimbursements for beneficiaries in private prescription drug plans, low-income beneficiaries, and beneficiaries in RDS plans. The 2014 Part D reimbursements grew significantly faster mainly due to the increased use of new and expensive hepatitis C drugs in that year. The direct subsidy and retiree drug subsidy are affected by the sequestration of Medicare expenditures, which applies from April 1, 2013 to September 30, 2024. Under the sequestration, Medicare benefit payments will be reduced by a specified percentage (usually around 2 percent), and administrative expenses will be reduced by an assumed 5 percent.

Table IV.B9.—Incurred Reimbursement Amounts per Enrollee for Part D Expenditures

	Private plans (PDPs and MA-PDs)							
	All beneficiaries				Low-income subsidy		Retiree drug subsidy	
Calendar year	Enrollment (millions)	Direct subsidy	Reinsur-ance	Risk sharing and other	Enrollment (millions)	Subsidy amount	Enrollment (millions)	Subsidy amount
Historical data:								
2006	20.3	$867	$297	−$80	8.3	$1,817	7.2	$527
2007	24.3	744	330	−20	9.2	1,820	7.1	548
2008	25.8	687	366	−6	9.7	1,858	6.8	553
2009	26.9	702	375	−27	10.0	1,955	6.7	578
2010	28.0	705	399	−2	10.4	2,020	6.8	569
2011	29.5	681	465	−31	10.6	2,093	6.2	576
2012	31.8	654	486	−35	11.0	2,045	5.6	540
2013	35.8	567	535	−20	11.5	2,023	3.3	541
2014	37.8	496	735	23	11.8	2,060	2.7	593
Intermediate estimates:								
2015	39.6	468	788	24	12.0	2,076	2.2	625
2016	41.4	471	862	12	12.4	2,141	1.8	659
2017	43.4	512	925	−1	12.7	2,245	1.4	699
2018	44.9	552	985	−1	13.1	2,357	1.1	740
2019	46.5	599	1,040	−2	13.5	2,475	0.9	781
2020	47.8	669	1,069	−4	13.9	2,588	0.9	825
2021	49.2	703	1,135	−5	14.3	2,711	0.9	871
2022	50.6	739	1,205	−6	14.7	2,842	1.0	919
2023	52.0	774	1,279	−7	15.1	2,977	1.0	968
2024	53.4	811	1,358	−8	15.5	3,119	1.0	1,020

Note: Amounts do not reflect the effects of the Independent Payment Advisory Board (IPAB).

(6) Incurred Aggregate Reimbursements

Table IV.B10 shows projected incurred aggregate reimbursements to plans and employers by type of payment.[62]

Table IV.B10.—Aggregate Part D Reimbursement Amounts on an Incurred Basis

[In billions]

Calendar year	Premiums[1]	Direct subsidy	Reinsurance	Low-income subsidy	Retiree drug subsidy	Risk sharing and other[2]	Total
Historical data:							
2006	$3.5	$17.6	$6.0	$15.0	$3.8	−$1.6	$44.3
2007	4.1	18.1	8.0	16.7	3.9	−0.5	50.3
2008	5.0	17.7	9.4	18.1	3.8	−0.2	53.9
2009	6.1	18.9	10.1	19.6	3.9	−0.7	57.9
2010	6.7	19.7	11.2	21.1	3.9	−0.1	62.5
2011	7.3	20.1	13.7	22.2	3.6	−0.9	66.0
2012	7.8	20.8	15.5	22.5	3.0	−1.1	68.5
2013	9.3	20.3	19.2	23.2	1.8	−0.7	73.0
2014	10.5	18.7	27.8	24.3	1.6	0.9	83.8
Intermediate estimates:							
2015	11.7	18.5	31.2	24.9	1.4	0.9	88.6
2016	14.4	19.5	35.7	26.4	1.2	0.5	97.7
2017	17.1	22.2	40.1	28.5	1.0	−0.1	108.9
2018	19.0	24.8	44.2	30.8	0.8	−0.1	119.6
2019	21.0	27.8	48.3	33.3	0.7	−0.1	131.0
2020	23.1	32.0	51.1	35.9	0.8	−0.2	142.6
2021	25.2	34.6	55.8	38.7	0.8	−0.2	154.9
2022	27.5	37.4	61.0	41.7	0.9	−0.3	168.2
2023	29.9	40.2	66.6	44.9	1.0	−0.4	182.3
2024	32.5	43.3	72.5	48.3	1.0	−0.4	197.2

[1]Total premiums paid to Part D plans by enrollees (directly, or indirectly through premium withholding from Social Security benefits).

[2]Positive amounts represent net loss-sharing payments to plans, and negative amounts are net gain-sharing receipts from plans. Other payments are one-time in nature. In addition to the risk-sharing amounts, the figures shown in 2006 and 2007 include the reimbursement of State costs under the Medicare Part D transition demonstration. Amount in 2010 includes the $250 rebate to the beneficiaries spending more than the initial coverage limit.

Note: Amounts do not reflect the effects of the IPAB.

d. Projections under Alternative Assumptions

Part D expenditures for the low-cost and high-cost alternatives were developed by modifying the estimates under the intermediate assumptions. The 2014 per capita estimates increased by about 3 percent under the high-cost scenario and decreased by about 3 percent under the low-cost scenario.

The 2014 base modifications include the following adjustments, since final data for 2014 will not be available until later in 2015:

- ±2 percent to account for the uncertainty of the completeness of the actual spending in 2014. The high-cost scenario increases the

[62]In prior reports, the projections in this table were shown on a cash basis.

spending by 2 percent, and the low-cost scenario decreases the spending by 2 percent.

- ±1 percent for the average manufacturer rebate that drug plans negotiate. The high-cost scenario decreases the average rebate by 1 percent, and the low-cost scenario increases the average rebate by 1 percent.

For the projections beyond 2014, the per capita drug costs for the high-cost and low-cost scenarios are increased, relative to GDP, 2 percent more rapidly and 2 percent less rapidly, respectively, than under the intermediate assumptions. In addition, for RDS participation, participation in the low-income subsidies, and the participation rate for Part D-eligible individuals who do not qualify for the low-income subsidy or receive coverage through employer-sponsored plans, assumptions vary in the alternative scenarios. Table IV.B11 compares these varying assumptions.

Table IV.B11.—Part D Assumptions under Alternative Scenarios for Calendar Years 2014-2024

Calendar year	Intermediate assumptions	Alternatives	
		Low-cost	High-cost
Participation of retiree drug subsidy beneficiaries as a percentage of Part D enrollees			
2014	6.5%	6.5%	6.5%
2015	5.3	5.3	5.3
2016	4.2	5.3	3.2
2017	3.2	5.3	1.5
2018	2.4	5.3	—
2019	1.9	5.3	—
2020	1.9	5.4	—
2021	1.9	5.4	—
2022	1.9	5.4	—
2023	1.9	5.4	—
2024	1.9	5.4	—
Participation of low-income beneficiaries as a percentage of Part D enrollees			
2014	29.2	29.2	29.2
2015	28.8	28.8	28.8
2016	28.6	28.1	28.8
2017	28.4	27.4	28.9
2018	28.4	26.8	29.7
2019	28.4	26.2	30.4
2020	28.5	25.6	31.1
2021	28.5	25.0	31.8
2022	28.5	24.4	32.6
2023	28.5	23.8	33.4
2024	28.5	23.2	34.2
Part D participation rate of the non-employer and non-low-income Part D-eligible individuals			
2014	59.4	59.4	59.4
2015	59.9	59.9	59.9
2016	61.0	59.9	63.0
2017	62.1	59.9	65.9
2018	62.1	59.8	66.0
2019	62.1	59.8	66.0
2020	62.1	59.8	66.0
2021	62.1	59.7	66.0
2022	62.1	59.7	66.0
2023	62.1	59.7	65.9
2024	62.1	59.7	65.9

C. PRIVATE HEALTH PLANS

1. Legislative History

Dating back to the 1970s, some Medicare beneficiaries have chosen to receive their coverage for Part A and Part B services through private health plans. Over time, numerous pieces of legislation have been enacted that have increased or decreased the attractiveness of private plan coverage.

The foundation of the current program was established by the Medicare Modernization Act (MMA) of 2003, which renamed most of the private plans as Medicare Advantage (MA) plans. The MMA also

formally designated all private health insurance coverage options available through Medicare as Part C.[63]

Beginning in 2006, payments are based on competitive bids and their relationship to corresponding benchmarks, which are based on an annually developed ratebook. Also, rebates were introduced and are used to provide additional benefits not covered under Medicare, reduce cost sharing, and/or reduce Part B or Part D premiums. From 2006 through 2011, rebates were calculated as 75 percent of the difference, if any, between the benchmark and the bid.

In addition to the plan types that already existed, the MMA provided for the establishment of regional preferred provider organizations (RPPOs) and special needs plans (SNPs). Unlike other MA plans, which define their own service areas, RPPOs operate in pre-defined service areas referred to as regions and have special rules for capitation payment benchmarks, and they received special incentives under the MMA.

SNPs are products designed for, and marketed to, these special population groups: Medicaid dual-eligible beneficiaries, individuals with specialized chronic conditions, and institutionalized beneficiaries. The statutory authority for SNPs, which has been extended several times previously, is scheduled to expire on January 1, 2019.

The ACA made fundamental changes to MA funding by linking the benchmark rates to Medicare fee-for-service costs and by requiring the use of quality measures to determine eligibility for bonuses and the share of bid savings versus benchmarks to be provided as a rebate.

Beginning in 2012, the ACA requires the MA county-level benchmarks to be based on a multiple of estimated fee-for-service costs in the county. The multiple applied for a given county is based on the ranking of its fee-for-service cost relative to that for other counties, and the multiplier factors are phased in. The 25 percent, or quartile, of counties with the highest fee-for-service costs will have a multiple of 95 percent of county fee-for-service costs; the second quartile, 100 percent; the third quartile, 107.5 percent; and the lowest quartile, 115 percent. Prior to the ACA, most county benchmarks were in the range of 100-140 percent of local fee-for-service costs.

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[63]Of Medicare beneficiaries enrolled in private plans, about 97 percent are in Medicare Advantage plans, with the remainder in certain holdover plans reimbursed on a cost basis rather than through capitation payments.

Starting in 2012, plans are eligible to receive specified increases to their benchmark based on their quality rating scores. The statutory provisions call for a bonus of 5 percent for plans with at least a 4-star rating.

The bonuses are doubled for health plans in a qualifying county, defined as a county in which (i) per capita spending in original Medicare is lower than average; (ii) 25 percent or more of eligible beneficiaries enrolled in Medicare Advantage as of December 2009; and (iii) the benchmark rate in 2004 was based on the minimum amount applicable to an urban area. There are special bonus provisions for newly established and low-enrollment plans.

The ACA benchmarks will phase in over 2, 4, or 6 years, depending upon the size of the benchmark reduction, with a longer phase-in schedule for areas in which the benchmark decreases by larger amounts. As of January 2015, the phased-in benchmarks, including bonuses, are capped at the pre-ACA level.

The ACA also made changes regarding the share of the excess of benchmarks over bids to be paid to the plan sponsors as rebates, which the legislation varies based on quality. The highest quality plans (4.5 stars or higher) will receive a 70-percent rebate, plans with a quality rating of at least 3.5 stars and less than 4.5 stars will receive a 65-percent rebate, and plans with a rating of less than 3.5 stars will receive a 50-percent rebate. Finally, the ACA requires that private insurers pay an assessment, or fee, based on their revenues from the prior year. The fees, which were first collected in 2014, apply to most health insurance sectors, including the majority of Medicare private health plans.

It is important to note that Medicare coverage provided through private health plans, or Part C, does not have separate financing or an associated trust fund. Rather, the Part A and Part B trust funds are the source for payments to such private health plans.

2. Participation Rates

a. Background

To account for the distinct benefit, enrollment, and payment characteristics of private health plans, enrollment and spending trends for such plans are analyzed at the product level:

- Local coordinated care plans (LCCPs), which include health maintenance organizations (HMOs), HMOs with a point-of-

service option, local preferred provider organizations (PPOs), provider-sponsored organizations (PSOs), and medical savings accounts.

- Private fee-for-service (PFFS) plans.
- Regional PPO (RPPO) plans.
- Special needs plans (SNPs).
- Other products, which include cost plans, Program of All-Inclusive Care for the Elderly (PACE) plans, and Medicare-Medicaid plans (MMPs).

All types of coverage except for those represented in the "other" category are Medicare Advantage plans. Also, the values represented in each category include enrollment not only in plans available to all beneficiaries residing in the plan's service area, but also in plans available only to members of employer or union groups.

b. Historical

One intent of the MMA was to establish higher payment rates beginning in 2005—the year that represented the first post-MMA opportunity for plan expansion. Between 2005 and 2014, private plan enrollment grew by 10.5 million or 180 percent, compared to growth in the overall Medicare population of 26 percent for the same period.

The Trustees previously estimated that plan enrollment would decrease, starting in 2011, as a result of the benchmark and rebate changes in the ACA. In practice, enrollment continued to increase from 2011 through 2014 in part due to higher payments to MA plans than previously projected. These payments are higher because of various policy decisions that increased payments to health plans and because the coding intensity adjustment factor remained level despite evidence that private plan risk scores increase more rapidly than those for the Medicare fee-for-service population.[64]

PFFS enrollment dropped 88 percent between 2009 and 2014 primarily due to plan reaction to new statutory provider network requirements beginning in 2011. Most of the enrollees in terminating PFFS plans transferred to a LCCP or RPPO plan.

[64]The coding intensity adjustment reduces risk scores to account for diagnosis coding that is generally more robust for private plan enrollees than for beneficiaries enrolled in the Medicare fee-for-service program. A smaller coding intensity adjustment results in higher payments to Medicare Advantage plans.

The 2014 enrollment includes 3.0 million beneficiaries with coverage through employer-only or union-only plans, the vast majority of whom are in LCCPs.

c. Projected

Now that the majority of the ACA benchmark phase-in has been completed, the projection of private plan enrollment has changed from the county-based approach to one based on aggregate enrollment levels. The relative growth for each county continues to be related to the projected level of net extra benefits, which account for such factors as statutory benchmark requirements and plan quality ratings. The projected private Medicare health plan enrollment is higher than in previous reports largely because the effect of the ACA benchmark reductions was less than previously assumed.

The share of Medicare enrollees in private health plans is projected to increase from 30.2 percent in 2014 to 34.8 percent in 2024. Modest increases are expected in private plan penetration rates between 2018 and 2024 due to higher relative bonus payments stemming from assumed improvements in quality rating scores. SNP enrollment is expected to increase by 22 percent from 2014 through 2018. The statutory authority for SNPs will expire as of January 1, 2019.[65] Beginning in 2019, it is expected that the majority of existing SNP enrollees will join LCCPs and that the remaining enrollees will transfer to the Medicare fee-for-service program.

The growth in LCCPs is expected to be 8 percent in 2015 after increasing 9 percent in 2014. The expected increase in LCCPs in 2015 follows closely the overall 2015 increase in private Medicare health plan membership of 8 percent. A further spike in enrollment of 21 percent is expected in 2019 due to the influx of enrollees from terminating SNPs.

[65]In practice, the SNP authority has been set to expire as far back as 2008 but has been routinely extended by lawmakers.

Table IV.C1.—Private Health Plan Enrollment[1]
[In thousands]

Calendar year	LCCP	PFFS	RPPO	SNP[2]	Other	Total private health plan	Total Medicare	Ratio of private health plan to total Medicare
2005	5,248	125	—	—	421	5,794	42,606	13.6%
2006	5,428	712	71	663	417	7,291	43,436	16.8
2007	5,530	1,623	135	977	403	8,667	44,368	19.5
2008	5,968	2,244	212	1,224	362	10,010	45,500	22.0
2009	6,605	2,433	349	1,343	373	11,104	46,604	23.8
2010	7,546	1,674	740	1,320	412	11,692	47,720	24.5
2011	8,925	602	1,042	1,367	446	12,383	48,896	25.3
2012	10,247	526	835	1,497	483	13,587	50,874	26.7
2013	11,211	388	948	1,768	527	14,842	52,481	28.3
2014	12,253	303	1,040	1,991	657	16,244	53,826	30.2
2015	13,267	262	1,029	2,073	977	17,607	55,829	31.5
2016	14,016	277	1,087	2,190	1,080	18,650	57,404	32.5
2017	14,770	291	1,145	2,307	1,085	19,598	59,067	33.2
2018	15,485	305	1,200	2,419	827	20,237	60,818	33.3
2019	18,734	320	1,256	—	706	21,015	62,619	33.6
2020	19,554	334	1,310	—	722	21,920	64,471	34.0
2021	20,310	346	1,361	—	743	22,760	66,335	34.3
2022	21,056	359	1,411	—	763	23,589	68,246	34.6
2023	21,767	371	1,458	—	784	24,381	70,145	34.8
2024	22,383	382	1,500	—	805	25,069	72,001	34.8

[1]Most private plan enrollees are eligible for Medicare Part A and enrolled in Medicare Part B. Some enrollees have coverage for only Medicare Part B. For example, in 2009 the Part B-only private plan enrollment consisted of 3,000 in LCCPs, 2,000 in PFFS plans, and 68,000 in the "other" coverage category.
[2]The statutory authority for SNPs is scheduled to expire on January 1, 2019.

3. Cost Projection Methodology

a. Background

Benchmarks form the foundation for payments to Medicare Advantage plans. Along with geographic, demographic, and risk characteristics of plan enrollees, these values determine the monthly prospective payments made to private health plans. Medicare Advantage benchmarks vary substantially by county. Prior to 2012, benchmarks have been in the range of 100 percent of local fee-for-service costs (for Parts A and B) to more than 200 percent of such costs in a few areas. Under the ACA, benchmarks will transition to the range of 95-115 percent of fee-for-service costs, plus applicable quality bonuses.

For non-RPPO plans, a plan's benchmark is an average of the statutory capitation ratebook values, weighted by projected plan enrollment in each county in the plan's service area. For RPPOs, the benchmark is a blend of the weighted ratebook values for all Medicare-eligible beneficiaries in the region and an enrollment-weighted average of RPPO bids for the region. The weight applied to

the bid component to calculate the blended benchmark is the national Medicare Advantage participation rate.

Plans submit bids equal to their projected per enrollee cost of providing the standard Medicare Part A and Part B benefits. Plans with bids below the benchmark apply the rebate share of the *savings* to aid plan enrollees through coverage of Part A and Part B cost sharing, coverage of additional non-drug benefits, and/or reduction in the Part B or Part D premium. From 2006 to 2011, the rebate share of the difference between a plan's benchmark and bid was 75 percent. For 2012 and later, the rebate percentage is based on the quality rating of the health plan and ranges from 50 to 70 percent. Beneficiaries choosing plans with bids above the benchmark must pay for both the full amount of the difference between the bid and the benchmark and the projected cost of the plans' supplemental benefits.

Medicare capitation payments to a Medicare Advantage plan are a product of the standardized plan bid, which is equal to the bid divided by the plan's projected risk score, and the actual enrollee risk score, which is based on demographic characteristics and medical diagnosis data. The risk score for a given enrollee may be adjusted retrospectively since CMS receives diagnosis data after the payment date.

Rebate payments are based on the projected risk profile of the plan and are not adjusted based on subsequent actual risk scores.

b. Incurred Basis

Private health plan expenditures are forecast on an incurred basis by coverage type. The bid-based expenditures for each quarter are a product of the average enrollment and the projected average per capita bid. Similarly, the rebate expenditures are a product of enrollment and projected average rebates.

Annual per capita benchmarks, bids, and rebates were determined on an incurred basis for calendar years 2006-2014 for each coverage category. These amounts include adjustments processed after the payment due date for retroactive enrollment and risk score updates.

Benchmark growth for 2014 and later will be significantly lower than historical trends because of the phase-in of the fee-for-service-based ratebook beginning in 2012, which will result in lower benchmark rates in most areas. Also, most price updates in Medicare fee-for-

service are lowered by the legislated changes in the ACA and MACRA.

Private health plan expenditures are affected by the sequestration of non-salary Medicare expenditures, which applies from April 1, 2013 to September 30, 2024. Under the sequestration, private health plan benefit payments will be reduced by a specified percentage (usually around 2 percent). The trend in the per capita bids for 2016 and 2017 is estimated to be equal to the average of the fee-for-service trend and the benchmark trend plus the incremental cost of the ACA insurer fees. For years 2018 and later, the trend in the per capita bids is estimated to be equal to that of beneficiaries enrolled in Medicare fee-for-service.

c. Cash Basis

Cash Medicare Advantage expenditures are largely identical to incurred amounts, since both arise primarily from the monthly capitation payments to plans. Small cash payment adjustments are developed from incurred spending by accounting for the payment lag that results from CMS' receipt of post-payment diagnosis data, retroactive enrollment notifications, and corrections in enrollees' demographic characteristics.

Table IV.C2 shows Medicare private plan expenditures on an incurred and cash basis, separately for the Part A and Part B trust funds. The incurred payments are reported separately for the bid-related and rebate expenditures. As noted, most payments to plans are made as they are incurred, and cash and incurred amounts are generally the same.

Table IV.C2.—Medicare Payments to Private Health Plans, by Trust Fund

[In billions]

Calendar year	Incurred basis[1]			Cash basis
	Bid	Rebate	Total	
Expenditures from the HI (Part A) trust fund:				
2006	$29.7	$3.5	$33.2	$32.9
2007	36.4	4.3	40.7	39.0
2008	44.1	5.4	49.5	50.6
2009	52.7	6.3	59.0	59.4
2010	55.5	5.2	60.7	60.7
2011	59.0	5.7	64.7	64.6
2012	64.3	6.2	70.5	70.2
2013	67.4	6.4	73.8	73.1
2014	68.5	5.6	74.1	74.0
2015	73.8	5.9	79.7	79.6
2016	80.2	6.2	86.4	86.2
2017	85.8	6.2	92.0	91.9
2018	90.7	6.9	97.6	97.5
2019	97.5	7.9	105.3	105.1
2020	105.9	8.8	114.7	114.4
2021	114.6	10.0	124.6	124.3
2022	123.7	11.3	135.0	134.7
2023	132.8	12.4	145.2	145.0
2024	141.8	13.6	155.4	155.1
Expenditures from the Part B account of the SMI trust fund:				
2006	$28.8	$3.2	$32.0	$31.5
2007	35.5	3.9	39.4	38.9
2008	42.9	5.0	47.9	48.1
2009	47.8	5.5	53.3	53.4
2010	50.6	4.6	55.2	55.2
2011	54.0	5.1	59.1	59.1
2012	60.5	5.6	66.1	66.0
2013	67.2	6.1	73.3	72.5
2014	79.8	6.4	86.2	85.6
2015	88.4	6.9	95.3	95.1
2016	98.5	7.4	105.9	105.6
2017	107.3	7.5	114.8	114.6
2018	114.2	8.4	122.6	122.4
2019	125.6	9.8	135.4	135.1
2020	138.8	11.3	150.1	149.6
2021	151.7	12.9	164.6	164.2
2022	165.8	14.7	180.5	180.0
2023	180.8	16.5	197.3	196.8
2024	195.8	18.3	214.1	213.6

[1]The bid category includes all expenditures for non-Medicare Advantage coverage.

Note: Amounts do not reflect the effects of the Independent Payment Advisory Board (IPAB).

d. Incurred Expenditures per Enrollee

Table IV.C3 shows estimated incurred per enrollee expenditures for beneficiaries enrolled in private health plans. It combines the values for expenditures from the Part A and Part B trust funds.

Table IV.C3.—Incurred Expenditures per Private Health Plan Enrollee[1]

Calendar year	LCCP	PFFS	RPPO	SNP[2]	Other	Total
Bid-based expenditures[3]						
2006	$8,203	$6,925	$7,495	$10,029	$4,852	$8,084
2007	8,543	7,367	7,461	10,020	5,043	8,339
2008	8,778	8,087	7,705	10,613	5,340	8,724
2009	9,010	8,753	7,774	11,274	5,285	9,085
2010	8,970	8,488	8,270	12,213	5,171	9,108
2011	8,959	8,280	8,212	12,771	4,844	9,154
2012	8,984	8,550	7,920	12,938	4,943	9,210
2013	8,784	8,945	8,145	12,737	5,061	9,100
2014	8,753	9,292	8,560	12,735	6,332	9,150
2015	8,800	9,379	8,352	12,849	8,237	9,232
2016	9,137	9,737	8,672	13,337	8,768	9,595
2017	9,411	10,037	8,939	13,738	8,845	9,875
2018	9,719	10,365	9,231	14,188	7,391	10,146
2019	10,845	10,887	9,696	—	6,294	10,634
2020	11,401	11,442	10,191	—	6,652	11,183
2021	11,949	11,990	10,680	—	6,992	11,723
2022	12,531	12,572	11,199	—	7,356	12,295
2023	13,133	13,173	11,736	—	7,744	12,888
2024	13,745	13,784	12,281	—	8,135	13,489
Rebate expenditures[3]						
2006	$958	$616	$504	$1,491	—	$920
2007	948	703	481	1,800	—	951
2008	1,124	613	509	1,850	—	1,049
2009	1,211	478	615	1,782	—	1,064
2010	990	320	397	1,146	—	842
2011	955	450	474	1,132	—	877
2012	935	355	510	1,084	—	872
2013	889	255	456	1,119	—	842
2014	798	210	352	898	—	740
2015	792	211	297	952	—	730
2016	800	190	283	955	—	734
2017	766	131	233	901	—	700
2018	815	160	264	964	—	758
2019	920	209	315	—	—	843
2020	1,000	250	359	—	—	919
2021	1,096	301	414	—	—	1,009
2022	1,196	359	474	—	—	1,102
2023	1,287	409	526	—	—	1,188
2024	1,380	459	580	—	—	1,275
Total expenditures						
2006	$9,162	$7,541	$7,998	$11,519	$4,852	$9,004
2007	9,491	8,070	7,942	11,820	5,043	9,290
2008	9,902	8,700	8,214	12,463	5,340	9,773
2009	10,221	9,230	8,389	13,056	5,285	10,148
2010	9,959	8,808	8,667	13,359	5,171	9,949
2011	9,914	8,730	8,686	13,903	4,844	10,032
2012	9,919	8,905	8,431	14,022	4,943	10,082
2013	9,673	9,199	8,601	13,856	5,061	9,942
2014	9,551	9,502	8,913	13,633	6,332	9,889
2015	9,592	9,590	8,649	13,800	8,237	9,962
2016	9,937	9,927	8,955	14,292	8,768	10,328
2017	10,177	10,169	9,172	14,639	8,845	10,575
2018	10,534	10,525	9,494	15,152	7,391	10,904
2019	11,764	11,096	10,011	—	6,294	11,477
2020	12,401	11,692	10,551	—	6,652	12,101
2021	13,046	12,291	11,094	—	6,992	12,731
2022	13,727	12,931	11,673	—	7,356	13,398
2023	14,420	13,582	12,262	—	7,744	14,076
2024	15,125	14,243	12,861	—	8,135	14,764

[1]Values represent the sum of per capita expenditures for Part A and Part B.
[2]The statutory authority for SNPs is scheduled to expire on January 1, 2019.

[3]The bid category includes all expenditures for non-Medicare Advantage coverage.
Note: Amounts do not reflect the effects of the IPAB.

Average Medicare payments per private plan enrollee vary by geographic location of the plan, plan efficiency, and average reported health status of plan enrollees. LCCPs and SNPs tend to be located in urban areas where prevailing health care costs tend to be above average. Conversely, PFFS plans and RPPOs generally reflect a more rural enrollment. These factors complicate meaningful comparisons of average per capita costs by plan category.

In general, the per capita increases in bids for 2006 through 2009 were in the single-digit range and were correlated with the Medicare fee-for-service trend and the change in risk profile of the plan populations. Per capita bid increases were flat from 2010 through 2014, increasing by 0.5 percent in total for those years. Per capita bid payments declined by 1.2 percent in 2013 due to the sequester of Medicare payments, increased by 0.5 percent in 2014, and are expected to increase again in 2015 by 0.9 percent. For years 2016 and 2017, the overall per capita bid trend is expected to be the average of the growth in Medicare fee-for-service expenditures and the benchmark growth, plus the per capita growth in the ACA insurer fees. For 2018 and later, the per capita bid trend is expected to be equal to the growth in per capita Medicare fee-for-service expenditures. After 2021, average Medicare payments to private plans per enrollee are assumed to follow the aggregate growth trends of the HI and SMI Part B per capita benefits, as described in section IV.D of this report.

There was significant variation in the per capita trend in rebates for 2006 through 2009; this variation reflected the difference in the annual trend between bids and benchmarks. All types of coverage experienced significant decreases in rebates for 2010 as a result of the reduction in risk-adjusted benchmarks—both in absolute terms and relative to the change in bids. The overall per capita rebate growth rate was flat from 2010 through 2013. Per capita rebates declined significantly in 2014, due in part to the sequester, the phase-in period of the fee-for-service-based ratebook, and the lower statutory share of benchmark-versus-bid savings to be provided as a rebate. Per capita rebates are projected to decline through 2017 as a result of the mandated benchmark reductions. Beginning in 2018, modest annual increases in per capita rebates are expected.

D. LONG-RANGE MEDICARE COST GROWTH ASSUMPTIONS

Sections IV.A, IV.B, and IV.C have described the detailed assumptions and methodology underlying the projected expenditures for HI (Part A) and SMI (Parts B and D) during 2015 through 2024. These projections are made for individual categories of Medicare-covered services, such as inpatient hospital care and physician services.

As the projection horizon lengthens, it becomes increasingly difficult to anticipate changes in the delivery of health care, the development of new medical technologies, and other factors that will affect future health care cost increases. Accordingly, rather than extending the detailed projections by individual type of service for all future years, the Trustees use a more aggregated basis for setting cost growth assumptions in the long range. With enactment of the ACA and MACRA, such increases are subject to greater uncertainty in the long term, especially for the Medicare program.

The assumed long-range rate of growth in annual Medicare expenditures per beneficiary for this year's report is based on statutory price updates and volume and intensity growth derived from the "factors contributing to growth" model, which decomposes the major drivers of historical and projected health spending growth into distinct factors. The Trustees assume that the productivity reductions to Medicare payment rate updates will reduce volume and intensity growth by 0.1 percent below the factors model projection. The Trustees' methodology is consistent with Finding III-2 and Recommendation III-2 of the 2010-2011 Medicare Technical Review Panel[66] and incorporates refinements and improvements based on research conducted by the CMS Office of the Actuary.

Beginning with the 2001 Trustees Report, the Trustees assumed that the increase in average expenditures per beneficiary for the 25th through 75th years of the projection would equal the growth in per capita GDP plus 1 percentage point,[67] as recommended by the 2000 Medicare Technical Review Panel. Starting with the 2006 report, the Trustees revised the methodology to provide for a more gradual transition from historical health cost growth rates, which had been roughly 2 to 3 percentage points above the level of GDP growth, to the

[66]The Panel's final report is available at http://aspe.hhs.gov/health/reports/2013/MedicareTech/TechnicalPanelReport2010-2011.pdf.

[67]This assumed increase in the average expenditures per beneficiary excludes the impacts of the aging of the population and changes in the gender composition of the Medicare population, which the Trustees estimated separately.

ultimate assumed level of GDP plus zero percent just after the 75th year and for the indefinite future. The year-by-year growth rate assumptions for the 50 years were based on a stylized economic model, and those relative growth rates were scaled so that the 75-year actuarial balance for the HI trust fund was consistent with that generated by the constant GDP plus 1 growth rate methodology.

For the 2010 and 2011 Medicare Trustees Reports, the Trustees assumed a baseline long-range Medicare cost growth assumption, using the methods described above, and then incorporated the effects of the provisions of the ACA. For all HI (Part A) providers and some SMI Part B providers (outpatient hospitals, ambulatory surgical centers, diagnostic laboratories,[68] and most other non-physician services), the annual increases in Medicare payment rates were reduced for 2011 and later by the 10-year moving average increase in economy-wide productivity. The resulting long-range growth assumption averaged the increase in per capita GDP plus 1 percent, minus the productivity factor. The sustainable growth rate formula at that time governed increases in average physician expenditures per beneficiary to equal the rate of per capita GDP growth. The remaining Part B services and all Part D outlays had an assumed average growth rate of per capita GDP plus 1 percent.

In December 2011, the 2010-2011 Medicare Technical Review Panel unanimously recommended a new approach that builds off of the longstanding GDP plus 1 percent assumption while incorporating several key refinements (Recommendation III-1).[69] Specifically, the Panel recommended two separate means of establishing long-range growth rates:

- The first approach is a refinement to the traditional GDP plus 1 percent growth assumption that better accounts for the level of payment rate updates for Medicare (prior to the effects of the ACA) compared to private health insurance and other payers of health care in the U.S. This refinement results in an increase in the long-range pre-ACA baseline cost growth assumption for Medicare to GDP plus 1.4 percent.

[68] Starting in 2017, the Protecting Access to Medicare Act of 2014 links payments for laboratory services to private payment rates.

[69] For convenience, the increase in Medicare expenditures per beneficiary, before consideration of demographic impacts, is referred to as the Medicare cost growth rate. Similarly, these growth rate assumptions are described relative to the per capita increase in GDP and characterized simply as GDP plus X percent.

- The "factors contributing to growth" model approach builds upon the key considerations underlying the earlier GDP plus 1 percent assumption. The model is based on economic research that decomposes health spending growth into its major drivers—income growth, relative medical price inflation, insurance coverage, and a residual factor that primarily reflects the impact of technological development.[70] It benefits from additional information that was not available when the 2000 Technical Panel recommended the GDP plus 1 percent assumption.

For the 2012 report, the Trustees based the average ultimate Medicare growth rate on the refinement recommended by the Technical Panel and used the factors model to create the specific, year-by-year declining growth rates during the last 50 years of the projection. Beginning with the 2013 report, the Trustees (i) used the statutory price updates and the volume and intensity assumptions from the factors model to derive the year-by-year Medicare cost growth assumptions for the last 50 years of the projection period and (ii) checked the ultimate Medicare cost growth assumptions derived from this approach for reasonableness by comparing them to results produced by an average "GDP plus" approach. For this report, the Trustees incorporate several improvements to the factors model relating to how changes in income, technology, and health care prices affect national health care expenditures. The remainder of section IV.D discusses the factors model and its role in the Medicare projections. Appendix V.C explains the methods used to derive the long-range cost growth assumptions underlying the illustrative alternative projection.

1. Long-Range Growth Assumptions for the Overall Health Sector

The first step to estimate the long-range Medicare trends is to determine the long-range assumptions affecting the overall health sector. The Trustees use the factors model to determine the year-by-year growth rates for the overall health sector over the last 50 years of the projection. Based on the factors model, the Trustees assume that the long-range per capita overall health spending growth is GDP plus 0.9 percent (or 4.9 percent) for 2039, gradually declining to GDP plus 0.5 percent by 2089 (or 4.4 percent). The per capita increase in overall health care costs is due to the combined effects of general

[70]Smith, Sheila, Newhouse, Joseph P., and Freeland, Mark S. "Income, Insurance, and Technology: Why Does Health Spending Outpace Economic Growth?" *Health Affairs,* 28, no. 5 (2009): 1276-1284.

inflation, medical-specific *excess* price inflation (above general price growth), and changes in the utilization of services per person and the intensity or average complexity per service. The Trustees assume that beginning in 2039 (i) general price inflation will remain constant at 2.3 percent per year, as measured by the GDP deflator; (ii) excess medical price inflation will remain constant at 0.8 percent per year, as discussed in more detail below; and (iii) the annual increase in the volume and intensity of services per person will decline gradually from approximately 1.7 percent in 2039 to 1.3 percent in 2089 based on the key economic assumptions and elasticity estimates from the factors model, as described below.

Excess medical price inflation for the overall health sector is assumed to grow at 0.8 percent annually from 2039 through 2089. This assumption is based on the difference between the change in the personal health care deflator from 1990 to 2013 and the change in the GDP deflator over the same period.[71] Combining this assumption with the ultimate assumed growth of 2.3 percent per year in the GDP deflator yields the Trustees' estimate of the long-range rate of medical price growth of 3.1 percent annually. Using the relationship between medical price growth and resource-based health sector productivity growth[72] allows for the determination of medical input price growth.[73] For resource-based health sector productivity, the Trustees assume that the rate of growth will be equivalent to published research[74] of 0.4 percent per year. Hence, the Trustees' estimate of the long-range rate of growth of medical input prices is 3.5 percent.

As stated earlier, the factors model is based on economic research that separates health spending growth into its major drivers—income

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[71]Information on the personal health care deflator is available at http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.html.

[72]Resource-based productivity is defined as the real value of provider goods and services divided by the real value of the resources (inputs) used to produce the goods and services, whereas price changes are measured across constant products—that is, defined health services with a constant mix of inputs. Resource-based productivity is used for this decomposition, rather than outcomes-based productivity (which incorporates the estimated value of improvements in health resulting from the services) because Medicare and most other payers reimburse providers based on their resource use.

[73]A third factor, provider profit margins, is assumed to remain constant over the long range.

[74]Cylus, Jonathan D., and Dickensheets, Bridget A. "Hospital Multifactor Productivity: A Presentation and Analysis of Two Methodologies." *Health Care Financing Review,* 29, no. 2 (2007): 49-64; Fisher, Charles. "Multifactor Productivity in Physicians' Offices: An Exploratory Analysis." *Health Care Financing Review,* 29, no. 2 (2007): 15-32.

growth, relative medical price inflation, insurance coverage, and a residual that primarily reflects the impact of technological development. The factors model provides the ability to model the expected behavioral effects associated with a continuing increase in the share of national income devoted to consumption of health care services. In particular, this approach is based on historically estimated income and price elasticities and uses measurable key variables, thereby improving the underlying basis for developing the long-range growth assumptions.[75]

In the factors model, the sensitivity of health cost growth to each of the three factors must be estimated. Each such sensitivity is measured as an elasticity, which is the percentage change in cost growth that is caused by a 1-percent change in a factor. The first elasticity, the income-technology elasticity, reflects the increase in demand for health care and new medical technologies in response to growth in income. The second elasticity, the relative medical price elasticity, reflects the sensitivity of consumers and purchasers in consuming health care to changes in excess medical price inflation. The final key elasticity is the insurance elasticity, which reflects the change in demand for medical care as the level of insurance coverage changes.

In the 2014 report, the income-technology elasticity for the 25th year of the projection (2038) was estimated at 1.4, which was the long-term historical average based on cross-country comparisons of the historical relationship between health spending and GDP growth for member countries in the Organisation for Economic Co-operation and Development. (A similar elasticity was estimated using only U.S.-specific data.) After 2038, the income-technology elasticity was assumed to decline linearly and to reach 1.0 by the end of the 75-year projection period (2088) under the assumption that the preference for additional health care would lessen as health care continued to consume a greater proportion of income. The price elasticity in the 25th year of the projection (2038) was estimated at −0.4, based on the Office of the Actuary's national health expenditure (NHE) projection model for 1970-2009, and was assumed to become larger in absolute value as the share of income devoted to health care increased.[76] As

[75]Additional information on the "factors contributing to growth" model is available in a memorandum by the Office of the Actuary titled "The Long-Term Projection Assumptions for Medicare and Aggregate National Health Expenditures," available at http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/Downloads/ProjectionMethodology.pdf.

[76]Silberberg, Eugene, and Suen, Wing C. *The Structure of Economics: A Mathematical Analysis*. 3rd ed. New York: McGraw-Hill/Irwin, 2000.

the overall health sector share of GDP was projected to double during the projection period, and as the income-technology elasticity approached 1.0, the price elasticity was assumed to reach −0.6 by the end of the 75 years (2088). The decline in the price elasticity from −0.4 to −0.6 was also assumed to occur linearly. Based on the RAND Health Insurance Experiment, the insurance elasticity was estimated at −0.2 and was assumed to be unchanged over the long range.[77]

For the 2015 report, the Trustees have modified the assumptions for the income-technology and price elasticities, based on research conducted over the past several years, but have retained the assumption about the insurance elasticity.

For the income-technology elasticity, the Trustees analyzed the historical data and determined that the elasticity has exhibited a declining trend that has slowed over time. For this year's report, therefore, the Trustees developed a time-trend-based method for projecting the elasticity that reflects the historical trend, produces results consistent with the elasticity implied by the most recent short-range NHE projections, and converges to 1.0 within a range of roughly 75 to 150 years. In the resulting projection, the income-technology elasticity is 1.28 in the 25th year of the projection period (2039) and declines at a slowing pace to 1.09 in the 75th year of the period (2089). This methodology results in an income-technology elasticity that reaches 1.0 in 2125.

For the medical price elasticity, the Trustees estimate its relationship to the share of income devoted to health care on a year-by-year basis in this year's report, whereas in past reports this sensitivity was specifically estimated for only the 25th and 75th years of the projection. This modified approach allows for the price elasticity to reflect the non-linearity of the income-technology elasticity, which maintains internal consistency within the model. For the 2015 report, the Trustees estimate the price elasticity in the 25th year of the projection (2039) at −0.51 and assume that it will follow a non-linear path until it reaches −0.59 in the 75th year of the projection (2089).

Two additional assumptions are required to complete the factors model determination. First, relative medical price inflation must be estimated over the long-range projection period. As discussed

[77]Newhouse, Joseph P., and the Insurance Experiment Group. *Free for All? Lessons from the RAND Health Insurance Experiment*. Cambridge: Harvard University Press, 1993. The coefficient of this elasticity is negative because the level of insurance coverage is measured using individuals' cost-sharing requirements (such as deductibles and coinsurance).

previously, the Trustees assume that relative medical price growth is 0.8 percent per year. Second, insurance coverage is assumed to be unchanged over the long range in order to maintain consistency with the concept of a Medicare projection in which the Medicare benefit package is not altered.

In subsequent reports, the Trustees will use the output from the factors model as determined in the 2015 report as the basis for future year-by-year growth rates. For example, the output from the factors model currently estimated for the 26th year of this year's projection (2040) will be used for 2040 in next year's report. The Trustees will update this output only when the factors model is periodically re-estimated.

2. Long-Range Growth Assumptions for Medicare

The Trustees have assumed since 2001 that it is reasonable to expect over the long range that the drivers of health spending will be similar for the overall health sector and for the Medicare program. This view was affirmed by the 2010-2011 Medicare Technical Review Panel, which recommended use of the same long-range assumptions for the increase in the volume and intensity of health care services for the total health sector and for Medicare. Therefore, the overall health sector long-range cost growth assumptions for volume and intensity are used as the starting point for developing the Medicare-specific assumptions.

Prior to the ACA, Medicare payment rates for most non-physician provider categories were updated annually by the increase in providers' input prices for the market basket of employee wages and benefits, facility costs, medical supplies, energy and utility costs, professional liability insurance, and other inputs needed to produce the health care goods and services. To the extent that health care providers can improve their productivity each year, their net costs of production (other things being equal) will increase more slowly than their input prices—but the Medicare payment rate updates prior to the ACA were not adjusted for potential productivity gains. Accordingly, Medicare costs per beneficiary would have increased somewhat faster than for the health sector overall.[78] In particular, the Trustees assume that the full market basket increase would be approximately 3.5 percent annually, or about 0.4 percent greater than

[78]Historically, lawmakers frequently reduced the payment updates below the increase in providers' input prices in an effort to slow Medicare cost growth or to offset unwarranted changes in claims coding practices. Prior to the ACA, the law did not specify any such adjustments after 2009.

the net price increase of 3.1 percent per year described above for the total health sector. The ACA requires that many of these Medicare payment updates be reduced by the 10-year moving average increase in economy-wide productivity, which the Trustees assume will be 1.1 percent per year over the long range. The different statutory provisions for updating payment rates require the development of separate long-range Medicare cost growth assumptions for four categories of health care providers:

(i) *All HI, and some SMI Part B, services that are updated annually by provider input price increases less the increase in economy-wide productivity.*

Under the ACA, the annual increase in Medicare payment rates for these services will be reduced by the 10-year moving average increase in economy-wide productivity. These gains are estimated to be 1.1 percent per year over the long-range period. Combined with an assumed market basket increase of 3.5 percent, the statutory price update for these services is 2.4 percent per year over the long-range projection period. The initial projected increase in the volume and intensity of these Medicare services is assumed to be equivalent to the average projected growth in the volume and intensity of services for the overall health sector. The Trustees believe that the use of a common baseline rate of volume and intensity growth across all Medicare services is reasonable, as there would be only a small likelihood that one part of the health sector could continue to grow indefinitely at significantly faster rates of growth than do other parts.

Additionally, the Trustees assume that the growth in Medicare payment rates will reduce the volume and intensity growth of these services by 0.1 percent per year relative to the assumption from the factors model. The Trustees' assumption is also based on Recommendation III-2 of the 2010-2011 Medicare Technical Review Panel, which concluded that there would likely be a small net negative impact on volume and intensity growth due to reduced incentives to develop new technologies, provider exits, and the impact of greater bundling of services for payment purposes.[79] For new technology that leads to new services, the ACA will result in lower fees than would otherwise be the case,

[79]Other factors, such as reduced beneficiary cost-sharing requirements, would tend to increase the volume and intensity of services. The assumption of −0.1 percent reflects the Technical Panel's assessment that the overall impact would be a small net decrease in volume and intensity growth.

and providers will be less likely to adopt new services and innovations, thereby lowering the demand for, and intensity of, the medical care provided. Regarding provider exits, as fee-for-service fees decline relative to the pre-ACA levels, facilities of marginal profitability are likely to exit the Medicare market, reducing capacity and volume. This change could also cause a more bifurcated health system in which only providers that can operate profitably under Medicare offer services to Medicare beneficiaries, with a tendency to provide only the more basic services not associated with new medical technologies. Finally, the innovations being tested under the ACA, such as bundled payments or accountable care organizations, could reduce incentives to adopt new cost-increasing technologies and increase incentives to adopt new cost-decreasing technologies for those participating in these programs and/or could contribute to greater efforts to avoid services of limited or no value within the service bundle.

Reflecting all of these considerations, the year-by-year long-range cost growth assumption for these HI and SMI Part B services starts at 4.0 percent in 2039, or GDP plus 0.0 percent, and gradually declines to 3.6 percent by 2089, or GDP minus 0.3 percent.

(ii) *Physician services*

Payment rate updates are 0.75 percent per year under the assumption that all physicians would be participating in *alternative payment models* (APMs) in the long-range. The year-by-year growth rates for physician payments are assumed to be 3.3 percent in 2039, or GDP minus 0.7 percent, declining to 2.8 percent in 2089, or GDP minus 1.1 percent.

(iii) *Certain SMI Part B services that are updated annually by the CPI increase less the increase in productivity.*

Such services include durable medical equipment,[80] ambulatory surgical centers, ambulance services, and medical supplies, which are updated by the CPI and affected by the ACA productivity adjustment. For these services, the Trustees initially assume that the rate of per beneficiary volume and intensity growth is equivalent to that derived for the overall

[80]Certain durable medical equipment (DME) is subject to competitive bidding, and the price is assumed to grow by the CPI increase less the increase in productivity, the same update specified for DME not subject to bidding.

health sector using the factors model. This volume and intensity growth is assumed to be reduced by 0.1 percent per year to reflect the ACA impact, as described above. The post-ACA volume and intensity assumption is combined with the long-range CPI assumption (2.7 percent) minus the productivity factor (1.1 percent) to produce a long-range growth assumption for these SMI Part B services. The corresponding year-by-year growth rates are 3.3 percent in 2039, or GDP minus 0.7 percent, gradually declining to 2.8 percent in 2089, or GDP minus 1.1 percent.

(iv) *All other Medicare services, for which payments are established based on market processes, such as prescription drugs provided through Part D and the remaining Part B services.*

The Trustees assume that per beneficiary outlays for these other Part B services, which constitute about 15 percent of total Part B expenditures in 2024, and for all Part D services grow at the same rate as the overall health sector as determined from the factors model. The services are assumed to grow similarly because their payment updates are determined by market forces, such as the competitive-bidding process for Medicare Part D. The year-by-year growth rates are 4.9 percent in 2039, or GDP plus 0.9 percent, gradually declining to 4.4 percent by 2089, or GDP plus 0.5 percent.

In addition, these long-range cost growth rates must be modified to reflect demographic impacts. For example, beneficiaries at ages 80 and above use Part A skilled nursing and home health services much more frequently than do younger beneficiaries. As the beneficiary population ages, Part A costs will grow at a faster rate due to increased use of these services. In contrast, the incidence of prescription drug use is more evenly distributed by age, and an increase in the average age of Part D enrollees has significantly less of an effect on Part D costs.

After combining the rates of growth from the three long-range assumptions, the weighted average growth rate for Part B is 3.8 percent per year for the last 50 years of the projection period, or GDP minus 0.2 percent, on average. When Parts A, B, and D are combined, the weighted average growth rate is 4.0 percent over this same time period, or GDP minus 0.0 percent, while the growth rate in 2089 is 3.7 percent, or GDP minus 0.2 percent.

As in the past, the Trustees have established detailed growth rate assumptions for the initial 10 years of the projection period by individual type of service (for example, inpatient hospital care and physician services), reflecting recent trends and the impact of all provisions of the ACA and other applicable statutory provisions. For each of Parts A, B, and D, the assumed growth rates for years 11 through 25 of the projection period are set by interpolating between the rate at the end of the short-range period and the rate at the start of the final 50 years of the long-range period described above.

V. APPENDICES

A. MEDICARE AMENDMENTS SINCE THE 2014 REPORT

Since the 2014 annual report was transmitted to Congress on July 28, 2014, four laws have been enacted that have an effect on the Medicare trust funds: the Veteran's Access, Choice, and Accountability Act of 2014; the Medicare Post-Acute Care Transformation Act of 2014; the Tax Increase Prevention Act of 2014; and the Medicare Access and CHIP Reauthorization Act of 2015. The more important provisions, from an actuarial standpoint, are described, in brief, in the following paragraphs. Certain provisions with a relatively minor financial impact, but which are important from a policy perspective, are briefly described as well.

1. **The Veteran's Access, Choice, and Accountability Act (VACAA) of 2014 (Public Law 113-146, enacted on August 7, 2014) included one provision that affects both the HI and SMI Part B programs.**

   - A temporary program is established that allows eligible veterans to receive hospital care and medical services from eligible providers outside of the Veteran's Administration (VA) system, rather than waiting for a VA appointment or traveling to a VA facility. It is anticipated that a number of veterans will take advantage of this option and that, as a result, such services previously paid for by Medicare will instead be paid for by the VA. This program expires either when its funding is depleted or on the date that is 3 years after enactment, whichever comes first.

2. **The Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014 (Public Law 113-185, enacted on October 6, 2014) included several provisions that affect the HI and SMI programs.**

   IMPACT Provision Affecting HI

   - For hospices, standard surveys are mandated at least once every 3 years, for the period beginning 6 months after the date of enactment and ending September 30, 2025. Also, hospice programs with a high percentage of patients qualifying for long lengths of stay (more than 180 days) are subject to additional medical review. In addition, the legislation aligns the inflation of the hospice aggregate cap

with that of hospice reimbursement for accounting years that end after September 30, 2016 and before October 1, 2025.

IMPACT Provisions Affecting HI and Part B of SMI

- The data collected for post-acute care provided to Medicare beneficiaries across four types of settings—home health agencies, skilled nursing facilities, inpatient rehabilitation facilities, and long-term care hospitals—are to be standardized, in order to obtain comparable information regarding patient assessment, quality of care, resource use, payment, and other specified measures. (Post-acute care is care provided after discharge from the hospital.) Once the data are collected, studies are to be performed and reports are to be prepared for Congress, and processes are to be developed to assist providers and beneficiaries with discharge planning from inpatient and post-acute care settings. Certain penalties are prescribed for failing to report data in the required manner. Funds are provided from the HI and SMI trust funds for the implementation of these provisions.

- The Transitional Fund for Sustainable Growth Rate Reform (for which funds were previously eliminated, as described in last year's report) is replaced with a re-established Medicare Improvement Fund, to be used for improvements to the Part A and/or Part B fee-for-service programs. Annual funding is provided from the HI and SMI trust funds, in such proportion as is deemed appropriate by the Secretary of Health and Human Services (HHS), for fiscal years 2020 and later.

3. The Tax Increase Prevention Act (TIPA) of 2014 (Public Law 113-295, enacted on December 19, 2014) included three provisions that affect the SMI program.

TIPA Provisions Affecting Part B of SMI Only

- Under the Medicare physician fee schedule, for payment adjustments for misvalued services (as provided for by the Protecting Access to Medicare Act and described in last year's report), the starting date is accelerated from 2017 to 2016. The annual target rates for identifying misvalued services are revised from 0.5 percent of the estimated amount of fee schedule expenditures for 2017 through 2020 to 1.0 percent for 2016 and 0.5 percent for 2017 and 2018.

- Medicare coverage of vacuum erection systems is prohibited until such time as Medicare covers erectile dysfunction drugs under Part D.

TIPA Provision Affecting SMI

- For the Medicare end-stage renal disease (ESRD) prospective payment system, the required inclusion of oral-only ESRD-related drugs into the ESRD bundled payment system is delayed from 2024 to 2025.

4. The Medicare Access and CHIP Reauthorization Act (MACRA) of 2015 (Public Law 114-10, enacted on April 16, 2015) included many provisions that affect the HI and SMI programs.

MACRA Provisions Affecting HI

- Medicare inpatient hospital add-on payments for low-volume hospitals (having fewer than 1,600 Medicare discharges annually and located 15 miles or more from the nearest like hospital) are extended through September 30, 2017.

- The Medicare-Dependent Hospital Program is extended through September 30, 2017. This program enhances reimbursement for Medicare inpatient hospital services provided in small rural hospitals for which Medicare patients constitute a significant percentage of inpatient days or discharges.

- For inpatient hospital services, the American Taxpayer Relief Act (ATRA) of 2012 required CMS to retrospectively recoup $11 billion in past Medicare overpayments through reductions in the payment rates for discharges in fiscal years 2014 through 2017. (The overpayments were due to documentation and coding adjustments associated with the implementation of Medicare severity diagnosis-related groups that did not reflect real changes in patient case mix.) ATRA provided for a one-time payment rate increase in fiscal year 2018 to remove the ATRA reductions for fiscal year 2018 and later, during which they do not apply. Under MACRA, this one-time increase for fiscal year 2018 (which was to be 3.2 percentage points, as determined by CMS) is replaced with a payment rate increase of 0.5 percentage point per year for fiscal years 2018 through 2023. In addition, the legislation prohibits the

Secretary of HHS from recouping any additional amounts associated with documentation and coding adjustments for discharges that occurred during fiscal year 2010.

MACRA Provisions Affecting HI and Part B of SMI

- The 3-percent add-on payment for home health agencies serving beneficiaries in rural areas is extended through December 31, 2018.

- The market basket increase for fiscal year 2018 for skilled nursing facilities, inpatient rehabilitation facilities, long-term care hospitals, and hospices, and for calendar year 2018 for home health agencies, is replaced by 1 percent.

- Enforcement of the two-midnight rule by Medicare Recovery Audit Contractors for certain hospital stays is delayed through September 30, 2015, unless there is evidence of systematic gaming, fraud, abuse, or delays in the provision of care by a provider of services. (The two-midnight rule is a payment policy that requires a patient to stay across two midnights in a hospital to qualify for inpatient status in most instances; hospital stays that do not continue across two midnights are to be paid for as outpatient visits in most instances.) CMS is allowed to continue using Medicare Administrative Contractor "probe and educate" programs to assess provider understanding of, and compliance with, the two-midnight rule, on a pre-payment basis, through September 30, 2015.

MACRA Provisions Affecting Part B of SMI Only

- The sustainable growth rate (SGR) formula for physician payments is permanently repealed. The 21.2-percent reduction in payment rates that was scheduled to begin on April 1, 2015 is averted; payment rates will instead be frozen for 3 months (that is, from April 1 to June 30, 2015) and will then increase by 0.5 percent for the last 6 months of calendar year 2015. For services paid under the physician fee schedule and furnished during calendar years 2016 through 2019, payment rates will increase by 0.5 percent each year.

  Payment rates for services on the physician fee schedule will remain at 2019 levels through 2025, but, starting in 2019, the amounts paid to individual providers are subject to

adjustment through one of two mechanisms, depending on whether the physician chooses to participate in an *alternative payment model* (APM) program or the *merit-based incentive payment system* (MIPS).

For 2026 and subsequent years, there will be two payment rates for services on the physician fee schedule. For providers paid through an APM program, payment rates will be increased by 0.75 percent each year. Payment rates for other providers will be increased by 0.25 percent each year. Providers who opt to participate in MIPS will receive payments that are subject to positive or negative performance adjustments. The basic adjustments will be designed to be offsetting in the aggregate, so that they will have no net effect on overall payments. The performance adjustment for an individual provider will depend on that provider's performance compared to a threshold. In addition, the legislation provides for $500 million each year, from 2019 to 2024, as an additional performance adjustment for providers in this program who achieve exceptional performance.

For 2019 through 2024, providers receiving a substantial portion of revenue from APMs will receive a lump-sum payment after each year equal to 5 percent of their Medicare payments for services reimbursed according to the physician fee schedule in that year. Providers with smaller amounts of revenue from APMs will receive either no adjustment to their payment or the MIPS performance adjustment if they report measures and activities under that program.

- The 1.00 floor on the geographic index for physician work is extended through December 31, 2017.

- The exceptions process for limits on therapy services is extended through December 31, 2017.

- Certain ambulance add-on payments are extended through December 31, 2017. These add-on payments include a 3-percent bonus for services originating in rural areas, a 2-percent bonus for services originating in other locations, and a super rural bonus for rural areas with the lowest population densities.

- The Qualifying Individual program is made permanent. This program is part of Medicaid and pays the Medicare Part B

premium on behalf of certain beneficiaries with relatively low income and assets, with the cost financed from the Part B account of the SMI trust fund.

- Under the Medicare durable medical equipment, prosthetics, orthotics, and supplies competitive acquisition program, bidding entities must meet State licensure requirements applicable within their product category and, for contracts beginning between January 1, 2017 and January 1, 2019, must have obtained a bid surety bond of between $50,000 and $100,000 for each bidding area. (Suppliers whose bids are at or below the median composite bid rate but do not accept a contract will forfeit their surety bond.)

- The implementation of the global surgical package final rule, issued by CMS on November 13, 2014, is prohibited. (A global surgical package is a bundled payment that includes all necessary services normally furnished by a surgeon before, during, and after a procedure. The three global packages are labeled based on the number of post-operative days included in the global period: 0-day, 10-day, and 90-day. Concerned with inaccurate valuation and disparate payments associated with global surgical packages, CMS issued the now overridden rule, which would have transformed all 10- and 90-day global codes to 0-day global codes; that is, instead of receiving a single payment that included follow-up care, physicians would have billed for each individual post-surgery follow-up service. The transitions for current 10-day and 90-day current global codes were to begin in calendar years 2017 and 2018, respectively.)

  The Secretary of HHS is required to develop and implement a process to gather, from a representative sample of physicians, information needed to value surgical services furnished during these 10- and 90-day global periods, beginning not later than January 1, 2017, and use the information to ensure that the bundled payment amounts are accurate. The Secretary can delay a portion of the 10- and 90-day global package payments to incentivize reporting of information.

MACRA Provision Affecting SMI

- The income thresholds for determining the unsubsidized percentage of the Medicare Part B and Part D premiums are lowered, beginning in 2018, for the two highest income ranges

specified in the law. As a result, certain high-income beneficiaries will be subject to paying higher premium amounts.

In addition, the thresholds for 2020 and later are to be adjusted annually for inflation, and the inflation adjustments are to be based on the new threshold levels (as described above), rather than on the thresholds that would have been in place had they not been frozen since 2011 (as was required by statute prior to MACRA). As a result, more beneficiaries will be subject to paying higher premium amounts.

MACRA Provisions Affecting Part C

- The authorization for specialized Medicare Advantage (MA) plans for special needs individuals is extended through December 31, 2018.

- Reasonable cost plans that no longer meet statutory requirements to operate under Medicare in their service area can extend their contract for 2 years (following 2016) by transitioning into an MA plan. Certain rules and beneficiary protections apply.

MACRA Provisions Affecting All Parts of Medicare

- Funding for the National Quality Forum is provided from the HI and SMI trust funds for the remainder of fiscal year 2015 and for fiscal years 2016 and 2017.

- Funding for certain low-income outreach and assistance programs is extended through September 30, 2017.

- The section of MACRA titled "Protecting the Integrity of Medicare" contains numerous provisions intended to strengthen Medicare's ability to reduce fraud and build upon program integrity policies. In addition, funding for the Medicare Improvement Fund, as enacted by the IMPACT Act of 2014 and discussed above, is eliminated.

B. TOTAL MEDICARE FINANCIAL PROJECTIONS

Medicare is the nation's second largest social insurance program, exceeded only by Social Security (OASDI). Although Medicare's two components—Hospital Insurance (HI) and Supplementary Medical Insurance (SMI)—are very different from each other in many key respects, it is important to consider the overall cost of Medicare and its financing. By reviewing Medicare's total expenditures, readers can assess the financial obligation created by the program. Similarly, the sources and relative magnitudes of HI and SMI revenues are an important policy matter.

The issues of Medicare's total cost to society and the means of financing that cost are different from the question of the financial status of the Medicare trust funds. The latter focuses on whether a specific trust fund's income and expenditures are in balance. The separate HI and SMI financial projections prepared for this purpose, however, can be usefully combined for the broader purposes outlined above. To that end, this section presents information on combined HI and SMI costs and revenues. Sections III.B, III.C, and III.D of this report present detailed assessments of the financial status of the HI trust fund and the Part B and Part D accounts of the SMI trust fund, respectively.

1. 10-year Actuarial Estimates (2015-2024)

Table V.B1 shows past and projected Medicare income, expenditures, and trust fund assets in dollar amounts for calendar years,[81] with projections shown under the intermediate set of assumptions for the short-range projection period 2015 through 2024.

[81]The table shows amounts on a *cash* basis, reflecting actual expenditures made during the year, even if the payments were for services performed in an earlier year. Similarly, income figures represent amounts actually received during the year, even if incurred in an earlier year.

Table V.B1.—Total Medicare Income, Expenditures, and Trust Fund Assets during Calendar Years 1970-2024

[In billions]

Calendar year	Total income	Total expenditures	Net change in assets	Assets at end of year
Historical data:				
1970	$8.2	$7.5	$0.7	$3.4
1975	17.7	16.3	1.3	12.0
1980	37.0	36.8	0.1	18.3
1985	76.5	72.3	4.2	31.4
1990	126.3	111.0	15.3	114.4
1995	175.3	184.2	−8.9	143.4
2000	257.1	221.8	35.3	221.5
2005	357.5	336.4	21.0	309.8
2006	437.0	408.3	28.7	338.5
2007	462.1	431.7	30.4	368.9
2008	480.8	468.2	12.7	381.6
2009	508.3[1]	509.0	−0.7	380.8
2010	486.1[1]	522.9	−36.8	344.0
2011	530.0	549.1	−19.2	324.9
2012	537.0	574.2	−37.3	287.6
2013	575.8	582.9	−7.1	280.5
2014	599.3	613.3	−14.1	266.4
Intermediate estimates:				
2015	651.0[1]	649.1	1.9	268.3
2016	703.3[1]	688.0	15.3	283.6
2017	755.0	731.7	23.4	307.0
2018	800.3	778.2	22.2	329.2
2019	868.8	839.3	29.6	358.7
2020	950.4[1]	911.7	38.8	397.5
2021	990.0[1]	983.2	6.8	404.3
2022	1,077.8	1,061.6	16.2	420.5
2023	1,154.2	1,143.4	10.8	431.3
2024	1,235.7	1,229.4	6.3	437.6

[1]Section 708 of the Social Security Act modifies the provisions for the payment of Social Security benefits when the regularly designated day falls on a Saturday, Sunday, or legal public holiday. Payment of those benefits normally due January 3, 2010 actually occurred on December 31, 2009. Consequently, the Part B and Part D premiums withheld from these benefits and the associated Part B general revenue contributions were added to the respective Part B or Part D account on December 31, 2009. The total income for 2010 excludes these amounts. Similarly, the payment date for those benefits normally due January 3, 2016 will be December 31, 2015, and the payment date for those benefits normally due January 3, 2021 will be on December 31, 2020.

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

As indicated in table V.B1, Medicare expenditures have increased rapidly during most of the program's history. From 1985 to 2014, expenditures grew at an average annual rate of 7.7 percent, and they are projected to increase at an average annual rate of 7.2 percent during the period 2015 through 2024.

Through most of Medicare's history, trust fund income has kept pace with increases in expenditures.[82] The Trustees estimate that total Medicare income will increase at a somewhat faster rate (7.5 percent annually) than expenditures in the years 2015 through 2024. This

[82]This balance resulted from periodic increases in HI payroll tax rates and other HI financing, from annual increases in SMI premium and general revenue financing rates (to cover the following year's estimated expenditures), and from frequent legislation designed to slow the rate of growth in expenditures.

difference arises in part because of the lower expenditures under the ACA and the sequestration of Medicare benefits during this period. It is also attributable to faster growth in HI payroll tax revenues because the income threshold for application of the additional 0.9-percent tax rate is not indexed for inflation (with the result that an increasing proportion of workers become subject to the additional tax rate over time).

The Department of the Treasury has invested past excesses of income over expenditures in U.S. Treasury securities, with total trust fund assets accumulating to $266.4 billion at the end of calendar year 2014. Combined assets decreased from 2009 through 2014 and are estimated to increase slightly in 2015. Although it remains positive, the change in assets fluctuates slightly over the remainder of the short-range projection period due to the timing of premium collections as described in the footnote to table V.B1. The shift from the actual declines in total Medicare trust fund assets from 2009 through 2014 to significant expected growth in assets from 2015 through 2020 reflects that the projected HI deficits decrease and become HI surpluses as key provisions of the ACA phase in and as the lower provider payment updates compound over time.[83]

The ACA established a 15-member Independent Payment Advisory Board (IPAB) to develop and submit proposals to Congress aimed at extending the solvency of Medicare, slowing Medicare cost growth, and improving the quality of care delivered to Medicare beneficiaries. The IPAB is required to submit proposals to the President the year following a determination that the projected rate of growth in Medicare spending per beneficiary exceeds a target growth rate.[84] Since 2013, the Chief Actuary at CMS has been required to determine the projected and target growth rates. If the Chief Actuary makes a determination that the projected Medicare per capita growth rate exceeds the per capita target growth rate in the implementation year, the Chief Actuary will establish a savings target for that year. For the 2013 through 2015 determination years, the target growth rates have not been exceeded.

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[83]See sections III.B, III.C, and III.D regarding the asset projections for HI and Part B and Part D of SMI, separately.

[84]Beginning in 2019, the ACA provides an exception to the requirement that the IPAB submit proposals if the projected rate of growth for Medicare is less than that for national health expenditures. This exception can occur only if the IPAB was required to submit a proposal in the prior year, and it may not be used in 2 consecutive years. In addition, when there is a determination that the projected increase in the medical CPI is less than the CPI-U for the implementation year, the IPAB is not required to submit a proposal.

For a given determination year, the rates of growth for Medicare spending and the target are calculated as the 5-year average consisting of the 2 prior years, the current year, and the 2 following years. For example, for the 2015 determination year, 2016 is the proposal year, 2017 is the implementation year, and the 5-year period is 2013-2017. For determination years 2013 through 2017, the target growth rate is equal to the average in the Consumer Price Index for All Urban Consumers (all items; United States city average) and the medical care expenditure category of the Consumer Price Index for All Urban Consumers (United States city average). For determination years 2018 and after, the target growth rate is equal to the nominal Gross Domestic Product per capita plus 1 percentage point. Table V.B2 presents the projected rates of growth that are used in the IPAB determination. The first determination that the Medicare per capita growth rate exceeds the per capita target growth rate is projected to be made in 2017.

Table V.B2.—Key Rates of Growth for IPAB Determination

[In percent]

Calendar year	Medicare per capita[1]	CPI-U	CPI medical care	GDP per capita	NHE per capita[2]	IPAB determination[3,4]	
						Medicare	Target[5]
2011	2.1%	3.2%	3.0%	3.0%	2.9%	—	—
2012	0.2	2.1	3.7	3.5	3.0	—	—
2013	−1.0	1.5	2.5	3.0	2.8	1.46%	3.04%
2014	2.2	1.6	2.4	3.1	4.7	0.43	2.61
2015	1.9	0.2	1.8	3.5	4.0	1.70	2.48
2016	1.7	3.0	4.7	4.8	4.7	2.69	2.80
2017	3.8	2.8	4.4	4.7	4.7	3.22	3.10
2018	3.9	2.7	4.3	4.5	5.1	3.85	5.49
2019	4.7	2.7	4.3	4.2	5.5	4.49	5.32
2020	5.1	2.7	4.3	4.1	5.6	4.70	5.13
2021	5.0	2.7	4.3	4.0	5.3	4.88	4.98
2022	4.8	2.7	4.3	3.8	5.3	4.87	4.86
2023	4.8	2.7	4.3	3.7	5.2	5.10	4.78
2024	4.7	2.7	4.3	3.7	5.2	5.06	4.73

[1]These amounts differ from those presented in section V.D because they are determined based on the methodology required for the IPAB determination. They are calculated as the sum of the average per capita spending under each of Parts A, B, and D. For Parts B and D, the spending is net of premiums. In addition, the amounts in section V.D include other miscellaneous items such as Medicare Advantage additional premiums.

[2]Source: National health expenditure (NHE) projections article published in September 2014 (*Health Affairs,* vol. 33, no. 10). The findings presented in this article, along with the paper outlining its methodology, are available at http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsProjected.html.

[3]5-year average starting 2 years prior to the determination year and ending 2 years after the determination year. An implementation year is 2 years after a determination year in which Medicare per capita costs are projected to grow at a faster rate than the target, requiring a reduction in spending.

[4]The determination values for 2013 and 2014 reflect the actual determinations made in 2013 and 2014.

[5]For determinations made in 2013-2017, the target is equal to the average of the growth in the Consumer Price Index for All Urban Consumers (all items; United States city average) and the medical care expenditure category of the Consumer Price Index for All Urban Consumers (United States city average). For 2018 and later determinations, the target rate of growth is per capita GDP plus 1 percent.

2. 75-year Actuarial Estimates (2015-2089)

Table V.B3 shows past and projected Medicare expenditures expressed as a percentage of GDP.[85] This percentage provides a relative measure of the size of the Medicare program compared to the general economy and represents the portion of the nation's total resources dedicated each year to providing health care services to beneficiaries through Medicare. Expenditures represented 0.7 percent of GDP in 1970 and had grown to 2.6 percent of GDP by 2005, reflecting rapid increases in the factors affecting health care cost growth. Starting in 2006, Medicare provided subsidized access to prescription drug coverage through Part D, which caused most of the increase in Medicare expenditures to 3.0 percent of GDP in the first year. The Trustees project much more moderate continuing growth in the long range, partially as a result of the lower price updates under the ACA, with total Medicare expenditures projected to reach about 6.0 percent of GDP by 2085. The Trustees do not expect Medicare costs to exceed those for Social Security during the projection period; this expectation differs from the projection in last year's report and results from lower long-range physician payment updates and lower assumptions about health care cost growth.

Part of the projected increase is attributable to the prescription drug benefit in Medicare. In its first (partial) year of operation, this benefit increased aggregate Medicare costs by about one-eighth.[86] With continuing faster growth in drug costs, relative to the traditional HI and SMI Part B expenditures, the Trustees project that the prescription drug benefit will increase Medicare costs by roughly 19 percent beginning in 2024 and by about 30 percent at the end of the projection period.

The change to the long-range health care cost growth assumptions decreases costs compared to last year's report and is the reason that the projections shown in table V.B3 for total Medicare in 2040 and later are lower than in the 2014 report. Prior to 2040, this year's projections are higher than those in 2014 primarily due to higher recent actual experience for Part B providers and Part D plans.

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[85]In contrast to the expenditure amounts shown in table V.B1, table V.B3 shows historical and projected expenditures on an incurred basis. Incurred amounts relate to the expenditures for services performed in a given year, even if payment for those expenditures occurs in a later year.

[86]Although the Part D drug benefit became available on January 1, 2006, beneficiaries had until May 15 to enroll. About 62 percent of the ultimate number of enrollees had enrolled as of January 1.

The details of these changes are described in sections III.B, III.C, and III.D.

Table V.B3.—HI and SMI Incurred Expenditures as a Percentage of the Gross Domestic Product

Calendar year	HI Part A	SMI Part B	SMI Part D	Total
Historical data:				
1970	0.50%	0.21%	—	0.71%
1975	0.71	0.29	—	1.00
1980	0.88	0.40	—	1.29
1985	1.09	0.55	—	1.63
1990	1.11	0.74	—	1.85
1995	1.52	0.87	—	2.39
2000	1.27	0.91	—	2.18
2005	1.41	1.17	0.01%	2.59
2006	1.41	1.23	0.32	2.96
2007	1.43	1.27	0.35	3.05
2008	1.51	1.25	0.37	3.13
2009	1.64	1.43	0.40	3.47
2010	1.62	1.44	0.42	3.48
2011	1.63	1.46	0.43	3.52
2012	1.60	1.49	0.43	3.52
2013	1.58	1.48	0.44	3.50
2014	1.52	1.54	0.48	3.54
Intermediate estimates:				
2015	1.49	1.55	0.49	3.53
2016	1.48	1.55	0.51	3.55
2017	1.47	1.57	0.54	3.58
2018	1.48	1.59	0.56	3.62
2019	1.50	1.65	0.58	3.73
2020	1.53	1.71	0.60	3.84
2021	1.56	1.76	0.63	3.95
2022	1.60	1.82	0.65	4.07
2023	1.64	1.89	0.67	4.20
2024	1.67	1.95	0.70	4.32
2025	1.74	2.04	0.72	4.50
2030	1.90	2.31	0.83	5.04
2035	2.05	2.48	0.90	5.42
2040	2.13	2.51	0.95	5.59
2045	2.17	2.48	0.98	5.63
2050	2.17	2.45	1.02	5.64
2055	2.16	2.43	1.06	5.65
2060	2.15	2.44	1.11	5.70
2065	2.17	2.44	1.16	5.77
2070	2.20	2.45	1.21	5.86
2075	2.23	2.45	1.27	5.95
2080	2.23	2.43	1.30	5.96
2085	2.23	2.41	1.35	5.98

Note: Percentages are affected by economic cycles.

The 75-year projection period fully allows for the presentation of anticipated future developments, such as the impact of a large increase in enrollees from 2010 through 2030. This increase in the number of beneficiaries will occur because the relatively large number of persons born during the period between the end of World War II and the mid-1960s (known as the baby boom generation) will reach eligibility age and begin to receive benefits. Moreover, as this generation ages, these individuals will experience greater health care

utilization and costs, thereby adding further to growth in program expenditures. Table V.B4 shows past and projected enrollment in the Medicare program.

As indicated in table V.B4, over the last 35 years the total number of Medicare beneficiaries approximately doubled, and the Trustees expect the total to almost double again over approximately the next 35 years. During this same historical period, the number of covered workers also increased rapidly (by about 52 percent), but the Trustees project this number to increase much more slowly (about 25 percent) over the next 35 years. This demographic shift and its implications for Medicare costs, relative to workers' earnings or to the GDP, are fairly well known.

The enrollment data also show that the number of Medicare beneficiaries enrolled in private health plans under Part C has increased substantially in recent years. This increase reflects the higher Medicare payments to Medicare Advantage plans specified by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, which enabled these plans to offer additional benefit coverage. Since the passage of the ACA, enrollment increases have slowed. (Section IV.C of this report describes the changes in enrollment growth since 2005.)

By 2018, the Trustees estimate that over 33 percent of Medicare beneficiaries will be enrolled in private Part C health plans. The Trustees expect modest increases in private plan penetration rates between 2019 and 2025, with the estimated proportion of beneficiaries in such plans ultimately stabilizing at about 35 percent.

Table V.B4.—Medicare Enrollment

[In thousands]

Calendar year	HI Part A	SMI Part B	SMI Part D	Part C	Total[1]
Historical data:					
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
2005	42,233	39,752	1,841	5,794	42,606
2006	43,065	40,361	30,560	7,291	43,436
2007	44,010	41,093	31,392	8,667	44,368
2008	45,150	41,975	32,589	10,010	45,500
2009	46,256	42,908	33,644	11,104	46,604
2010	47,365	43,882	34,772	11,692	47,720
2011	48,549	44,917	35,720	12,383	48,896
2012	50,540	46,477	37,448	13,587	50,874
2013	52,145	47,942	39,103	14,842	52,481
2014	53,492	49,344	40,484	16,244	53,826
Intermediate estimates:					
2015	55,495	50,778	41,774	17,607	55,829
2016	57,071	52,159	43,238	18,650	57,404
2017	58,734	53,605	44,786	19,598	59,067
2018	60,485	55,132	46,037	20,237	60,818
2019	62,286	56,699	47,359	21,015	62,619
2020	64,137	58,333	48,755	21,920	64,471
2021	66,000	59,974	50,160	22,760	66,335
2022	67,910	61,660	51,601	23,589	68,246
2023	69,808	63,349	53,031	24,381	70,145
2024	71,662	64,989	54,429	25,069	72,001
2025	73,549	66,655	55,857	25,774	73,890
2030	81,660	73,894	61,992	28,541	82,005
2035	86,745	78,351	65,834	30,258	87,087
2040	89,328	80,663	67,783	[2]	89,666
2045	90,887	82,047	68,961	[2]	91,224
2050	93,027	83,982	70,582	[2]	93,368
2055	95,930	86,564	72,787	[2]	96,284
2060	99,531	89,838	75,525	[2]	99,907
2065	103,084	93,028	78,230	[2]	103,485
2070	107,021	96,581	81,231	[2]	107,454
2075	111,140	100,332	84,374	[2]	111,613
2080	113,735	102,684	86,363	[2]	114,244
2085	117,156	105,793	88,983	[2]	117,710

[1]Number of beneficiaries with HI and/or SMI coverage.
[2]The Trustees do not explicitly project enrollment in Part C beyond 2035.

Table V.B5 shows the past and projected amounts of Medicare revenues as a percentage of total non-interest Medicare income, under the intermediate assumptions. The table excludes interest income, which would not be a significant part of program financing in the long range.

Table V.B5.—Medicare Sources of Income as a Percentage of Total Non-Interest Income[1]

Calendar year	Payroll taxes	Tax on benefits	Premiums[1]	Brand-name drug fees	State transfers	General revenue
Historical data:						
1970	61.8%	—	13.7%	—	—	24.6%
1980	68.0	—	8.6	—	—	23.4
1990	62.2	—	9.8	—	—	27.9
2000	59.8	3.6%	9.1	—	—	27.6
2010	38.9	2.9	13.3	—	0.9%	44.0
2014	38.8	3.1	13.7	0.5%	1.5	42.4
Intermediate estimates:						
2015	37.7	3.3	13.6	0.5	1.3	43.6
2020	35.1	3.7	15.3	0.3	1.5	44.2
2030	29.3	4.3	16.7	0.2	1.7	47.8
2040	27.8	4.6	17.1	0.1	1.8	48.8
2050	28.2	4.6	17.0	0.1	1.9	48.3
2060	28.2	4.7	17.0	0.0	2.0	48.1
2070	27.9	4.7	17.2	0.0	2.1	48.1
2080	27.8	4.6	17.4	0.0	2.2	48.0

[1]Includes premium revenue from HI and both accounts in the SMI trust fund.

Note: Row sums may not exactly equal 100 percent due to rounding.

In 2014, general revenues (primarily those for SMI) represented 42 percent of total non-interest income to the Medicare program—becoming, for the sixth year in a row, the largest share of Medicare financing. HI payroll taxes were the next largest source of overall financing at 39 percent. Beneficiary premiums (again, primarily for SMI) were third, at 14 percent. Projected HI tax revenues fall short of projected HI expenditures for most future years. In contrast, SMI premium and general revenues will keep pace with SMI expenditure growth, and, once fully phased down,[87] State payments (on behalf of Medicare beneficiaries who also qualify for full Medicaid benefits) will grow with Part D expenditures. Under the ACA, another source of Part B financing, from fees on manufacturers and importers of brand-name prescription drugs, will increase from $2.5 billion in 2011 to $4.1 billion in 2018 but then decrease to $2.8 billion for 2019 and later. In the absence of legislation, HI tax income would represent a declining portion of total Medicare revenues. In 2030, for example, the projected year of depletion of the HI trust fund, currently scheduled HI payroll taxes would represent about 29 percent of total non-interest Medicare income. General revenues and beneficiary premiums would equal about 48 and 17 percent, respectively.

The Medicare Modernization Act requires an expanded analysis of the combined expenditures and dedicated revenues of the HI and SMI trust funds. In particular, the Act requires a determination as to

[87]State payments to Part D amounted to 90 percent of their projected foregone Medicaid prescription drug costs in 2006, with this percentage phasing down over a 10-year period to 75 percent in 2015.

whether projected annual *general revenue funding* exceeds 45 percent of total Medicare outlays within the next 7 fiscal years (2015-2021). For this purpose, the law defines general revenue funding as total Medicare outlays minus dedicated Medicare financing sources. Dedicated Medicare financing sources include HI payroll taxes; income from taxation of Social Security benefits; State transfers for the prescription drug benefit; premiums paid under Parts A, B, and D; fees on brand-name prescription drugs paid to Part B; fines and penalties collected as a result of program integrity efforts; and any gifts received by the Medicare trust funds. The test uses expenditures adjusted to avoid temporary distortions arising from the payment of Medicare Advantage capitation amounts in September when the normal October payment date is a Saturday or Sunday.

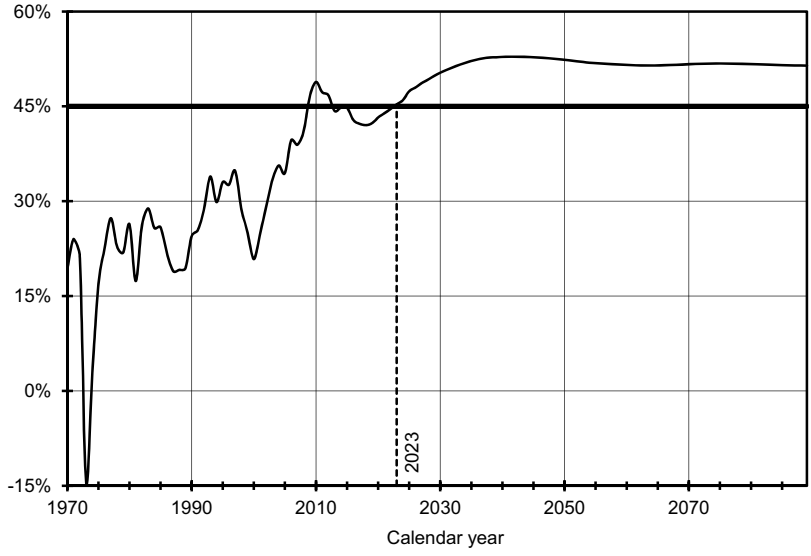
Lawmakers established the 45-percent test to help call attention to Medicare's impact on the Federal budget. The Trustees made determinations of excess general revenue Medicare funding in each of the reports for 2006 through 2013. Two consecutive such determinations trigger a *Medicare funding warning*, which indicates that a trust fund's financing is inadequate or that the general revenues are becoming unduly large. The 2007 through 2013 reports thus prompted Medicare funding warnings. Such findings require the President to submit to Congress, within 15 days after the date of the Budget submission for the succeeding year, proposed legislation to respond to the warning. The law also requires Congress to consider the legislation proposed in response to Medicare funding warnings on an expedited basis. To date, elected officials have not enacted legislation responding to these funding warnings.

Figure V.B1 displays, on a calendar-year basis, the historical and projected ratio of the difference between total Medicare outlays and dedicated financing sources to total Medicare outlays. As indicated, this ratio exceeded 45 percent at the end of calendar years 2009 through 2012. Formal application of the test, however, is on a fiscal-year basis. As a result of the recent slowdown in Medicare spending, in this year's report the Trustees project that the difference will not exceed 45 percent in the next 7 fiscal years (2015-2021), meaning there is no determination of excess general revenue Medicare funding for the second consecutive year.[88] As in past reports, the Trustees expect higher tax income beginning in 2014 and extending through about 2023, along with lower outlays due to provisions of the ACA

[88]The Trustees estimate that the ratio will again exceed 45 percent beginning in fiscal year 2024.

and other legislation, causing excess general revenue funding to remain below 45 percent.

Figure V.B1.—Projected Difference between Total Medicare Outlays and Dedicated Financing Sources, as a Percentage of Total Outlays



As figure V.B1 also indicates, the Board projects that the difference between outlays and dedicated funding sources will reach 53 percent of outlays by 2037 and will decline to 52 percent in about 2050 and remain at about that level throughout the remainder of the 75-year period. Although the law characterizes this difference as *general revenue funding*, it is important to recognize that current law provides for general revenue transfers only for certain purposes related to Parts A, B, and D, as follows:

- Financing specified portions of SMI Part B and SMI Part D expenditures;
- Reimbursing the HI trust fund for the costs of certain uninsured beneficiaries;
- Paying interest on invested assets of the trust funds; and
- Redeeming the special Treasury securities held as assets by the trust funds.

The difference between outlays and dedicated funding sources, as shown in figure V.B1, reflects all of these general revenue transfers,

plus the imbalance between HI expenditures and dedicated revenues after HI asset depletion in 2030. There is no provision under current law to cover the shortfall. In particular, transfers from the general fund of the Treasury could not occur for the purpose of avoiding asset depletion without new legislation.

The Medicare Modernization Act also requires a comparison of projected growth in the difference between outlays and dedicated revenues with other health spending growth rates. Table V.B6 contains this comparison.

Table V.B6.—Comparative Growth Rates of Medicare, Private Health Insurance, National Health Expenditures, and GDP

	Average annual growth in:				
Calendar year	Incurred outlays minus dedicated revenues	Incurred Medicare outlays	GDP	National health expenditures[1]	Private health insurance[1]
2009	24.2%	8.7%	−2.0%	3.8%	3.1%
2010	11.0	4.1	3.8	3.8	3.2
2011	1.1	4.8	3.7	3.6	3.4
2012	2.7	4.2	4.2	3.7	3.2
2013	−0.1	3.3	3.7	3.6	3.3
2014	5.5	4.8	3.8	5.6	6.8
2015	2.3	4.2	4.3	4.9	6.9
2016	1.9	6.3	5.8	5.6	5.0
2017	5.6	6.7	5.7	5.7	4.8
2018	6.7	6.7	5.4	6.1	5.2
2019	9.5	8.3	5.2	6.5	6.2
2020	10.1	8.3	5.1	6.6	6.0
2021	9.7	7.9	5.0	6.3	5.6
2022	9.7	8.0	4.7	6.2	5.4
2023	9.6	7.8	4.6	6.1	5.3
2024	9.2	7.5	4.5	6.1	5.3
2025-2039	7.3	6.3	4.5	5.8	—
2040-2064	4.5	4.6	4.5	5.1	—
2065-2089	4.6	4.6	4.4	5.0	—

[1]Source for years 2009-2023: National health expenditure (NHE) projections article published in September 2014 (*Health Affairs,* vol. 33, no. 10). The findings presented in this article, along with the paper outlining its methodology, are available at http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsProjected.html. Years after 2023 are extrapolated based on Trustees' assumptions.

As shown in table V.B6, the gap between outlays and dedicated revenues increased substantially, as did Medicare outlays, through 2010. The growth in both then slows initially as Medicare spending decelerates and as provisions of the ACA begin taking effect. In addition, this gap will increase faster than outlays in most years through 2043 since the dedicated sources of income to the HI trust fund will generally cover a decreasing percentage of HI outlays.

In addition to projected Medicare outlay growth, table V.B6 shows projected growth in GDP, total NHE in the U.S., and private health insurance expenditures. The Trustees expect each of the health expenditure categories to continue the longstanding trend of

increasing more rapidly than GDP in most years. Private health insurance expenditures equal the total premiums earned by private health insurers, including benefits incurred and the net cost of insurance. The net cost of insurance includes administrative costs, additions to reserves, rate credits and dividends, premium taxes, and profits or losses.

Several factors affect comparisons between aggregate Medicare and private health insurance cost growth:

- The number of Medicare beneficiaries is currently increasing by about 3 percent per year, and this growth rate will continue as more of the post-World War II baby boom generation reaches eligibility age. The number of individuals with private health insurance is estimated to be stable through 2013 as the economy continues to slowly recover from the recent recession. Thereafter, with the availability of Federal premium and cost-sharing subsidies for many individuals and families under the ACA, the projected number of people with private health insurance increases significantly.

- Certain ACA provisions, such as the limitation on maximum out-of-pocket costs in 2014 and later and the 40-percent excise tax on high-cost employer-sponsored insurance plans in 2018 and later, will also affect the average actuarial value of private health insurance benefits.

- The use of health care services differs significantly between Medicare beneficiaries (who are generally over 65) and individuals with private health insurance (who are predominantly below age 65). The former group, for example, has a higher incidence of hospitalization, skilled nursing care, and home health care. For the latter group, physician services represent a greater proportion of their total health care needs. Different cost growth trends by type of service will affect overall growth rates and reflect the distribution of services for each category of people.

- There is some overlap between people with Medicare and those with private health insurance. For example, many Medicare beneficiaries have supplemental health insurance coverage through private Medigap insurance policies or employer-sponsored retiree health benefits, and private health insurance includes both of these categories. About 10 million Medicare beneficiaries receive supplemental coverage through the Medicaid

program; neither the growth rates for Medicare nor those for private health insurance reflect the Medicaid costs for these *dual beneficiaries*.

A number of research studies have attempted to control for some or all of these differences in comparing growth trends. Over long historical periods, average, demographically adjusted, per capita growth rates for common benefits have been somewhat lower for Medicare than for private health insurance. For shorter periods, however, the rates of growth have often diverged substantially, and the differential has been negative in some years and positive in others. More information on past and projected national and private health expenditures, and on comparisons to Medicare growth rates, is available in the sources cited in table V.B6.

C. ILLUSTRATIVE ALTERNATIVE PROJECTIONS

The Social Security Act requires the Trustees to evaluate the financial status of the Medicare trust funds. To comply with this mandate, the Trustees must assess whether the financing provided under current law is adequate to cover the benefit payments and other expenditures required under current law. Accordingly, the estimates shown in this report are based on all of the current statutory requirements, including (i) the reductions in payment updates by the increase in economy-wide productivity for most non-physician provider categories; (ii) the physician payment updates specified by MACRA for all future years; and (iii) the operations of the Independent Payment Advisory Board.

As discussed in the Introduction, there is substantial uncertainty regarding the adequacy of future Medicare payment rates under current law. This section illustrates the higher Medicare outlays that would result if certain statutory Medicare payment provisions were not fully implemented in all future years.

For all Part A services and some other (non-physician) Part B services, payment updates will be reduced in all future years by the increase in economy-wide productivity.[89] By the end of the long-range projection period, payment rates for affected providers would be about 56 percent lower than their level in the absence of these reductions. Currently, the Medicare payment rates for inpatient hospital services are about 67 percent of those paid by private health insurance. If future improvements in productivity were to remain similar to what providers have achieved in the recent past (about 0.4 percent annually), then Medicare payment levels for inpatient hospital services at the end of the long-range projection period would be less than 40 percent of the corresponding level paid by private health insurance. This comparison assumes that private payer rate increases would continue to be set through the same negotiation process used to date, independent of the Medicare reductions or other health system changes. Specifically, private payer rates would grow by 3.1 percent per year, or the increase in the price of inputs to the provision of health care (3.5 percent) less the assumed growth in hospital productivity (0.4 percent). By comparison, Medicare payment

[89]In addition to the productivity adjustments, current law requires certain other reductions in payment updates for 2010 through 2019. For inpatient hospital services, the cumulative impact of these adjustments is a further reduction of 3.6 percent in payment levels. Also, Medicare payments to providers will be affected by the sequestration of outlays in April 2013 through September 2024.

rates would grow by 2.4 percent per year, or 3.5 percent less the assumed growth in economy-wide productivity (1.1 percent).

Simulations that take into account the lower Medicare payment rates, other payment provisions, sequestration, changes to Medicare and Medicaid disproportionate share payments, and coverage expansions collectively suggest a deterioration of facility margins for hospitals, skilled nursing facilities, and home health agencies, particularly over the long run. By 2019, the simulations suggest that up to 5 percent more hospitals would experience negative total facility margins and that approximately 15 percent more would experience negative Medicare margins. Other factors, such as efforts to improve efficiency in lower-performing hospitals, could mitigate some of the impact of the ACA payment provisions, though there is a wide range of uncertainty regarding these types of behavioral changes. By 2040, simulations suggest that approximately half of hospitals, 70 percent of skilled nursing facilities, and 90 percent of home health agencies would have negative total facility margins, raising the possibility of access and quality-of-care issues for Medicare beneficiaries. A memorandum on these provider margin simulations is available on the CMS website.[90]

Over time, unless providers could alter their use of inputs to reduce their cost per service correspondingly, Medicare's payments for health services would fall increasingly below providers' costs. Providers could not sustain continuing negative margins and would have to withdraw from serving Medicare beneficiaries or (if total facility margins remained positive) shift substantial portions of Medicare costs to their non-Medicare, non-Medicaid payers. Under such circumstances, lawmakers might feel substantial pressure to override the productivity adjustments, much as they did to prevent reductions in physician payment rates while the SGR was in effect.

While the physician payment system put in place by MACRA avoids the significant short-range physician payment issues resulting from the SGR system approach, it nevertheless raises important long-range concerns that will almost certainly need to be addressed by future legislation. In particular, additional updates totaling $500 million per year and 5-percent annual bonuses are scheduled to expire in 2025, resulting in a payment reduction for most physicians. In addition, the law specifies the physician payment updates for all years in the future, and these updates do not vary based on

[90]See http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/Downloads/ACAmarginsimulations2015.pdf.

underlying economic conditions, nor are they expected to keep pace with the average rate of physician cost increases. The specified rate updates could be an issue in years when levels of inflation are high and would be problematic when the cumulative gap between the price updates and physician costs becomes large. The Trustees anticipate that physician payment rates under current law will be lower than they would have been under the SGR formula by 2048 and will be about 30 percent lower by 2089. Absent a change in the delivery system or level of update by subsequent legislation, the Trustees expect access to Medicare-participating physicians to become a significant issue in the long term.

The Independent Payment Advisory Board (IPAB) must submit proposals to the President for years in which the projected rate of growth in Medicare spending per beneficiary exceeds specified thresholds. For 2015 through 2019, the threshold rate of growth in Medicare spending per beneficiary is the average of the increases in the Consumer Price Index (CPI-U) for all items and in the CPI for Medical Care. Thereafter, the law requires IPAB proposals if the projected rate of growth in Medicare spending exceeds the estimated increase in GDP plus 1 percent.[91] The IPAB's proposals will automatically take effect unless lawmakers enact an alternative measure that achieves the same level of savings. As a result of the other savings provisions incorporated into current law, the Trustees estimate that the IPAB provision will reduce Medicare growth rates for the first time in 2019, and by only 0.1 percent in that year. In addition, the Trustees project that rates will be reduced by similar small amounts in 2024, 2026, 2028, and 2033. The IPAB is not triggered over the long-range period in current law, mostly due to the assumptions about long-range health care cost growth, which are lower than in the 2014 report. (See section V.B for more details about the IPAB determination.)

In view of these issues, it is important to note that the actual future costs for Medicare may exceed the projections shown in this report, possibly by substantial amounts. Use of an alternative projection can illustrate the potential magnitude of this difference.

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[91]The effects of the IPAB's proposals on Medicare expenditures are limited to 0.5 percentage point in 2015, 1.0 percentage point in 2016, 1.25 percentage points in 2017, and 1.5 percentage points in 2018 and subsequent years (or, if smaller, the amount by which the rate of growth in Medicare spending exceeds the threshold growth rate). A number of other provisions govern the operations of the IPAB; appendix V.A in the 2010 Medicare Trustees Report summarizes these additional provisions.

It is conceivable that health care providers could improve their productivity, reduce wasteful expenditures, and take other steps to keep their cost growth within the bounds imposed by the Medicare price limitations. For such efforts to be successful in the long range, however, providers would have to generate and sustain unprecedented levels of productivity gains—a very challenging and uncertain prospect.

A transformation of health care in the U.S., affecting both the means of delivery and the method of paying for care, is also a possibility. Private health insurance and Medicare are taking important steps in this direction by initiating programs of research into innovative payment and service delivery models, such as accountable care organizations, patient-centered medical homes, improvement in care coordination for individuals with multiple chronic health conditions, better coordination of post-acute care, payment bundling, pay for performance, and assistance for individuals in making informed health choices. Such changes have the potential to reduce health care costs and cost growth rates and could, as a result, help lower health care spending to levels compatible with the lower price updates payable under current law.

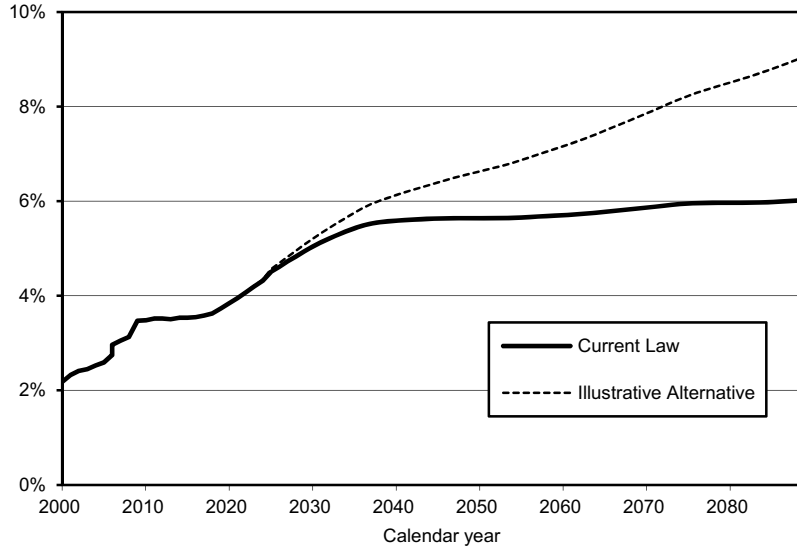
The ability of new delivery and payment methods to lower cost growth rates is uncertain at this time. Preliminary indications are that some of these delivery reforms have had modest levels of success in lowering costs. It is too early to tell if these reductions in spending will continue or if they will grow to the magnitude needed to align with the statutory Medicare price updates. Given these uncertainties, it will be important for policy makers to monitor the adequacy of Medicare payment rates over time to ensure beneficiary access to high-quality care.

To help illustrate and quantify the potential magnitude of the cost understatement, the Trustees asked the Office of the Actuary to prepare an illustrative Medicare trust fund projection under a hypothetical alternative that assumes that, starting in 2020, the economy-wide productivity adjustments gradually phase down to 0.4 percent and, starting in 2024, physician payments transition from a payment update of 0.0 percent to an increase of 2.3 percent.[92]

[92]The illustrative alternative projections included changes to the productivity adjustments starting with the 2010 annual report, following enactment of the ACA. The assumption regarding physician payments is being used because the SGR was replaced earlier this year.

Figure V.C1 compares the illustrative alternative projection with the projections under current law.[93]

Figure V.C1.—Medicare Expenditures as a Percentage of the Gross Domestic Product under Current Law and Illustrative Alternative Projections



Note: Percentages are affected by economic cycles.

The top curve in figure V.C1 shows the cost levels under the illustrative alternative. This scenario illustrates the impact that would occur if the productivity adjustments gradually phased down, starting in 2020, until the Medicare price updates equaled those assumed for private health plans in 2034.[94] It also reflects physician payment updates that transition from 0.0 percent to the MEI increase of about 2.3 percent by 2039. In addition, the projection assumes that the IPAB requirements would not be implemented. On average under this alternative, the long-range per beneficiary growth rate for all Medicare services would be similar to the long-range growth rate

[93]The 2010-2011 Medicare Technical Review Panel supported the continued use of illustrative alternative projections for this purpose (Recommendation IV-3). In addition, the Panel recommended a graphical comparison of the current-law and alternative projections within the Medicare annual report, highlighting the potential effects of both SGR and productivity adjustments (Recommendation IV-4). The Panel's report, *Review of Assumptions and Methods of the Medicare Trustees' Financial Projections,* can be found at http://aspe.hhs.gov/health/reports/2013/MedicareTech/TechnicalPanelReport2010-2011.pdf. The text summarizes the specific assumptions chosen by the Trustees for the illustrative alternative projections.

[94]Section IV.D of this report describes the price component of health care cost increases for the overall health sector.

assumed for the overall health sector. These growth rates are very similar to the full illustrative alternative projections referenced in the 2010-2014 reports.

As indicated in figure V.C1, Medicare costs as a percentage of GDP would continue to increase rapidly throughout the projection period absent the full economy-wide productivity adjustments, legislated physician payment rate updates, and IPAB effects. The illustrative projection reaches 6.1 percent of GDP in 2040 and 9.1 percent in 2089—considerably higher than the 5.6 percent of GDP in 2040 and 6.0 percent of GDP in 2089 under current law.

D. AVERAGE MEDICARE EXPENDITURES PER BENEFICIARY

Table V.D1 shows historical average per beneficiary expenditures for HI and SMI, as well as projected costs for calendar years 2015 through 2024 under the intermediate assumptions. Starting with the 2014 report, this section presents per beneficiary expenditures based on when the service is incurred rather than when payment for the service is made.

For both HI and SMI Part B, costs increased very rapidly in the early years, in part because the availability of Medicare coverage enabled many beneficiaries to obtain the full range of health services they needed. The rapid inflation of the 1970s and early 1980s also contributed to rapid Medicare expenditure increases, and the cost-based reimbursement mechanisms in place provided relatively little incentive for efficiency in the provision of health care. Growth in average HI expenditures moderated dramatically following the introduction of the inpatient hospital prospective payment system in fiscal year 1984, but accelerated again in the late 1980s and early 1990s due to rapid growth in skilled nursing and home health expenditures. During this same period, SMI Part B average costs generally continued to increase at relatively fast rates but slowed somewhat in the early 1990s with the implementation of physician fee reform legislation.

Expenditure growth moderated again during the late 1990s due to the effects of further legislation, including the Balanced Budget Act (BBA) of 1997, and efforts to control fraud and abuse. In addition, historically low levels of general and medical inflation helped reduce Medicare payment updates. The growth rates rebounded from 2001 through 2005 and then moderated somewhat for the remainder of the decade.

For 2010 through 2014, HI and Part B of SMI experienced the lowest 5-year per beneficiary growth rates in the program's history. This slow growth was driven, in part, by legislated update reductions, low provider payment updates caused by the economic recession, and adjustments for documentation and coding that did not reflect changes in real case mix.

In addition, increased enrollment resulting from eligibility of the baby boom generation has decreased the average age of Medicare beneficiaries, thereby reducing per beneficiary costs. The growth rates also reflect the impact of the sequestration process, which is

required under current law and reduces Medicare expenditures by 2 percent per year beginning April 1, 2013. Finally, growth in the volume and intensity of the services delivered has also been relatively low, highlighted by reductions in the number of hospital admissions over this period.

Although SMI Part D began in 2004, full prescription drug coverage did not start until 2006. Accordingly, this discussion includes only the per beneficiary expenditures for 2006 and later. The initial open enrollment period for Part D ran through May 15, 2006. Beneficiaries who enrolled at the beginning of the year tended to have higher costs than those who enrolled toward the end of the open enrollment period. Consequently, the average per beneficiary costs in 2006 were relatively high, resulting in a growth rate for 2007 that was lower than normal. Growth rebounded in 2008 through 2011. Part D growth in 2012 was negative due to the patent expiration of certain high-cost drugs. The large growth in 2014 was due to utilization of the new, expensive specialty drugs used to treat hepatitis C.

Table V.D1.—HI and SMI Average per Beneficiary Costs

Calendar year	Average per beneficiary costs				Average percent change[1]			
		SMI				SMI		
	HI	Part B	Part D	Total	HI	Part B	Part D	Total
Historical data:								
1970	$270	$115	—	$385	13.8%	13.8%	—	13.8%
1975	472	205	—	677	11.8	12.3	—	12.0
1980	929	423	—	1,352	14.5	15.6	—	14.8
1985	1,579	795	—	2,373	11.2	13.4	—	11.9
1990	1,979	1,355	—	3,334	4.6	11.3	—	7.0
1995	3,194	1,867	—	5,061	10.0	6.6	—	8.7
2000	3,333	2,496	—	5,828	0.9	6.0	—	2.9
2005	4,367	3,839	—	8,205	5.6	9.0	—	7.1
2006	4,534	4,116	$1,619	10,269	3.8	7.2	—	25.1
2007	4,692	4,313	1,630	10,635	3.5	4.8	0.7%	3.6
2008	4,929	4,574	1,662	11,165	5.0	6.0	2.0	5.0
2009	5,108	4,798	1,730	11,635	3.6	4.9	4.1	4.2
2010	5,120	4,907	1,807	11,835	0.2	2.3	4.5	1.7
2011	5,213	5,038	1,858	12,109	1.8	2.7	2.8	2.3
2012	5,130	5,173	1,840	12,143	−1.6	2.7	−1.0	0.3
2013	5,090	5,184	1,877	12,150	−0.8	0.2	2.0	0.1
2014	4,935	5,417	2,081	12,432	−3.0	4.5	10.9	2.3
Intermediate estimates:								
2015	4,890	5,538	2,132	12,560	−0.9	2.2	2.5	1.0
2016	4,994	5,725	2,271	12,990	2.1	3.4	6.5	3.4
2017	5,088	5,952	2,441	13,482	1.9	4.0	7.5	3.8
2018	5,229	6,164	2,610	14,003	2.8	3.6	6.9	3.9
2019	5,421	6,545	2,778	14,744	3.7	6.2	6.5	5.3
2020	5,649	6,930	2,937	15,516	4.2	5.9	5.7	5.2
2021	5,891	7,299	3,099	16,289	4.3	5.3	5.5	5.0
2022	6,143	7,695	3,271	17,109	4.3	5.4	5.5	5.0
2023	6,383	8,120	3,448	17,951	3.9	5.5	5.4	4.9
2024	6,635	8,551	3,636	18,822	4.0	5.3	5.4	4.8

[1]Percent changes for 1970 represent the average annual increases from 1967 (the first full year of trust fund operations) through 1970. Similarly, percent changes shown for 1975, 1980, 1985, 1990, 1995, 2000, and 2005 represent the average annual increase over the 5-year period ending in the indicated year.

On average, annual increases in per beneficiary costs have been greater for SMI Part B than for HI during the previous four decades—by approximately 1.0 percent, 4.5 percent, 1.0 percent, and 2.6 percent per year in the 1970s, 1980s, 1990s, and 2000s, respectively. The HI increase remains lower than the SMI Part B increase due to lower utilization, the productivity adjustments, and other payment rate adjustments affecting all of the HI providers but only some of the SMI Part B providers.

Note that the rapid growth rates in the 1970s and 1980s are not expected to recur for either HI or SMI Part B due to more moderate inflation rates and the conversion of Medicare's remaining cost-based reimbursement mechanisms to prospective payment systems as part of the Balanced Budget Act of 1997. In addition, the reduction in Medicare price updates for most categories of providers that affected the growth rates over the last several years will continue to reduce growth rates throughout the projection period. For 2015, the HI growth rate is projected to be negative as a result of the low payment update and further reductions to disproportionate share payments that are required by the ACA.

The average annual increases in Part D per beneficiary costs are expected to be somewhat greater than for HI or SMI Part B for the period 2015 through 2024, in part because the savings provisions of recently enacted legislation affect Parts A and B only.

E. MEDICARE COST SHARING AND PREMIUM AMOUNTS

HI beneficiaries who use covered services may be subject to deductible and coinsurance requirements. A beneficiary is responsible for an inpatient hospital deductible amount, which is deducted from the amount payable by the HI trust fund to the hospital, for inpatient hospital services furnished in a spell of illness. When a beneficiary receives such services for more than 60 days during a spell of illness, he or she is responsible for a coinsurance amount equal to one-fourth of the inpatient hospital deductible for each of days 61-90 in the hospital. After 90 days in a spell of illness, each individual has 60 lifetime reserve days of coverage, for which the coinsurance amount is equal to one-half of the inpatient hospital deductible. A beneficiary is responsible for a coinsurance amount equal to one-eighth of the inpatient hospital deductible for each of days 21-100 of skilled nursing facility services furnished during a spell of illness. No cost sharing is required for home health or hospice services.

Most persons aged 65 and older and many disabled individuals under age 65 are insured for HI benefits without payment of any premium. The Social Security Act provides that certain aged and disabled persons who are not insured may voluntarily enroll, subject to the payment of a monthly premium. In addition, since 1994, voluntary enrollees may qualify for a reduced premium if they have at least 30 quarters of covered employment.

Table V.E1 shows the historical levels of the HI deductible, coinsurance amounts, and premiums, as well as projected values for future years based on the intermediate set of assumptions used in estimating the operations of the trust funds. Certain anomalies in these values resulted from specific trust fund features in particular years (for example, the effect of the Medicare Catastrophic Coverage Act of 1988 on 1989 values). The values listed in the table for future years are estimates, and the actual amounts are likely to be somewhat different as experience emerges.

Table V.E1.—HI Cost-Sharing and Premium Amounts

Year	Inpatient hospital deductible[1]	Inpatient daily coinsurance[1]		SNF daily coinsurance[1]	Monthly premium	
		Days 61-90	Lifetime reserve days		Standard[2]	Reduced[1]
Historical data:						
1967	$40	$10	—	$5.00	—	—
1968	40	10	$20	5.00	—	—
1969	44	11	22	5.50	—	—
1970	52	13	26	6.50	—	—
1971	60	15	30	7.50	—	—
1972	68	17	34	8.50	—	—
1973	72	18	36	9.00	$33	—
1974	84	21	42	10.50	36	—
1975	92	23	46	11.50	40	—
1976	104	26	52	13.00	45	—
1977	124	31	62	15.50	54	—
1978	144	36	72	18.00	63	—
1979	160	40	80	20.00	69	—
1980	180	45	90	22.50	78	—
1981	204	51	102	25.50	89	—
1982	260	65	130	32.50	113	—
1983	304	76	152	38.00	113	—
1984	356	89	178	44.50	155	—
1985	400	100	200	50.00	174	—
1986	492	123	246	61.50	214	—
1987	520	130	260	65.00	226	—
1988	540	135	270	67.50	234	—
1989[3]	560	—	—	25.50	156	—
1990	592	148	296	74.00	175	—
1991	628	157	314	78.50	177	—
1992	652	163	326	81.50	192	—
1993	676	169	338	84.50	221	—
1994	696	174	348	87.00	245	$184
1995	716	179	358	89.50	261	183
1996	736	184	368	92.00	289	188
1997	760	190	380	95.00	311	187
1998	764	191	382	95.50	309	170
1999	768	192	384	96.00	309	170
2000	776	194	388	97.00	301	166
2001	792	198	396	99.00	300	165
2002	812	203	406	101.50	319	175
2003	840	210	420	105.00	316	174
2004	876	219	438	109.50	343	189
2005	912	228	456	114.00	375	206
2006	952	238	476	119.00	393	216
2007	992	248	496	124.00	410	226
2008	1,024	256	512	128.00	423	233
2009	1,068	267	534	133.50	443	244
2010	1,100	275	550	137.50	461	254
2011	1,132	283	566	141.50	450	248
2012	1,156	289	578	144.50	451	248
2013	1,184	296	592	148.00	441	243
2014	1,216	304	608	152.00	426	234
2015	1,260	315	630	157.50	407	224
Intermediate estimates:						
2016	1,300	325	650	162.50	418	230
2017	1,340	335	670	167.50	425	234
2018	1,376	344	688	172.00	437	240
2019	1,412	353	706	176.50	453	249
2020	1,460	365	730	182.50	472	260
2021	1,508	377	754	188.50	492	271
2022	1,556	389	778	194.50	513	282
2023	1,604	401	802	200.50	533	293
2024	1,652	413	826	206.50	555	305

[1]Amounts shown are effective for calendar years.

[2]Amounts shown for 1967-1982 are for the 12-month periods ending June 30; amounts shown for 1983 are for the period July 1, 1982 through December 31, 1983; amounts shown for 1984 and later are for calendar years.
[3]Anomalies in the 1989 values are due to the Medicare Catastrophic Coverage Act of 1988. Most of the provisions of the Act were repealed the following year.

The *Federal Register* notice announcing the HI deductible and coinsurance amounts for 2015 included an estimate of the aggregate cost to HI beneficiaries for the changes in the deductible and coinsurance amounts from 2014 to 2015. At the time of the notice's publication, it was estimated that in 2015 there would be 7.39 million inpatient deductibles paid at $1,260 each, 1.91 million inpatient days subject to coinsurance at $315 per day (for hospital days 61 through 90), 0.95 million lifetime reserve days subject to coinsurance at $630 per day, and 43.73 million extended care days subject to coinsurance at $157.50 per day. Similarly, it was estimated that in 2014 there would be 7.23 million deductibles paid at $1,216 each, 1.87 million days subject to coinsurance at $304 per day (for hospital days 61 through 90), 0.93 million lifetime reserve days subject to coinsurance at $608 per day, and 41.80 million extended care days subject to coinsurance at $152.00 per day. The total increase in cost to beneficiaries was estimated to be $1,120 million due to (i) the increase in the inpatient deductible and coinsurance amounts and (ii) the increase in the number of deductibles and daily coinsurance amounts paid.

Table V.E2 displays the SMI cost-sharing and premium amounts for Parts B and D. The projected values for future years are based on the intermediate set of assumptions used in estimating the operations of the Part B and Part D accounts. As a result, these values are estimates, and the actual amounts are likely to be somewhat different as experience emerges. The premiums for 2010, 2011, and 2016 also reflect significant additional increases designed to offset the loss of revenues attributable to the hold-harmless provision, as described later in this appendix.

Table V.E2.—SMI Cost-Sharing and Premium Amounts

	Part B		Part D			
Calendar year	Standard monthly premium[1]	Annual deductible[2]	Base beneficiary premium	Deductible	Initial benefit limit	Catastrophic threshold
Historical data:						
1967	$3.00	$50	—	—	—	—
1968	4.00	50	—	—	—	—
1969	4.00	50	—	—	—	—
1970	4.00	50	—	—	—	—
1971	5.30	50	—	—	—	—
1972	5.60	50	—	—	—	—
1973	5.80	60	—	—	—	—
1974	6.30[3]	60	—	—	—	—
1975	6.70	60	—	—	—	—
1976	6.70	60	—	—	—	—
1977	7.20	60	—	—	—	—
1978	7.70	60	—	—	—	—
1979	8.20	60	—	—	—	—
1980	8.70	60	—	—	—	—
1981	9.60	60	—	—	—	—
1982	11.00	75	—	—	—	—
1983	12.20	75	—	—	—	—
1984	14.60	75	—	—	—	—
1985	15.50	75	—	—	—	—
1986	15.50	75	—	—	—	—
1987	17.90	75	—	—	—	—
1988	24.80	75	—	—	—	—
1989[4]	31.90	75	—	—	—	—
1990	28.60	75	—	—	—	—
1991	29.90	100	—	—	—	—
1992	31.80	100	—	—	—	—
1993	36.60	100	—	—	—	—
1994	41.10	100	—	—	—	—
1995	46.10	100	—	—	—	—
1996	42.50	100	—	—	—	—
1997	43.80	100	—	—	—	—
1998	43.80	100	—	—	—	—
1999	45.50	100	—	—	—	—
2000	45.50	100	—	—	—	—
2001	50.00	100	—	—	—	—
2002	54.00	100	—	—	—	—
2003	58.70	100	—	—	—	—
2004	66.60	100	—	—	—	—
2005	78.20	110	—	—	—	—
2006	88.50	124	$32.20	$250	$2,250	$3,600
2007	93.50	131	27.35	265	2,400	3,850
2008	96.40	135	27.93	275	2,510	4,050
2009	96.40	135	30.36	295	2,700	4,350
2010	110.50	155	31.94	310	2,830	4,550
2011	115.40	162	32.34	310	2,840	4,550
2012	99.90	140	31.08	320	2,930	4,700
2013	104.90	147	31.17	325	2,970	4,750
2014	104.90	147	32.42	310	2,850	4,550
2015	104.90	147	33.13	320	2,960	4,700
Intermediate estimates:						
2016	159.30	223	37.66	360[5]	3,310[5]	4,850[5]
2017	120.70	169	42.15	380	3,490	5,050
2018	122.30	171	45.09	400	3,700	5,250
2019	132.20	185	48.15	425	3,930	5,450
2020	140.00	196	51.24	450	4,160	6,650
2021	147.60	207	54.20	475	4,400	7,050
2022	155.80	218	57.38	500	4,650	7,450
2023	164.50	230	60.70	530	4,910	7,850
2024	173.90	243	64.16	560	5,190	8,300

[1]Amounts shown for 1967-1982 are for the 12-month periods ending June 30; amounts shown for 1983 are for the period July 1, 1982 through December 31, 1983; amounts shown for 1984 and later are for calendar years.
[2]Prior to the Medicare Modernization Act, the Part B deductible was fixed by statute and had only occasionally been adjusted. The Medicare Modernization Act raised the deductible to $110 in 2005 and specified that it be indexed by average per beneficiary Part B expenditures thereafter.
[3]In accordance with limitations on the costs of health care imposed under Phase III of the Economic Stabilization program, the standard premium rates for July and August 1973 were set at $5.80 and $6.10, respectively. Effective September 1973, the rate increased to $6.30.
[4]Anomalies in the 1989 values are due to the Medicare Catastrophic Coverage Act of 1988. Most of the provisions of the Act were repealed the following year.
[5]These amounts have already been determined.

The Part B monthly premiums displayed in table V.E2 are the standard premium rates paid by most Part B enrollees. However, there are three provisions that alter the premium rate for certain Part B enrollees. First, there is a premium surcharge for those beneficiaries who enroll after their initial enrollment period. Second, beginning in 2007, there is a higher income-related premium for those individuals whose modified adjusted gross income exceeds a specified threshold. Table V.E3 displays these Part B income-related premium amounts for 2007 through 2024, based on the intermediate set of assumptions.

Table V.E3.—Part B Income-Related Monthly Premium Amounts[1]

Calendar year	Ultimate percentage of program costs represented by premium			
	35%	50%	65%	80%
Historical data:				
2007	$105.80	$124.40	$142.90	$161.40
2008	122.20	160.90	199.70	238.40
2009	134.90	192.70	250.50	308.30
2010	154.70	221.00	287.30	353.60
2011	161.50	230.70	299.90	369.10
2012	139.90	199.80	259.70	319.70
2013	146.90	209.80	272.70	335.70
2014	146.90	209.80	272.70	335.70
2015	146.90	209.80	272.70	335.70
Intermediate estimates:				
2016	223.00	318.60	414.20	509.80
2017	168.90	241.30	313.70	386.10
2018	171.20	244.50	317.90	391.20
2019	185.00	264.30	343.60	422.90
2020	195.90	279.90	363.90	447.80
2021	206.60	295.20	383.80	472.30
2022	218.10	311.50	405.00	498.40
2023	230.20	328.90	427.60	526.20
2024	243.50	347.80	452.10	556.50

[1]Includes the impact of the 3-year transition in 2007 and 2008.

In 2014 the initial threshold is $85,000 for an individual tax return and $170,000 for a joint return. The thresholds are not indexed to inflation in the years 2011 through 2019 but are indexed thereafter. Individuals exceeding the threshold will pay premiums covering 35, 50, 65, or 80 percent of the average program cost for aged beneficiaries, depending on their income level, compared to the standard premium covering 25 percent. MACRA lowered certain

income thresholds used for determining the income-related monthly adjustment amounts to be paid by beneficiaries, resulting in a greater number of beneficiaries paying the higher amounts. In addition, beginning in 2020, the legislation adjusted the methodology used to index the thresholds, and accordingly more beneficiaries will be subject to the income-related premiums.

Lastly, Part B premiums may also vary from the standard rate because a hold-harmless provision can lower the premium rate for individuals who have their premiums deducted from their Social Security benefits. On an individual basis, this provision limits the dollar increase in the Part B premium to the dollar increase in the individual's Social Security benefit. As a result, the person affected pays a lower Part B premium, and the net amount of the individual's Social Security benefit does not decrease despite the greater increase in the premium.

Most services under Part B are subject to an annual deductible and coinsurance. The annual deductible was set by statute through 2005. Thereafter, it increases with the increase in the Part B aged actuarial rate to approximate the growth in per capita Part B expenditures.[95] After meeting the deductible, the beneficiary pays an amount equal to the product of the coinsurance percentage and the remaining allowed charges. The coinsurance percentage is 20 percent for most services. For those services not subject to the deductible or coinsurance (clinical laboratory tests, home health agency services, and most preventive care services), the beneficiary pays nothing.

The Part D average premiums displayed in table V.E2 are the estimated base beneficiary premiums. Starting in 2009, the national average plan bid is based on the enrollment-weighted average. The actual premium that a beneficiary pays varies according to the plan in which the beneficiary enrolls. The average paid premium has always been lower than the base beneficiary premium; the average paid premium was about $31 in 2014 and increased to about $32 in 2015 due to drug spending growth. Since beneficiaries may switch plans each year once the premium rates become known, the Trustees

[95]The current mechanism to index the Part B deductible has technical computational issues mainly due to the timing of the calculation. The Part B deductible for any given year is indexed by the increase in the monthly aged actuarial rate for that same year, which represents estimated monthly per capita expenditures. However, these expenditures are dependent on the Part B deductible, which is not known until the actuarial rate is determined. The result is circularity in the modeling process. A possible alternative approach is to index the Part B deductible using the increase in the actuarial rate from the prior year, which is already known when the determination is made, thereby removing any circularity.

assume that the estimated average premium rate paid by beneficiaries will continue to be slightly less than the base beneficiary premium in future years.

Similar to Part B, there are two provisions that affect the premium rate for certain Part D beneficiaries. First, there is a Part D late enrollment penalty for those beneficiaries enrolling after their initial enrollment period. Second, starting in 2011, individuals whose modified adjusted gross income exceeds the same thresholds applicable to the Part B premium pay an income-related premium in addition to the premium charged by the plan in which the individual enrolled. The amount of the income-related premium adjustment is dependent on the individual's income level, and the extra premium amount is the difference between 35, 50, 65, or 80 percent and 25.5 percent, applied to the National Average Monthly Bid Amount adjusted for reinsurance. MACRA made the same changes to the income ranges and threshold methodology for Part D that were previously described for Part B. Table V.E4 displays the historical and projected Part D income-related premium adjustment amounts for 2012 through 2024, based on the intermediate set of assumptions.

Table V.E4.—Part D Income-Related Monthly Premium Adjustment Amounts

	Percentage of program costs represented by premium			
Calendar year	35%	50%	65%	80%
Historical data:				
2011	$12.00	$31.10	$50.10	$69.10
2012	11.60	29.90	48.10	66.40
2013	11.60	29.90	48.30	66.60
2014	12.10	31.10	50.20	69.30
2015	12.30	31.80	51.30	70.80
Intermediate estimates:				
2016	14.00	36.20	58.30	80.50
2017	15.70	40.50	65.30	90.10
2018	16.80	43.30	69.80	96.40
2019	17.90	46.30	74.60	102.90
2020	19.10	49.20	79.40	109.50
2021	20.20	52.10	84.00	115.80
2022	21.40	55.10	88.90	122.60
2023	22.60	58.30	94.00	129.70
2024	23.90	61.60	99.40	137.10

In addition, there are premium and cost-sharing subsidies for those beneficiaries with incomes less than 150 percent of the Federal poverty level and with assets in 2015 less than $13,640 for an individual and $27,250 for a couple. The asset thresholds are indexed in subsequent years by the Consumer Price Index (CPI-U). Under the current statutory adjustment formula, the asset figures for 2015 increase for both an individual and a couple as a result of increases in the CPI-U.

Under standard Part D coverage, there is an initial deductible. After meeting the deductible, the beneficiary pays 25 percent of the remaining costs up to the initial benefit limit. Beyond this limit, prior to 2011, the beneficiary paid all the drug costs until his or her total out-of-pocket expenditures reached the catastrophic threshold. (This total includes the deductible and coinsurance payments for expenses up to the initial benefit limit.) The ACA will gradually fill in the coverage gap from 2011 until 2020, when beneficiaries will pay 25 percent of the drug costs between the deductible and the catastrophic threshold under the standard coverage. In 2015, after reaching the catastrophic threshold, the beneficiary pays the greater of (i) 5 percent of the drug cost or (ii) $2.65 for generic or preferred multiple-source drugs or $6.60 for preferred single-source drugs. The latter copayment amounts from 2015 are indexed annually by per enrollee Part D average costs. Beneficiaries qualifying for the Part D low-income subsidy pay substantially reduced premium and cost-sharing amounts. Many Part D plans offer alternative coverage that differs from the standard coverage described above. The majority of beneficiaries have not enrolled in the standard benefit design but rather in plans with low or no deductibles, flat copayments for covered drugs, and, in some cases, partial coverage in the coverage gap.

F. MEDICARE AND SOCIAL SECURITY TRUST FUNDS AND THE FEDERAL BUDGET

One can view the financial operations of Medicare and Social Security in the context of the programs' trust funds or in the context of the overall Federal budget. The financial status of the trust funds differs fundamentally from the impact of these programs on the budget, and people often misunderstand the relationship between these two perspectives. Each perspective is appropriate and important for its intended purpose; this appendix attempts to clarify their roles and relationship.

By law, the annual reports of the Medicare and Social Security Boards of Trustees to Congress include a statement of the financial status of the programs' trust funds—that is, whether these funds have sufficient revenues and assets to enable the payment of benefits and administrative expenses. This trust fund perspective is important because the existence of trust fund assets provides the statutory authority to make such payments without the need for an appropriation from Congress. Medicare and Social Security benefits can be paid only if the relevant trust fund has sufficient income or assets.

The trust fund perspective does not encompass the interrelationship between the Medicare and Social Security trust funds and the overall Federal budget. The budget is a comprehensive display of all Federal activities, whether financed through trust funds or from the general fund of the Treasury. This broader focus may appropriately be termed the budget perspective or government-wide perspective and is officially presented in the *Budget of the United States Government* and in the *Financial Report of the United States Government*.

Payroll taxes, income taxes on Social Security benefits, Medicare premiums, and special State payments to Medicare finance the majority of Medicare and Social Security costs. In addition to these earmarked receipts from workers, employers, beneficiaries, and States, Medicare and Social Security rely on Federal general fund revenues for some of their financing (principally for the SMI trust fund), and the trust funds are credited with interest payments on their accumulated assets as well. The financial status of a trust fund appropriately considers all sources of financing provided for that fund, including the availability of trust fund assets that Medicare or Social Security can use to meet program expenditures. From a budget perspective, however, general fund transfers, interest payments to the trust funds, and asset redemptions represent a draw on other

Federal resources for which there is no earmarked source of revenue from the public.

In the past, general fund and interest payments for Medicare and Social Security were relatively small. These amounts have increased substantially over the last two decades, however, and the expected rapid future growth of Medicare and Social Security will make their interaction with the Federal budget increasingly important. As the difference between earmarked and total trust fund revenues grows, the financial operations of Social Security and Medicare can appear markedly different depending on which of the two perspectives one uses.[96]

Illustration with Actual Data for 2014

Table V.F1 illustrates the trust fund and budget perspectives using actual data on Federal financial operations for fiscal year (FY) 2014. The first three columns show revenues and expenditures for HI, SMI, and OASDI, respectively, and the fourth column is the sum of these three columns. The fifth column shows total revenues and expenditures for all other government programs (including the general fund account of the Treasury), and the final column is the sum of the "Combined" and "Other Government" columns. The table shows earmarked revenues from the public separately from revenues from other government accounts (general revenue transfers and interest credits). Note that the transfers and interest credits received by the trust funds appear in total as negative entries under the "Other Government" column and are thus offsetting when summed for the total budget in the final column. These two intragovernmental transactions are key to the differences between the two perspectives.

[96]A more complete treatment of this topic appears in the *2014 Financial Report of the United States Government* at www.fms.treas.gov/fr/ and in a May 2009 Treasury report titled "Social Security and Medicare Trust Funds and the Federal Budget" at http://www.treasury.gov/resource-center/economic-policy/ss-medicare/Documents/budget_trust_fund_perspectives_2009.pdf. Additional information is available in a *Health Care Financing Review* article titled "Medicare Financial Status, Budget Impact, and Sustainability: Which Concept Is Which?" at http://www.cms.gov/Research-Statistics-Data-and-Systems/Research/HealthCareFinancingReview/Downloads/05-06Winpg127.pdf.

Table V.F1.—Annual Revenues and Expenditures for Medicare and Social Security Trust Funds and the Total Federal Budget, Fiscal Year 2014

(In billions)

Revenue and expenditures categories	Trust funds				Other government	Total[1]
	HI	SMI	OASDI	Combined		
Revenues from public:						
Payroll and benefit taxes	$245.6	—	$777.0	$1,022.6	—	$1,022.6
Premiums[2]	5.4	$76.2	—	81.6	—	81.6
Other taxes, fees, and payments[3]	—	14.5	—	14.5	$1,902.8	1,917.3
Total	251.0	90.7	777.0	1,118.7	1,902.8	3,021.5
Total expenditures to public[4]	266.9	333.4	850.3	1,450.6	2,055.5	3,506.1
Net Results for Budget Perspective	**−15.9**	**−242.7**	**−73.3**	**−331.9**	**−152.7**	**−484.6**
Revenues from other government accounts:						
Transfers	2.8	244.4	0.2	247.3	−247.3	—
Interest credits	8.9	2.5	100.3	111.7	−111.7	—
Total	11.8	246.8	100.4	359.0	−359.0	—
Net Results for Trust Fund Perspective	**−4.1**	**4.1**	**27.1**	**27.1**	**n/a**	**n/a**

[1]This column is the sum of the preceding two columns and shows data for the total Federal budget. The figure $484.6 billion was the total Federal budget deficit for fiscal year 2014.
[2]Includes Part D premiums paid directly to plans, which are not displayed on Treasury statements and are estimated.
[3]Includes Part D State transfers.
[4]The OASDI figure includes $4.7 billion transferred to the Railroad Retirement Board.

Notes: 1. For comparison, HI taxable payroll, OASDI taxable payroll, and GDP were $7,717 billion, $6,140 billion, and $17,411 billion, respectively, in 2014.
2. Totals do not necessarily equal the sums of rounded components.
3. n/a indicates not applicable.

The trust fund perspective reflects both categories of revenues for each trust fund. For HI, revenues from the public plus transfers/credits from other government accounts were $4.1 billion less than total expenditures in FY 2014, as shown at the bottom of the first column.[97] For the SMI trust fund, the statutory revenues from beneficiary premiums, State transfers, general revenue transfers, and interest earnings collectively were $4.1 billion more than expenditures in FY 2014. Note that it is appropriate to view the general revenue transfers from other government accounts as financial resources from the trust fund perspective since they are available to help meet trust fund outlays. For OASDI, total trust fund revenues from all sources (including $100.3 billion in interest

[97]The Department of the Treasury invests surplus revenues from the public over expenditures to the public in special Treasury securities, which thereby represent a loan from the trust funds to the general fund of the Federal Government. These loans reduce the amount that the general fund has to borrow from the public to finance a deficit (or likewise increase the amount of debt paid off if there is a surplus). Interest is credited to the trust funds while the securities are being held. Trust fund securities can be redeemed at any time if needed to help meet program expenditures. Thus, the accumulation of fund assets creates budget commitments for future years when interest earnings and asset redemptions are used to meet expenditures. Note that there were no surpluses to invest in FY 2014.

payments and $0.2 billion in general fund reimbursements) exceeded total expenditures by $27.1 billion.

From the government-wide or budget perspective, only earmarked revenues received from the public—principally taxes on payroll and benefits, plus premiums—and expenditures made to the public are important for the final balance.[98] For HI, the difference between such revenues ($251.0 billion) and total expenditures made to the public ($266.9 billion) was $15.9 billion in FY 2014, indicating that HI had a negative effect on the overall budget in FY 2014. For SMI, beneficiary premiums, fees on brand-name prescription drugs to Part B, and State payments to Part D of Medicare were the only sources of revenues from the public in FY 2014 and represented only about 27 percent of total expenditures. The remaining $242.7 billion in FY 2014 outlays represented a substantial net draw on the Federal budget in that year.[99] For OASDI, the difference between revenues from the public ($777.0 billion) and total expenditures ($850.3 billion) was $73.3 billion, indicating that OASDI also had a negative effect on the overall budget last year.

Thus, from the trust fund perspective, OASDI and SMI had annual surpluses in FY 2014, and HI had a deficit. From the budget perspective, HI, SMI, and OASDI each required a net draw on the budget. HI, SMI, and OASDI collectively had a trust fund surplus of $27.1 billion in FY 2014 but a net draw of $331.9 billion on the budget.

It is important to recognize that each viewpoint is appropriate for its intended purpose but that one perspective cannot be used to answer questions related to the other. In the case of SMI, the trust fund will always be in balance and there will always be a net draw on the Federal budget. In the case of HI, trust fund surpluses in a given year may occur with either a positive or negative direct impact on the budget for that year. Conversely, a positive or negative budget impact from HI offers minimal insight into whether its trust fund has sufficient total revenues and assets to permit payment of benefits.

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[98]For this purpose, the public includes State governments since they are outside of the Federal Government.

[99]Three types of trust fund transactions constituted this net budget obligation: $244.4 billion was drawn in the form of general revenue transfers, and another $2.5 billion in interest payments, while $4.1 billion was transferred from the trust fund to the general fund through the purchase of special-issue Treasury securities in an amount equal to the trust fund surplus for the year.

The next section illustrates the magnitude of the long-range difference between projected expenditures and revenues for Medicare and Social Security from both the trust fund and budget perspectives.

Future Obligations of the Trust Funds and the Budget

Table V.F2 collects from the Medicare and OASDI Trustees Reports the present values of projected future revenues and expenditures over the next 75 years. For HI and OASDI, tax revenues from the public are projected to fall short of statutory expenditures by $3.2 trillion and $13.4 trillion, respectively, in present value terms.[100]

Table V.F2.—Present Values of Projected Revenue and Cost Components of 75-Year Open-Group Obligations for HI, SMI, and OASDI
(In trillions, as of January 1, 2015)

Revenue and expenditure categories	HI	SMI	OASDI	Combined
Revenues from public:				
Payroll and benefit taxes	$17.9	—	$55.5	$73.4
Premiums	0.0	$8.4	—	8.4
Other taxes and fees[1]	—	1.0	—	1.0
Total	17.9	9.4	55.5	82.8
Total expenditures to public	21.1	34.2	69.0	124.2
Net Results for Budget Perspective	**−3.2**	**−24.8**	**−13.4**	**−41.4**
Revenues from other government accounts:				
Transfers	0.0	24.6	0.0	24.6
Interest credits	n/a	n/a	n/a	n/a
Total	0.0	24.6	0.0	24.6
Trust fund assets on January 1, 2015	0.2	0.1	2.8	3.1
Net Results for Trust Fund Perspective	**−3.0**	**0.0**	**−10.7**	**−13.7**

[1]Includes Part B revenues from fees on manufacturers and importers of brand-name prescription drugs and Part D State transfers.

Notes:
1. For comparison, the present values of HI taxable payroll, OASDI taxable payroll, and GDP are $470.7 trillion, $420.7 trillion, and $1,048.2 trillion, respectively, over the next 75 years. This present value of GDP is calculated using HI-specific interest discount factors and differs slightly from the corresponding amount shown in the OASDI Trustees Report.
2. Medicare present values are calculated using HI-specific discount factors, while OASDI amounts use OASDI-specific discount factors.
3. Totals do not necessarily equal the sums of rounded components.
4. n/a indicates not applicable.
5. 0.0 indicates an amount of less than $50 billion.

From the budget perspective, these are the additional amounts that would be necessary in order to pay HI and OASDI benefits and other costs at the level scheduled over the next 75 years. From the trust fund perspective, the amounts needed are smaller by the value of the accumulated assets in the respective trust funds—$0.2 trillion for HI and $2.8 trillion for OASDI—that could be drawn down to cover a

[100]Interest income is not a factor in this table, as dollar amounts are in present value terms.

part of the projected shortfall in tax revenues. Two points about this comparison are important to note:

- Other than asset redemptions and interest payments, no provision exists to address the projected HI and OASDI financial imbalances. Once assets are depleted, expenditures cannot be made except to the extent covered by ongoing tax receipts.

- From a trust fund perspective, the long-range HI and OASDI deficits reflect the net imbalance after redemption of trust fund assets. From a government-wide perspective, the deficits represent the cost of redeeming those assets plus the additional legislative authorization that would be necessary to fully satisfy future scheduled benefit payments.[101]

The situation for SMI is somewhat different. SMI expenditures for Part B and Part D are projected to exceed premium and other dedicated revenues by $24.8 trillion. To keep the SMI trust fund solvent for the next 75 years will require general fund transfers of this amount, and these transfers represent a formal budget requirement. From the trust fund perspective, the present value of projected total premiums and general revenues is about equal to the present value of future expenditures.

From the 75-year budget perspective, the present value of the additional resources that would be necessary to meet projected expenditures, for the three programs combined, is $41.4 trillion.[102] To put this very large figure in perspective, it would represent 3.9 percent of the present value of projected GDP over the same period ($1,048 trillion). The components of the $41.4-trillion total are as follows:

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[101]In practice, the long-range HI and OASDI deficits could be addressed by reducing expenditures, increasing payroll or other earmarked tax revenues, implementing a general revenue subsidy (which would require a reduction in other Federal spending, increases in other taxes, or larger deficits), or some combination of such measures. For Medicare, in particular, lawmakers have frequently enacted legislation to slow the growth of expenditures.

[102]As noted previously, the long-range HI and OASDI financial imbalances could instead be partially addressed by expenditure reductions, thereby reducing the need for additional revenues. Similarly, SMI expenditure reductions would reduce the need for general fund transfers.

Unfunded Medicare and OASDI obligations (trust fund perspective)[103]	$13.7 trillion	(1.3% of GDP)
HI, SMI, and OASDI asset redemptions	3.1 trillion	(0.3% of GDP)
SMI general revenue financing	24.6 trillion	(2.4% of GDP)

These resource needs would be in addition to the payroll taxes, benefit taxes, and premium payments. As noted, the asset redemptions and SMI general revenue transfers represent formal budget commitments, but no provision exists for covering the HI and OASDI trust fund deficits once assets are depleted.

As discussed throughout this report, the Medicare projections shown here could be substantially understated as a result of other potentially unsustainable elements of current law. Although this issue does not affect the nature of the budget and trust fund perspectives described in this appendix, it is important to note that actual long-range present values for HI expenditures and SMI expenditures and revenues could exceed the amounts shown in table V.F2 by a substantial margin.

[103]Additional revenues and/or expenditure reductions totaling $13.7 trillion, together with $3.1 trillion in asset redemptions, would cover the projected financial imbalance but would leave the HI and OASDI trust funds depleted at the end of the 75-year period. The long-range actuarial deficits for HI and OASDI include a cost factor to allow for a normal level of fund assets. See section III.B3 in this report, and section IV.B4 in the OASDI Trustees Report, for the numerical relationship between the actuarial deficit and the unfunded obligations of each program.

G. INFINITE HORIZON PROJECTIONS

Consistent with the practice of previous reports, this report focuses on the 75-year period from 2015 to 2089 for the evaluation of the long-range financial status of the Medicare program. The estimates are for the open-group population—all persons, some of whom are not yet born, who will participate during the period as either taxpayers or beneficiaries, or both—and consist of payments from, and on behalf of, employees now in the workforce, as well as those who will enter the workforce over the next 75 years.

Experts have noted that limiting the projections to 75 years understates the magnitude of the long-range unfunded obligations because summary measures (such as the actuarial balance and open-group unfunded obligations) reflect the full amount of taxes paid by the next two or three generations of workers, but not the full amount of their benefits. One approach to addressing the limitations of 75-year summary measures is to extend the projection horizon indefinitely, so that the overall results reflect the projected costs and revenues after the first 75 years.[104] Such extended projections can also help indicate whether the financial imbalance would be improving or continuing to worsen beyond the normal 75-year period.

Table V.G1 presents estimates of HI unfunded obligations that extend to the infinite horizon. The extension assumes that the HI program and the demographic and economic trends used for the 75-year projection continue indefinitely except that average HI expenditures per beneficiary increase at the same rate as GDP per capita less the productivity adjustments after 2089. If the slower HI price updates under the ACA were able to continue indefinitely, then the HI financial imbalance would actually improve beyond the 75-year period. Specifically, under these assumptions, extending the calculations beyond 2089 *subtracts* $2.9 trillion in unfunded obligations from the amount estimated through 2089. Over the infinite horizon, the HI program thus has a projected deficit of $0.04 trillion.

[104]The calculation of present values, in effect, applies successively less weight to future amounts over time, through the process of interest discounting. For example, the weights associated with the 25th, 75th, and 200th years of the projection would be about 29 percent, 2 percent, and 0.0015 percent, respectively, of the weight for the first year. In this way, it is possible to calculate a finite summary measure for an infinite projection period.

Table V.G1.—Unfunded HI Obligations from Program Inception through the Infinite Horizon

[Present values as of January 1, 2015; dollar amounts in trillions]

	Present value	As a percentage of: HI taxable payroll	GDP
Unfunded obligations through the infinite horizon[1]	$0.04	0.0%	0.0%
Unfunded obligations from program inception through 2089[1]	2.99	0.6	0.3

[1]Present value of future expenditures less income, reduced by the amount of trust fund assets at the beginning of the period.

Notes: 1. The present values of future HI taxable payroll for 2015-2089 and for 2015 through the infinite horizon are $470.7 trillion and $738.9 trillion, respectively.
2. The present values of GDP for 2015-2089 and for 2015 through the infinite horizon are $1,048.2 trillion and $1,731.7 trillion, respectively. (These present values differ slightly from the corresponding amounts shown in the OASDI Trustees Report due to the use of HI-specific interest discount factors.)

It is possible to separate the projected HI unfunded obligation over the infinite horizon into the portions associated with current participants versus future participants. The first line of table V.G2 shows the present value of future expenditures less future taxes for current participants, including both beneficiaries and covered workers. Subtracting the current value of the HI trust fund (the accumulated value of past HI taxes less outlays) results in a closed-group unfunded obligation of $8.6 trillion. In contrast, the projected difference between taxes and expenditures for future participants is a surplus of $8.5 trillion.

The year-by-year HI deficits described in section III.B have shown that HI taxes will not be adequate to finance the program on a pay-as-you-go basis (whereby payroll taxes from today's workers provide benefits to today's beneficiaries).[105] The unfunded obligations shown in table V.G2 for current participants further indicate that their HI taxes are not adequate to cover their own future costs when they become eligible for HI benefits—and that this situation has also occurred for workers in the past. For future workers, however, the compounding effects of the lower HI price updates would, if they were able to continue indefinitely, lower costs to the point that scheduled HI taxes would be more than sufficient. In practice, lawmakers could address the projected aggregate HI deficits by raising additional revenue or reducing benefits (or some combination of these actions). The impact of such changes on the unfunded obligation amounts for current versus future participants would depend on the specific policies selected.

[105]As noted previously, the HI trust fund also receives small amounts of income in the form of income taxes on OASDI benefits, interest, and general revenue reimbursements for certain uninsured beneficiaries.

Table V.G2.—Unfunded HI Obligations for Current and Future Program Participants through the Infinite Horizon

[Present values as of January 1, 2015; dollar amounts in trillions]

	Present value	As a percentage of: HI taxable payroll	GDP
Future expenditures less income for current participants	$8.8	1.2%	0.5%
Less current trust fund (income minus expenditures to date for past and current participants)	0.2	0.0	0.0
Equals unfunded obligations for past and current participants[1]	8.6	1.2	0.5
Plus expenditures less income for future participants for the infinite horizon	−8.5	−1.2	−0.5
Equals unfunded obligations for all participants for the infinite future	0.0	0.0	0.0

[1]This concept is also referred to as the closed-group unfunded obligation.

Notes: 1. The estimated present value of future HI taxable payroll for 2015 through the infinite horizon is $738.9 trillion.
2. The estimated present value of GDP for 2015 through the infinite horizon is $1,731.7 trillion. See note 2 in table V.G1.
3. Totals do not necessarily equal the sums of rounded components.

Tables V.G3 and V.G4 show the infinite horizon estimates for Part B. The extension assumes that the demographic and economic trends used for the 75-year projection continue indefinitely and that the productivity adjustments to payment updates for some providers remain unchanged. To simplify and stabilize the modeling for the infinite horizon, the Trustees project that average Part B expenditures per beneficiary will increase at about the same rate as GDP per capita minus 0.3 percentage point in every year, reflecting the mix of costs by provider category after 2089 and the payment rate updates applicable to each category.

Table V.G3 shows an estimated present value of Part B expenditures through the infinite horizon of $38.9 trillion, of which $24.0 trillion would occur during the first 75 years. Because such amounts, calculated over extremely long horizons, can be difficult to interpret, they are also shown as percentages of the present value of future GDP. So expressed, the corresponding figures are 2.2 percent and 2.3 percent, respectively. The table also indicates that beneficiary premiums will finance approximately 27 percent of expenditures for each time period and that fees related to brand-name prescription drugs will finance about 0.2 percent. General revenues pay for the remaining 73 percent.

Table V.G3.—Unfunded Part B Obligations from Program Inception through the Infinite Horizon

[Present values as of January 1, 2015; dollar amounts in trillions]

	Present value	As a percentage of GDP
Unfunded obligations through the infinite horizon[1]	$0.0	0.0%
Expenditures	38.9	2.2
Income	38.9	2.2
Beneficiary premiums	10.6	0.6
General revenue contributions	28.3	1.6
Fees related to brand-name prescription drugs	0.1	0.0
Unfunded obligations from program inception through 2089[1]	0.0	0.0
Expenditures	24.0	2.3
Income	24.0	2.3
Beneficiary premiums	6.5	0.6
General revenue contributions	17.5	1.7
Fees related to brand-name prescription drugs	0.1	0.0

[1]Present value of future expenditures less income, reduced by the amount of trust fund assets at the beginning of the period.

Notes: 1. The present values of GDP for 2015-2089 and for 2015 through the infinite horizon are $1,048.2 trillion and $1,731.7 trillion, respectively. See note 2 of table V.G1.
2. Totals do not necessarily equal the sums of rounded components.

Table V.G4 shows corresponding present values separately for current versus future beneficiaries. As indicated, about 53 percent of the projected total, infinite-horizon cost is attributable to current beneficiaries, with the remaining 47 percent attributable to beneficiaries becoming eligible for Part B benefits after January 1, 2015.

Table V.G4.—Unfunded Part B Obligations for Current and Future Program Participants through the Infinite Horizon

[Present values as of January 1, 2015; dollar amounts in trillions]

	Present value	As a percentage of GDP
Future expenditures less income for current participants	$0.1	0.0%
Expenditures	20.5	1.2
Income	20.3	1.2
Beneficiary premiums	5.5	0.3
General revenue contributions	14.8	0.9
Fees related to brand-name prescription drugs	0.0	0.0
Less current trust fund (Income minus expenditures to date for past and current participants)	0.1	0.0
Equals unfunded obligations for past and current participants[1]	0.1	0.0
Expenditures	20.4	1.2
Income	20.3	1.2
Beneficiary premiums	5.4	0.3
General revenue contributions	14.7	0.8
Fees related to brand-name prescription drugs	0.0	0.0
Plus expenditures less income for future participants for the infinite horizon	0.1	0.0
Expenditures	18.5	1.1
Income	18.6	1.1
Beneficiary premiums	5.1	0.3
General revenue contributions	13.5	0.8
Fees related to brand-name prescription drugs	0.0	0.0
Equals unfunded obligations for all participants for the infinite future	−0.1	0.0
Expenditures	38.9	2.2
Income	38.9	2.2
Beneficiary premiums	10.5	0.6
General revenue contributions	28.3	1.6
Fees related to brand-name prescription drugs	0.0	0.0

[1]This concept is also referred to as the closed-group unfunded obligation.

Notes: 1. The estimated present value of GDP for 2015 through the infinite horizon is $1,731.7 trillion. See note 2 of table V.G1.
2 Totals do not necessarily equal the sums of rounded components.

Tables V.G5 and V.G6 present revenue and expenditure estimates for Part D that extend to the infinite horizon. The extension assumes that the demographic and economic trends used for the 75-year projection continue indefinitely except that average Part D expenditures per beneficiary would increase at the same rate as GDP per capita after 2089.

Table V.G5 shows an estimated present value of Part D expenditures through the infinite horizon of $20.9 trillion, of which $10.2 trillion would occur during the first 75 years. To put the estimates in perspective, they are also shown as percentages of the present value of future GDP. Expressed in this way, the corresponding figures are 1.2 percent and 1.0 percent of GDP, respectively. The table also indicates that, for each time period, beneficiary premiums would finance approximately 19 percent of expenditures and State transfers would finance 10 percent, with general revenues paying for the remaining 72 percent.

Table V.G5.—Unfunded Part D Obligations from Program Inception through the Infinite Horizon

[Present values as of January 1, 2015; dollar amounts in trillions]

	Present value	As a percentage of GDP
Unfunded obligations through the infinite horizon[1]	$0.0	0.0%
Expenditures	20.9	1.2
Income	20.9	1.2
Beneficiary premiums	3.9	0.2
State transfers	2.0	0.1
General revenue contributions	15.0	0.9
Unfunded obligations from program inception through 2089[1]	0.0	0.0
Expenditures	10.2	1.0
Income	10.2	1.0
Beneficiary premiums	1.9	0.2
State transfers	1.0	0.1
General revenue contributions	7.3	0.7

[1]Present value of future expenditures less income, reduced by the amount of trust fund assets at the beginning of the period.

Notes: 1. The present values of GDP for 2015-2089 and for 2015 through the infinite horizon are $1,048.2 trillion and $1,731.7 trillion, respectively. See note 2 of table V.G1.
2 Totals do not necessarily equal the sums of rounded components.

Table V.G6 shows corresponding projections separately for current versus future beneficiaries. As indicated, about 35 percent of the projected total, infinite-horizon cost is attributable to current beneficiaries, with the remaining 65 percent attributable to beneficiaries becoming eligible for Part D benefits after January 1, 2015.

Table V.G6.—Unfunded Part D Obligations for Current and Future Program Participants through the Infinite Horizon

[Present values as of January 1, 2015; dollar amounts in trillions]

	Present value	As a percentage of GDP
Future expenditures less income for current participants	$0.0	0.0%
Expenditures	7.3	0.4
Income	7.3	0.4
Beneficiary premiums	1.4	0.1
State transfers	0.7	0.0
General revenue contributions	5.2	0.3
Less current trust fund (Income minus expenditures to date for past and current participants)	0.0	0.0
Equals unfunded obligations for past and current participants[1]	0.0	0.0
Expenditures	7.3	0.4
Income	7.3	0.4
Beneficiary premiums	1.4	0.1
State transfers	0.7	0.0
General revenue contributions	5.2	0.3
Plus expenditures less income for future participants for the infinite horizon	0.0	0.0
Expenditures	13.6	0.8
Income	13.6	0.8
Beneficiary premiums	2.5	0.1
State transfers	1.3	0.1
General revenue contributions	9.7	0.6
Equals unfunded obligations for all participants for the infinite future	0.0	0.0
Expenditures	20.9	1.2
Income	20.9	1.2
Beneficiary premiums	3.9	0.2
State transfers	2.0	0.1
General revenue contributions	15.0	0.9

[1]This concept is also referred to as the closed-group unfunded obligation.

Notes: 1. The estimated present value of GDP for 2015 through the infinite horizon is $1,731.7 trillion. See note 2 of table V.G1.
2. Totals do not necessarily equal the sums of rounded components.

H. FISCAL YEAR HISTORICAL DATA AND PROJECTIONS THROUGH 2024

Tables V.H1, V.H2, and V.H3 present detailed operations of the HI trust fund, along with Part B and Part D of the SMI trust fund, for fiscal year 2014. These tables are similar to the calendar-year operation tables displayed in sections III.B, III.C, and III.D.

Table V.H1.—Statement of Operations of the HI Trust Fund during Fiscal Year 2014
[In thousands]

Total assets of the trust fund, beginning of period	$206,386,139
Revenue:	
Payroll taxes	$227,578,733
Income from taxation of OASDI benefits	18,066,000
Interest on investments	8,928,254
Premiums collected from voluntary participants	3,259,005
Premiums collected from Medicare Advantage participants	277,844
ACA Medicare shared savings program receipts	1,553
Transfer from Railroad Retirement account	580,700
Reimbursement, transitional uninsured coverage	432,000
Reimbursement, program management general fund	2,069,000
Interfund interest receipts[1]	509
Interest on reimbursements, Railroad Retirement	30,897
Other	1,880
Reimbursement, union activity	1,099
Fraud and abuse control receipts:	
Criminal fines	344,379
Civil monetary penalties	23,559
Civil penalties and damages, Department of Justice	783,152
Asset forfeitures, Department of Justice	24,676
3% administrative expense reimbursement, Department of Justice	24,294
General fund appropriation fraud and abuse, FBI	255,468
General fund transfer, Discretionary	69,749
Total revenue	$262,752,753
Expenditures:	
Net benefit payments	$262,520,380
Administrative expenses:	
Treasury administrative expenses	116,723
Salaries and expenses, SSA[2]	778,717
Salaries and expenses, CMS[3]	1,802,084
Salaries and expenses, Office of the Secretary, HHS	42,946
Medicare Payment Advisory Commission	6,724
Administration on aging funding	5,566
CMS program management–Affordable Care Act	24,639
Transfer to Patient-Centered Outcomes Research Trust Fund[4]	49,097
Fraud and abuse control expenses:	
HHS Medicare integrity program	802,190
HHS Office of Inspector General	321,654
Department of Justice	34,616
FBI	60,196
HCFAC Discretionary, CMS	105,073
HCFAC Other HHS Discretionary, CMS	41,386
HCFAC Department of Justice Discretionary, CMS	18,716
HCFAC Office of Inspector General Discretionary, CMS	121,996
Total administrative expenses	4,332,323
Total expenditures	$266,852,703
Net addition to the trust fund	−4,099,950
Total assets of the trust fund, end of period	$202,286,189

[1]Reflects interest adjustments on the reallocation of administrative expenses among the Medicare trust funds, the OASDI trust funds, and the general fund of the Treasury. Estimated payments are made from

the trust funds and then are reconciled, with interest, the next year when the actual costs are known. A positive figure represents a transfer to the HI trust fund from the other trust funds. A negative figure represents a transfer from the HI trust fund to the other funds.
[2]For facilities, goods, and services provided by SSA.
[3]Includes administrative expenses of the intermediaries.
[4]Represents amount transferred from the HI trust fund to the Patient-Centered Outcomes Research trust fund, as authorized by the Patient Protection and Affordable Care Act of 2010.

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

Table V.H2.—Statement of Operations of the Part B Account in the SMI Trust Fund during Fiscal Year 2014
[In thousands]

Total assets of the Part B account in the trust fund, beginning of period[1]		$66,246,053
Revenue:		
Premiums from enrollees:		
Enrollees aged 65 and over	$54,415,445	
Disabled enrollees under age 65	10,457,517	
Total premiums		64,872,962
Premiums collected from Medicare Advantage participants		300,575
Government contributions:		
Enrollees aged 65 and over	150,676,628	
Disabled enrollees under age 65	33,831,855	
Health information technology receipts	6,922,886	
Total government contributions		191,431,369
Other		6,501
Interest on investments		2,450,187
Interfund interest receipts[2]		205
Annual fees–branded Rx manufacturers and importers[1]		5,809,131
ACA Medicare shared savings program receipts		1,475
Total revenue		$264,872,406
Expenditures:		
Net Part B benefit payments		$256,986,296
Administrative expenses:		
Transfer to Medicaid[3]	687,552	
Treasury administrative expenses	472	
Salaries and expenses, CMS[4]	2,109,152	
Salaries and expenses, Office of the Secretary, HHS	42,946	
Salaries and expenses, SSA	912,491	
Medicare Payment Advisory Commission	4,482	
Administration on aging funding	5,194	
Railroad Retirement administrative expenses	29,343	
CMS program management–Affordable Care Act	47,828	
Transfer to Patient-Centered Outcomes Research trust fund[5]	57,870	
Total administrative expenses		3,897,330
Total expenditures		$260,883,626
Net addition to the trust fund		3,988,780
Total assets of the Part B account in the trust fund, end of period		$70,234,833

[1]Does not reflect the adjustment made by Treasury in November of 2014 to account for $2.6 billion in Part B drug fee income in September of 2013, rather than in October of 2013 when it was actually received.
[2]Reflects interest adjustments on the reallocation of administrative expenses among the Medicare trust funds, the OASDI trust funds, and the general fund of the Treasury. Estimated payments are made from the trust funds and then are reconciled, with interest, the next year when the actual costs are known. A positive figure represents a transfer to the Part B account of the SMI trust fund from the other trust funds. A negative figure represents a transfer from the Part B account in the SMI trust fund to the other funds.
[3]Represents amount transferred from the Part B account in the SMI trust fund to Medicaid to pay the Part B premium for certain qualified individuals, as legislated by the Balanced Budget Act of 1997.
[4]Includes administrative expenses of the carriers and intermediaries.
[5]Represents amount transferred from the Part B account of the SMI trust fund to the Patient-Centered Outcomes Research trust fund, as authorized by the Patient Protection and Affordable Care Act of 2010.

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

Table V.H3—Statement of Operations of the Part D Account in the SMI Trust Fund during Fiscal Year 2014

[In thousands]

Total assets of the Part D account in the trust fund, beginning of period		$972,118
Revenue:		
Premiums from enrollees		
Premiums deducted from Social Security benefits	$3,563,591	
Premiums paid directly to plans[1]	7,452,849	
Total premiums		11,016,440
Government contributions:		
Prescription drug benefits	52,519,661	
Prescription drug administrative expenses	400,019	
Total government contributions		52,919,680
Payments from States		8,726,542
Interest on investments		10,352
Total revenue		$72,673,015
Expenditures:		
Part D benefit payments[1]		$72,157,379
Part D administrative expenses		400,019
Total expenditures		$72,557,398
Net addition to the trust fund		115,617
Total assets of the Part D account in the trust fund, end of period		$1,087,735

[1]Premiums paid directly to plans are not displayed on Treasury statements and are estimated. These premiums have been added to the benefit payments reported on the Treasury statement to obtain an estimate of total Part D benefits. Direct data on such benefit amounts are not yet available.

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

Tables V.H4, V.H5, V.H6, V.H7, and V.H8 present estimates of the fiscal-year operations of total Medicare, the HI trust fund, the SMI trust fund, the Part B account in the SMI trust fund, and the Part D account in the SMI trust fund, respectively. These tables correspond to the calendar-year trust fund operation tables shown in section V.B and in section III.

Table V.H4.—Total Medicare Income, Expenditures, and Trust Fund Assets during Fiscal Years 1970-2024

[In billions]

Fiscal year	Total income	Total expenditures	Net change in assets	Assets at end of year
Historical data:				
1970	$7.5	$7.1	$0.3	$2.7
1975	16.9	14.8	2.1	11.3
1980	35.7	35.0	0.7	19.0
1985	75.5	71.4	4.1	31.9
1990	125.7	109.7	16.0	110.2
1995	173.0	180.1	−7.1	143.4
2000	248.9	219.3	29.6	214.0
2005	349.4	336.9	12.5	294.6
2006	422.3	380.5	41.8	336.4
2007	457.1	434.8	22.2	358.7
2008	474.6	455.1	19.5	378.1
2009	491.5	498.3	−6.8	371.4
2010	500.7	521.2	−20.5	350.9
2011	528.0	560.3	−32.3	318.6
2012	532.6	550.1	−17.5	301.2
2013	556.7[1]	581.7	−25.0	276.2
2014	597.7[1]	600.3	−2.6	273.6
Intermediate estimates:				
2015	625.6	635.3	−9.7	263.9
2016	702.9	703.0	−0.1	263.8
2017	748.6	724.7	24.0	287.7
2018	784.1	743.5	40.7	328.4
2019	851.5	823.5	28.0	356.4
2020	917.9	894.2	23.7	380.2
2021	988.5	965.5	23.1	403.2
2022	1,070.8	1,077.7	−6.9	396.3
2023	1,136.1	1,124.5	11.6	407.9
2024	1,205.2	1,166.7	38.5	446.4

[1]Reflects the adjustment made by Treasury in November of 2014 to account for $2.6 billion in Part B drug fee income in September of 2013, rather than in October of 2013 when it was actually received.

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

Table V.H5.—Operations of the HI Trust Fund during Fiscal Years 1970-2024

[In billions]

	Income								Expenditures			Trust fund	
Fiscal year[1]	Payroll taxes	Income from taxation of benefits	Railroad Retirement account transfers	Reimburse-ment for uninsured persons	Premiums from voluntary enrollees	Payments for military wage credits	Interest and other[2,3]	Total	Benefit payments[3,4]	Adminis-trative expenses[5]	Total	Net change	Balance at end of year
Historical data:													
1970	$4.8	—	$0.1	$0.6	—	$0.0	$0.1	$5.6	$4.8	$0.1	$5.0	$0.7	$2.7
1975	11.3	—	0.1	0.5	$0.0	0.0	0.6	12.6	10.4	0.3	10.6	2.0	9.9
1980	23.2	—	0.2	0.7	0.0	0.1	1.1	25.4	23.8	0.5	24.3	1.1	14.5
1985	46.5	—	0.4	0.8	0.0	0.1	3.2	50.9	47.8	0.8	48.7	4.1[6]	21.3
1990	70.7	—	0.4	0.4	0.1	0.1	7.9	79.6	65.9	0.8	66.7	12.9	95.6
1995	98.1	$3.9	0.4	0.5	1.0	0.1	11.0	114.8	113.6	1.3	114.9	−0.0	129.5
2000	137.7	8.8	0.5	0.5	1.4	0.0	10.8	159.7	127.9[7]	2.4	130.3	29.4	168.1
2005	169.0	8.8	0.4	0.3	2.3	0.0	16.2	196.9	181.3	2.9	184.1	12.8	277.7
2006	180.4	10.3	0.5	0.4	2.6	0.0	16.1	210.3	181.8	3.1	184.9	25.4	303.1
2007	188.0	10.6	0.5	0.5	2.8	0.0	16.9	219.2	200.2	2.6	202.8	16.4	319.5
2008	197.2	11.7	0.5	0.5	2.9	0.0	16.9	229.7	227.0[8]	3.2	230.2	−0.5	319.0
2009	194.1	12.4	0.5	0.6	2.8	1.0[9]	17.5	228.9	234.7	3.3	238.0	−9.1	309.9
2010	183.6	13.8	0.5	−0.1	3.3	0.0	16.9	218.0	245.6	3.3	249.0	−31.0	278.9
2011	192.1	15.1	0.5	0.3	3.3	0.0	15.3	226.5	255.7	3.9	259.6	−33.1	245.8
2012	204.8	18.6	0.5	0.3	3.4	0.0	14.2	241.7	254.5	3.7	258.2	−16.4	229.4
2013	212.9	14.3	0.6	0.0	3.4	0.0	12.4	243.6	262.4	4.1	266.5	−23.0	206.4
2014	227.6	18.1	0.6	0.4	3.3	0.0	12.8	262.8	262.5	4.3	266.9	−4.1	202.3
Intermediate estimates:													
2015	237.2	20.8	0.6	0.2	3.4	0.0	11.6	273.8	268.9	4.7	273.6	0.2	202.5
2016	251.5	23.0	0.6	0.2	3.5	0.0	11.9	290.7	287.9	5.0	292.9	−2.2	200.3
2017	270.5	26.0	0.7	0.2	3.7	0.0	12.2	313.1	294.6	5.4	299.9	13.1	213.5
2018	287.9	28.5	0.7	0.2	3.9	0.0	13.0	334.0	302.0	5.8	307.8	26.2	239.7
2019	305.1	31.3	0.7	0.1	4.0	0.0	14.5	355.9	329.5	6.2	335.7	20.2	259.8
2020	320.8	34.1	0.7	0.1	4.3	0.0	15.9	376.0	353.3	6.6	359.9	16.1	275.9
2021	340.4	37.7	0.8	0.1	4.6	0.0	17.3	400.9	378.9	7.1	386.0	14.8	290.7
2022	359.1	41.5	0.8	0.1	4.9	0.0	18.3	424.7	417.3	7.6	424.9	−0.2	290.5
2023	375.7	44.8	0.8	0.1	5.1	0.0	19.1	445.6	435.0	8.1	443.1	2.5	293.0
2024	393.6	48.4	0.8	0.1	5.5	0.0	19.8	468.1	451.3	8.7	460.0	8.1	301.0

[1]Fiscal years 1970 and 1975 consist of the 12 months ending on June 30 of each year; fiscal years 1980 and later consist of the 12 months ending on September 30 of each year.
[2]Other income includes recoveries of amounts reimbursed from the trust fund that are not obligations of the trust fund, receipts from the fraud and abuse control program, and a small amount of miscellaneous income. In 2008, includes an adjustment of −$0.9 billion for interest inadvertently earned as a result of Part A hospice costs that were misallocated to the Part B trust fund account.
[3]See footnote 2 of table III.B4.
[4]Includes costs of Peer Review Organizations from 1983 through 2001 (beginning with the implementation of the prospective payment system on October 1, 1983) and costs of Quality Improvement Organizations beginning in 2002.
[5]Includes costs of experiments and demonstration projects. Beginning in 1997, includes fraud and abuse control expenses, as provided for by the Health Insurance Portability and Accountability Act of 1996 (Public Law 104-191).
[6]Includes repayment of loan principal, from the OASI trust fund, of $1.8 billion.
[7]For 1998 to 2003, includes monies transferred to the SMI trust fund for home health agency costs, as provided for by the Balanced Budget Act of 1997 (Public Law 105-33).
[8]Includes the $8.5 billion transferred to the general fund of the Treasury for Part A hospice costs that were previously misallocated to the Part B trust fund account.
[9]Includes the lump-sum general revenue adjustment of $1.0 billion, as provided for by section 151 of the Social Security Amendments of 1983 (Public Law 98-21).

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

Table V.H6.—Operations of the SMI Trust Fund (Cash Basis) during Fiscal Years 1970-2024

[In billions]

	Income					Expenditures			Trust fund	
Fiscal year[1]	Premium income	General revenue[2]	Transfers from States	Interest and other[3,4]	Total	Benefit payments[4,5]	Adminis-trative expense	Total	Net change	Balance at end of year[6]
Historical data:										
1970	$0.9	$0.9	—	$0.0	$1.9	$2.0	$0.2	$2.2	−$0.3	$0.1
1975	1.9	2.3	—	0.1	4.3	3.8	0.4	4.2	0.2	1.4
1980	2.9	6.9	—	0.4	10.3	10.1	0.6	10.7	−0.5	4.5
1985	5.5	17.9	—	1.2	24.6	21.8	0.9	22.7	1.8	10.6
1990	11.5[7]	33.2	—	1.4[7]	46.1[7]	41.5	1.5[7]	43.0[7]	3.1[7]	14.5[7]
1995	19.2	37.0	—	1.9	58.2	63.5	1.7	65.2	−7.0	13.9
2000	20.5	65.6	—	3.2	89.2	87.2[8]	1.8	89.0	0.2	45.9
2005	35.9	115.2	—	1.4	152.5	149.8	2.9	152.7	−0.2	16.9
2006	44.2	162.6	$3.6	1.5	212.0	192.1	3.5	195.6	16.4	33.3
2007	49.7	179.2	7.0	2.1	237.9	228.6	3.4	232.0	5.9	39.1
2008	54.2	180.4	7.0	3.2	244.9	221.4[9]	3.4	224.9	20.0	59.1
2009	57.7	194.3	7.5	3.1	262.6	256.9	3.3	260.3	2.3	61.5
2010	61.4	213.7	4.5	3.2	282.7	268.7	3.5	272.2	10.5	72.0
2011	64.5	225.2	6.5	5.3	301.5	296.8	3.8	300.7	0.9	72.8
2012	66.1	210.5	8.3	6.0	290.9	287.8	4.1	291.9	−1.0	71.8
2013	71.3	227.2	8.7	6.0[10]	313.2	311.4	3.8	315.1	−2.0	69.8
2014	75.9	244.4	8.7	6.0[10]	334.9	329.1	4.3	333.4	1.5	71.3
Intermediate estimates:										
2015	80.4	257.3	8.6	5.6	351.8	357.9	3.8	361.7	−9.9	61.4
2016	92.2	304.8	9.5	5.7	412.1	406.1	4.0	410.1	2.0	63.5
2017	100.5	317.3	10.5	7.3	435.6	420.5	4.2	424.7	10.8	74.3
2018	107.4	323.4	11.4	8.0	450.1	431.1	4.5	435.7	14.5	88.8
2019	118.9	357.0	12.4	7.2	495.6	482.9	4.9	487.8	7.8	96.6
2020	130.8	389.7	13.6	7.8	541.9	529.1	5.2	534.2	7.7	104.3
2021	142.5	421.9	14.8	8.5	587.7	573.9	5.5	579.4	8.3	112.5
2022	155.2	465.7	16.0	9.2	646.1	646.9	5.9	652.8	−6.7	105.8
2023	168.9	494.3	17.4	9.9	690.5	675.2	6.2	681.4	9.1	114.9
2024	183.8	523.7	18.9	10.7	737.1	700.1	6.6	706.7	30.4	145.3

[1]Fiscal years 1970 and 1975 consist of the 12 months ending on June 30 of each year; fiscal years 1980 and later consist of the 12 months ending on September 30 of each year.

[2]Includes Part B general fund matching payments, Part D subsidy costs, and certain interest-adjustment items.

[3]Other income includes recoveries of amounts reimbursed from the trust fund that are not obligations of the trust fund and other miscellaneous income. In 2008, includes an adjustment of $0.8 billion for interest inadvertently earned as a result of Part A hospice costs that were misallocated to the Part B trust fund account.

[4]See footnote 2 of table III.B4.

[5]See footnote 3 of table III.B4.

[6]The financial status of SMI depends on both the assets and the liabilities of the trust fund (see table III.C8).

[7]Includes the impact of the Medicare Catastrophic Coverage Act of 1988 (Public Law 100-360).

[8]Benefit payments less monies transferred from the HI trust fund for home health agency costs, as provided for by the Balanced Budget Act of 1997.

[9]Benefits shown for 2008 are lower by the $8.5 billion transferred from the general fund of the Treasury to reimburse Part B for Part A hospice costs that were previously misallocated to the Part B trust fund account.

[10]See footnote 1 of table V.H4.

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

Table V.H7.—Operations of the Part B Account in the SMI Trust Fund (Cash Basis) during Fiscal Years 1970-2024

[In billions]

	Income				Expenditures			Account	
Fiscal year[1]	Premium income	General revenue[2]	Interest and other[3,4]	Total	Benefit payments[4,5]	Administrative expense	Total	Net change	Balance at end of year[6]
Historical data:									
1970	$0.9	$0.9	$0.0	$1.9	$2.0	$0.2	$2.2	−$0.3	$0.1
1975	1.9	2.3	0.1	4.3	3.8	0.4	4.2	0.2	1.4
1980	2.9	6.9	0.4	10.3	10.1	0.6	10.7	−0.5	4.5
1985	5.5	17.9	1.2	24.6	21.8	0.9	22.7	1.8	10.6
1990	11.5[7]	33.2	1.4[7]	46.1[7]	41.5	1.5[7]	43.0[7]	3.1[7]	14.5[7]
1995	19.2	37.0	1.9	58.2	63.5	1.7	65.2	−7.0	13.9
2000	20.5	65.6	3.2	89.2	87.2[8]	1.8	89.0	0.2	45.9
2005	35.9	114.0	1.4	151.3	148.6	2.9	151.5	−0.2	16.9
2006	41.6	134.3	1.5	177.4	158.3	3.3	161.6	15.7	32.6
2007	45.7	137.8	2.0	185.6	177.2	2.4	179.7	6.0	38.6
2008	49.4	144.9	3.2	197.5	174.7[9]	3.0	177.7	19.8	58.3
2009	51.9	150.7	3.1	205.7	200.3	3.1	203.4	2.3	60.6
2010	54.8	161.1	3.2	219.0	205.1	3.3	208.4	10.7	71.3
2011	57.0	168.8	5.3	231.2	226.2	3.4	229.6	1.5	72.8
2012	57.9	165.3	6.0	229.1	227.2	3.8	230.9	−1.8	70.9
2013	61.8	176.9	6.0[10]	244.7	243.4	3.4	246.8	−2.1	68.8
2014	64.9	191.4	6.0[10]	262.3	257.0	3.9	260.9	1.4	70.2
Intermediate estimates:									
2015	68.0	194.3	5.6	267.9	274.1	3.4	277.4	−9.5	60.7
2016	77.2	222.5	5.7	305.4	299.1	3.5	302.6	2.7	63.5
2017	82.5	234.6	7.3	324.3	309.7	3.8	313.5	10.8	74.3
2018	86.8	242.9	8.0	337.7	320.1	4.1	324.2	13.5	87.8
2019	95.9	264.4	7.2	367.5	355.4	4.4	359.8	7.7	95.5
2020	105.4	288.5	7.8	401.7	389.4	4.6	394.1	7.6	103.1
2021	114.7	312.4	8.5	435.5	422.4	5.0	427.3	8.2	111.3
2022	124.8	338.0	9.1	471.9	472.0	5.3	477.3	−5.4	105.8
2023	135.7	365.8	9.9	511.3	496.6	5.6	502.3	9.1	114.9
2024	147.5	396.2	10.7	554.4	519.6	6.0	525.6	28.8	143.7

[1]Fiscal years 1970 and 1975 consist of the 12 months ending on June 30 of each year; fiscal years 1980 and later consist of the 12 months ending on September 30 of each year.
[2]General fund matching payments, plus certain interest-adjustment items.
[3]Other income includes recoveries of amounts reimbursed from the trust fund that are not obligations of the trust fund and other miscellaneous income. In 2008, includes an adjustment of $0.8 billion for interest earned as a result of Part A hospice costs that were misallocated to the Part B trust fund account.
[4]See footnote 2 of table III.B4.
[5]See footnote 3 of table III.B4.
[6]The financial status of Part B depends on both the assets and the liabilities of the trust fund (see table III.C8).
[7]Includes the impact of the Medicare Catastrophic Coverage Act of 1988 (Public Law 100-360).
[8]Benefit payments less monies transferred from the HI trust fund for home health agency costs, as provided for by the Balanced Budget Act of 1997.
[9]Benefits shown for 2008 are lower by the $8.5 billion transferred from the general fund of the Treasury to reimburse Part B for Part A hospice costs that were previously misallocated to the Part B trust fund account.
[10]See footnote 1 of table V.H4.

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

Table V.H8.—Operations of the Part D Account in the SMI Trust Fund (Cash Basis) during Fiscal Years 2004-2024

[In billions]

	Income					Expenditures			Account	
Fiscal year	Premium income	General revenue[1]	Transfers from States[2]	Interest and other	Total	Benefit payments[3]	Administrative expense	Total	Net change	Balance at end of year
Historical data:										
2004	—	$0.2	—	—	$0.2	$0.2	—	$0.2	—	—
2005	—	1.2	—	—	1.2	1.2	—	1.2	—	—
2006	$2.6	28.3	$3.6	$0.0	34.6	33.7	$0.2	33.9	$0.7	$0.7
2007	3.9	41.4	7.0	0.0	52.3	51.4	1.0	52.4	−0.1	0.6
2008	4.8	35.5	7.0	0.0	47.4	46.8	0.4	47.2	0.2	0.8
2009	5.8	43.5	7.5	0.0	56.9	56.6	0.2	56.8	0.0	0.9
2010	6.6	52.6	4.5	0.0	63.7	63.6	0.3	63.8	−0.2	0.7
2011	7.5	56.3	6.5	0.0	70.4	70.6	0.4	71.0	−0.7	0.0
2012	8.2	45.3	8.3	0.0	61.8	60.6	0.4	61.0	0.8	0.8
2013	9.5	50.3	8.7	0.0	68.5	68.0	0.4	68.3	0.1	1.0
2014	11.0	52.9	8.7	0.0	72.7	72.2	0.4	72.6	0.1	1.1
Intermediate estimates:										
2015	12.4	62.9	8.6	0.0	83.9	83.8	0.4	84.3	−0.4	0.7
2016	14.9	82.4	9.5	0.0	106.8	107.0	0.4	107.5	−0.7	0.0
2017	18.0	82.7	10.5	0.0	111.3	110.8	0.5	111.3	0.0	0.0
2018	20.6	80.4	11.4	0.0	112.5	111.0	0.5	111.5	1.0	1.0
2019	23.0	92.6	12.4	0.0	128.1	127.5	0.5	128.0	0.1	1.1
2020	25.4	101.2	13.6	0.0	140.3	139.6	0.5	140.2	0.1	1.2
2021	27.8	109.5	14.8	0.0	152.2	151.5	0.6	152.1	0.1	1.3
2022	30.5	127.7	16.0	0.0	174.2	174.9	0.6	175.5	−1.3	0.0
2023	33.3	128.5	17.4	0.0	179.2	178.6	0.6	179.2	0.0	0.0
2024	36.3	127.5	18.9	0.0	182.7	180.5	0.6	181.1	1.6	1.6

[1]Includes, net of transfers from States, all government transfers required to fund benefit payments, administrative expenses, and State expenses for making low-income eligibility determinations.
[2]See footnote 3 of table III.D3.
[3]Includes payments to Part D plans, payments to retiree drug subsidy plans, payments to States for making low-income eligibility determinations, Part D drug premiums collected from beneficiaries, and transfers to Medicare Advantage plans and private drug plans. Includes amounts for the Transitional Assistance program of $0.2, $1.1, and $0.2 billion in 2004-2006, respectively.

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

Table V.H9 shows the total assets of the HI trust fund and their distribution by interest rate and maturity date at the end of fiscal years 2013 and 2014. The assets at the end of fiscal year 2014 totaled $202.3 billion: $202.2 billion in the form of U.S. Government obligations and an undisbursed balance of $0.1 billion.

Table V.H9.—Assets of the HI Trust Fund, by Type, at the End of Fiscal Years 2013 and 2014[1]

	September 30, 2013	September 30, 2014
Investments in public-debt obligations sold only to the trust funds (special issues):		
Certificates of indebtedness:		
2.125-percent, 2015	——	9,542,925,000.00
2.375-percent, 2014	8,841,177,000.00	——
Bonds:		
3.250-percent, 2023-2024	18,380,800,000.00	18,380,800,000.00
3.500-percent, 2016	1,491,940,000.00	665,742,000.00
3.500-percent, 2017-2018	18,509,747,000.00	18,509,747,000.00
4.000-percent, 2016-2023	30,297,364,000.00	30,297,364,000.00
4.125-percent, 2016-2020	22,749,120,000.00	22,749,120,000.00
4.625-percent, 2016-2019	20,750,369,000.00	20,750,369,000.00
5.000-percent, 2016-2022	26,565,823,000.00	26,565,823,000.00
5.125-percent, 2016-2021	24,225,592,000.00	24,225,592,000.00
5.250-percent, 2016-2017	17,199,676,000.00	17,199,676,000.00
5.625-percent, 2016	13,320,128,000.00	13,320,128,000.00
6.500-percent, 2015	3,678,142,000.00	——
Total investments	$206,009,878,000.00	$202,207,286,000.00
Undisbursed balance	376,261,114.98	78,903,399.37
Total assets	$206,386,139,114.98	$202,286,189,399.37

[1]Certificates of indebtedness and bonds are carried at par value, which is the same as book value.

The effective annual rate of interest earned by the assets of the HI trust fund during the 12 months ending on December 31, 2014 was 4.4 percent. Interest on special issues is paid semiannually on June 30 and December 31. The interest rate on public-debt obligations issued for purchase by the trust fund in June 2014 was 2.25 percent, payable semiannually.

Table V.H10 shows a comparison of the total assets of the SMI trust fund, Parts B and D combined, and their distribution at the end of fiscal years 2013 and 2014. At the end of 2014, assets totaled $71.3 billion: $68.4 billion in the form of U.S. Government obligations and an undisbursed balance of $2.9 billion.

Table V.H10.—Assets of the SMI Trust Fund, by Type, at the End of Fiscal Years 2013 and 2014[1]

	September 30, 2013	September 30, 2014
Investments in public-debt obligations sold only to the trust funds (special issues):		
Certificates of indebtedness:		
2.125-percent, 2015	——	6,106,381,000.00
2.375-percent, 2014	9,146,845,000.00	——
2.375-percent, 2015	——	65,395,000.00
Bonds:		
2.250-percent, 2016-2029	——	12,679,657,000.00
2.500-percent, 2016-2017	1,009,451,000.00	——
2.500-percent, 2018-2026	9,816,400,000.00	9,816,400,000.00
2.875-percent, 2016-2017	976,455,000.00	——
2.875-percent, 2018-2025	8,158,848,000.00	8,158,848,000.00
3.250-percent, 2016-2017	674,844,000.00	——
3.250-percent, 2018-2024	6,277,564,000.00	6,277,564,000.00
4.000-percent, 2016-2017	1,764,948,000.00	——
4.000-percent, 2018-2023	10,874,634,000.00	10,874,634,000.00
5.000-percent, 2017	2,277,075,000.00	1,037,108,000.00
5.000-percent, 2018-2022	12,619,018,000.00	12,619,018,000.00
5.125-percent, 2016	913,275,000.00	——
5.125-percent, 2017	756,060,000.00	756,060,000.00
5.250-percent, 2016	297,753,000.00	——
5.625-percent, 2016	1,822,107,000.00	——
Total investments	$67,385,277,000.00	$68,391,065,000.00
Undisbursed balance[2]	−167,106,750.92	2,931,502,299.16
Total assets	$67,218,170,249.08	$71,322,567,299.16

[1]Certificates of indebtedness and bonds are carried at par value, which is the same as book value.
[2]Negative figures represent an extension of credit against securities to be redeemed within the following few days.

The effective annual rate of interest earned by the assets of the SMI trust fund for the 12 months ending on December 31, 2014 was 3.0 percent. Interest on special issues is paid semiannually on June 30 and December 31. The interest rate on special issues purchased by the account in June 2014 was 2.25 percent, payable semiannually.

I. GLOSSARY

Accountable care organizations (ACOs). Groups of clinicians, hospitals, and other health care providers that choose to come together to deliver coordinated, high-quality care to the Medicare patients they serve.

Actuarial balance. The difference between the summarized income rate and the summarized cost rate over a given valuation period.

Actuarial deficit. A negative actuarial balance.

Actuarial rates. One-half of the Part B expected monthly benefit and administrative costs for each aged enrollee adjusted for interest earned on the Part B account assets attributable to aged enrollees and a contingency margin (for the aged actuarial rate), and one-half of the expected monthly benefit and administrative costs for each disabled enrollee adjusted for interest earned on the Part B account assets attributable to disabled enrollees and a contingency margin (for the disabled actuarial rate), for the duration the rate is in effect.

Actuarial status. A measure of the adequacy of the financing as determined by the difference between assets and liabilities at the end of the periods for which financing was established.

Administrative expenses. Expenses incurred by the Department of Health and Human Services and the Department of the Treasury in administering HI and SMI and the provisions of the Internal Revenue Code relating to the collection of contributions. Such administrative expenses, which are paid from the HI and SMI trust funds, include expenditures for contractors to determine costs of, and make payments to, providers, as well as salaries and expenses of the Centers for Medicare & Medicaid Services (CMS).

Aged enrollee. An individual, aged 65 or over, who is enrolled in HI or SMI.

Allowed charge. Individual charge determined by a carrier for a covered Part B medical service or supply.

Alternative payment model (APM). A program or model (except for a health care innovation award model) implemented by the Center for Medicare and Medicaid Innovation at CMS; an ACO model participating in the Medicare shared savings program; or a Medicare demonstration required by law.

Annual out-of-pocket threshold. The amount of out-of-pocket expenses that must be paid for prescription drugs before significantly reduced Part D beneficiary cost sharing is effective. Amounts paid by a third-party insurer are not included in testing this threshold, but amounts paid by State or Federal assistance programs are included.

Assets. Treasury notes and bonds guaranteed by the Federal Government, and cash held by the trust funds for investment purposes.

Assumptions. Values relating to future trends in certain key factors that affect the balance in the trust funds. Demographic assumptions include fertility, mortality, net immigration, marriage, divorce, retirement patterns, disability incidence and termination rates, and changes in the labor force. Economic assumptions include unemployment, average earnings, inflation, interest rates, and productivity. Three sets of economic assumptions are presented in the Trustees Report:

(1) The low-cost alternative, with relatively rapid economic growth, low inflation, and favorable (from the standpoint of program financing) demographic conditions;
(2) The intermediate assumptions, which represent the Trustees' best estimates of likely future economic and demographic conditions; and
(3) The high-cost alternative, with slow economic growth, more rapid inflation, and financially disadvantageous demographic conditions.

See also *Hospital assumptions*.

Average market yield. A computation that is made on all marketable interest-bearing obligations of the United States. It is computed on the basis of market quotations as of the end of the calendar month immediately preceding the date of such issue.

Baby boom. The period from the end of World War II through the mid-1960s marked by unusually high birth rates.

Base estimate. The updated estimate of the most recent historical year.

Beneficiary. A person enrolled in HI or SMI. See also *Aged enrollee* and *Disabled enrollee*.

Benefit payments. The amounts disbursed for covered services after the deductible and coinsurance amounts have been deducted.

Benefit period. An alternate name for spell of illness.

Board of Trustees. A Board established by the Social Security Act to oversee the financial operations of the Federal Hospital Insurance Trust Fund and the Federal Supplementary Medical Insurance Trust Fund. The Board comprises six members, four of whom serve automatically by virtue of their positions in the Federal Government: the Secretary of the Treasury, who is the Managing Trustee; the Secretary of Labor; the Secretary of Health and Human Services; and the Commissioner of Social Security. Two other members are public representatives whom the President appoints and the Senate confirms. Charles P. Blahous III and Robert D. Reischauer began serving on September 17, 2010. The Administrator of CMS serves as Secretary of the Board of Trustees.

Bond. A certificate of ownership of a specified portion of a debt due by the Federal Government to holders, bearing a fixed rate of interest.

Callable. Subject to redemption upon notice, as is a bond.

Carrier. A private or public organization under contract to CMS to administer the Part B benefits under Medicare. Also referred to as contractors, these organizations determine coverage and benefit amounts payable and make payments to physicians, suppliers, and beneficiaries.

Case mix index. A relative weight that captures the average complexity of certain Medicare services.

Cash basis. The costs of the service when payment was made rather than when the service was performed.

Certificate of indebtedness. A short-term certificate of ownership (12 months or less) of a specified portion of a debt due by the Federal Government to individual holders, bearing a fixed rate of interest.

Closed-group population. Includes all persons currently participating in the program as either taxpayers or beneficiaries, or both. See also *Open-group population*.

Coinsurance. Portion of the costs for covered services paid by the beneficiary after meeting the annual deductible. See also *Hospital coinsurance* and *SNF coinsurance*.

Consumer Price Index (CPI). A measure of the average change in prices over time in a fixed group of goods and services. In this report, references to the CPI relate to the CPI for Urban Wage Earners and Clerical Workers (CPI-W), except for those cases in which the CPI for All Urban Consumers—all items (CPI-U) is indicated.

Contingency. Funds included in the SMI Part B trust fund account to serve as a cushion in case actual expenditures are higher than those projected at the time financing was established. Since the financing is set prospectively, actual experience may be different from the estimates used in setting the financing.

Contingency margin. An amount included in the actuarial rates to provide for changes in the contingency level in the SMI Part B trust fund account. Positive margins increase the contingency level, and negative margins decrease it.

Contribution base. See *Maximum tax base*.

Contributions. See *Payroll taxes*.

Cost rate. The ratio of HI cost (or outgo or expenditures) on an incurred basis during a given year to the taxable payroll for the year. In this context, the outgo is defined to exclude benefit payments and administrative costs for those uninsured persons for whom payments are reimbursed from the general fund of the Treasury, and for voluntary enrollees, who pay a premium to be enrolled.

Covered earnings. Earnings in employment covered by HI.

Covered employment. All employment and self-employment creditable for Social Security purposes. Almost every kind of employment and self-employment is covered under HI. In a few employment situations—for example, religious orders under a vow of poverty, foreign affiliates of American employers, or State and local governments—coverage must be elected by the employer. However, effective July 1991, coverage is mandatory for State and local employees who are not participating in a public employee retirement system. All new State and local employees have been covered since April 1986. In a few situations—for instance, ministers or self-employed members of certain religious groups—workers can opt out of coverage. Covered employment for HI includes all Federal employees (whereas covered employment for OASDI includes some, but not all, Federal employees).

Covered Part D drugs. Prescription drugs covered under the Medicaid program plus insulin-related supplies and smoking cessation agents. Drugs covered in Parts A and B of Medicare will continue to be covered there, rather than in Part D.

Covered services. Services for which HI or SMI pays, as defined and limited by statute. Covered HI services are provided by hospitals (inpatient care), skilled nursing facilities, home health agencies, and hospices. Covered SMI Part B services include most physician services, care in outpatient departments of hospitals, diagnostic tests, durable medical equipment, ambulance services, and other health services that are not covered by HI. See *Covered Part D drugs* for SMI Part D.

Covered worker. A person who has earnings creditable for Social Security purposes on the basis of services for wages in covered employment and/or on the basis of income from covered self-employment. The number of HI covered workers is slightly larger than the number of OASDI covered workers because of different coverage status for Federal employment. See *Covered employment*.

Creditable prescription drug coverage. Prescription drug coverage that meets or exceeds the actuarial value of Part D coverage provided through a group health plan or otherwise.

Dedicated financing sources. The sum of HI payroll taxes, HI share of income taxes on Social Security benefits, Part D State transfers, and beneficiary premiums. This amount is used in the test of excess general revenue Medicare funding.

Deductible. The annual amount payable by the beneficiary for covered services before Medicare makes reimbursement. See also *Inpatient hospital deductible*.

Deemed wage credit. See *Non-contributory or deemed wage credits*.

Demographic assumptions. See *Assumptions*.

Diagnosis-related groups (DRGs). A classification system that groups patients according to diagnosis, type of treatment, age, and other relevant criteria. Under the inpatient hospital prospective payment system, hospitals are paid a set fee for treating patients in a single DRG category, regardless of the actual cost of care for the individual.

Direct subsidy. The amount paid to the prescription drug plans representing the difference between the plan's risk-adjusted bid and the beneficiary premium for basic coverage.

Disability. For Social Security purposes, the inability to engage in substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or to last for a continuous period of not less than 12 months. Special rules apply for workers aged 55 or older whose disability is based on blindness. The law generally requires that a person be disabled continuously for 5 months before he or she can qualify for a disabled-worker cash benefit. An additional 24 months is necessary to qualify for benefits under Medicare.

Disability Insurance (DI). See *Old-Age, Survivors, and Disability Insurance (OASDI).*

Disabled enrollee. An individual under age 65 who has been entitled to disability benefits under Title II of the Social Security Act or the Railroad Retirement system for at least 2 years and who is enrolled in HI or SMI.

DRG Coding. The DRG categories used by hospitals on discharge billing. See also *Diagnosis-related groups (DRGs).*

Dual beneficiary. An individual who is eligible for both Medicare and Medicaid.

Durable medical equipment (DME). Items such as iron lungs, oxygen tents, hospital beds, wheelchairs, and seat lift mechanisms that are used in the patient's home and are either purchased or rented.

Earnings. Unless otherwise qualified, all wages from employment and net earnings from self-employment, whether or not taxable or covered.

Economic assumptions. See *Assumptions.*

Economic stabilization program. A legislative program during the early 1970s that limited price increases.

Economy-wide private nonfarm business multifactor productivity. A measure of real output per combined unit of labor and capital, reflecting the contributions of all factors of production for the private nonfarm business sector of the economy.

End-stage renal disease (ESRD). Permanent kidney failure.

Extended care services. In the context of this report, an alternate name for skilled nursing facility services.

Fallback prescription drug plan. Prescription drug coverage provided by plans bearing no risk. One fallback plan will be approved in regions that do not have a choice of at least two at-risk plans.

Federal Insurance Contributions Act (FICA). Provision authorizing taxes on the wages of employed persons to provide for OASDI and HI. The tax is paid in equal amounts by covered workers and their employers.

Financial interchange. Provisions of the Railroad Retirement Act providing for transfers between the trust funds and the Social Security Equivalent Benefit Account of the Railroad Retirement program in order to place each trust fund in the same position as if railroad employment had always been covered under Social Security.

Fiscal year. The accounting year of the U.S. Government. Since 1976, each fiscal year has begun October 1 of the prior calendar year and ended the following September 30. For example, fiscal year 2015 began October 1, 2014 and will end September 30, 2015.

Fixed capital assets. The net worth of facilities and other resources.

Frequency distribution. An exhaustive list of possible outcomes for a variable, and the associated probability of each outcome. The sum of the probabilities of all possible outcomes from a frequency distribution is 100 percent.

General fund of the Treasury. Funds held by the U.S. Treasury, other than revenue collected for a specific trust fund (such as HI or SMI) and maintained in a separate account for that purpose. The majority of this fund is derived from individual and business income taxes.

General revenue. Income to the HI and SMI trust funds from the general fund of the Treasury. Only a very small percentage of total HI trust fund income each year is attributable to general revenue.

General revenue funding. For the purpose of making a determination as to whether there is projected to be excess general revenue Medicare funding, as required by section 802 of the Medicare

Modernization Act, general revenue funding is defined as the difference between outlays and dedicated funding sources.

Gross Domestic Product (GDP). The total dollar value of all goods and services produced in a year in the United States, regardless of who supplies the labor or property.

High-cost alternative. See *Assumptions*.

Hold-harmless provision. A provision limiting the dollar increase in the Part B premium to the dollar increase in an individual's Social Security benefit. As a result, the person affected pays a lower Part B premium, and the net amount of the individual's Social Security benefit does not decrease despite the greater increase in the premium.

Home health agency (HHA). A public agency or private organization that is primarily engaged in providing the following services in the home: skilled nursing services, other therapeutic services (such as physical, occupational, or speech therapy), and home health aide services.

Hospice. A provider of care for the terminally ill; delivered services generally include home health care, nursing care, physician services, medical supplies, and short-term inpatient hospital care.

Hospital assumptions. These include differentials between hospital labor and non-labor indices compared with general economy labor and non-labor indices; rates of admission incidence; the trend toward treating less complicated cases in outpatient settings; and continued improvement in DRG coding.

Hospital coinsurance. For the 61st through 90th day of hospitalization in a benefit period, a daily amount for which the beneficiary is responsible, equal to one-fourth of the inpatient hospital deductible; for lifetime reserve days, a daily amount for which the beneficiary is responsible, equal to one-half of the inpatient hospital deductible (see *Lifetime reserve days*).

Hospital input price index. An alternate name for hospital market basket.

Hospital Insurance (HI). The Medicare trust fund that covers specified inpatient hospital services, posthospital skilled nursing care, home health services, and hospice care for aged and disabled

individuals who meet the eligibility requirements. Also known as Medicare Part A.

Hospital market basket. The cost of the mix of goods and services (including personnel costs but excluding nonoperating costs) comprising routine, ancillary, and special care unit inpatient hospital services.

Income rate. The ratio of income from tax revenues on an incurred basis (payroll tax contributions and income from the taxation of OASDI benefits) to the HI taxable payroll for the year.

Incurred basis. The costs based on when the service was performed rather than when the payment was made.

Infinite horizon. The period extending into the indefinite future.

Independent laboratory. A free-standing clinical laboratory meeting conditions for participation in the Medicare program and billing through a carrier.

Initial coverage limit. The amount up to which the coinsurance applies under the standard prescription drug benefit.

Inpatient hospital deductible. An amount of money that is deducted from the amount payable by Medicare Part A for inpatient hospital services furnished to a beneficiary during a spell of illness.

Inpatient hospital services. These services include bed and board, nursing services, diagnostic or therapeutic services, and medical or surgical services.

Interest. A payment for the use of money during a specified period.

Intermediary. A private or public organization that is under contract to CMS to determine costs of, and make payments to, providers for HI and certain SMI Part B services.

Intermediate assumptions. See *Assumptions*.

Late enrollment penalty. Additional beneficiary premium amounts for those who either do not enroll in Part D at the first opportunity or fail to maintain other creditable coverage for more than 63 days.

Lifetime reserve days. Under HI, each beneficiary has 60 lifetime reserve days that he or she may opt to use when regular inpatient

hospital benefits are exhausted. The beneficiary pays one-half of the inpatient hospital deductible for each lifetime reserve day used.

Long range. The next 75 years.

Low-cost alternative. See *Assumptions*.

Low-income beneficiaries. Individuals meeting income and assets tests who are eligible for prescription drug coverage subsidies to help finance premiums and out-of-pocket payments.

Managed care. See *Private Health Plans*.

Market basket. See *Hospital market basket*.

Maximum tax base. Annual dollar amount above which earnings in employment covered under HI are not taxable. In 1994, the maximum tax base was eliminated under HI.

Maximum taxable amount of annual earnings. See *Maximum tax base*.

Medicare. A nationwide, federally administered health insurance program authorized in 1965 under Title XVIII of the Social Security Act to cover the cost of hospitalization, medical care, and some related services for most people age 65 and over. In 1972, lawmakers extended coverage to people receiving Social Security Disability Insurance payments for 2 years and people with end-stage renal disease. (For beneficiaries whose primary or secondary diagnosis is Amyotrophic Lateral Sclerosis, the 2-year waiting period is waived.) In 2010, people exposed to environmental health hazards within areas under a corresponding emergency declaration became Medicare-eligible. In 2006, prescription drug coverage was added as well. Medicare consists of two separate but coordinated trust funds: Hospital Insurance (HI, or Part A) and Supplementary Medical Insurance (SMI). The SMI trust fund comprises two separate accounts: the Part B account and the Part D account. Almost all persons who are aged 65 and over or disabled and who are entitled to HI are eligible to enroll in Part B and Part D on a voluntary basis by paying monthly premiums.

Medicare Advantage (formerly called Medicare+Choice). An expanded set of options, established by the Medicare Modernization Act, for the delivery of health care under Medicare. Most Medicare beneficiaries can choose to receive benefits through the original fee-for-service program or through one of the following Medicare

Advantage plans: (i) coordinated care plans (such as health maintenance organizations, provider-sponsored organizations, and preferred provider organizations); (ii) medical savings account (MSA)/high-deductible plans; (iii) private fee-for-service plans; or (iv) special needs plans.

Medicare Advantage Prescription Drug Plan (MA-PDP). Prescription drug coverage provided by Medicare Advantage plans.

Medicare Advantage ratebook. A set of statutory capitation payment rates, by county, originally used directly to establish payments to private health insurance plans contracting with Medicare. Under current law, the ratebook amounts are used as benchmarks, against which plan costs are compared in the calculation of plan payments.

Medicare Economic Index (MEI). An index often used in the calculation of the increases in the prevailing charge levels that help to determine allowed charges for physician services. In 1992 and later, this index is considered in connection with the update factor for the physician fee schedule.

Medicare funding warning. A warning to lawmakers indicating that a trust fund's financing is inadequate or that general revenue funding is becoming unduly large. Such a finding requires the President to submit to Congress, within 15 days after the date of the Budget submission for the succeeding year, proposed legislation to respond to the warning. The law also requires Congress to consider the legislation proposed in response to Medicare funding warnings on an expedited basis.

Medicare Payment Advisory Commission (MedPAC). A commission established by Congress in the Balanced Budget Act of 1997 to replace the Prospective Payment Assessment Commission and the Physician Payment Review Commission. MedPAC is directed to provide the Congress with advice and recommendations on policies affecting the Medicare program.

Medicare Prescription Drug Account. The separate account within the SMI trust fund to manage revenues and expenditures of the Part D drug benefit.

Medicare severity diagnosis-related groups (MS-DRGs). A refinement of the diagnosis-related group classification system that groups patients according to diagnosis, type of treatment, age, and

other relevant criteria. Under the inpatient hospital prospective payment system, hospitals are paid a set fee for treating patients in a single MS-DRG category, regardless of the actual cost of care for the individual.

Merit-based incentive payment system (MIPS). A system for adjusting payments under the Medicare physician fee schedule to non-APM providers based on metrics assessing provider quality, resource use, meaningful use of electronic health records, and clinical practice improvement activities.

Military service wage credits. Credits recognizing that military personnel receive other cash payments and wages in kind (such as food and shelter) in addition to their basic pay. Noncontributory wage credits of $160 were provided for each month of active military service from September 16, 1940 through December 31, 1956. For years after 1956, the basic pay of military personnel is covered under the Social Security program on a contributory basis. In addition to contributory credits for basic pay, noncontributory wage credits of $300 were granted for each calendar quarter in which a person received pay for military service from January 1957 through December 1977. Deemed wage credits of $100 were granted for each $300 of military wages, up to a maximum of $1,200 per calendar year, from January 1978 through December 2001. See also *Quinquennial military service determinations and adjustments*.

National average monthly bid. The weighted average of all Part D drug bids including all of the bids from PDPs and the drug portion of bids from MA-PDPs.

Noncontributory or deemed wage credits. Wages and wages in kind that were not subject to the HI tax but are deemed as having been. Deemed wage credits exist for the purposes of (i) determining HI eligibility for individuals who might not be eligible for HI coverage without payment of a premium were it not for the deemed wage credits and (ii) calculating reimbursement due the HI trust fund from the general fund of the Treasury. The first purpose applies in the case of providing coverage to persons during the transitional periods when HI began and when it was expanded to cover Federal employees; both purposes apply in the cases of military service wage credits and deemed wage credits granted for the internment of persons of Japanese ancestry during World War II.

Old-Age, Survivors, and Disability Insurance (OASDI). The Social Security programs that pay for (i) monthly cash benefits to

retired-worker (old-age) beneficiaries, their spouses and children, and survivors of deceased insured workers (OASI); and (ii) monthly cash benefits to disabled-worker beneficiaries and their spouses and children, and for providing rehabilitation services to the disabled (DI).

Open-group population. Includes all persons who will ever participate in the program as either taxpayers or beneficiaries, or both. See also *Closed-group population*.

Outpatient hospital. Part of the hospital providing services covered by SMI Part B, including services in an emergency room or outpatient clinic, ambulatory surgical procedures, medical supplies such as splints, laboratory tests billed by the hospital, etc.

Part A. The Medicare Hospital Insurance trust fund.

Part A premium. A monthly premium paid by or on behalf of individuals who wish for and are entitled to voluntary enrollment in Medicare HI. These individuals are those who are aged 65 and older, are uninsured for Social Security or Railroad Retirement, and do not otherwise meet the requirements for entitlement to Part A. Disabled individuals who have exhausted other entitlement are also qualified. These individuals are those not now entitled but who have been entitled under section 226(b) of the Act, who continue to have the disabling impairment upon which their entitlement was based, and whose entitlement ended solely because the individuals had earnings that exceeded the substantial gainful activity amount (as defined in section 223(d)(4) of the Act).

Part B. The account within the Medicare Supplementary Medical Insurance trust fund that pays for a portion of the costs of physician services, outpatient hospital services, and other related medical and health services for voluntarily enrolled aged and disabled individuals.

Part B premium. The monthly amount paid by those individuals who have voluntarily enrolled in Part B. Most enrollees pay the standard premium amount, which currently represents approximately 25 percent of the average program costs for an aged beneficiary. Beneficiaries with high income are also required to pay an income-related monthly adjustment amount starting in 2007, and those who enroll late are required to pay a penalty. In addition, beneficiaries who are affected by the hold-harmless provision pay a lower premium. See section V.E for more details about the Part B premium.

Part C. See *Private health plans*.

Part D. The account within the Medicare Supplementary Medical Insurance trust fund that pays private plans to provide prescription drug coverage.

Pay-as-you-go financing. A financing scheme in which taxes are scheduled to produce just as much income as required to pay current benefits, with trust fund assets built up only to the extent needed to prevent depletion of the fund by random fluctuations.

Payroll taxes. Taxes levied on the gross wages of employees and net earnings of self-employed workers.

PDP regions. Regional areas that are fully serviced by prescription drug plans.

Peer Review Organization (PRO). A group of practicing physicians and other health care professionals paid by the Federal Government to review the care given to Medicare patients. Starting in 2002, these organizations are called Quality Improvement Organizations.

Percentile. A number that corresponds to one of the equal divisions of the range of a variable in a given sample and that characterizes a value of the variable as not exceeded by a specified percentage of all the values in the sample. For example, a score higher than 97 percent of those attained is said to be in the 97th percentile.

Prescription Drug Plans (PDPs). Stand-alone prescription drug plans offered to beneficiaries in traditional fee-for-service Medicare and to beneficiaries in Medicare Advantage plans that do not offer a prescription drug benefit.

Present value. The present value of a future stream of payments is the lump-sum amount that, if invested today, together with interest earnings would be just enough to meet each of the payments as it fell due. At the time of the last payment, the invested fund would be exactly zero.

Private health plans. Plans offered by private companies that contract with Medicare to provide coverage for Part A and Part B services. Medicare Advantage plans, cost plans, and Program of All-Inclusive Care for the Elderly (PACE) plans are all private health plans.

Projected baseline. A scenario that assumes an override of the provisions of the sustainable growth rate (SGR) payment system and an increase in the physician fee schedule equal to the average SGR override over the 10-year period ending with March 31, 2015. The projections shown throughout the 2014 Medicare Trustees Report were based on this scenario.

Projection error. Degree of variation between estimated and actual amounts.

Prospective payment system (PPS). A method of reimbursement in which Medicare payment is made based on a predetermined, fixed amount. The payment amount for a particular service is derived based on the classification system of that service (for example, DRGs for inpatient hospital services).

Provider. Any organization, institution, or individual who provides health care services to Medicare beneficiaries. Hospitals (inpatient services), skilled nursing facilities, home health agencies, and hospices are the providers of services covered under Medicare Part A. Physicians, ambulatory surgical centers, and outpatient clinics are some of the providers of services covered under Medicare Part B.

Quality Improvement Organization (QIO). See *Peer Review Organization.*

Quinquennial military service determination and adjustments. Prior to the Social Security Amendments of 1983, quinquennial determinations (that is, estimates made once every 5 years) were made of the costs arising from the granting of deemed wage credits for military service prior to 1957; annual reimbursements were made from the general fund of the Treasury to the HI trust fund for these costs. The Social Security Amendments of 1983 provided for (i) a lump-sum transfer in 1983 for (a) the costs arising from the pre-1957 wage credits and (b) amounts equivalent to the HI taxes that would have been paid on the deemed wage credits for military service for 1966 through 1983, inclusive, if such credits had been counted as covered earnings; (ii) quinquennial adjustments to the pre-1957 portion of the 1983 lump-sum transfer; (iii) general fund transfers equivalent to HI taxes on military deemed wage credits for 1984 and later, to be credited to the fund on July 1 of each year; and (iv) adjustments as deemed necessary to any previously transferred amounts representing HI taxes on military deemed wage credits.

Railroad Retirement. A Federal insurance program similar to Social Security designed for workers in the railroad industry. The provisions of the Railroad Retirement Act provide for a system of coordination and financial interchange between the Railroad Retirement program and the Social Security program.

Ratebook. See *Medicare Advantage ratebook*.

Real-wage differential. The difference between the percentage increases, before rounding, in (i) the average annual wage in covered employment and (ii) the average annual CPI.

Reasonable-cost basis. The calculation to determine the reasonable cost incurred by individual providers when furnishing covered services to beneficiaries. The reasonable cost is based on the actual cost of providing such services, including direct and indirect costs of providers, and excluding any costs that are unnecessary in the efficient delivery of services covered by a health insurance program.

Reinsurance subsidy. Payments to the prescription drug plans in the amount of 80 percent of drug expenses that exceed the annual out-of-pocket threshold.

Residual factors. Factors other than price, including volume of services, intensity of services, and age/sex changes.

Risk corridor. Triggers that are set to protect Part D prescription drug plans from unexpected losses and that allow the government to share in unexpected gains.

Self-employment. Operation of a trade or business by an individual or by a partnership in which an individual is a member.

Self-Employment Contributions Act (SECA). Provision authorizing taxes on the net income of most self-employed persons to provide for OASDI and HI.

Sequester. The reduction of funds to be used for benefits or administrative costs from a Federal account, based on the legislated requirements.

Short range. The next 10 years.

Skilled nursing facility (SNF). An institution that is primarily engaged in providing skilled nursing care and related services for

residents who require medical or nursing care or that is engaged in the rehabilitation of injured, disabled, or sick persons.

SNF coinsurance. For the 21st through 100th day of extended care services in a benefit period, a daily amount for which the beneficiary is responsible, equal to one-eighth of the inpatient hospital deductible.

Social Security Act. Public Law 74-271, enacted on August 14, 1935, with subsequent amendments. The Social Security Act consists of 20 titles, four of which have been repealed. The HI and SMI trust funds are authorized by Title XVIII of the Social Security Act.

Special public-debt obligation. Securities of the U.S. Government issued exclusively to the OASI, DI, HI, and SMI trust funds and other Federal trust funds. Sections 1817(c) and 1841(a) of the Social Security Act provide that the public-debt obligations issued for purchase by the HI and SMI trust funds, respectively, shall have maturities fixed with due regard for the needs of the funds. The usual practice in the past has been to spread the holdings of special issues, as of every June 30, so that the amounts maturing in each of the next 15 years are approximately equal. Special public-debt obligations are redeemable at par at any time.

Spell of illness. A period of consecutive days, beginning with the first day on which a beneficiary is furnished inpatient hospital or extended care services, and ending with the close of the first period of 60 consecutive days thereafter in which the beneficiary is in neither a hospital nor a skilled nursing facility.

Standard prescription drug coverage. Part D prescription drug coverage that includes a deductible, coinsurance up to an initial coverage limit, and protection against high out-of-pocket expenditures by having reduced coinsurance provisions for individuals exceeding the out-of-pocket threshold.

Stochastic model. An analysis involving a random variable. For example, a stochastic model may include a frequency distribution for one assumption. From the frequency distribution, possible outcomes for the assumption are selected randomly for use in an illustration.

Summarized cost rate. The ratio of the present value of expenditures to the present value of the taxable payroll for the years in a given period. In this context, the expenditures are on an incurred

basis and exclude costs for those uninsured persons for whom payments are reimbursed from the general fund of the Treasury, and for voluntary enrollees, who pay a premium in order to be enrolled. The summarized cost rate includes the cost of reaching and maintaining a target trust fund level, known as a contingency fund ratio. Because a trust fund level of about one year's expenditures is considered to be an adequate reserve for unforeseen contingencies, the targeted contingency fund ratio used in determining summarized cost rates is 100 percent of annual expenditures. Accordingly, the summarized cost rate is equal to the ratio of (i) the sum of the present value of the outgo during the period, plus the present value of the targeted ending trust fund level, plus the beginning trust fund amount, to (ii) the present value of the taxable payroll during the period.

Summarized income rate. The ratio of (i) the present value of the tax revenues incurred during a given period (from both payroll taxes and taxation of OASDI benefits) to (ii) the present value of the taxable payroll for the years in the period.

Supplemental prescription drug coverage. Coverage in excess of the standard prescription drug coverage.

Supplementary Medical Insurance (SMI). The Medicare trust fund comprising the Part B account, the Part D account, and the Transitional Assistance Account. The Part B account pays for a portion of the costs of physician services, outpatient hospital services, and other related medical and health services for voluntarily enrolled aged and disabled individuals. The Part D account pays private plans to provide prescription drug coverage, beginning in 2006. The Transitional Assistance Account paid for transitional assistance under the prescription drug card program in 2004 and 2005.

Sustainable growth rate. A system for establishing goals for the rate of growth in Medicare Part B expenditures for physician services. The Medicare Access and CHIP Reauthorization Act of 2015 permanently repealed the sustainable growth rate formula.

Tax rate. The percentage of taxable earnings, up to the maximum tax base, that is paid for the HI tax. Currently, the percentages are 1.45 for employees and employers, each. The self-employed pay 2.9 percent. There is an additional 0.9-percent tax on earnings above $200,000 (for those who file an individual tax return) or $250,000 (for those who file a joint income tax return).

Taxable earnings. Taxable wages and/or self-employment income under the prevailing annual maximum taxable limit.

Taxable payroll. A weighted average of taxable wages and taxable self-employment income. When multiplied by the combined employee-employer tax rate, it yields the total amount of taxes incurred by employees, employers, and the self-employed for work during the period.

Taxable self-employment income. Net earnings from self-employment—generally above $400 and below the annual maximum taxable amount for a calendar or other taxable year—less any taxable wages in the same taxable year.

Taxable wages. Wages paid for services rendered in covered employment up to the annual maximum taxable amount.

Taxation of benefits. Beginning in 1994, up to 85 percent of an individual's or a couple's OASDI benefits are potentially subject to Federal income taxation under certain circumstances. The revenue derived from taxation of benefits in excess of 50 percent, up to 85 percent, is allocated to the HI trust fund.

Taxes. See *Payroll taxes*.

Term insurance. A type of insurance that is in force for a specified period of time.

Test of Long-Range Close Actuarial Balance. The conditions required to meet this test are as follows: (i) The trust fund satisfies the short-range test of financial adequacy; and (ii) the trust fund ratios stay above zero throughout the 75-year projection period, such that benefits would be payable in a timely manner throughout the period. This test is applied to HI trust fund projections made under the intermediate assumptions.

Test of Short-Range Financial Adequacy. The conditions required to meet this test are as follows: (i) If the trust fund ratio for a fund exceeds 100 percent at the beginning of the projection period, then it must be projected to remain at or above 100 percent throughout the 10-year projection period; (ii) alternatively, if the fund ratio is initially less than 100 percent, it must be projected to reach a level of at least 100 percent within 5 years (and not be depleted at any time during this period), and then remain at or above 100 percent throughout the rest of the 10-year period. This test is applied to HI trust fund projections made under the intermediate assumptions.

Transitional assistance. An interim benefit for 2004 and 2005 that provided up to $600 per year to assist low-income beneficiaries who had no drug insurance coverage with prescription drug purchases. This benefit also paid the enrollment fee in the Medicare Prescription Drug Discount Card program.

Transitional Assistance Account. The separate account within the SMI trust fund that managed revenues and expenditures for the transitional assistance drug benefit in 2004 and 2005.

Trust fund. Separate accounts in the U.S. Treasury, mandated by Congress, whose assets may be used only for a specified purpose. For the HI and SMI trust funds, monies not withdrawn for current benefit payments and administrative expenses are invested in interest-bearing Federal securities, as required by law; the interest earned is also deposited in the trust funds.

Trust fund ratio. A short-range measure of the adequacy of the HI and SMI trust fund level; defined as the assets at the beginning of the year expressed as a percentage of the outgo during the year.

Uninsured beneficiaries. HI beneficiaries who do not have 40 quarters of covered earnings but are entitled to HI coverage either because (i) they were deemed additional wage credits during the transitional periods when the HI program began or when it was expanded to cover Federal employees, or because (ii) they pay a monthly premium that is intended to cover their full cost. See *Part A premium*.

Unit input intensity allowance. The amount added to, or subtracted from, the hospital input price index to yield the prospective payment system update factor.

Valuation period. A period of years that is considered as a unit for purposes of calculating the status of a trust fund.

Voluntary enrollees. Certain individuals, aged 65 or older or disabled, who are not otherwise entitled to Medicare and who opt to obtain coverage under Part A by paying a monthly premium.

Year of depletion. The first year in which a trust fund is unable to pay full benefits when due because the assets of the fund are depleted.

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J. STATEMENT OF ACTUARIAL OPINION

It is my opinion that (1) the techniques and methodology used herein to evaluate the financial status of the Federal Hospital Insurance Trust Fund and the Federal Supplementary Medical Insurance Trust Fund are based upon sound principles of actuarial practice and are generally accepted within the actuarial profession; and (2) with the important caveats noted below, the principal assumptions used and the resulting actuarial estimates are, individually and in the aggregate, reasonable for the purpose of evaluating the financial status of the trust funds, taking into consideration the past experience and future expectations for the population, the economy, and the program. I am a member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

The recently enacted Medicare Access and CHIP Reauthorization Act (MACRA) of 2015 permanently replaces the sustainable growth rate (SGR) formula, which was used for physician fee schedule payments, with a new method for determining annual payment rate updates. The changes specified in MACRA avoid the substantial reductions in physician payments that were required under the SGR formula and establish payment updates that are related to participation in alternative payment models or are subject to adjustments based on the quality of care provided. While the scheduled updates for the next several years provide a much more plausible expectation for current-law physician payments than under the SGR, the specified rate updates are not expected to keep up with underlying physician costs, resulting in a large and growing problem over the long range.

The ACA has been successful in reducing many Medicare expenditures to date. Although early indications from some of the alternative payment model demonstrations have been encouraging, there is a strong possibility that certain payment changes will not be viable in the long range. Specifically, the annual price updates for most categories of non-physician health services will be adjusted downward each year by the growth in economy-wide productivity. Sustaining these price reductions will be challenging for health care providers, as the best available evidence indicates that most providers cannot improve their productivity to this degree for a prolonged period given the labor-intensive nature of these services.

Absent an unprecedented change in health care delivery systems and payment mechanisms, the prices paid by Medicare for most health services will fall increasingly short of the cost of providing such services. If this issue is not addressed by subsequent legislation, it is likely that access to, and quality of, physicians' services would deteriorate over time for beneficiaries. Overriding the price updates specified in current law, as lawmakers repeatedly did in the case of physician payment rates under the SGR formula, would lead to substantially higher costs for Medicare in the long range than those projected in this report.

I encourage readers to review the illustrative alternative projection. This scenario includes price update assumptions constructed to transition from the price updates specified in current law to levels consistent with the overall health economy, and therefore it provides the potential magnitude of the understatement of Medicare costs relative to the current-law projections. The illustrative alternative scenario is summarized in appendix V.C of this report, and additional details are available at http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Reports TrustFunds/Downloads/2015TRAlternativeScenario.pdf.

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